

INDIA YEAR BOOK-2015

Dear Students,

With the focus on the provision of best study material to our students, Rau's IAS Study Circle is innovatively presenting the voluminous INDIA YEAR BOOK-2015 in a very concise and lucid manner.

Through this, efforts have been taken to circulate the best synopsis extracted from the Year Book-2015 for the benefit of the students.

The abstract has been designed to present contents of the year book in most user-friendly manner. All the major and important points are given in bold and highlighted. The content is also supported by figures and pictures as per the requirement.

The content has been chosen and compiled judiciously so that maximum coverage of all the relevant and significant material is presented within minimum readable pages.

Considering the above, the entire Year Book-2015 will be covered in two parts. This is second and final issue of the series titled '**INDIA YEAR BOOK-(2015) | PART II**' and will be covering the following topics:

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|---|------------------------------|
| 16. Health and Family Welfare | 26. Transport |
| 17. Housing | 27. Water Resources |
| 18. India and the World | 28. Welfare |
| 19. Industry | 29. Youth Affairs and Sports |
| 20. Law and Justice | |
| 21. Labour and Employment | |
| 22. Mass Communication | |
| 23. Planning | |
| 24. Rural and Urban Development | |
| 25. Scientific and Technological Developments | |

By providing this, the Study Circle hopes that all the students will be able to make the best use of it as a ready reference material and allay their fears of perusing and cramming the entire year book.

Good Luck!

RAU'S IAS STUDY CIRCLE

TABLE OF CONTENTS

CHAPTER SIXTEEN HEALTH AND FAMILY WELFARE	03
CHAPTER SEVENTEEN HOUSING.....	06
CHAPTER EIGHTEEN INDIA AND THE WORLD	09
CHAPTER NINETEEN INDUSTRY	15
CHAPTER TWENTY LAW AND JUSTICE	25
CHAPTER TWENTY ONE LABOUR AND EMPLOYMENT	44
CHAPTER TWENTY TWO MASS COMMUNICATION	46
CHAPTER TWENTY THREE PLANNING	56
CHAPTER TWENTY FOUR RURAL AND URBAN DEVELOPMENT	67
CHAPTER TWENTY FIVE SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENTS	78
CHAPTER TWENTY SIX TRANSPORT	97
CHAPTER TWENTY SEVEN WATER RESOURCES	106
CHAPTER TWENTY EIGHT WELFARE	113
CHAPTER TWENTY NINE YOUTH AFFAIRS AND SPORTS	118

CHAPTER SIXTEEN | HEALTH AND FAMILY WELFARE

THE obligation of the Government to ensure the highest possible health status for India's population and to ensure that all people have access to quality health care has been recognized by a number of key policy documents. The policy directions of the "Health for All" declaration became the stated policy of Government of India with the adoption of the National Health Policy Statement of 1983. Driven by this declaration there was some expansion of primary health care in the 80s. Further, the National Health Policy of 2002 and the Report of the Macro-Economic Commission on Health and Development (2005) emphasized the need to increase the total public health expenditure from 2 to 3 per cent of the GDP. They also stressed the need to strengthen the role of public sector in social protection against the rising costs of health care and the need to provide a comprehensive package of services without reducing the prioritization given to women and children's health.

Major initiatives under National Rural Health Mission (NRHM)

ASHA: More than 8.94 lakh community health volunteers called **Accredited Social Health Activists (ASHAs)** have been engaged under the mission to work as a link between the community and the public health system. ASHA is the first port of call for any health related demands of deprived sections of the population, especially women and children, who find it difficult to access health services in rural areas. ASHA Programme is expanding across States and has particularly been successful in bringing people back to Public Health System and increase in the utilization of their outpatient services, diagnostic facilities, institutional deliveries and in-patient care.

DEPARTMENT OF HEALTH RESEARCH (DHR)

The Department of Health Research (DHR) was set up in 2007 primarily to promote Medical Research in India through augmentation of human resources for basic, applied and clinical research, development of infrastructure and other steps required to achieve the endeavour. Besides Indian Council of Medical Research (ICMR), there were nine new businesses allocated to DHR.

The ICMR concentrates on knowledge generation and 'affordable technology development, and serves as the fulcrum of new department. It is pertinent to mention that, the proposed seamless integration between the ICMR (generation of new knowledge) and the DHR (putting this new knowledge to public good) which began in recent past, has been progressing well in the right direction.

INDIAN COUNCIL OF MEDICAL RESEARCH (ICMR)

Set up in 1911 as Indian Research Fund Association (IRFA) with the specific objective of sponsoring and coordinating medical research in the country was re-designated in 1949 as the Indian Council of Medical Research (ICMR) with considerably expanded scope of functions.

The ICMR promotes biomedical research in the country through intramural as well as extramural research. Intramural research is carried out currently through a network of 32 Permanent Research Institutes Centres which are mission-oriented national institutes located in different parts of the country.

Technologies released in 2013-14

Following technologies were released during the year:

- 1. Development of killed vaccine for Japanese Encephalitis (JE):** (Useful for prevention of Japanese Encephalitis) The first indigenously developed Japanese Encephalitis vaccine (JENVAC) under Public Private Partnership was launched on 4th October, 2013. The indigenous virus strain was isolated and characterized by the ICMR's National Institute of Virology at Pune and the strains were transferred to Bharat Biotech for further vaccine development.
- 2. Rapid Diagnostic Kit (RDB) for the detection of β -Thalassemia syndromes; inherited blood disorder:** (for prenatal diagnosis and screening beta thalassemia syndromes) The "Thalassemia Detection Kit" was

launched on 17th December, 2013. This technology was developed by National Institute of Immunohaematology (NIIH-ICMR), Mumbai.

4. **Test reagents/strips for Diabetes :** (For detection and monitoring of Diabetes mellitus) Two simple and affordable technologies for glucose monitoring devices and testing strips-Suchek and QuickcheQ were launched on 13th January 2014. These two technologies were developed by Nanobios Lab, India Institute of Technology, Mumbai and BITS, Hyderabad respectively.
5. **ELISA for Ferritin as marker for assessing bio-availability of iron using Caco-2 cell line :** (Useful for quality assurance in nutrition programmes, as a biomarker for identification of true iron deficiency in population and for management of patients suffering from β -Thalassemia). The "Elisa kit for Ferritin estimation" was launched on 20th February, 2014. This technology was developed by National Institute of Nutrition (NIN-ICMR), Hyderabad.
6. **Dried Blood Spot (DBS)-collection kit for sub-clinical deficiency of Vit.A:** (kit for transportation of samples for diagnosis of vitamin A deficiency). The "Dried Blood Spot (DBS) collection kit for Vitamin A analysis" was launched on 20th February, 2014. This technology was developed by National Institute of Nutrition (NIM-ICMR), Hyderabad.
9. **Novel non-invasive method for diagnosis of visceral leishmaniasis by rK39 testing of sputum samples:** (Non-invasive method useful for diagnosis for visceral leishmaniasis) the kit for visceral leishmaniasis was launched on 2nd September, 2014. This kit was developed by Rajendra Memorial Research Institute of Medical Sciences (RMRIMS-ICMR), Patna.

Japanese Encephalitis (JE)

Phase II/III study were conducted by collection of sera/serum from vaccine who had received an indigenously developed, genotype III strain based JEV vaccine by BBIL, Hyderabad. The vaccine was safe, well tolerated and immunogenic in healthy volunteers after one or two doses of vaccination. Total no. of 35 representative sera from vaccines tested against newly introduced JEV GI strain by Plaque Reduction Neutralization Test (PRNT) showed protection against the JEV GI strain isolated in India. Drug Controller General of India (DCGI) approved it for marketing clearance. The Vero cell-derived purified inactivated JE vaccine-JENVAC is the first vaccine in the public-private partnership mode between the Indian Council of Medical Research and Bharat Biotech launched in India.

Influenza

Multi-centric surveillance of human influenza virus activity during the period 2013-14 by NW Pune showed predominance of Influenza A (H3N2) and A (H1N1) pdm09. Few instances of Yamagata lineage viruses of type B were also noted. Drug susceptibility monitoring of pandemic virus showed reduced susceptibility to oseltamivir in two 2013 virus isolates. However, seasonal viruses remained sensitive to oseltamivir. Genetic analysis of pandemic and seasonal viruses showed good match with 2013-2014 vaccine component.

Malaria

Therapeutic efficacy studies of ACT (artesunate+SP) in *P. falciparum* and CQ in *P. vivax* are being conducted at 15 sites in the country (13 for *P. falciparum* and 2 for *P. vivax*) in collaboration with NVBDCP and State Health Authorities. These studies have shown the efficacy of chloroquine for *P. vivax* as 100 per cent at 2 sites. These results were shared with ICMR and NVBDCP which led to change of drug policy for malaria in North-Eastern (NE) region by NVBDCP. Current ACT (artesunate + sulfadoxine pyrimethamine) has been replaced with coformulated tablet of ARTEMETHER, (20 mg) - LUMEFANTRINE (120 mg) for treatment of uncomplicated *P. falciparum* malaria in NE region.

Leishmaniasis

A novel blood based antigen detection assay (RBC-ELISA), antibody based ELISA (BSM ELISA) and parasite ELISA for diagnosis and longitudinal follow up of VL patients have been standardized for screening a large population. Additionally, RBC-ELISA assay showed prognostic potential that may be explored for early diagnosis of VL (RMRIMS, Patna)

Nutrition

Task Force study on Hypertension entitled Effectiveness of diet and life style intervention through IEC tools with **Angan wadi** Centres as the centre of knowledge dissemination for hypertension risk reduction has been initiated at 10 centres across the country including 7 in tribal belt. The primary objective of the study is to assess the effectiveness of intense versus usual IEC interventions on diet and lifestyle modifications delivered by existing community-level health-workers (ASHA or equivalent) on population level blood pressure.

Department of Ayush

Department of Indian Systems of Medicine and Homoeopathy (ISM&H) was created in March, 1995 and re-named as Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) in November, 2003 with a view to provide focused attention to development of Education and Research in Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy systems. The Department continued to lay emphasis on upgradation of Ayush educational standards, quality control and standardization of drugs, improving the availability of medicinal plant material, research/development and awareness generation about the efficacy of the systems domestically and internationally. **Sowa Rigpa is the recent addition to the existing family of AYUSH systems.**

Statutory Regulatory Councils

(i) Central Council of Indian Medicine (CCIM), New Delhi

The Central Council of Indian Medicine is a Statutory Body constituted under the Indian Medicine Central Council Act, 1970. The Central Council of Indian Medicine with the previous sanction of the Central Government as required under Section 36 of the Indian Medicine Central Council Act, 1970 and after obtaining the comments of the State Governments as required under Section 22 of the said Act has prescribed courses for Under-graduate and Post-graduate education in Ayurveda, Unani and Siddha through the Regulations.

(ii) Central Council of Homeopathy (CCH), New Delhi

The Central Council of Homeopathy is a statutory body constituted under the Homoeopathy Central Council Act, 1973, which provides for the maintenance of a Central Register of Homoeopathy and for other matters connected therewith. The Central Government had amended Homoeopathy Central Council Act, 1973 on December 9, 2002, and amended Act had been enforced w.e.f. 28th January, 2003.

CHAPTER SEVENTEEN | HOUSING

THE Ministry of Housing & Urban Poverty Alleviation (MoHUPA) is the apex authority of Government of India at the national level for formulation of housing policy and programme, implementation of the plan scheme, collection and dissemination of data on housing, building materials/techniques and for adopting general measures for reduction of building costs. In addition, it is entrusted with implementation of specific programmes of urban poverty alleviation, and slum improvement.

SWARNA JAYANTI SHAHARI ROZGAR YOJANA (SJSRY)

With a view to provide gainful employment to the urban unemployed and underemployed through encouraging the setting up of self-employment ventures or provision of wage employment, a new urban poverty alleviation programme, namely, **Swarna Jayanti Shahari Rozgar Yojana (SJSRY)**, was launched by the Government of India on 1st December, 1997 by subsuming the earlier three urban poverty alleviation programmes, namely **Urban Basic Services for the Poor (UBSP)**, **Nehru Rozgar Yojana (NRY)** and **Prime Minister's Integrated Urban Poverty Eradication Programme (PMIUPEP)**. The SJSRY was comprehensively revamped w.e.f. 2009-10 with the following components:

- (i) Urban Self Employment Programme (USEP)
- (ii) Urban Women Self-help Programme (UWSP)
- (iii) Skill Training for Employment Promotion amongst Urban Poor (STEP-UP)
- (iv) Urban Wage Employment Programme (UWEP)
- (v) Urban Community Development Network (UCDN)

NATIONAL URBAN LIVELIHOODS MISSION (NULM)

Ministry of Housing and Urban Poverty Alleviation has launched National Urban Livelihoods Mission (NULM) in the 12th Five Year w.e.f. 24th September, 2013 replacing the existing Swarna Jayanti Shahari Rozgar Yojana (SJSRY). The NULM focuses on organizing urban poor in self-help groups, creating opportunities for skill development leading to market-based employment and helping them to set up self-employment ventures by ensuring easy access to credit. The Mission aims at providing shelter equipped with essential services to the urban homeless in a phased manner. In addition, the Mission will also address livelihood concerns of the urban street vendors. The primary target of NULM is the urban poor, including the urban homeless.

JAWAHARLAL NEHRU NATIONAL URBAN RENEWAL MISSION (JNNURAM)

The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched on 3rd December, 2005 to implement reform driven, planned development of cities in a Mission mode with focus on upgradation of urban infrastructure, creation of housing stock and provision of basic services to the urban poor, community participation and accountability of Urban Local bodies (ULBs). The Mission comprises four components of which two, viz, the Sub Mission for Urban Infrastructure and Government (UIG) and the Sub-Mission for Basic Services to the Urban Poor (BSUP) are implemented in 65 select cities. The other two components, namely, Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) and Integrated Housing and Slum Development Programme (IHSDP) are implemented in other cities/towns. The Ministry of Housing and Urban Poverty Alleviation is implementing BSUP and IHSDP components of JNNURM.

RAJIV AWAS YOJANA

The Cabinet Committee on Economic Affairs has approved launch of Implementation Phase of Rajiv Awas Yojana (RAY) as a Centrally Sponsored Scheme (CSS), to be implemented in Mission mode during 2013-2022. The preparatory phase of RAY was launched in June, 2011 which came to an end in June, 2013. Rajiv Awas Yojana (RAY) envisages a 'Slum Free India' with inclusive and equitable cities in which every citizen has access to basic civic infrastructure, social amenities and decent shelter.

Objectives of the Scheme: Improving and provisioning of housing, basic civic infrastructure and social amenities in intervened slums, enabling reforms to address some of the causes leading to creation of slums; facilitating a supportive environment for expanding institutional credit linkages for the urban poor; institutionalizing mechanisms for prevention of slums including creation of affordable housing stock; strengthening institutional and human resource capacities at the Municipal, City and State levels through comprehensive capacity building and strengthening of resource network and empowering community by ensuring their participation at every stage of decision making through strengthening and nurturing Slum Dwellers' Associations/Federations.

NATIONAL BUILDINGS ORGANISATION (NBO): The National Buildings Organization (NBO), an attached office of the Ministry of Housing and Urban Poverty Alleviation has been functioning as **an apex organization in the country for collection, tabulation and dissemination of statistical information on housing and building construction activities.** The National Building Organization was restructured in March 2006.

The restructured National Buildings Organization endeavours :

- To bring out compendiums on urban poverty, slums, housing and building construction statistics and applied research publications analyzing statistical data gathered from various sources such as the Census, NSSO etc.
- To act as a national resource centre and repository on urban poverty, slums, housing, building construction and related statistics, networked with similar resource centres at State and Urban Local Body levels and internationally.
- To collect, collate, validate, analyze, disseminate and publish building construction, housing and other related statistics and statistical reports from time to time.
- To create and manage a fully computerized data centre equipped with appropriate systems and e-governance tools to store, manage, retrieve and disseminate urban data as when needed for policies and programmes.
- To conduct regular short-term sample surveys/field studies in various pockets of the country to study the impacts of plan schemes being run by the Ministry of Housing & Urban Poverty Alleviation and other Ministries and to gather primary data as needed.
- To undertake socio-economic research relating to design, formulation, implementation, monitoring, review and impact evaluation of policies, plans, programmes and projects covering areas such as slum development/upgradation, affordable housing and basic services to the urban poor.
- To develop a documentation centre relating to urban poverty, slums, housing, building construction, and related urban statistics which can function as a repository of urban resources, including best practices and innovations.
- To organize capacity building/training programmes for the officers and staff of Government of India, State Governments and Urban Local Bodies engaged in collection and dissemination of urban poverty, slums, housing, building construction, and related urban statistics.
- To coordinate and collaborate with State Governments/Municipal Authorities/ Research & Training Institutions/Statistical Institute /International Organisations as nodal agency catering to data and MIS needs of urban policymakers, planners and researchers in areas relating to urban poverty, slums, housing etc.

HOUSING & URBAN DEVELOPMENT CORPORATION LIMITED (HUDCO) HUDCO, a techno-financial institution engaged in financing and promotion of housing and urban infrastructure projects throughout India, was established on **April 25, 1970** as a wholly owned government company with the **objective of providing long term finance and undertaking housing and urban infrastructures development programmes.** HUDCO is a public financial institution under section 4A of the Companies Act and has been conferred the status of Mini-ratna. It has a pan-India presence through its wide network of zonal, regional and development offices. HUDCO

occupies a key position in the nations growth plans and implementation of its policies in the housing and urban infrastructure sector. **It aims to achieve sustainable growth in these sectors by catering to the needs of every section of the society, with a basket of delivery options both in housing and urban infrastructure development.**

HINDUSTAN PREFAB LIMITED (HPL): Hindustan Prefab Limited is a profit making Government of India Enterprise under administrative control of Ministry of Housing & Urban Poverty Alleviation and is engaged in execution of projects on turnkey basis i.e. from concept to completion on Project Management basis. Its area of operations are :

1. Mass Housing & Infrastructure works for Slum Dwellers and Urban Poor,
2. Institutional Buildings and Residential Complexes,
3. Hospital Buildings,
4. Sewerage Treatment Plant,
5. Interiors & Furniture,
6. Sports Complexes,
7. Campus Development,
8. Reality Advisory,
9. Prefab Concrete Construction and Pre-Engineered Steel Structure,
10. Third Party Quality Inspection,
11. Disaster Rehabilitation Projects etc.

BUILDING MATERIALS & TECHNOLOGY PROMOTION COUNCIL (BMTPC): Building Materials and Technical Promotion Council (BMTPC) was established in **1990-91** to bridge the gap between laboratory development and field application of alternate building materials and construction technologies. **BMTPC in its endeavour to promote the use of innovative and environment friendly building materials and construction technologies successfully disseminated the knowhow in the field through series of activities such as demonstration construction, capacity building, skill development, organisation of courses, hands-on training, exhibitions, development of guidelines, manuals & publications etc.** Over the years, the Council's prime focus has been on **the promotion and development of the alternate, cost-effective, environment-friendly and energy efficient building materials and construction technologies.**

CENTRAL GOVERNMENT EMPLOYEES WELFARE HOUSING ORGANISATION (CGEWHO): The Central Government Employees Welfare Housing Organisation an autonomous body of the Ministry of Housing & Urban Poverty Alleviation, **a Society registered under the Societies Registration Act 1860** was specifically created for execution of housing projects for Central Government employees, on "all India", self-financing' and 'no profit-no loss' basis. The CGEWHO has at present, to its credit, on-going housing schemes at Hyderabad (Ph-III) (380), Bhubaneswar (Ph-I) (256), Mohali (Ph-I) (603), Mohali (Ph-II) (535), Meerut (Ph-I) (90), Jaipur (Ph-II) (572) and Kolkata (Ph-II) (582) with 3018 dwelling units under various stages of construction and planning.

NATIONAL COOPERATIVE HOUSING FEDERATION OF INDIA: The National Cooperative Housing Federation of India (NCHF), set-up in **1969**, is the national apex organization spearheading the entire cooperative housing movement in India. The primary objective of NCHF is **to promote, guide and coordinate the activities of housing cooperatives.** In all, 23 State Cooperative Housing Federations are members of NCHF. About 30,000 primary housing cooperatives are affiliated to State Federations for getting loan assistance for construction of housing units for their members.

CHAPTER EIGHTEEN | INDIA AND THE WORLD

INDIA'S foreign policy pursues an active interaction with the international community, to meet our key goals including the national economic transformation, ensuring national security, sovereignty and territorial integrity and addresses key regional and global concerns. India deepened its engagement with all of its neighbours and SAARC.

AFGHANISTAN

India's strategic partnership with Afghanistan was further strengthened with high level visits of President Hamid Karzai to India in May 2013, December 2013 and May 2014, and the visit of Afghan Second Vice President Mohammad Karim Khalili in August 2013.

India's bilateral assistance programme for Afghanistan, of about US\$ 2 billion, is spread across Afghanistan and spans almost the entire gamut of economic and social development activities. The then EAM(External Affairs Minister) led an Indian delegation to Kandahar on 15 February 2014, where along with President Hamid Karzai, he inaugurated the Afghan National Agricultural Sciences and Technology University (ANASTU).

BHUTAN

India and Bhutan share close and friendly relations underpinned by mutual trust and confidence. There was sustained progress in bilateral co-operation in all areas of importance including hydropower, transport, communications, infrastructure, health, education and culture, information and communications technology and agriculture. The King of Bhutan visited India in 2014.

Prime Minister Shri Narendra Modi visited Bhutan on 15-16 June 2014 on his first visit abroad after assuming office. During the visit, he met with the King of Bhutan, the 4th King and the Prime Minister of Bhutan and addressed the joint sitting of Bhutanese Parliament. He also inaugurated the Supreme Court building, an Indian assistance project and laid the foundation stone of the 600 MW Kholongchu HEP.

India continues to be the largest trade and development partner of Bhutan. The construction of three Hydroelectric Projects (HEPs)-Punatsangchhu-I (1200 MW). Punatsangchhu-II (1020 MW) and Mangdechhu (720 MW) are on schedule. The Chukkha HEP (336 MW) celebrated its 25th anniversary in 2013, and the Dungsam Cement Plant constructed with Indian assistance of 400 crore, has commenced commercial production. An inter-governmental framework agreed on 4 more HEPs totalling 2020MW under a JV model between Indian and Bhutanese PSUs was signed in April 2014.

CHINA

India and China have declared 2014 as the Year of Friendly Exchanges to commemorate the 60th anniversary of the Five Principles of Peaceful Coexistence existence (Panchsheel).

India established a Strategic Economic Dialogue (SED) with China. The Special Representatives (SRs) continued to explore from the political perspective the framework for a boundary settlement. India and China agreed that peace and tranquillity on the border is the basis for the continued expansion of mutual relations. Both countries continued to cooperate and coordinate on important global issues such as climate change, food security and energy security, and maintained closer dialogue on important regional issues including through BRICs and G-20.

NEPAL

India-Nepal friendship and cooperation is characterized by open borders, extensive people-to-people ties and multi-faceted socio-economic interaction. India continues to support Nepal in its transition to a prosperous,

peaceful, stable and democratic country. Intensive bilateral exchanges were held with a spectrum of Nepali leaders in the run-up to their second Constituent Assembly-cum-Parliament elections in November 2013.

Prime Minister Shri Narendra Modi visited Nepal on 3-4 August 2014 which was the first Prime Minister level bilateral visit in 17 years. During the visit, Shri Modi met President Ram Baran Yadav and PM Sushil Koirala. Shri Modi addressed the Constituent Assembly-cum-Parliament which was the first address by a foreign dignitary. **PM announced a US\$ 1 billion concessional Line of Credit to Nepal which will be utilized for energy and infrastructural projects of Nepal. The terms of reference of the 5600 MW Pancheshwar multipurpose project were signed during the visit.** An MoU on Indian assistance for goat control programme and another between Nepal TV and Doordarshan were also signed during the visit. PM offered prayers at the Pashupatinath Temple, where he gifted 2500 kg sandal wood and announced all support for restoration of the Pushupatinath Temple Complex.

PAKISTAN

India desires peaceful, friendly and cooperative relations with Pakistan. India remains committed to the resolution of all outstanding issues with Pakistan, through a peaceful bilateral dialogue. However, an environment free from terror and violence is necessary for a meaningful and sustained dialogue. India continues to view the progress in the trial underway in Islamabad on the Mumbai terror attack an important marker of Pakistan's commitment to combat-terrorism emanating from its soil.

In his meeting with the Prime Minister of Pakistan in May 2014, Prime Minister Narendra Modi reiterated India's long standing policy of working to build a peaceful, friendly and cooperative bilateral relationship with Pakistan, and reiterated India's commitment to resolve outstanding issues with that country within the framework of the **Shimla Agreement of 1972**. In this context Prime Minister underlined the importance of maintaining an environment free from terrorism and violence, to ensure peace and tranquillity along the international border and ensure the sanctity of the Line of Control.

SOUTH EAST ASIA AND PACIFIC

In recent years, there has been a significant transformation in India's relations with the countries in South East Asia and the Pacific region. The expansion and deepening of our engagement has led to an enhanced Look East Policy. Our relations, characterized by civilizational contacts, mutual goodwill and desire to strengthen cooperation, are multifaceted and forward-looking and have acquired a strategic dimension with five of the countries in the region (Australia, Indonesia, Malaysia, Singapore and Vietnam) and with ASEAN. The steady trend of economic growth and stability in the region and the continuing geopolitical shift towards Asia have imparted new momentum and positive trajectory to our partnerships in the region, both bilaterally with individual countries as well as with regional and sub-regional forum.

Our enhanced Look East Policy has deep imprint in the region and beyond, complements the regional approach of several partners and is an integral component of our strategic agenda. The current approach towards the region has gained political, strategic and cultural dimensions. Security, connectivity and regional integration have emerged as new priorities.

Economic relations with South East Asian countries have emerged as a major pillar of our relations. With the implementation of India-ASEAN Free trade Agreement in Goods, our trade with ASEAN countries has shown steady growth trends, with total trade with ASEAN reaching almost \$76.4 billion in 2013-14. The agreement to conclude India-ASEAN Free Trade Agreement in Services and Investments will provide further impetus to our growing economic engagement with the region. Negotiations with ASEAN and partners have commenced on Regional Comprehensive Economic Partnership (RCEP), which will promote economic cooperation and regional integration. At the same time, our bilateral Comprehensive Economic Cooperation Agreements (CECA) are under negotiation with Thailand and Indonesia and FTAs with Australia and New Zealand, which will promote

competitiveness and growth. For India, our Economic interaction with the region has become more important for our development priorities as the countries of the region have emerged as major trade and investment partners; Singapore, Malaysia and Thailand are key players in infrastructure development; and Indonesia, Australia and Vietnam are emerging as long-term, reliable sources of resources and energy security. Moreover, our corporate sector has developed business links with their counterparts and established business presence to further strengthen economic ties.

JAPAN

India enjoys a strong bilateral relationship with Japan, premised on peace, prosperity and development. In 2006, the 'India-Japan Strategic and Global Partnership' identified five pillars of cooperation - political, defence and security cooperation; comprehensive economic partnership, science and technology initiatives; people to people exchanges and cooperation in regional and multilateral issues. The India-Japan relationship has broadened and deepened in its scope, and this dynamic growth was reflected in political, economic and security interactions between the two countries.

Prime Minister Shri Narendra Modi visited Japan in September 2014 on his first official visit abroad outside India's immediate neighbourhood. During the visit, PM held talks with his Japanese counterpart Mr. Shinzo Abe and met other leaders.

The visit was very successful and achieved substantive outcomes. Japan expressed its intention to realise 3.5 trillion Yen (approx \$35 billion) investment into India through public and private funding over the next 5 years for creation of next generation infrastructure and various developmental projects. It also expressed its desire to associate with Prime Minister's vision of 'Come and Make in India' by announcing its intention to double Japan's FDI and number of Japanese companies operating in India in the next five years. Japan will be establishing Japan Industrial Parks and Electronics manufacturing clusters with Japanese investment.

RUSSIAN FEDERATION

The India-Russia 'special and privileged' strategic partnership remains a matter of the highest priority for both the nations. This partnership is based on a shared belief in the enduring value of the relationship, both for mutual benefit and as a factor for global peace and stability.

Russian Deputy Prime Minister Mr. Dmitry Rogozin visited New Delhi in June 2014 to make contact with the new government in India. During his stay, he called on Prime Minister Shri Narendra Modi to convey President Vladimir Putin's greetings, his desire to work with him to further strengthen and deepen the special and privileged strategic partnership between the two countries. Prime Minister described Russia as a time-tested and reliable friend that had stood with India in difficult times and a major partner in building India's defence capabilities, for which Russia enjoys enormous goodwill in India. Prime Minister expressed his intention to take the relationship to a higher level. He also recalled his recent visit to INS Vikramaditya on June 14 and thanked Deputy PM Rogozin for Russian contribution to the realisation of a major milestone in India's naval capabilities. Mr. Rogozin also held talks with External Affairs Minister Smt. Sushma Swaraj.

Despite the fragile global economic environment, bilateral trade grew by nearly 25 per cent in 2012 to cross US\$ 11 billion. In 2013, it dipped somewhat to a level of around US\$10 billion. Unit-I at Kudankulam nuclear power project was synchronised to the power grid in October 2013. A crucial element of the strategic partnership is defence cooperation. The year 2013 saw the delivery of the third Russian - built frigate INS Trikanth and the commissioning of the aircraft carrier INS Vikramaditya.

CENTRAL ASIA (KAZAKHSTAN, TAJIKISTAN, KYRGYZ REPUBLIC, UZBEKISTAN, AND TURKMENISTAN)

Central Asia is an important priority in India's extended neighbourhood. Equally, for Central Asia, India is an important friend and partner in its growth and development. The Ministry, announced a 'Connect Central Asia' Policy in June 2012, which addressed India's relationship with the region both collectively and on the bilateral mode. The policy has a vision of collective engagement with Central Asia for tackling issues of regional political and security stability and bilateral mechanisms for developing relations with each of the five Central Asian States (Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan). High level interaction with Central Asian countries continued in the year. Vice President Shri M. Hamid Ansari visited Tajikistan and Uzbekistan; former Foreign Minister Shri Salman Khurshid visited Kazakhstan, Kyrgyzstan and Uzbekistan. The Second Track IT-India Central Asia Dialogue was held in Almaty, Kazakhstan in June 2013 and the second regional HOMS conference of the Eurasian region was held in Tashkent in September 2013. The Third Track 11-India Central Asia Dialogue is scheduled to be held in Dushanbe, Tajikistan in 2014.

THE GULF, WEST ASIA AND NORTH AFRICA

India's historical and traditionally friendly relations with the countries of the Gulf region were further strengthened during the past year. Gulf region continued to be India's largest trading partner with bilateral trade turnover of US\$ 181.4 billion in 2012-13, up from US\$ 167 billion in 2011-12. Out of India's global crude oil imports of about 186 million metric tonnes (MMT) in 2012-13, over 60 per cent was sourced from the countries of the Gulf region.

India's bilateral relationship with the countries of the region was further strengthened by visits at the highest level including visits to India of the Prime Minister of Iraq in August 2013; the Prime Minister of Kuwait in 2013, the King of the Kingdom of Bahrain in February 2014 and the C. Prince, the Deputy Prime Minister and the Defence Minister of Saudi Arabia, February 2014. During the year, the former Foreign Minister Shri Salman Khurshid visited Bahrain, Iraq, Saudi Arabia and UAE. Due to our vital stake in the peace, stability, development and prosperity of the countries in the Gulf region, India continued to monitor the developments.

The events of Arab Spring continued to have roll-on impact on the countries of West Asia and North Africa (WANA) region. It was assessed that the earlier exaggerated expectations of progress towards democracy turned out to be misplaced. The region continued to be in a state of flux and uncertainty, which made analysis difficult. On her part, conscious of the long term strategic, energy, food, economic and commercial interests, Indian Government closely monitored the evolving situation and remained engaged with WANA countries for further diversification of mutual relationship.

EUROPE

West Europe

India's relationship with countries of Western Europe continued to deepen and strengthen. India shares common values of democracy, rule of law, civil liberties with countries of the region. The depth of India's relationship can be seen from frequent high-level exchanges with these countries. There is a continuing recognition in West Europe about the strength of Indian economy and increasing interest to invest in India. Despite the sovereign debt crisis in the region, the European Union remains India's largest trading partner. Efforts to strengthen commercial and economic ties with the region continued with exchanges of business delegations. High level official exchanges continued through Foreign Office consultations and other dialogue mechanisms. Interaction at the Foreign Minister level imparted depth to our relations with the region.

UNITED STATES

India and the United States continued their intensive engagement in diverse areas of bilateral cooperation including defence, security, counter-terrorism, trade and investment, higher education, science and technology, energy and health. Strategic and political consultations continued on a range of regional and global issues of

mutual interest, which were augmented with the announcement of new dialogues on the Indian Ocean Region and UN and multilateral issues.

A Joint Declaration of Principles for Defence Cooperation was announced during Dr. Singh's visit to USA in September 2013, wherein the U.S. committed to treat India on par with its closest partners for technology release and both countries agreed to identify transformative co-development and co-production projects in a year. A preliminary commercial contract to build a nuclear power plant in Gujarat by the US company Westinghouse and a MoU for Promoting Energy Access through Clean Energy (PEACE) to enhance affordable and innovative clean energy solutions to rural areas, were also signed on the margins of the visit. India-US cooperation in the field of climate change was strengthened with the decision to establish a Climate Change Working Group. It was also announced that the US will be the Partner Country for the Science and Technology Summit to be hosted by India in 2014, for the first time.

The Prime Minister Shri Narendra Modi paid a five day visit to US from September 27, 2014. During the stay he visited the 9/11 memorial and museum and paid homage to the victims of the terrorists attacks. Some of the important engagement during his stay in the US were- address to the Indian community at the Madison Square Garden, New York, meeting with Israeli Prime Minister, Benjamin Netanyahu, address at the Council on Foreign Relations in New York, issue of Vision Statement on the US India Strategic Partnership, interactive session at the Council on Foreign Relations, address at the US-India Business Council and the joint press briefing with the US President Barack Obama.

SOUTH ASIAN ASSOCIATION FOR REGIONAL COOPERATION

India's proactive stance in South Asian Association for Regional Cooperation (SAARC) since 2004, as part of its new approach to the countries of the neighbourhood, has been a transformative factor in ensuring the gradual and irreversible transition of the organization from a declaratory phase to one of implementation. The growth of the organization has been stimulated by the increasing need of Member States to look to SAARC for solutions to their domestic development challenges.

The Government of India has announced the award of 50 scholarships to students from the SAARC Least Developed Countries (Afghanistan, Bangladesh, Bhutan and Nepal) under the SAARC India Silver Jubilee scholarships scheme announced by the former Prime Minister Dr. Manmohan Singh at the XVI SAARC Summit in Thimphu. During the XVII SAARC Summit held in Maldives in November 2011, Prime Minister Dr. Singh had announced increase in scholarships from 50 to 100.

The 18th SAARC Summit was held at Kathmandu in November, 2014. Prime Minister Shri Narendra Modi visited Nepal from 25th to 27th November for the SAARC Summit.

NALANDA UNIVERSITY

Considerable progress was made during the year in finalizing the legal framework for Nalanda University and in obtaining the necessary approvals that would allow it to commence operations. The Financial Regulations of the University were notified in December 2013. A Headquarters Agreement granting privileges and immunities to the academic staff signed in July 2013 was notified in January 2014. Statutes relating to Universitys Finance Committee, the constitution of the International Advisory Panel and the constitution of an Endowments Committee to raise resources for the University were approved. Nalanda University signed an agreement with M/s Vastu Shilpa Consultants as architects for Phase-I of the construction of Nalanda University campus in Rajgir.

Nalanda University will commenced classes in the Schools of Historical Studies and Ecology and Environment Studies from September 2014 from temporary campus in Rajgir. MEA has offered six scholarships to students

from Cambodia, Myanmar, Laos Vietnam. The developments were recognized at the EAS Ministerial Meeting held in Nay Pyi Taw (Myanmar) on 10 August 2014.

An MoU on the Establishment of Nalanda University was opened for signature at the eighth East Asia Summit held in Brunei in October 2013. This Memorandum has so far been signed by 10 participating countries, viz., Australia, Brunei, Cambodia, China, India, Laos, Myanmar, New Zealand, Singapore and South Korea. Any other State that subscribes to the object and purpose of the establishment of Nalanda University may also become a signatory to this MoU. EU, Portugal and Bangladesh have expressed interest in the Nalanda University initiative.

DIASPORA SERVICES DIVISION

The Diaspora Services Division deals with all matters relating to overseas Indian comprising Persons of Indian Origin (PIO) and Non-Resident Indians (NRIs), Overseas Citizenship of India matters, Pravasi Bharatiya Divas, Pravasi Bhartiya Samman Awards, scholarships to NRI/PIO students in India and new initiatives to promote interaction of overseas Indians with India in tourism, media, youth affairs, education, culture among other areas.

India has second biggest diaspora in the world next only to China. Around 25 million people spread across every major region in the world, working in different fields. i.e., doctors, scientists, lawyers, entrepreneurs etc., **42 per cent of Indian migrants are living in Gulf, 21 per cent in South Asian countries and 12 per cent in USA.**

KNOW INDIA PROGRAMME

Know India Programme (KIP) of the Ministry is a three-week orientation programme for diaspora youths (between the age of 18-26 years) of Indian origin conducted in partnership with one state government with a view to introduce India to them and promote awareness on different facets of Indian life and the progress made in various fields e.g., economic, industrial, education, science and technology, communication and information technology and culture.

Voting Rights for NRIs

The Representation of Peoples Amendment Act, 2010 has been passed conferring voting rights on overseas Indian passport holders. Overseas electors names are to be included in the roll pertaining to the locality in which their place of residence in India as mentioned in their passport is located. As per electoral roll data 2013 published by the Election Commission of India, the total number of overseas Indian electors registered is 10,787.

e-Migrate Project

e-Migrate project was conceptualized in 2008 to bring in 'e-Governance in Emigration. This project involves re-engineering in Emigration Services offered by the Ministry. It will change many processes to make them easier for the emigrant. For example, in the new system, the applications for Emigration clearance will be accepted online, transparency and convenience of transaction will increase; status checking of applications will be possible through SMS and so on.

CHAPTER NINETEEN | INDUSTRY

THE quest for industrial development started soon after independence in 1947. The Industrial Policy Resolution of 1948 defined the broad contours of the policy delineating the role of the State in industrial development both as an entrepreneur and authority.

The main objectives of the Industrial Policy of the Government are: (i) to maintain a sustained growth in productivity; (ii) to enhance gainful employment; (iii) to achieve optimal utilisation of human resources; (iv) to attain international competitiveness; and (v) to transform India into a major partner and player in the global arena. To achieve these objectives, the Policy focus is on deregulating Indian industry; allowing freedom and flexibility to the industry in responding to market forces; and providing a policy regime that facilitates and fosters growth.

Economic reforms initiated since 1991 envisage a significantly bigger role for private initiatives. The policy has been progressively liberalized over the years it present, as would be evident in subsequent paragraphs.

Industrial Entrepreneur's Memorandum

Industries not covered under compulsory licensing and not reserved for public sector was required to file an Industrial Entrepreneur's Memorandum (IEM) with the Secretariat for Industrial Assistance (SIA), Department of Industrial Policy & Promotion (DIPP). No industrial license is required for such exempted industries. Such memoranda are to be filed by non-MSME category industrial undertakings. Since 1998, amendments to IEMs filed have also been allowed.

Further, in a paradigm shift in procedural changes, since May 2014, the process of applying for Industrial License and Industrial Entrepreneur Memorandum has been made totally online without human interface on 24 × 7 basis at the e-Biz website.

National Manufacturing Policy

The Government of India has notified a National Manufacturing Policy (NMP) in November, 2011 with the objective of enhancing the share of manufacturing in GDP to 25 per cent and creating 100 million jobs over a decade or so. The policy is based on the principle of industrial growth in partnership with the states. The Central Government will create the enabling policy frame work, provide incentives for infrastructure development on a Public Private Partnership (PPP) basis through appropriate financing instruments, and State Governments will be encouraged to adopt the instrumentalities provided in the policy.

Important instruments/features of the policy are:

- National Investment and Manufacturing Zones (NIMZs);
- Rationalization and simplification of business regulations;
- Simple and expeditious exit mechanism for manufacturing units;
- Incentives for SMEs;
- Industrial training and skill upgradation measures;
- Financial and institutional mechanisms for technology development, including green technologies;
- Government procurement;
- Special focus sectors.

National Investment and Manufacturing Zones (NIMZs)

NIMZs have been conceived as large integrated industrial townships with state-of-the-art infrastructure; land use on the basis of zoning; clean and energy efficient technology; necessary social infrastructure; skill

development facilities, etc., to provide a conducive environment for manufacturing industries. To enable the NIMZ to function as a self government and autonomous body, it will be declared by the State Government as a Industrial Township under Article 243 Q (I) (c) of the Constitution. These NIMZs would be managed by a Special Purpose Vehicle (SPV) which would ensure master planning of the zone; pre-clearances for setting up the industrial units to be located within the zone and undertake such other functions as specified in the various sections of the policy. The policy mandates that the SPV in a zone will be headed by a senior government official and will include inter-alia an official expert conversant with the work relating to pollution control/environment protection.

Foreign Direct Investment (FDI)

Capital inflows from other countries, particularly in the nature of investment are very important contributor in augmenting availability of capital for funding for infrastructure, industries and other economic ventures. Equity inflows are more stable and bring in new management practices and technology together with the investment. For encouraging FDI inflows, the FDI policy is reviewed on an ongoing basis, with a view to making it more investor-friendly. Significant changes have been made in the FDI policy regime in the recent times, to ensure that India remains an increasingly attractive investment destination. The Government regularly disseminates information on the investment climate and opportunities in India, as well as advises prospective investors about investment policies and procedures and opportunities. International cooperation for industrial partnerships is solicited both through bilateral and multilateral, arrangements including through interaction with the industry associations.

Initiatives in FDI policy

Significant initiatives have been made in the FDI policy regime in the recent times to ensure that India remains increasingly attractive and investor-friendly.

Some of the main initiatives are as follows:

- (i) **Consolidation of FDI Policy:** For ease of reference, all existing regulations on FDI were integrated into one consolidated document. The first such document was released as Circular 1 of 2010, effective from 1 April, 2010.
- (ii) **Rationalisation and liberalization of FDI Policy:** In order to make the FDI policy more liberal and investor-friendly, further rationalization and simplification has been carried out since. Government allowed FDI up to 100 per cent on the automatic route for most activities and a small negative list was notified where either the automatic route was not available or there were limits on FDI. Some of the recent decisions are: **FDI in Telecom recently approved up to 100 per cent; FDI in Defence recently approved up to 49 per cent; and FDI in Railway infrastructure recently approved up to 100 per cent.**

FDI inflows

FDI inflows to India have been quite significant since 2003-04. The equity inflows have risen from US \$ 2.19 billion in 2003-04 to US \$ 24.30 billion in 2013-14. Under international practices of reporting, i.e., including equity capital, of unincorporated bodies, reinvested earnings and other capital, total FDI inflow was US \$4.32 billion in 2003-04 which increased to US \$36.40 billion in 2013-14. Overall FDI inflows of US\$ 323.91 billion were received during April, 2000 to March, 2014.

FDI inflows in the Industrial Sector

Manufacturing sectors were the first ones to be opened up for FDI inflows as with the product market reforms, it was considered necessary to invite FDI inflows in these sectors. The infrastructure and services sectors were gradually opened up in subsequent phases partly because these were for a long time considered to be the public sector responsibility. The overall equity flow, however, indicate that 'industrial sectors covering mining, manufacturing and power accounted for nearly 50 per cent of the total equity inflows. FDI has particularly been important in sectors like machinery, chemicals, auto sector, miscellaneous manufacturing, telecommunication

and power. In case of telecommunication, the FDI is both for the setting up of production base and also for providing telecommunication services.

Intellectual Property Rights

All aspects of IPR concerning patents, marks, designs and geographical indications are administered by DIPP. These are administered through the Office of the Controller General of Patents, Designs and Trade Marks (CGPDTM), a subordinate office, with headquarters at Mumbai as under:

- a) The Patents Act, 1970 (amended in 1999, 2002 and 2005) through the Patent Offices at Kolkata (HQ), Mumbai, Chennai and Delhi.
- b) The Designs Act, 2000 through the Patent Offices at Kolkata (HQ), Mumbai, Chennai and Delhi.
- c) The Trade Marks Act, 1999 (amended in 2010) through the Trade Marks Registry at Mumbai (HQ) Chennai, Delhi, Kolkata and Ahmedabad.
- d) The Geographical Indications of Goods (Registration & Protection) Act, 1999 through the Geographical Indications Registry at Chennai.

Intellectual Property Appellate Board

An Intellectual Property Appellate Board (IPAB) has been set up at Chennai to hear appeals against the decisions of Registrar of Trademarks, Geographical Indications and the Controller of Patents.

Trade Mark (Amendment) Act Trade Mark (Amendment) Bill came into force since 2013. The necessary amendments in the Trade Marks Rules, 2002 have also been made. The amended Act and rules enabled India to accede to the Madrid Protocol which is a simple, facilitative and cost effective system for registration of international trade marks. India's membership of the protocol will enable Indian companies to register their trade marks in Member Countries of the Protocol through filing a single application in one language and by paying one time fee in one currency. India acceded to the Protocol in April, 2013. The Madrid Protocol has come into force in India since July, 2013.

Till 30th June, 2014, 5100 international applications from the WIPO seeking protection of trademarks in India have been forwarded by WIPO to the Indian Trademark Office for further processing. On the other hand, Indian Trade Marks office received 117 applications for international registration of trademarks under the Madrid Protocol, out of which 112 applications have been certified and forwarded to the WIPO.

National Design Policy

The National Design Policy was announced in 2007. : This Policy envisages a key role for design in enhancing the competitiveness of Indian industry. The focus is on spread of design education, branding of Indian designs and the establishment of a Design Council. This period witnessed both the expansion and upgradation of India's premier design institution i.e. the National Institute of Design (NID) with three campuses at Ahmedabad (main campus), Gandhinagar (PG Campus), and Bangalore (R&D Campus). Intake of students at MD was substantially increased and new courses introduced at Undergraduate and Post Graduate levels. India Design Council (IDC), a society under the aegis of DIPP was constituted in 2009 as a mandate of the policy, the National Institute Design Act, 2014 declaring NID, Ahmedabad as an Institution of National Importance was notified on 18th July, 2014.

NORTH EAST INDUSTRIAL AND INVESTMENT PROMOTION POLICY (NEIIPP)

The North East Industrial and Investment Promotion Policy (NEIIP), 2007 is a revised version of the erstwhile North East Industrial Policy (NEIP), 1997, and was notified for a period of 10 years upto 2017. The scheme covers eight North East states recognized under North Eastern Council (NEC) including Sikkim. The scheme provides incentives to all new as well as existing units which go for industrial expansion located anywhere in this region and which commence commercial production within 10 years from the date of notification of NEIIPP, 2007 for a period of 10 years from the date of commercial production. Exceptions are the industries considered hazardous

to public health and environment such as tobacco and its substitutes, pan masala, plastic carry bags, refinery products, etc.

PERFORMANCE OF SELECTED INDUSTRIES

Cement

Cement is one of the most technologically advanced industries in the country. The industry plays a crucial role in the development of the housing and infrastructure sector of the economy. The price and distribution control of cement has been removed since 1989 and the cement industry has been de-licensed in 1991 under the Industrial (Development & Regulation) Act, 1951. Since then, the Cement Industry has progressed well both in capacity/production and as well as in process technology.

India is producing different varieties of cement like Ordinary Portland Cement (OPC), Portland Pozzolana Cement (PPC), Portland Blast Furnace Slag Cement (PBFS), Oil Well Cement, White Cement, etc. These different varieties of cement are produced as per the Bureau of Indian Standard (BIS) specifications and its quality is comparable with the best in the world. The Indian cement industry has managed to keep pace with the global technological advancement. The induction of advanced technology has helped the industry immensely to improve its efficiency by conserving energy, fuel and addressing the environmental concerns.

The cess collected on cement for the year 2012-13 and 2013-14 is Rs. 19.62 Cr. and Rs. 19.02 Cr respectively and deposited in the Consolidated Fund of India. Out of this fund, a sum of 2.00Cr was given under the Head Development Council for Cement Industry for the year 2013-14 for recurring expenditure on R&D activities for Cement industry.

Paper Industry

India continued to reign as one of the fastest growing paper markets in the world. The growing knowledge base coupled with synergistic contribution from flagship schemes of the government, namely, Sarva Shiksha Abhiyan (SSA) Rashtriya Madhyamik Shiksha Abhiyan (RMSA), Inclusive Education for the Disabled at Secondary School (IEDSS), Adult Education and Skill Development Scheme, and Right to Education assured a robust demand for paper board. The industry was de-licensed in July, 1997. **As per the present policy, FDI up to 100 per cent is allowed on the automatic route for the pulp and paper sector.**

As regards the paper industry the working group on pulp and paper has identified the following targets of the 12th Five Year Plan based on production and consumption-(a) the production of paper, paper board, and newsprint by the year 2016-17 is estimated to be 16.7 million, and (b) corresponding, the consumption of paper, paper board and newsprint is estimated to touch 18.4 tonnes.

LIGHT INDUSTRIAL MACHINERY SECTOR

Food Processing Machinery

The Indian market for food processing machinery has been growing steadily fuelled by strong domestic demand for processed food and beverage products spurred by increase in income level, increasing number of women joining the work force, rapid urbanization, changing lifestyle and mass media promotion. The most promising areas of growth are fruit and vegetable processing, meat, poultry, dairy and seafood, packaged/convenience food, soft drinks and grain processing. Food Processing Sector is expected to grow at a healthy pace considering the rapid changes in food habits and consumerist culture developing in the country. The machinery manufacturers have honed their expertise in manufacturing dairy machinery and other core equipment of food processing machinery.

Indian Textiles

Indian Textiles Industry contributes about 14 per cent to the industrial production 4 per cent to the GDP and 11 per cent to the country's export earnings. The textile sector is the second largest provider of employment after agriculture. The Indian textiles industry is extremely varied, with the hand-spun and handwoven sector at one end of the spectrum, and the capital intensive sophisticated mills sector at the other. The decentralized powerlooms/hosiery and knitting sector form the largest section of the Textiles Sector.

The major sub-sectors that comprise the textiles sector include the organized cotton/man-made fibre textiles mill industry, the man-made fibre / filament yarn industry, the wool and woollen textiles industry, the sericulture and silk textiles industry, handlooms, handicrafts, the jute and jute textiles industry, and textiles exports.

GROWTH RATE OF TEXTILES AND APPAREL

During the year, the Ministry of Textiles has given the required policy and financial support to the sector through its various schemes and as a result, there has been a significant improvement in textiles production in spite of slowdown in demand, high raw material prices etc. Textiles and Wearing apparel; dressing and dyeing of far have registered a growth rates of 4.2 per cent and 22.6 per cent respectively over the corresponding period of the previous year.

New Schemes

The following new schemes shall be implemented during the 12th Plan period;

Comprehensive Handlooms Development Scheme (CHDS)

CHDS has been formulated by merging the components of Integrated Handloom Development Scheme (IHDS), Marketing and Export Promotion Scheme (MEPS), Diversified Handlooms Development Scheme (DHDS), implemented during the 11th Plan. Sub-components of the CHDS are; Cluster development programme; Handloom marketing assistance; Development and strengthening of the handloom institutions; Handloom census and implementing innovative ideas and publicity, advertisement, monitoring, training and evaluation of the scheme.

Cotton

Cotton is one of the principal crops of the country and is the major raw material for domestic textile industry, it provides sustenance to millions of farmers as also the workers involved in cotton industry, right from processing to trading of cotton. The Indian Textile Industry consumes a diverse range of fibres and yarn, but is predominantly cotton based. Cotton accounts for more than 75 per cent of the total fibre consumption in the spinning mills and more than 54 per cent of the total fibre consumption in the textile sector.

Government of India announces Minimum Support Price (MSP) for two basic staple groups viz., medium long staple (staple length 24.5 mm to 25.5 mm and micronaire value 4.3 to 5.1) and long staple cotton (staple length 29.5 mm to 30.5 mm and micronaire value.

Handloom Industry

Handloom weaving is one of the largest economic activity after agriculture providing direct and indirect employment to more than 43 lakh weavers and allied workers. This sector contributes nearly 11 per cent of the cloth production in the country and also contributes to the export earning of the country. **95 per cent of the world's hand woven fabric comes from India.**

The handloom sector has a unique place in our economy. It has been sustained by transferring skills from one generation to another. The strength of the sector lies in its uniqueness, flexibility of production, openness to innovations, adaptability to the supplier's requirement and the wealth of its tradition.

“The Government of India has since independence been following a policy of promoting and encouraging the handloom sector through a number of programmes and schemes. Due to various policy initiative and scheme interventions like cluster approach, aggressive marketing initiative and social welfare measures, the handloom sector has shown positive growth and the income level of weavers has improved.

In the cluster approach, efforts have been made to cover 300 to 25000 handlooms through different cluster sizes for their integrated and holistic development. The yarn supply under Mill Gate Price Scheme (MGPS) has also increased. Aggressive marketing initiative through marketing events has helped weavers and their cooperative societies to understand the market trend and consumer choice, besides selling products directly to the customers.

Micro Small and Medium Enterprises (MSME) Sector

The Ministry of Micro, Small and Medium Enterprises (MSME) performs its tasks of formulation of policies and implementation of programmes mainly through Office of the Development Commissioner (MSME), National Small Industries Corporation Ltd. (NSIC), Khadi and Village Industries Commission (KVIC) and Coir Board. **The Micro, Small and Medium Enterprises Developments Organisation (Earlier known as Small Industries Development Organization) set up in 1954, functions as an apex body for sustained and organized growth of micro, small and medium enterprises.**

Scheme

A New scheme titled Prime Ministers Employment Generation Programme (PMEG) was launched in 2008-09 with the merging of the erstwhile Prime Minister Rojgar Yojana (PMRY) and Rural Employment Generation Programme (REGP) schemes of this Ministry with a total plan outlay of Rs. 4735 crores including Rs. 250 crore for backward and forward linkages. The Scheme was envisaged to generate (Rs. 37.37 lakh additional employment opportunities during the terminal four years of XI Plan. The scheme is being continued during XII Plan with a outlay of Rs. 8060 crore including Rs. 260 crore under-backward and forward linkage.

Main Objectives

The main objectives of the PMEGP are:

- To generate employment opportunities in rural as well as urban areas;
- To bring together widely dispersed traditional artisans / rural and urban unemployed youth and give them self-employment opportunities to the extent possible, at their place;
- To provide continuous and sustainable employment to a large segment of traditional and prospective artisans and rural & urban unemployed youth; and
- To increase the wage earning capacity of artisans.

Credit Guarantee Fund Scheme for Micro and Small Enterprises

The Government launched the Credit Guarantee Fund Scheme for Small Industries (now renamed as Credit Guarantee fund Scheme for Micro and Small Enterprises) in August 2000 with the objective of making available credit to MSEs, particularly micro enterprises for loans up to 100 lakhs without collateral third party guarantees. The scheme is being operated by the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) set up jointly by the Government of India (SJDBI).

The Scheme covers collateral free credit facility (term loan and/or working capital) extended by eligible member lending institutions to new and existing micro and small enterprises up to 100 lakh per borrowing unit. The guarantee cover provided is up to 75 per cent of the credit facility up to Rs. 50 lakh (85 per cent for loans up to Rs. 5 lakh provided to micro enterprises, 80 per cent for MSEs owned/operated by women and all loans to NER) with a uniform guarantee at 50 per cent of the credit exposure above Rs. 50 lakh and upto Rs. 100 lakh.

Khadi and Village Industries Commission

Khadi and Village Industries Commission (KVIC) established under the Khadi and Village Industries Commission Act, 1956, is a statutory organization under the aegis of the Ministry of MSME, engaged in promoting and developing Khadi and village industries for providing employment opportunities in the rural areas, thereby strengthening the rural economy. KVIC has been identified as one of the major organisations in the decentralised sector for generating sustainable non-farm employment opportunities in rural areas at a low per capita investment. It undertakes activities like skill improvement, transfer of technology; research and development; marketing etc., and helps in generating employment/self-employment opportunities in rural areas.

The main objectives of KVIC include:

- (i) **The social objective of providing employment in rural areas;**
- (ii) **The economic objective of producing saleable articles; and**
- (iii) **The wider objective of creating self-reliance amongst people and building up a strong rural community spirit,**

Delegation of enhanced powers to CPSEs

Maharatna Scheme

The Government has introduced the Maharatna scheme in February, 2010 with the objective to delegate enhanced powers to the Boards of identified large sizes Navratna CPSEs so as to facilitate expansion of their operations, both in domestic as well as global markets. The Maharatna CPSEs in addition to having Navratna powers, have been delegated additional powers in the area of investment in joint ventures /subsidiaries and human resources development. The Government has conferred Maharatna status to 7 CPSEs namely, (i) **Bharat Heavy Electricals, (ii) Coal India Ltd. (iii) GAIL India Ltd. (iv) Indian Oil Corporation Limited, (v) NTPC Limited, (vi) Oil & Natural Gas Corporation Limited and (vii) Steel Authority of India Limited.**

Navratna Scheme

The Government had introduced the Navratna scheme in 1997 in order to identify public sector companies that have comparative advantages and support them in their drive to become global giants.

Presently there are 16 Navratna CPSEs viz., (i) Bharat Electronics Limited, (ii) Bharat Petroleum Corporation Limited, (iii) Engineers india Limited, (iv) Hindustan Aeronautics Limited (v) Hindustan Petroleum Corporation Limited, (vi) Mahanagar Telephone Nigam Limited, (vii) National Aluminium company Limited (viii) National Building Construction Limited (ix) Neyveli Lignite Corporation Ltd. (x) NMDC Limited (xi) Oil India Ltd. (xii) Power Finance Corporation Limited, (xiii) Power Grid Corporation of India Limited (xiv) Rashtriya Ispat Nigam Limited (xv) Rural Electrification Corporation of India Limited and (Xvi) Shipping Corporation of India Limited. (xvii) Container Corporation of India Ltd.

Guidelines on Corporate Social Responsibility (CSR) and sustainability for Central Public Sector Enterprises

All the companies, including the Central Public Sector Enterprises (CPSEs) are governed by the provisions of Section - 135 of the Companies Act, 2013 which deals with Corporate Social Responsibility (CSR), and the CSR Rules notified there under by the Ministry of Corporate Affairs which are effective from 1.4.2014. Schedule VII of the Companies Act, 2013 lists the possible activities which can be considered by companies for undertaking their CSR activities/projects.

The companies which meet the eligibility criteria mentioned in Section -135 of Companies Act, 2013 are mandated to spend, in every financial year, at least 2 per cent of the average net profit of the three preceding financial years, in pursuance of their CSR policy. Under the extent CSR Rules of Ministry of Corporate Affairs, all companies including CPSEs are mandated to spend the entire amount allocated under CSR during the year of allocation itself and if a company fails to spend such amount, the Board of the company shall, in its report, specify the reasons for not spending the amount during the same year.

National Fertilizers Limited (NFL)

National Fertilizers Limited (NFL) was incorporated on 23 August 1974 for setting up two nitrogenous plants, at Bathinda (Punjab) and Panipat (Haryana), each having urea production capacity of 5.11 lakh MT per annum. Consequent upon the reorganization of the FCI, the Nangal Unit (including Nangal Expansion Project) of FCI was also transferred to NFL in 1978.

Index of Industrial Production (IIP)

In the compilation of IIP (base 2004-05=100) in over all weight of 1000, chemical and chemical products (industry division 24 of NIC 2004) contribute 100.50. The General Index for the month of March 2014 stands at 193.2, which is 0.5 per cent lower as compared to the level in the month of March 2013. The cumulative growth for the period April-march 2013-14 over the corresponding period of the previous year stands at (-) 0.1 per cent IIP for the Manufacturing sector for the month of March 2014 stands at 204.8, which is 1.2 per cent lower as compared to the level in the month of March 2011. The IIP for the Chemicals and Chemical products for the month of March 2014 stands at 134.0, which is 2.4 per cent higher as compared to the level in the month of March 2013. The overall growth in manufacturing sector during April-March 2013-14 over the corresponding period of 2012-13 has been (-) 0.8 per cent, as against the growth of 8.9 per cent in respect of Chemical and Chemical products.

Important Features of National Mineral Policy, 2008

As a sequel to the recommendations of the **Hoda Committee** which was constituted by the Planning Commission to review the National Mineral Policy, a New National Mineral Policy, 2008 was approved by the Government. The policy advocates:

- (i) use of state-of-the-art technology for exploration;
- (ii) zero waste mining;
- (iii) development of capital market structures to attract risk investment into survey and prospecting;
- (iv) transparency in allocation of concessions;
- (v) auction of ore bodies prospected at public expense
- (vi) independent Mining Administrative Tribunal;
- (vii) a framework of sustainable development to take care of biodiversity issues etc.

A draft Bill to replace the existing MMDR Act is under consideration of the Government and consultation process with Stakeholders including States Government and Industry is under way.

MINERAL RESOURCES IN INDIA

BAUXITE

The Total Resources of Bauxite as per United Nations Framework classification (UNFC) in the country are placed at 3,290 million tonnes as on 1.4.2005. These resources include 899 million tonnes Reserves. Odisha, Andhra Pradesh, Gujarat, Chhattisgarh, Madhya Pradesh, Jharkhand and Maharashtra are the principal States where bauxite deposits are located. **Major deposits are concentrated in the East Coast Bauxite deposits of Odisha and Andhra Pradesh.**

CHROMITE

The total resources of Chromite in the country as per UNFC System as on 1.4.2005 are estimated at 213 million tonnes, comprising 66 million tonnes reserves (31 per cent) and 147 million tonnes of remaining resources (69 per cent). **In India 95 per cent resources are located in Odisha, mostly in the Sukinda valley in Cuttack and Jaipur districts** and the remaining 5 per cent resources distributed in Manipur and Karnataka and meagre quantities in the states of Jharkhand, Maharashtra, Tamil Nadu and Andhra Pradesh.

COPPER

The total resources of copper ore as on 1 April 2005 as per UNFC system are (placed at 1.39 billion tonnes with a metal content of 11,418 thousand tonnes). **Rajasthan is credited with the largest resources of copper** ore at 668.5 million tonnes with a metal content of 3942 thousand tonnes followed by Madhya Pradesh and Jharkhand. Copper resources are also established in Andhra Pradesh, Gujarat, Haryana, Karnataka, Maharashtra, Meghalaya, Odisha, Sikkim, Tamil Nadu, Uttarakhand and West Bengal.

GOLD

There are three important gold fields in the country, namely, **Kolar Gold Field, Kolar district and Hutti Gold Field in Raichur district (both in Karnataka) and Ramgiri Gold Field in Anantpur district (Andhra Pradesh)**. As per UNFC as on 1.4.2005 the total resources of gold ore (primary) in the country were estimated at 390.29 million tonnes with a metal content of 490.81 tonnes. Out of these, 19 million tonnes with a metal content of 85.12 tonnes.

IRON ORE

Hematite and magnetite are the most important iron ores in India. About 60 per cent hematite ore deposits are found in the Eastern sector and about 87 per cent magnetite deposits occur in Southern sector, specially in Karnataka. The total resources of iron ore as per UNFC are placed at 25,249 million tonnes as on 1.4.2005. The resources of very high grade ore are limited and are restricted mainly in Bailadila sector of Chhattisgarh and to a lesser extent in Bellary-Hospet area of Karnataka and Barajamda sector in Jharkhand and Orissa. Iron ore (magnetite) resources are placed at 10,619 million tonnes of which only 59 million tonnes constitute reserves located mainly in Goa, Rajasthan and Jharkhand.

MANGANESE

The total resources of manganese ore as per UNFC system as on 1.4.2005 are placed at 379 million tonnes. Out of these, 138 million tonnes are categorized as reserves and the balance 240 million tonnes are in the remaining resources. **Main deposits fall in Orissa, followed by Karnataka, Madhya Pradesh, Maharashtra, Goa and Andhra Pradesh,** Minor occurrences of manganese are in Rajasthan, Gujarat, Jharkhand and West Bengal.

DIAMOND

Diamond deposits occur in three types of geological settings such as **kimberlite pipes, conglomerate beds and alluvial gravels. The main diamond bearing areas in India are Panna belt in Madhya Pradesh, Munimadugu-Banganapallic conglomerate in Kurnool district, Wajrakarur kimberlite pipe in Anantapur district,** the gravels of Krishna river basin in Andhra Pradesh and damondiferous kimberlite in Raipur, Bastar and Raigarh districts in Chhattisgarh. Reserves have been estimated in Panna belt, Madhya Pradesh; Krishna Gravels in Andhra Pradesh; and in Raipur district, Chhattisgarh. As per the UNFC system as on 1.4.2005 diamonds are placed at around 4582 thousand carats, out of which about 1206 thousand carats are under reserve category and remaining 3376 thousand carats are under remaining Resources category.

GRAPHITE

As per the UNFC the total resources of graphite in the country as on 1.4.2005 are placed at about 168.77 million tonnes comprising 10.75 million tonnes in the reserve category and remaining 158.02 million tonnes under resources category. **Out of total resources, Arunachal Pradesh accounts 43 per cent followed by Jammu and Kashmir (37 per cent), Jharkhand (6 per cent), Tamil Nadu (5 per cent) and Odisha (3 per cent).** However, in term of reserves, Tamil Nadu has major share of about 37 per cent.

MICA

Important mica bearing pegmatite occurs in Andhra Pradesh, Jharkhand, Maharashtra, Bihar and Rajasthan. The total resources of Mica in the country as per UNFC system as on 1.4.2005 are estimated at 393855 tonnes, out of which only 68570 tonnes are placed under 'Reserves' category. Remaining resources are placed at 325285 tonnes. **Rajasthan accounts for about 51 per cent resources, followed by Andhra Pradesh Maharashtra and Bihar.**

Hindustan Copper Limited (HCL)

(HCL), a public sector undertaking under the administrative control of the Ministry of Mines, was incorporated on 9th November, 1967 under the Companies Act, 1956. It was established as a government of India enterprise to take over all plants, projects, schemes and studies pertaining to the exploration and exploitation of copper deposits, including smelting and refining from National Mineral Development Corporation Ltd.

Bharat Gold Mines Limited

Bharat Gold Mines Limited having registered office at Kolar Gold Fields, was incorporated as a public sector company under the Ministry of Mines, on 1st April 1972. It was engaged in mining and production of gold from its captive mines.

Bharat Aluminium Company Limited (BALCO)

Bharat Aluminium Company Limited (BALCO) was incorporated on 27th November, 1965 as a Central Public Sector Undertaking with an integrated Alumina/Aluminium Complex and a 270 MW Captive Power Plant at Korba presently in Chhattisgarh.

National Institute of Miners Health (NIMH)

National Institute of Miners Health (NIMH), Nagpur was established for promotion of occupational health and hygiene in mining and mineral based industries and for development of trained manpower in these fields. It was registered as Society in the State of Karnataka.

Jawaharlal Nehru Aluminium Research Development and Design Center (JNARDDC)

Jawaharlal Nehru Aluminium Research Development and Design Centre, Nagpur is a "Centre of Excellence" set up in 1989 and became fully functional since 1996. The Centre was conceived as the major R and D support system for the emerging modern aluminium industry in India.

CHAPTER TWENTY | LAW AND JUSTICE

THE Constitution of India guarantees, besides other rights, protection of life and personal liberty and provides adequate safeguards against the arbitrary deprivation thereof by the State. Adoption of a Constitution by India in 1950 did not disturb continuity of existing laws and unified structure of courts. Unity and uniformity of the judicial structure were preserved by placing such areas of law as criminal law and procedure, Civil Procedure, Will, Succession, Contracts including special form of Contracts, but not including contracts relating to agricultural land, registration of deeds and documents, evidence, etc. in the Concurrent List.

Source of Law: The main source of law in India is the Constitution, statutes (legislation), customary law and case law. **Statutes are enacted by Parliament, state legislatures and union territory legislatures.** Besides, there is also a vast body of laws known as subordinate legislation in the form of rules, regulations as well as bye-laws made by central/state governments and local authorities like municipal corporations, municipalities, gram panchayats and other local bodies. This **subordinate legislation is made under the authority conferred or delegated either by Parliament or state or union territory legislatures concerned.** Judicial decisions of superior courts like Supreme Court and High Courts are important source of law. Decisions of the Supreme Court are binding on all courts within the territory of India. Local customs and conventions which are not against statute, morality, etc. are also recognised and taken into account by courts while administering justice in certain spheres.



Enactment of Law: The Parliament is competent to make laws on matters enumerated in the Union List. State legislatures are competent to make laws on matters enumerated in the State List. Parliament alone has power to make laws on matters not included in the State List or the Concurrent List. On matters enumerated in the Concurrent List, laws can be made by both Parliament and state legislature. But in the event of repugnancy, law made by Parliament shall prevail over law made by State Legislature, to the extent of repugnancy, be void unless the latter law having been reserved for consideration of President, has received his assent and in that event shall prevail in that State.

Judiciary: At the apex of the entire judicial system exists the Supreme Court of India with a High Court for each state or group of states. Under the High Courts lies a hierarchy of subordinate courts. Panchayat Courts also function in some states under various names like **Nyaya Panchayat, Panchayat Adalat, Gram Nyayalayas**, etc., to decide civil and criminal disputes of petty and local nature. Different State laws provide for jurisdiction of these courts. Each State is divided into judicial districts presided over by a district and sessions judge, who is the principal civil court of original jurisdiction and can try all offences including those punishable with death. He is highest judicial authority in a district. Below him, there are Courts of civil jurisdiction, known in different States as Munsifs, Sub-Judges, civil judges and the like. Similarly, criminal courts comprise chief judicial magistrate and judicial magistrate of first and second class.

Supreme Court: The Supreme Court of India at present comprises the Chief Justice and 30 other Judges appointed by the President of India. Supreme Court Judges retire on attaining the age of 65 years. In order to be appointed as a Judge of the Supreme Court, a person must be a citizen of India and must have been, for at least five years, a Judge of a High Court or of two or more such Courts in succession, or an Advocate of a High Court or of two or more such Courts in succession for at least 10 years, or he must be, in the opinion of the President, a distinguished jurist. Provisions exist for the appointment of a Judge of a High Court as an Ad-hoc Judge of the Supreme Court and for retired Judges of the Supreme Court or High Courts to sit and act as Judges of that Court.

The **Constitution seeks to ensure the independence of Supreme Court Judges in various ways:**

- (i) A Judge of the Supreme Court cannot be removed from office except by an order of the President passed after an address in each House of Parliament supported by a majority of the total membership of that House and by a majority of not less than two-thirds of members present and voting, and presented to the President in the same Session for such removal on the ground of proved misbehaviour or incapacity.
- (ii) A person who has been a Judge of the Supreme Court is debarred from practising in any court of law or before any other authority in India. The proceedings of the Supreme Court are **conducted in English only**.
- (iii) **Supreme Court Rules, 1966 are framed under Article 145** of the Constitution to regulate the practice and procedure of the Supreme Court.

The Supreme Court of India has **original jurisdiction** in any dispute arising:

- (a) Between the Government of India and one or more states,
- (b) Between the Government of India and any state or states on the one side and one or more states on the other, or
- (c) Between two or more states.

An appeal shall lie to the Supreme Court from any judgement, decree or final order of a High Court in the territory of India, whether in a civil, criminal or other proceedings.

High Courts: High Court stands at the head of the State's Judicial Administration. There are 24 High Courts in the country, three having jurisdiction over more than one state. Among the Union Territories, **Delhi alone has a High Court of its own**. Each High Court comprises a Chief Justice and such other Judges as the President may, from time to time appoint. The Chief Justice of a High Court is appointed by the President in consultation with the Chief Justice of India and the Governor of the state. The procedure for appointing of the High Court judges is the same except that the recommendation for the appointment of Judges in the High Court is initiated by the Chief Justice of the High Court concerned. They hold office up to **62 years of age**.

To be eligible for appointment as a judge, one must be a citizen of India and should have held a **judicial office in India for 10 years or must have practised as an advocate of a High Court or two or more such courts in succession for a similar period**. Each High Court has power to issue to any person or authority and Government within its jurisdiction, direction, orders or writs, including writs which are in the nature of habeas corpus, mandamus, prohibition, quo warranto and certiorari, for enforcement of Fundamental Rights and for any other purpose. This power may also be exercised by any high court exercising jurisdiction in relation to territories within which the cause of action, wholly or in part arises for exercise of such power, even if the seat of such Government or authority or residence of such person is not within those territories.

Jurisdiction and Seat of High Courts: Each High Court has powers of superintendence over all courts and Tribunals within its jurisdiction. It can call for returns from such courts, make and issue general rules and prescribed forms to regulate their practices and proceedings and determine the manner and form in which book entries and accounts shall be kept. This table gives the seat and territorial jurisdiction of the High Courts.

Name of High Courts, Their Principal Seats, Benches and their Jurisdiction

S.No.	High Court	Principal Seat	Jurisdiction	Permanent Bench and Date from which the Bench began functioning
1.	Allahabad	Allahabad	Uttar Pradesh	Lucknow (01.07.1948)
2.	Andhra Pradesh	Hyderabad	Andhra Pradesh	-
3.	Mumbai	Mumbai	Maharashtra, Goa; Daman and Diu Dadra and Nagar Haveli	Nagpur (01.05.1960) Panji (01.07.1948) Aurangabad (27.08.1984)
4.	Calcutta	Kolkata	West Bengal and Andaman and Nicobar Islands	Circuit Bench Jalpaiguri (yet to begin functioning)
5.	Chattisgarh	Bilaspur	Chattisgarh	-
6.	Delhi	New Delhi	NCT of Delhi	-
7.	Gauhati	Guwahati	Assam, Nagaland, Mizoram and Arunachal Pradesh	Kohima (10.02.1990) Aizawl (05.07.1990) Itanagar (12.08.2000)
8.	Gujarat	Sola (Ahmedabad)	Gujarat	-
9.	Himachal Pradesh	Shimla	Himachal Pradesh	-
10.	Jammu and Kashmir	Jammu and Srinagar	Jammu and Kashmir	-
11.	Jharkhand	Ranchi	Jharkand	-
12.	Karnataka	Bengaluru	Karnataka	Circuit Benches a Dharwar (07.02.2008) Gulbarga (07.02.2008)
13.	Kerala	Kochi	Kerala and Lakshadwee Is.	-
14.	Madhya Pradesh	Jabalpur	Madhya Pradesh	Gwalior (01.11.1956) Indore (01.11.1956)
15.	Madras	Chennai	Tamil Nadu and Puducherry	Madurai (24.07.2004)
16.	Orissa	Cuttack	Orissa	-
17.	Patna	Panta	Bihar	-

18.	Punjab and Haryana	Chandigarh	Punjab, Haryana and Chandigarh	Chandigarh
19.	Rajasthan	Jodhpur	Rajasthan	Jaipur (31.01.1977)
20.	Sikkim	Gangtok	Sikkim	-
21.	Uttarakhand	Nainital	Uttarakhand	Nainital
22.	Manipur	Imphal	Manipur	-
23.	Meghalaya	Shillong	Meghalaya	-
24.	Tripura	Agartala	Tripura	-

Subordinate Courts: The structure and functions of subordinate courts are more or less uniform throughout the country. Designations of courts connote their functions. These courts deal with all disputes of civil or criminal nature as per the powers conferred on them. These courts follow two important codes prescribing procedures, i.e., the Code of **Civil Procedure, 1908** and the **Code of Criminal Procedure, 1973** and further strengthened by state level amendments.

As per direction of **Supreme Court in WP (Civil) 1022/1989** in the All India Judges Association case, a uniform designation has been brought about in the subordinate judiciary's judicial officers all over the country, viz., District or Additional District Judge, Civil Judge (Senior Division) and Civil Judge (Junior Division) on the civil side and on criminal side, Sessions Judge, Additional Sessions Judge, Chief Judicial Magistrate and Judicial Magistrate, etc., as laid down in the Cr.P.C. Under **Article 235 of the Constitution of India**, the administrative control over the members of subordinate judicial service vests with the concerned High Court. Further in exercise of powers conferred under provision to **Article 309 read with Articles 233 and 234 of the Constitution, the State Government shall frame rules and regulations in consultation with the High Court exercising jurisdiction in relation to such State**. The members of the State Judicial Services are governed by these rules and regulations.

The following initiatives/schemes have been undertaken by the Department of Justice for facilitating improvement in administration of justice delivery system.

National Mission for Justice Delivery and Legal Reforms: The National Mission for Justice Delivery and Legal Reforms was set up in **August, 2011** to **achieve twin goals** of

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| <ul style="list-style-type: none"> (i) Increasing access by reducing delays and arrears; and (ii) Enhancing accountability through structural changes and by setting performance standards and capacities. |
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The Mission is pursuing **five strategic initiatives**:

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| <ul style="list-style-type: none"> (i) Outlining policy and legislative changes (ii) Re-engineering of procedures and court processes (iii) Focussing on human resource development, (iv) Leveraging information and communication technology and tools for better justice delivery and (v) Improving Infrastructure. |
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The Mission has adopted a coordinated approach for **phased liquidation of arrears and pendency in judicial administration** which, **inter-alia, involve better infrastructure for courts including computerisation, increase in strength of subordinate judiciary, policy and legislative measures in the areas prone to excessive litigation, re-engineering of court procedure for quick disposal of cases.**

Judicial Standards and Accountability Bill is being considered by the Parliament. Constitution Amendment Bill for raising the retirement age of High Court Judges is also before the Parliament. A comprehensive proposal has been formulated for constitution of All India Judicial Service (AIJS). All states have formulated their litigation policies with a view to reduce the governmental litigation. State governments have been requested to make an assessment of the impact of the state litigation policies on controlling proliferation of litigation by state agencies. An Inter-Ministerial Group (IMG) constituted to suggest necessary amendments to the Negotiable Instruments (NI) Act along with other policy and administrative measures to check increasing litigation relating to cheque bounce cases, has suggested a number of measures including procedural and legislative changes to reduce number of cheque bounce cases. These measures are being further pursued by Department of financial Services and Reserve Bank of India.

An important aspect of the judicial reforms relates to re-engineering court procedures and court processes for early disposal of cases. A comprehensive scheme of **National Court Management Systems (NCMS)** has been formulated and notified by the Supreme Court of India. Under the NCMS, a **National Framework of Court Excellence (NFCE)** has been prepared, which shall set measurable standards of performance for courts addressing the issues of quality, responsiveness and timeliness. A number of suggestions are being received by the National Mission for speedy disposal of court cases. One of the suggestions relates to doing away with the payment of 'Process Fee' to curtail procedural delays. It has been suggested that if needed 'Court Fee' could be suitably modified to include such expenses.

1. **Pendency Reduction Drive:** A pendency reduction drive was launched from **July 2011 to December, 2011**. Chief Justices of the High Courts were requested to initiate a campaign mode approach towards clearing long pending cases and cases relating to marginalized sections of the society.
2. **Gram Nyayalayas:** The Gram Nyayalayas Act, 2008 was enacted for establishment of Gram Nyayalayas at the intermediate panchayat level with a view to providing access to justice to citizens at their doorsteps. The Act has come into force from October, 2009. In terms of Section 3 (1) of the Act, it is for the state governments to establish Gram Nyayalayas in consultation with the respective high courts.
3. **Centrally sponsored scheme for the development of infrastructure facilities for the judiciary:** With a view to enhance the resources of the state governments, the government has increased the central share by revising the funding pattern from 50:50 to 75:25 (for states other than north eastern states) under modified centrally sponsored scheme for development of infrastructure facilities for the judiciary from the year 2011-12 onwards.
4. **Computerisation of Courts : eCourts Integrated Mission Mode Project:** The eCourts Integrated Mission Mode Project (eCourts IMMP) is one of the National eGovernance Plan (NeGP) projects, which is being implemented for the Information and Communication Technology (ICT) enablement/computerisation of the Supreme Court, high courts and district and subordinate courts in the country. To expedite the project implementation, the institutional structure of the project was strengthened in 2010. To provide strategic direction to the project an Empowered Committee (EC) was constituted along with a dedicated Project Monitoring Unit (PMU).

Another significant outcome of the eCourts Project would be the establishment of **National Judicial Data Grid (NJDG)**. The NJDG will make available information on real time basis on the pendency of cases in each court, along with their reasons. By doing so, it will facilitate better management of court performance and facilitate better resource management.

5. **Thirteenth Finance Commission Grant:** With the objective of improving justice delivery, Thirteenth Finance Commission (FC-XIII) has recommended a grant of 5000 crore over its award period 2010-15.

Guidelines for release and utilisation of grant-in-aid for improvement in justice delivery system as recommended by the FC-XIII have been finalised and circulated to the state governments.

6. **Access to justice for marginalised people:** The Department of Justice, implementing a project on "**Access to Justice for Marginalized people**" with UNDP support:

The first phase of the Project (2009- 2012) has focused on both the demand side as well as supply side of justice, and has in this endeavour promoted interventions at both the grassroots and at the policy level, across a range of stakeholders, and primarily justice delivery stakeholders. The first phase covered 7 states of Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Uttar Pradesh, Odisha and Rajasthan. Under the project, activities were conducted in 87 districts in collaboration with 25 local and national partners.

A large variety of rights and entitlements are being covered under the project. These include rights against domestic violence and other women's rights including their right to property and land, rights of Scheduled Cates (SC) and Scheduled Tribes (STs), land rights, forest dwellers rights, Rights to Information (RTI) and rights under the existing criminal laws.

Key milestones achieved are:

- (i) The project has built greater synergy between a range of key actors, both nationally and at state levels to better coordinate efforts in supporting the legal needs of marginalised communities;
- (ii) Convergence with the Ministry of Human Resource Development resulted in legal literacy in the continuing adult literacy programm under the Sakshar Bharat Scheme. Information, education and communication materials (IEC) (12 booklets, 10 motivational songs and 1 short film on legal aid) on rights and entitlements of the marginalised people were prepared;
- (iii) To empower the adolescent girls by making them aware of their rights and various laws related to women and child, a total of 236 Sabla girls (identified under a scheme of the Ministry of Women and Child Development) from Madhya Pradesh and Rajasthan were trained as paralegals.;
- (iv) Legal awareness of 20,00,000 people belonging to marginalized communities enhanced; to assist marginalised communities, over 7000 paralegals were identified and trained. The paralegals were drawn from diverse backgrounds including women Self Help Groups, Muslim women, women living in urban slums, community based organisations and NGO.;
- (v) 300 lawyers sensitized and trained through a series of capacity development programmes;
- (vi) A short film developed on "legal protection against domestic violence in India";
- (vii) A first-ever study conducted in the country on legal aid clinics run by law schools;
- (viii) Needs assessment study of select state legal services authorities mandated to provide legal aid was conducted with a view to influence policy;
- (ix) In coordination with National Mission for Empowerment of Women, an action research was conducted on access to justice by women in 5 districts in the north eastern states to which the Sixth Schedule or Article 371A, B and C of the Constitution of India apply;
- (x) A training manual prepared for training Judges on laws and issues related to marginalised communities;
- (xi) A module prepared for training Judges on anti-human trafficking;
- (xii) with the objective of studying good practices on legal aid and legal empowerment field visits were facilitated to 4 (four) countries, namely, Sierra Leone, Indonesia, South Africa and Malawi.
- (xiii) with a view to exchange information and share good practices on legal aid and legal empowerment, an international conference was organised in Delhi in November, 2012, which was attended by 200 participants including 40 participants from 21 countries;

7. **Access to Justice Project:** The second phase of the project will continue to focus both on the demand and supply side. In terms of geographical coverage, the project will focus efforts in 1-2 select districts in the 8 states of Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan and Uttar

Pradesh for better impact. The project will try to ensure sustainability of results achieved in the previous phase. Best practices on legal aid, legal empowerment and improved justice delivery from across the globe, will be shared with a view to adapt them to the Indian context. The second phase will witness special focus on developing pilots on legal aid and legal empowerment which are scalable and replicable within costs that can be afforded by the government aided institutions, particularly the legal services authorities.

National Commission to Review the Working of Constitution: The National Commission to Review the Working of the Constitution was set up in 2000. The terms of reference stated that the Commission shall examine, in the light of the experience of the past 50 years, as to how best the Constitution can respond to the changing needs of efficient, smooth and effective system of governance and socio-economic development of modern India within the framework of Parliamentary democracy, and to recommend changes, if any, that are required in the provisions of the Constitution without interfering with its basic structure or features.

Income-Tax Appellate Tribunal: Section 252 of the Income-tax Act, 1961 provides that the central government shall constitute an Appellate Tribunal consisting of as many judicial members and accountant members as it thinks fit, to exercise the powers and discharge the functions conferred on the Appellate Tribunal by the said Act. The Income Tax Act, 1961 further provides that a Judicial Member of the Tribunal shall be a person, who has for at least 10 years held a Judicial Office in the territory of India or has been a Member of the Central Legal Service and has held a legal post in Grade-II of that Service or any equivalent or higher post for at least three years or who has been an Advocate for at least ten years. An Accountant Member shall be a person, who has for at least 10 years been in practice of Accountancy as Chartered Accountant under the Chartered Accountants Act, 1949 or as a Registered Accountant under any law formerly in force or partly as Registered Accountant and partly as a Chartered Accountant, or who has been a Member of the Indian Income Tax Service, Group A and has held the post of (Additional) Commissioner of Income-tax or any equivalent or higher post for at least three years.

Appellate Tribunal for Foreign Exchange: The Appellate Tribunal for Foreign Exchange was established in June 2000 under section 18 of Foreign Exchange Management Act (FEMA), 1999. Under section 19 FEMA, the Central Government or any person aggrieved by an order made by Special Director (Appeals), or made by an Adjudicating Authority other than referred to in sub-Section (i) of Section 17, may prefer an appeal to the Appellate Tribunal that may be filed within 45 days from the date of receiving the order by the aggrieved person or the Central Government. Section 20 of FEMA provides that the Appellate Tribunal shall consist of a Chairperson and such number of members as the Central Government may deem fit.

The International Centre for Alternative Dispute Resolution: The International Centre for Alternative Dispute Resolution (ICADR) was registered under the Societies Act, 1860 on 31 May 1995. It is an autonomous organization working under the aegis of the Ministry of Law and Justice, Government of India with its headquarters at New Delhi and Regional Centres at Hyderabad and Bangalore. It has been established to promote, popularize and propagate alternative dispute resolution methods to facilitate earlier resolution of disputes and to reduce the burden of arrears in courts.

ENFORCEMENT AGENCIES

Police

The police force in the country is entrusted with the responsibility of maintenance of public order and prevention and detection of crimes. Public order and police being state subjects under the Constitution, police is maintained and controlled by States.

The police force in a state is headed by the Director General of Police/Inspector General of Police. State is divided into convenient territorial divisions called ranges and each police range is under the administrative control of a Deputy Inspector General of Police. A number of districts constitute the range. District police is further sub-

divided into police divisions, circles and police-stations. Besides the civil police, states also maintain their own armed police and have separate intelligence Branches, crime branches, etc.

Police set up in big cities like Delhi, Kolkata, Mumbai, Chennai, Bengaluru, Hyderabad, Ahmedabad, Nagpur, Pune, etc. is directly under a Commissioner of Police who enjoys magisterial powers. All senior police posts in various states are manned by the Indian Police Service (IPS) cadres, recruitment to which is made on All-India basis.

The central government maintains Central Police forces, Intelligence Bureau (IB), Central Bureau of Investigation (CBI), Institutions for training of police officers and forensic science institutions to assist the states in gathering intelligence, in maintaining law and order, in investigating special crime cases and in providing training to the senior police officers of the state governments.

Indo-Tibetan Border Police: The Indo-Tibetan Border Police was raised on **October 24, 1962** in the wake of Chinese aggression for re-organizing the frontier intelligence and security setup along the Indo-Tibetan border covering 2115 kms from Karakoram pass to Lipulekh pass. The force was restructured in 1978 to 09 service battalions with four specialists battalions and two training centres. With additional tasks entrusted to ITBP from time to time on border guarding, counter insurgency and Internal Security Roles, the number of ITBP battalions increased gradually and ITBP presently has 52 service battalions, four specialists battalions and 17 training Centres and 02 logistic Centres. Out of 52 service battalions, two battalions have been converted in to DM battalions and transferred to NDRF. ITBP is basically a mountain trained force and most of the officers and men are professionally trained mountaineers and skiers.

Border Security Force: International borders of India with Pakistan both east and west were being manned by the respective state police forces till Indo-Pak war in September 1965. Certain inherent shortcomings of this arrangement came to light during the war and it was decided by the government of India to have one single force under the Union of India for guarding the international borders of India with Pakistan.

Based on above premise, **BSF came into existence in December 1965** by amalgamation of various state police battalions into B.S.F. The force was thus raised with a meager strength of 25 battalions as against the present size of 175 Battalions. Presently, it is manning 6623 kms of international borders with Pakistan and Bangladesh. Beside this, BSF is also a crucial role in various internal security duties.

BSF's role during peace time is as:

- (i) promote a sense of security among the people living in the border areas;
- (ii) To prevent trans-border crimes, unauthorized entry into or exit from the territory of India;
- (iii) To prevent smuggling and any other illegal activities on the Border;
- (iv) anti-infiltration duties; and
- (v) To collect trans-border intelligence.

BSF's role during war time is as:

- (i) Holding ground in assigned sectors;
- (ii) Limited aggressive action against central armed police or irregular Forces of the enemy
- (iii) Maintenance of law and order in enemy territory administered under the army's control;
- (iv) Guarding of prisoners of war camps;
- (v) Acting as guides to the army in border areas;
- (vi) Assistance in control of refugees;
- (vii) Provision of sectors; and
- (viii) Performing special tasks connected with intelligence including raids.

Assam Rifles: The Assam Rifles raised as Catchar Levy in 1835 is the oldest Central Para Military Force in India. The force was raised primarily to guard the alluvial plains of Assam from the wild and unruly tribes inhabiting the surrounding hill tracts. This was the earliest embodied unit of what eventually developed into the Assam Rifles.

Gradually more such units were raised and employed for establishing posts in the interior and thus acted as the strong arm of the civil administration in extending the authority of the Britishers. The Force also helped in opening up these inaccessible and isolated areas and in undertaking development activities; earning many accolades from the administration. The Assam Rifles' contribution towards assimilation of the people of the north-east into the national mainstream is truly monumental. Their long association with the region reflects in the force being fondly called "The Sentinel of the North-East" and "Friends of the hill People" security in the north-eastern region and guarding the Indo-Myanmar border. The forces have 46 battalions and have a dual role of maintaining internal security in the north-eastern region and guarding the Indo-Myanmar border.

National Security Guard: Terrorism, both national and international raised its head in the west during the seventies. It manifested in many forms including hijacking of aircraft, taking of hostages, assassination of dignitaries and others. The normal law and order machinery and the defence forces of the West were found wanting to deal with this menace. Specially equipped and trained forces like SAS of UK, Delta Force of USA and GSG-9 of West Germany were raised abroad. Accordingly, NSG was raised in October 1985 as a Federal Contingency Force under the MHA. It consists of selected and highly motivated personnel from the army as well as the central armed police. 53 per cent of the personnel are drawn from the army while the central armed police like BSF, CRPF and ITBP contribute 47 per cent. NSG has a glorious heritage and is held in high esteem by the nation.

Central Reserve Police Force: The Central Reserve Police Force was formed 71 years ago in July, 1939 at **Neemuch** as the **Crown Representative's Police**. After independence, it was renamed as the Central Reserve Police Force (CRPF) and Late Sardar Vallabh Bhai Patel, the then Home Minister had visualized a multi dimensional role for it. The CRPF has innumerable achievements to its credit. As a tribute to the saga of our brave men, 9th April is now befittingly celebrated as "Valour Day" in the Force.

The CRPF has also been deployed internationally at Kosovo—, Haiti and Sri Lanka. From a single battalion in 1939 the Force has now grown to four zones, 20 Adm. Sector, 2 Ops Sector, 36 Adm Ranges, 7 Ops Ranges, 228 Bns, 41 group centers, 15 training institutions and 4 composite Hhospitals. It is the only Central Armed Police Force in the country which has 3 Mahila Battalions. It presently has 10 Cobra units, a specially trained force to fight the naxals. The Cobra battalions have been deployed strategically in the naxal affected areas. CRPF has always been playing a significant role in times of natural disasters. When the destructive Tsunami had caused an unprecedented damage to lives and property or when the J and K earthquake had devastated large areas disrupting life on a massive scale, CRPF played a significant role in the relief, rescue and rehabilitation efforts. We now have two battalions of CRPF designated as Disaster Management battalions and they have been located at Pune and Ahmedabad.

Rapid Action Force: Presidential colour to RAF was presented in Oct. 2003. RAF was raised to deal with communal problem and continues to deal with militancy in J and K and Punjab, insurgency in north-east, overseas deployment for UN Peace Keeping in Haiti, Bosnia and Kosovo, rescue and relief (Odisha super cyclone, Gujarat and JandK earthquake). RAF dealt with mammoth human congregations (Amarnath Yatra, Jagannath Yatra, etc.) combating naxalism in LWE affected states guarding of vital shrines in Ayodhya, Kashi, Mathura, Vaishno Devi and Raghunath Temple, Jammu law and order situation on the issue of revocation of transfer of land to Shri Amarnath Shrine Board.

Central Industrial Security Force: Raised in 1969, Central Industrial Security Force (CISF) is providing security cover to 303 units including 59 domestic and international airports and fire protection cover to 87 industrial undertakings. It has become a premier multi-skilled security agency of the country, mandated to provide security to major critical infrastructure installations of the country in diverse regions including terrorist and naxal affected areas. CISF is currently providing security cover to 308 units which includes atomic power plants, space installations, defence production units, mines, oil fields and refineries, major sea ports, heavy engineering steel plants, fertilizer units, airports, hydro electric /thermal power plants, sensitive government buildings and even heritage monuments (including the Taj Mahal and Red Fort) and also iconic private sector units. CISF is also one of the largest fire protection service providers in the country. It provides fire protection cover to 86 industrial undertakings.

Sashastra Seema Bal: SSB, the 'Sashastra Seema Bal' is newest border guarding force of Union of India entrusted with the guarding of Indo-Nepal and Indo-Bhutan borders. "Sashastra Seema Bal" is guarding Indo-Nepal border since 2001, and later on was also given the additional responsibility of guarding Indo-Bhutan border in 2004. Sashtra Seema Bal came into existence under the name Special Service Bureau in early 1963 in the wake of Indo-China conflict. Its earlier aim was to build people's morale and inculcate a spirit of resistance in border population in the then NEFA, North Assam, North Bengal, hills of Uttar pradesh, Himachal Pradesh and Jammu and Kashmir (Ladakh). The area of operation was extended to other border areas in Manipur, Tripura, Jammu, Meghalaya, Sikkim, Rajasthan Gujarat, Mizoram, south Bengal and Nagaland.

Role of SSB in earlier setup includes:-

- (i) To inculcate a sense of security and spirit of resistance in border population.
- (ii) Promoting national awareness and security consciousness.
- (iii) Organizing and preparing border population to resist enemy.

Civil Defence: Civil Defence includes any measures not amounting to actual combat, for affording protection to any person, property, place or thing in India or any part of the territory thereof against any hostile attack whether from air, land, sea or other places or for depriving any such attack of the whole or part of its effect, whether such measures are taken before, during or after the time of such attack, or any measures taken for the purpose of disaster management, before during, at or after any disaster. The amendment bill to the Civil Defence Act 1968 has been passed by the parliament. This amendment has accorded legal sanction to the additional role of the Civil Defence constituents in the field of disaster management. The additional role in Disaster Management will be enacted by the Civil Defence personnel before, during and after emergencies arising out of calamities/disasters, whether natural or manmade.

Home Guards: Home Guards is a voluntary force, first raised in India in December 1946, to assist the police in controlling civil disturbances and communal riots. Subsequently, the concept of the voluntary citizen's force was adopted by several States. In the wake of Chinese aggression in 1962, the centre advised the states and union territories to merge their existing voluntary organisations into one uniform voluntary force known as Home Guards. The role of Home Guards **is to serve as an auxiliary to the police in maintenance of internal security, help the community in any kind of emergency such as an air-raid, fire, cyclone, earthquake, epidemic, etc., help in maintenance of essential services, promote communal harmony and assist the administration in protecting weaker sections, participate in socio-economic and welfare activities and perform civil defence duties. Home Guards are of two types – rural and urban.** In Border States, Border Wing Home Guard Battalions have also been raised, which serve as an auxiliary to the Border Security Force, guarding of VVIPs and lines of communication in vulnerable areas at the time of external aggression.

Home Guards are raised under the Home Guards Act and Rules of the states/union territories. They are recruited from various cross sections of the people such as doctors, engineers, lawyers, private sector organisations, college and University students, agricultural and industrial workers, etc., who give their spare time to the organisation for betterment of the community. All citizens of India, who are in the age group of 18-50,

are eligible to become members of Home Guards. Normal tenure of membership in Home Guards is 3 to 5 years. Home Guard personnel are also awarded President's Medal for gallantry, distinguished and meritorious services. Members of Home Guards in the organisation are trained to assist police in maintenance of law and order, prevention of crime, order, prevention of crime, anti-dacoity measures, border patrolling, prohibition, flood relief, fire-fighting, election duties and social welfare. The Ministry of Home Affairs formulates the policy in respect of role, target, raising, training, equipping, establishment and other important matters of Home Guards Organisation. Expenditure on Home Guards is generally shared between centre and state Governments as per existing financial policy on discrete financial terms.

Fire Services: "Fire Services" is a state subject and has been included as a municipal function in the XII schedule of the Constitution of India in terms of Article 243-W. As such, it is the primary responsibility of the state governments/municipal bodies to enforce the National Building Code and allocate sufficient resources for strengthening and equipping Fire Services to ensure that safety of life and property of citizens within their jurisdiction.

The 13th Finance Commission recognizing the need to restructure Fire & Emergency Services across the country has recommended that a portion of the grants provided to the urban local bodies be spent on revamping of fire services ;sist within their respective jurisdiction.

Personal Law: The people of India are of different religions and faiths. They are governed by different sets of personal laws in respect of matters relating to family affairs, i.e., marriage, divorce, succession, adoption, wills etc. The subject matter of personal laws is relatable to entry 5 of List III- Concurrent list in the Seventh Schedule to the Constitution of India and hence the Union Legislature, namely Parliament and subject to the provisions of Article 254 of the Constitution. The State Legislatures are also competent to make laws in the field.

Marriage: Law relating to marriage and divorce has been codified in different enactments applicable to people of different religions.

These are : **(1)** the Converts Marriage Dissolution Act, 1866; **(2)** the Divorce Act, 1869; **(3)** the Indian Christian Marriage Act, 1872; **(4)** the Kazis Act, 1180; **(5)** the Anand Marriage Act, 1909; **(6)** the Indian Succession Act, 1925; **(7)** the Parsi Marriage And Divorce Act, 1936; **(8)** the Dissolution of Muslim Marriage Act, 1939; **(9)** the Special Marriage Act, 1954; **(10)** the Hindu Marriage Act, 1955; **(11)** the Foreign Marriage Act, 1969; and **(12)** the Muslim Women (Protection of Rights on Divorce) Act, 1986.

The **Special Marriage Act, 1954** which provide for a special form of marriage and the registration of such marriages extends to the whole of India except the State of Jammu and Kashmir, but also applies to the citizens of India domiciled in Jammu and Kashmir. Persons governed by this Act can specifically register marriage under the said Act even though they are of different religious faiths. The Act also provides that the marriage celebrated under any other form can also be registered under the Special Marriage Act, if it satisfies the requirements of the Act. The section **4(b) (iii) of the Act**, was amended to omit the words "or epilepsy." **Sections 36 and 38** have been amended to provide that an application for alimony *pendente lite* or the maintenance and education of minor children be disposed of within 60 days from the date of service of notice on the respondent.

An attempt has been made to codify customary law which is prevalent among Hindus by **enacting the Hindu Marriage Act, 1955**. This Act, which extends to the whole of India, except the state of Jammu and Kashmir, applies also to Hindus domiciled in territories to which the Act extends and those who are out side the said territories. **It applies to Hindus (in any of its forms or development) and also to Buddhists, Sikhs, Jains** and also those who are not Muslims, Christians, Parsis or Jews by religion, However, the Act does not apply to members of any scheduled tribes unless the Central Government by notification in the official Gazette otherwise directs. Provisions as regard to **divorce are contained in section 13 of the Hindu Marriage Act and Section 27 of the Special Marriage Act**. Common ground on which divorce can he sought by a husband or a wife under these

Acts fall under these broad heads:- **Adultery, desertion, cruelty, unsoundness of mind, venereal disease, leprosy, mutual consent and being not heard of as alive for seven years.**

As regards the Christian community, provisions relating to marriage and divorce are contained in the **Indian Christian Marriage Act, 1872 and in Section 10 of the Indian Divorce Act, 1869 respectively.** In the Divorce Act, 1869 comprehensive amendments were made through the **Indian Divorce (Amendment) Act, 2001 (No. 51 of 2001)** to remove discriminatory provisions against women in the matter of divorce and to provide for dissolution of Law and Marriage by mutual consent.

As regards Muslims, **marriages are governed by the Mohammedan Law prevalent in the country.** As regards divorce, i.e., Talaq, a Muslim wife has a much restricted right to dissolve her marriage. Unwritten and traditional law tried to ameliorate her position by permitting her to see dissolution under the following forms : **(a) Talaq-I-Tafwid** : This is a form of delegated divorce. According to this the husband delegates his right to divorce in a marriage contract which may stipulate, inter alia, on his taking another wife, the first wife has a right to divorce him; **(b) Khula** : this is a dissolution of agreement between the parties to marriage on the wife's giving some consideration to the husband for her release from marriage ties. Terms are a matter of bargain and usually take the form of the wife giving up her mehr or a portion of it, and **(c) Mubarat** : this is divorce by mutual consent.

Further, by the **Dissolution of Muslim Marriage Act, 1939**, a Muslim wife has been given the right to seek dissolution of her marriage on these grounds; **(i)** whereabouts of the husband have not been known for a period of four years; **(ii)** husband is not maintaining her for a period of two years; **(iii)** imprisonment of husband for a period of seven years or more; **(iv)** failure on the part of husband to perform his marital obligations, without a reasonable cause, for a period of three years; **(v)** impotency of husband; **(vi)** two-year long insanity; **(vii)** suffering from leprosy or virulent venereal disease **(viii)** marriage took place before she attained the age of 15 years and not consummated; and **(x)** cruelty.

The **Parsi Marriage and Divorce Act, 1936** governs the matrimonial relations of Parsis. The Act provides only for provisions of the Parsi Marriage and Divorce Act, 1936 have been enlarged so as to bring them in line with the Hindu Marriage Act, 1955. Sections 39 and 49 of the Parsi Marriage and Divorce Act, 1936 were amended by the Marriage Laws (Amendment) and education of minor children be disposed of within 60 days from the date of service of notice on the wife or the husband as the case may be.

As for the **matrimonial laws of Jews**, there is no codified law in India. Even today, they are governed by their religious laws. Jews do not regard marriage as a civil contract, but as a relation between two persons involving very sacred duties. Marriage can be dissolved through courts on grounds of adultery or cruelty. Marriages are monogamous.

Adoption: Although there is no general law governing adoption, it is permitted by the **Hindu Adoption and Maintenance Act, 1956** amongst Hindus and by custom amongst a few numerically insignificant categories of persons. Since adoption is legal affiliation of a child, it forms the subject matter of personal law. Muslims, Christians and Parsis have no adoption laws and have to approach the court under the **Guardians and Wards Act, 1890.** Muslims, Christians and Parsis can take a child under the said Act only under foster care once a child under foster care attaining the age of majority that is eighteen years old; he/she is free to break away all these connections. Besides, such a child does not have the legal right of inheritance. Foreigners, who want to adopt Indian children, have to approach the court under the aforesaid Act.

Hindu law relating to adoption has been amended and codified into the Hindu Adoptions and Maintenance Act, 1956, under which a male or female Hindu having legal capacity, 'can take a son a daughter in adoption. In dealing with the question of guardianship of a minor child, as in other spheres of family law, there is no uniform

law. **Hindu law, Muslim Law and the Guardians and Wards Act, 1890** are three distinct legal systems which are prevalent. A guardian maybe a -natural guardian, testamentary guardian or a guardian appointed by the court. In deciding the question of guardianship two distinct things have to be taken into account - person of the minor and his property. Often the same person is not entrusted with both. Though the **Personal Laws (Amendment) Act, 2010 (Act 30 of 2010)**, the Hindu adoptions and Maintenance Act, 1956 was amended so as to remove the incapacity of a married women to take in adoption of a son or daughter merely on the basis of her marital status and to provide that the mother with the consent of the father and the father with the consent of the mother shall have equal right to give in adoption of their children.

The **Hindu Minority and Guardianship Act, 1956** has codified laws of Hindus relating to minority and guardianship. As in the case of uncodified law, it has upheld the superior right of father. It lies down that a child is a minor till the age of 18 years. Prior right of mother is recognised only for the custody of children below five. In case of illegitimate children, the mother has a better claim than the putative father. Under the **Muslim Law (Shariat)**, the father enjoys a dominant position. Muslim law recognises that mother's right to custody of minor children (Hizanat) is an absolute right. Even the father cannot deprive her of it. Misconduct is the only condition which can deprive the mother of this right. As regards the age at which the right of mother to custody terminates, the Shia school holds that mother's right to the Hizanat is only during the period of rearing which ends when the child completes the age of two, whereas Hanafi School extends the period till the minor son has reached the age of seven. In case of girls, Shia law upholds mother's right till the girl reaches the age of seven and Hanafi School till she attains puberty.

Maintenance: Obligation of a husband to maintain his wife arises out of the status of the marriage. Right to maintenance forms a part of the personal law. Under the **Code of Criminal Procedure, 1973, (2 of 1974)**, right of maintenance extends not only to the wife and dependent children, but also to indigent parents and divorced wives. Claims of the wife, etc., however, depend on the husband having sufficient means. Claim of maintenance for all dependent persons was limited to Rs. 500 per month. But, this limit was removed by the Code of Criminal Procedure (Amendment) Act, 2001 (No. 50 of 2001).

Under the Hindu Law, the wife has an absolute right to claim maintenance from her husband. But she loses her right if she deviates from the path of chastity. Her right to maintenance is codified in the Hindu Adoptions and Maintenance Act, 1956.

Under the Muslim Law, the **Muslim Women (Protection of Rights on Divorce) Act, 1986** protects rights of Muslim women who have been divorced by or have obtained divorce from their husbands and provides for matters connected there with or incidental there to. This Act, inter alia, provides that a divorced Muslim woman shall be entitled to (a) reasonable and fair provision and maintenance to be made and paid to her within the iddat period by her former husband; (b) where she self maintains children born to her before or after her former husband for a period of two years from the respective dates of birth of such children; (c) an amount equal to the sum of mehr or dower agreed to be paid to her at the time of her marriage or at any time thereafter according to the Muslim Law; and (d) all property given to her before or at the time of marriage or after her marriage by her relatives or friends or by husband or any relatives of the husband or his friends.

The **Parsi Marriage and Divorce Act, 1936** recognises the right of wife to maintenance-both alimony pendente lite and permanent alimony. The maximum amount that can be decreed by the court as alimony during the time a matrimonial suit is pending in court is one-fifth of the husband's net income.

The **Divorce Act, 1869** inter alia governs maintenance rights of a Christian wife. The provisions are the same as those under the Parsi Law and the same considerations are applied in granting maintenance, both alimony pendente lite and permanent maintenance.

Succession: The **Indian Succession Act was enacted in 1925** to consolidate the law applicable to intestate and testamentary succession which was in existence at that time. The Act does not apply to the renoncants of the union territory of Puducherry. While consolidating the law in respect of succession, two schemes, one relating to succession to property of persons like Indian Christians, Jews and persons married under the Special Marriage Act, 1954 and the other relating to succession rights of Parsis, were adopted.

This Act was amended by the **Indian Succession (Amendment) Act, 2002**. It was felt that section 32 of the principal Act is discriminatory to widows and as such the proviso to section 32 was omitted to remove discrimination in this regard. Section 213 was also amended by this amending Act to make Christians at par with other Communities.

The law relating testamentary succession among Hindu, Buddhist, Sikh or Jain, subject to certain restriction and modifications is carried in section 57 of the Indian Succession Act, 1925 read with in the Third Schedule. The law relating to intestate succession among Hindus is codified in the Hindu Succession Act, 1956 (30 of 1956). It extends to the whole of India except the State of Jammu and Kashmir. The remarkable features of the Act are the recognition of the right of women to inherit property of an intestate equally with men and abolition of the life estate of female heirs. Further, (vide the Hindu Succession (Amendment) Act, 2005), the Hindu Succession Act, 1956 was amended so as to provide for the equal share to a coparcener daughter in a joint Hindu property.

A vast majority of Muslims in India follow **Hanafi doctrines of Sunni law**. Courts presume that Muslims are governed by Hanafi law unless it is established to be the contrary. Though there are many features in common between Shia and Sunni schools, yet there are differences in some respects. Sunni law regards Koranic verses of inheritance as an addendum to pre-Islamic customary law and preserves the superior position of male agnates. Unlike Hindu and Christian laws, Muslim law restricts a person's right of testation. A Muslim can bequeath only one-third of his estate. A bequest to a stranger is valid without the consent of heirs if it does not exceed a third of the state, but a bequest to an heir with out the consent of other heirs is invalid. Consent of heirs to a bequest must be secured after the succession has opened and any consent given to a bequest during the life time of the testator can be retracted after his death. Shia law allows Muslims the freedom of bequest with in the disposable third.

The Administration-General (Amendment) Act, 2012 (Act 33 of 2012): The Administrators-General Act, 1963 is an Act to consolidate and amend the law relating to the office and duties of Administrator-General. In the Act originally enacted in 1963, the monetary limit specified in section 29 was only Rs. 5000/-. On account of considerable decrease in money value and escalation in the value of assets and also for protection of the interests of poor persons and legal heirs of the deceased persons especially widows, minor children and other dependents from protracted and expensive litigation in civil courts, the monetary limit in the said section was enhanced to Rs. 15,000 in 1972 vide the Administrators-General Act, 1972, to 50,000 in 1983 vide the Administrators-General Act, 1983 and to Rs. 2,00,000 / - in 1999 vide the Administrators General Act, 1999. Vide the said Act, this monetary limit provided in section 29 of the Administrators-General Act, 1963 from Rs. 2,00,000/ - (Rs. Two lakhs only) to be enhanced to Rs. 10,00,000/- (Rs. Ten lakhs only) on account of the decrease in money value escalation of prices of properties.

The Anand Marriage (Amendment) Act, 2012 (Act 29 of 2012): The Anand Marriage Act, 1909 (7 of 1909) was enacted to remove doubts as to the validity of the marriage rights of the Sikh called "Anand" and it does not provide for the provisions of registration of marriages. The Hindu Marriage Act, 1955 applies to all Hindus, Buddhists, Jams or Sikhs by religion. It also applies to all other persons who are not Muslims, Christians, Parsis or Jews unless they establish that they were not governed by Hindu law, custom or us age prior to the Act. Section 8 of the Hindu Marriage Act, 1955 provides for registration of Hindu marriages and as Sikhs were included in the definition of Hindu, under Section 2 of the Hindu Marriage Act, 1955, a Sikh marriage performed

according to the Sikh marriage ceremony called "Anand" or other customary ceremonies could be registered here to under the provisions of Section 8 of the Hindu Marriage Act, 1955. However, vide the Anand Marriage (Amendment), Act, 2012 (Act No. 29 of 2012), the Anand Marriage Act, 1909 was amended to provide for registration of Anand marriages which commonly known as Anand Karaj.

Election Laws and Electoral Reforms: The Legislative Department is administratively concerned with the following Acts in connection with the conduct of elections to Parliament, State Legislatures and to the offices of the President and the Vice-President, reform of these laws /rules made the re under and matters pertaining /incidental thereto:

- (i) The Representation of the People Act, 1950;
- (ii) The Representation of the People Act, 1951;
- (iii) The Presidential and Vice-Presidential Elections Act, 1952;
- (iv) The Delimitation Act, 2002;
- (v) The Andhra Pradesh Legislative Council Act, 2005;
- (vi) The Tamil Nadu Legislative Council Act, 2010; and
- (vii) The Parliament (Prevention of Disqualification) Act, 1959.

The electoral system of our country, which is also called the **first-past-the-post system of elections**, has completed more than sixty years. In this regard, **the Representation of the People (Amendment) Act, 2009 (41 of 2009)** has been enacted in which 5 issues had been dealt which inter-alia relate to

- (a) Simplification of procedure for disqualification of a person found guilty of corrupt practices by amending section 8A of the Representation of the People Act, 1951 so as to provide for a time limit, say three months, within which the specified 'authority' will have to submit the case of a person found guilty of corrupt practice to the President;
- (b) Making a provision for appointment of the appellate authority within the district against the orders of the electoral registration officers instead of Chief Electoral Officer;
- (c) Increase in security deposit of the candidates for Lok Sabha and Vidhan Sabha respectively, which would be reduced by fifty percent for candidates belonging to Scheduled Castes and Scheduled Tribes;
- (d) Inclusion of all officials appointed in connection with the conduct of elections within the scope of section 123(7) of the Representation of the People Act, 1951; and
- (e) Restriction on conducting and publication of result of exit polls conducted during election to Lok Sabha and Legislative Assemblies.

Delimitation of Constituencies: The periodic readjustment of the Lok Sabha and Assembly constituencies is mandatory in a representative system where single-member constituencies are used for electing political representatives. The electoral boundaries are drawn on the basis of the last published census figures and are relatively equal in population; equally populous constituencies allow voters to have an equally weighted vote in the Legislature. Electoral constituencies that vary greatly in population - a condition called "malapportionment" - violate a central tenet of democracy, namely, that all voters should be able to cast a vote of equal weight. Delimitation and Elections are the two basic pillars of a parliamentary democracy.

The first Delimitation Commission in India was constituted in **1952**, the second in 1962 and the third in the year 1973. The third delimitation exercise - based on 1971 census - was completed in the year 1975. The present delimitation, based on 2001 census, has been undertaken after 30 years. The population has increased by almost 87 per cent and the nature of constituencies in the country, by and large, had become malapportioned.

The Government, as part of the National Population Policy strategy, decided to extend the current constitutional freeze **on undertaking fresh delimitation up to the year 2026 as a motivational measure to enable state governments to fearlessly pursue the agenda for population stabilization.** It has also been decided, however, to

simultaneously undertake readjustment and rationalization of electoral constituencies, including those reserved for the Scheduled Castes and the Scheduled Tribes, based on the population census for the year 1991, without affecting the number of seats allocated to States in the legislative bodies so as to correct the imbalance caused due to uneven growth of population/electorate in different constituencies.

The Constitution (Eighty-fourth Amendment) Act, 2001 enacted on 21-02-2002 has effected the aforesaid policy decisions of the Government. Pursuant to the enactment of the Constitution (eighty-fourth Amendments) Act, 2001 which provided for readjustment of electoral constituencies, including those reserved for the Scheduled Castes and the Scheduled tribes. The Delimitation Act, 2002 was enacted. The Delimitation Commission had accordingly been constituted on 12.7.2002 under the provisions of the Delimitation Act, 2002 with Shri Justice Kuldeep Singh, a retired judge of the Supreme Court as its Chairperson and Shri B.B. Tandon, Election Commissioner in the Election Commission of India, and the State Election Commissioner as its ex officio members. The main task of the Commission was to readjust the division of territorial constituencies of the seats in the House of the People allocated to each State and the readjustment of the division of territorial constituencies of the total number of seats in the Legislative Assembly of each State. Subsequent to that the Constitution (Eighty-seventh Amendment) Act, 2003 was enacted and by that Act the basis of the delimitation of territorial constituencies was changed based on the 2001 census in place of 1991. In India, the drawing of boundaries, generally, entails:

- (a) Allocating seats to the states and districts within a state;
- (b) Creating a database composed of maps, population figures and the details showing geographic/natural/administrative conditions of the area concerned;
- (c) Associating the statutory representatives from the Lok Sabha and State Assemblies;
- (d) Distributing the states and districts into geographic units called the constituencies;
- (e) Having an extensive exercise for public input into delimitation process;
- (f) Summarizing and evaluating the constituencies; and (g) passing and publishing the final Order. The procedure for delimiting the constituencies in India stands clearly spelt out in the Delimitation Act, 2002. This legal framework provides for an independent and impartial Delimitation Commission. The final orders of the Commission are not subject to any modification or veto by the Government.

Reservation of Seats for Women: During the years, a consistent demand has been made for giving adequate representation to women in Parliament and state legislatures. Such a demand finds support in the **73rd and 74 Amendments to the Constitution made in the year 1992**. In consonance with its commitment to empower women and as agreed to in principle by most of the political parties, the Government introduced in the Rajya Sabha on 6th May, 2008 the Constitution (One Hundred and Eighth Amendment) Bill, 2008 seeking to provide that nearly one-third of the seats shall be reserved for women in the House of the People and Legislative Assemblies of States. The Bill was examined by the Department Related Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice, and presented in its Thirty-sixth Report to the Rajya Sabha on 17.12.2009. There after, on the 9th March, 2010 the Bill was considered and passed by the Rajya Sabha and is now before the Lok Sabha for its consideration and passing. This being one of the landmark pieces of legislation will certainly change the whole face of the Indian polity.

Electronic Voting Machines: Starting from the experimental use of Electronic Voting Machines (EVMs) in **1982**, it took more than two decades for the universal use of EVMs and during the General Elections to the Lok Sabha in **2004**; EVMs were used in all polling stations across the country. The EVMs were developed at the behest of the Election Commission of India jointly with two Public Sector Undertakings, i.e. BEL (Bharat Electronics Limited, Bangalore) and ECIL (Electronics Corporation of India Limited, Hyderabad) in 1989.

Electors Photo Identity Cards: The scheme of **Electors Photo Identity Cards (EPIC)**, was started in August, 1993 with a view to preventing impersonation of electors and facilitating their identification at the time of poll and to eliminate bogus and fictitious entries from the electoral roll. The scheme was conceived as a project with a time-frame for completion. An 'Elector' has been defined in the law, as a person whose name figures in the electoral roll and an EPIC can only be issued to a person who is an elector.

In the second half of 1997, while taking up the summary revision of electoral rolls with 1st January, 1998 as the qualifying date, the Commission decided to computerise the electoral rolls taking into account the experience and lessons learnt in the implementation of the EPIC scheme. Right from the beginning, the scheme of Computerisation of Rolls was planned in a systematic manner with a thorough professional approach. The Computerisation of Electoral Rolls Programme created the basic ground conditions in which integration of EPIC with the electoral rolls became possible.

The entry of EPIC number against the name of the elector in the rolls is a fundamental element that enables an assessment of the task achieved so far and the residual work required to be done for achieving higher coverage of electors with EPICs.

The Election Commission also decided to keep the parliamentary Constituency as a unit for the purpose of identifying the relevant electoral roll. The Election Commission took a historic decision in February, 2000 for the elections to the Legislative Assembly in Haryana, by insisting upon the use of EPICs for identification of the voters. Based on the experience of the implementation of the Computerisation of Rolls Programme and drawing from the lessons of the EPIC scheme as implemented earlier and encouraged by the response of voters in producing identity cards in Haryana and in elections held there after, the Commission modified and revised the guidelines for EPIC in May, 2000 to cover the residual electors who have not been issued EPIC. Major modifications have been done in terms of technical specifications and implementation strategy which envisage full and complete integration of EPIC with the Programme of Computerisation of Electoral Rolls. The key factors which led to the success of the latter programme were analysed and incorporated in the EPIC programme as well.

One key decision taken by the Election Commission was to treat the Identity Card as a permanent document valid for the lifetime of an elector. Consequently, the elector will not only have the physical card as a permanent identity document for his lifetime, but he will also carry the same unique card number. It automatically follows that the EPIC number given to each elector has to be unique, not merely at the time of issue but for all time. In other words, when an elector shifts from one polling station to another with in or outside a constituency, he carries with him the same identity card and also his unique number; the necessary changes in the EPIC are to be carried out with the help of stickers which incorporate the changes in particulars relating to place of residence, name of constituency, etc.

Voting Rights to the Citizens of India Living Abroad: Section 19 of the Representation of the People Act, 1950 provides that every person who is not less than eighteen years of age on the qualifying date and is ordinarily resident in constituency shall be entitled to be registered in the electoral rolls for that constituency. The meaning of "ordinarily resident" is laid down in section 20 of the said Act. It has been specified under Chapter-III in the Hand Book for Electoral Registration Officers that a person who has gone out of the country for business or employment should be treated as having moved out of that place. Mere ownership or possession of a building or other immovable property will not bestow on the the residential qualification. There are a large number of citizens of India residing outside India due to various reasons. They have been persistently demanding for conferring voting rights. Though the issue had been receiving the attention of the Government for quite some time, yet the demand could not be acceded to owing to certain practical difficulties in enrolling them in the

electoral rolls of the concerned constituency and allowing them to cast their votes from outside India within a short span of time available in the election process.

It is noted that the right to vote as demanded by the citizens of India living abroad is their legitimate right. Conferring such right will enable them to participate in the democratic process of elections in their motherland and will also boost their involvement in the nation building.

The Government considered all aspects of the demand and accordingly introduced the Representation of the People (Amendment) Bill, 2006 in Rajya Sabha on the 27th February, 2006 to enable the Indian citizens absenting from their place of ordinary residence in India owing to their employment, education or otherwise outside India to get their names registered in the electoral rolls of the concerned constituency of their place of ordinary residence in India as mentioned in their owner, passport so that they would be in a position to cast their votes in elections to the Lok Sabha and to the State Legislatures in case they happen to be in their constituency at the time of polls. The Department Related Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice which examined the Bill in their Sixteenth report presented to Rajya Sabha on the 4th August, 2006 has accepted the a fore said Bill in letter and spirit and recommended for bringing a comprehensive Bill on the subject containing the details regarding the manner of enrollment of non-resident Indians, the mode of voting and the conditionalities for contesting elections.

In pursuance of the recommendations of the Hon'ble Standing Committee, the Government have withdrawn, with the leave of the Rajya Sabha, the earlier Bill, namely, the Representation of the People (Amendment) Bill, 2006 introduced on the 27th February, 2006 in the Rajya Sabha and introduced a fresh Bill, namely, the Representation of the People (Amendment) Bill, 2010 in August, 2010 inter alia, to amend the Representation of the People Act, 1950 to, -

- (a) Provide that every citizen of India, whose name is not included in the electoral roll and who has not acquired the citizenship of any other country and who is absenting from his place of ordinary residence in India owing to his employment, education, or otherwise outside India, (whether temporarily or not), shall be entitled to have his name registered in the electoral roll in the constituency in which his place of residence in India as mentioned in his passport is located:
- (b) Provide that the Electoral Registration Officer shall make corrections of entries in electoral rolls and inclusion of names in electoral rolls after proper verification;
- (c) Confer power upon the Central Government to specify, after consulting the Election Commission of India, by rules, the time within which the name of persons referred to in sub-paragraph (a) above shall be registered in the electoral roll and the manner and procedure for registering of such persons in the electoral roll.

Reservation of Seats for Scheduled Castes and Scheduled Tribes: Our Constitution makers were fully conscious of the fact that the Scheduled Castes and Scheduled Tribes in India had been an oppressed and under-privileged class in our society over the centuries and they deserved a special dispensation so that their condition may be vastly improved. For this purpose, several special provisions were incorporated in our Constitution. One such provision related to the reservation of seats for these communities in Lok Sabha and State Legislative Assemblies. This provision found place in articles **330 and 332 of the Constitution**. Similarly, they were also sensitive of the difficulties and problems which were likely to be faced by the persons belonging to Anglo Indian community in the independent India. Consequently, adequate safeguards were provided for them in our Constitution by giving representation to this small section of the society, under article 331 of the Constitution by way of nomination of two persons of that community in the House of the People by the President.

Likewise, provision for nomination of one member each by the Governor, wherever necessary, belonging to this community in the State Legislative Assemblies was also incorporated. Initially, the said provisions were made only for 3 periods of ten years from the commencement of the Constitution. Consequently, the provision initially made for a period of ten years has been extended from time to time. Recently, though the Constitution (One Hundred Ninth Amendment) Bill, 2009 extended the period for a further period of ten years has been passed by both the Houses of Parliament and received the assent of the President on the 18th January, 2010 The said Bill was enacted as the Constitution (Ninety-fifth Amendment) Act, 2009.

The Andhra Pradesh Legislative Council Act, 2005 and the Tamil Nadu Legislative Council Act, 2010: Under article 169(1) of the Constitution, Parliament may, by law, provide for the creation of a Legislative Council in a State having no such Council, if the Legislative Assembly of the State passes a resolution to that effect by a majority of total membership of the Assembly and by a majority of not less than two-thirds of the Members of the Assembly present and voting. The same article also contemplates that any such law may contain such supplemental, incidental and consequential provisions, as Parliament may deem necessary.

The Legislative Assembly of the State of Andhra Pradesh passed a resolution on the 8th July 2004 in terms of clause (1) of article 169 of the Constitution for the creation of Legislative Council in the State. The Andhra Pradesh Legislative Council Bill, 2004 was introduced in Lok Sabha on 16.12.2004. The said Bill was enacted vide the Andhra Pradesh Legislative Council Act, 2005 (1 of 2006) and came into force with effect from the 30th June, 2007. Accordingly, a Legislative Council in the State of Andhra Pradesh was created with a total strength of 90 Members, 31 of which are being elected by the local authorities, 8 each are being elected by the Graduates and Teachers Constituencies, 31 by the Legislative Assembly and the remaining 12 are being nominated by the Governor. The local authorities being represented in the Legislative Council are Municipal Corporations, Municipalities, Nagar Panchayats, Cantonment Boards, Zila Praja Parishads and Mandal Praja Parishads.

The Legislative Council of Tamil Nadu was abolished by the Tamil Nadu Legislative Council (Abolition) Act, 1986 (Act 40 of 1986) with effect from 1st November, 1986. Thereafter, The Legislative Assembly of the State of Tamil Nadu passed a resolution on the 12th April, 2010 in terms of clause (1) of article 169 of the Constitution for the creation of Legislative Council in that State by a majority of the total membership and by a majority of not less than two-thirds of the members of the Assembly present and voting as mandated under the said article. Thereafter the Tamil Nadu Legislative Council Act, 2010 (16 of 2010) has been enacted but yet to come into force. The strength of the Legislative Council in the State of Tamil Nadu would be 78 out of which 26 members would be elected by the local authorities, 7 each would be elected by the Graduates and Teachers Constituencies, 26 by the Legislative Assembly and the remaining 12 would be nominated by the Governor. The local authorities being represented in the Legislative Council are Municipal Corporations, Municipalities, Panchayat Union Council, Cantonment Board and District Panchayat.

Constitution Amendments: In pursuance of the Resolution passed by the Legislative Assembly of Orissa on 28th August, 2008 to change the name of the language specified as 'Oriya', in the Eighth Schedule of Constitution as 'Odia' and translation of the word 'Odia' in Hindi language, the Constitution (Ninety-Sixth) Amendment Act, 2011 was enacted.

CHAPTER TWENTY ONE | LABOUR AND EMPLOYMENT

THE Ministry of Labour & Employment is one of the oldest Ministries of the Government of India. The main responsibility of the Ministry is to protect and safeguard the interest of workers in general and to poor deprived and disadvantages sections of the society in particular. Further it aims to create a healthy work environment for higher production and productivity and to develop and coordinate vocational skill training and employment services. Government's attention is also focused on promotion of welfare and providing social security to the labour force both in organized and unorganized sectors, in tandem with the process of liberalization. These objectives are sought to be achieved through implementation of various labour laws, which regulate the terms and conditions of service and employment of workers. The state governments are also empowered to enact legislations, as labour is a subject in the concurrent list under the Constitution of India.

LABOUR REFORMS

Labour Reforms essentially means taking steps to increase production, productivity and employment opportunities in the economy while protecting overall interest of labour. Essentially it means skill development, retraining, redeployment, updating knowledge base of workers-teachers, promotion of leadership qualities etc. Labour Reforms also includes labour law reforms. Changes in the labour laws are also done protecting the interests of workers

The Minimum Wages Act, 1948

The Minimum Wages Act, 1948 provides for fixation, review, revision and enforcement of minimum wage, both by the Central Government and the State Government, in respect of scheduled employment in their respective jurisdictions.

The Minimum Wages Act, 1948 does not allow discrimination between male and female workers or different minimum wages for them. All the provisions of the Act equally apply to both male and female workers.

In order to protect the minimum wages against inflation, the Central Government has made provision of Variable Dearness Allowance (VDA) linked to Consumer Price Index.

National Floor Level Minimum Wage

In order to have a uniform wage structure and to reduce the disparity in minimum wages across the country, a concept of National Floor Level Minimum Wage (NFLMW) was mooted. The NFLMW has been revised from time to time primarily taking into account the increase in the Consumer Price Index Number for Industrial Workers. The NFLMW was revised from time to time. The Central Government has recently revised the NFLMW from Rs. 100/- to Rs. 137/- per day with effect from 1st July 2013. It however, needs to be noted that the National Floor Level Minimum Wage, is a non-statutory measure.

Payment of Wages Act, 1936

The payment of wages Act, 1936, which is a labour friendly Legislation, ensures primarily timely payment of wages and that no unauthorized deductions are made from the wages of the workers. In exercise of the powers conferred by sub-section (6) of Section 1 of the Act, the Central Government, on the basis of figures of the Consumer Expenditure Survey published by National Sample Survey Organization, has enhanced the wage ceiling from Rs. 10,000/- to Rs. 18,000/- per month w.e.f. 11th September 2012.

WAGE BOARDS

In the 1990s and 60s, when the organised labour sector was at a nascent stage of its development without adequate unionization or with trade unions without adequate bargaining power, Government in appreciation of

the problems which arise in the arena of wage fixation, constituted various Wage Boards. The Wage Boards are tripartite in character in which representatives of workers, employers and independent members participate and finalize the recommendations. The utility and contribution of such boards in the present context are not beyond question. Except for the Wage Boards for Journalists and Non-Journalists, newspaper and news-agency employees, which are statutory Wage Boards, all other Wage Boards are non-statutory in nature.

The Second National Commission on Labour (NCL) has recommended that, there is no need for any wage board, statutory or otherwise, for fixing wage rates for workers in any industry. However, the Government decided not to accept the recommendations regarding the statutory wage boards i.e., Wage Boards for Working Journalists and Non-Journalists Newspaper Employees under the working Journalists and Non-Journalists Newspaper Employees (Conditions of Service) and Miscellaneous Provisions Act, 1955.

CONTRACT LABOUR

The system of employing contract labour is prevalent in most industries for different jobs including skilled and semi-skilled. It is also prevalent in agricultural and allied operations and to some extent, in the services sector. A contract labour is a person who is hired, supervised, contracted and remunerated by a contractor, who, in turn, is compensated by the user enterprises. The concern to improve the working and living conditions of contract labour and the Supreme Court of India's observations in the case of Standard Vacuum Refinery Company Vs. their Workmen, resulted in the enactment of the Contract Labour (Regulation and Abolition) Act, 1970.

The Act seeks to regulate the employment of contract labour to certain establishments and to provide for its abolition in certain circumstances and for matters connected therewith. The Act and the Contract Labour (Regulation Abolition) Central Rules, 1971 came into force on 10 February 1971. The Act provides for the constitution of Central and State Advisory Contract Labour Boards to advise the respective Governments on matters arising out of the administration of the Act. The Act contains specific provisions to ensure payment of wages and certain amenities to be provided by the contractor to the contract labour.

The Central and State Governments are empowered to prohibit employment of contract labour in any activity in an establishment and also to grant exemption to establishments/contractors in the case of an emergency, from the applicability of the provisions of the Act.

CHAPTER TWENTY TWO | MASS COMMUNICATION

THE Ministry of Information and Broadcasting, through the mass communication media consisting of radio, television, films, press and print publications, advertising and traditional modes of communication such as dance and drama, plays an effective role in helping people to have access to free flow of information. The Ministry is involved in catering to the entertainment needs of various age groups and focusing attention of the people on issues of national integrity environmental protection, health care and family welfare, eradication of illiteracy and issues relating to women, children, minority and other disadvantaged sections of the society. The Ministry is divided into four wings i.e., the Information Wing, the Broadcasting Wing, the Films Wing and the Integrated Finance Wing. The Ministry functions through its 21 media units/ attached & subordinate offices, autonomous bodies and PSUs.

PRASAR BHARTI

Prasar Bharati (Broadcasting Corporation of India) is the public service broadcaster in the country, with Akashvani (All India Radio) and Doordarshan as its two constituents. It came into existence on 23rd November 1997, with a mandate to organize and conduct public broadcasting services to inform, educate and entertain the public and to ensure a balanced development of broadcasting on radio and television.

Objective

The major objectives of the Prasar Bharati Corporation as laid out in the Prasar Bharati Act 1990 are as follows:

- (i) To uphold the unity and integrity of the country and the values enshrined in the Constitution.
- (ii) To promote national integration.
- (iii) To safeguard citizen's rights to be informed on all matters of public interest and presenting a fair and balanced flow of information.
- (iv) To pay special attention to the fields of education and spread of literacy, agriculture, rural development, environment, health and family welfare and science and technology.
- (v) To create awareness about women's issues and to take special steps to protect the interests of children, the aged and other vulnerable sections of the society.
- (vi) To provide adequate coverage to the diverse cultures, sports and games and youth affairs.
- (vii) To promote social justice, safeguard the rights of working classes, minorities and tribal communities.
- (viii) To promote research and expand broadcasting facilities and development in broadcast technology.

FM RAINBOW: FM rainbow channel of All India Radio was launched at a time when radio listening was declining especially in big cities. FM radio filled this gap effectively by ensuring disturbance, free high quality music to its listeners.

FM GOLD: FM Gold channel was on air on 1st September, 2001 at Delhi as a niche infotainment channel with 30 per cent of News and Current affairs component and 70 per cent of entertainment programming. At present FM gold channel is available in four Metro's i.e. Delhi, Mumbai, Kolkata and Chennai. This channel is providing information interlinked with entertainment and bring information updates on Traffic, Airlines, Railways, Weather report etc.

DTH SERVICE: DTH Radio Channel is a Satellite Service meant for listeners who own a TV set. DTH Service is available through the DTH platform of Prasar Bharati with uplinking facilities at Todapur, Delhi. DTH is a 24-hour service broadcast digitally. DTH Service provides different language channels available across the country. The most significant aspect of DTH broadcast is its digital quality.

VIVIDH BHARATI: The popular Vividh Bharati Service provides entertainment for 15 hrs a day from 37 CBS-VB Centres and 4 Short Wave transmitters at Mumbai, Delhi, Chennai and Guwahati on a synchronized meter which can be heard on the same wavelength in any part of the country.

National Channel: All India Radio offers a 3- tier system of broadcasting, namely National, Regional and Local. Having the entire area of India as its zone, the programme composition of the Channel has been designed to make it representative of the varied cultural mosaic and ethos of the Nation as a whole. National Channel serves in three languages - Hindi, Urdu and English with variety of programmes on Science, Health, Sports, Literature, Humour, Current Social Issues, and Cultural Heritage.

EXTERNAL SERVICES DIVISION: ESD of AIR, a window to the world, is trying its best to project eternal India with focus on encounters between India, which is the largest democracy of the world. The aim of the service is to foster a greater understanding of India and its foreign policy concerns. It highlights India's ancient civilization, its rich cultural heritage, innovative entrepreneurial spirit, dynamic economy and vibrant democracy and also its saecular ethos. It also propagates India's growing role in global affairs, its approach to UN reforms, WTO, World Bank, IMF.

TRANSCRIPTION AND PROGRAMME EXCHANGE SERVICE: The Transcription Service was started on 3rd April 1954 and entrusted with the main function of preparing transcription of speeches of all dignitaries with a special reference to the Presidents and the Prime Ministers of the country. This office has the following functional units - **Central Archives Programme Exchange Unit (Internal & Foreign), Transcription unit, Refurbishing Unit, Digital Sound Archives and Commercial Release & Marketing.**

AUDIENCE RESEARCH UNIT: All India Radio has been the pioneer in this field. It has a wide net work of Audience Research Units across the country operational since 1946. It provides feedback to producers to plan, design and modify the programmes according to the needs, tastes and aspiration of the target audience. Apart from this, programme ratings /listenership data are provided to sponsors, advertisers and marketers to fulfill their commercial objectives. Audience Research Unit also functions as data bank and reference section for the organization.

NEWS SERVICES DIVISION: The News Services Division (NSD) of All India Radio disseminates news and information to listeners in India and abroad. The News based programmes focus on issues related to common man and development initiatives taken by the government.

DOORDARSHAN: Doordarshan, a public service broadcaster, is one of the largest television networks in the world. It started a service on **15 September, 1959 at Delhi** with the transmission of educational and development programmes on an experimental basis. The rapid expansion of DD started in 1984 with almost everyday a transmitter being installed in the country. Doordarshan is presently operating 31 TV channels besides free-to-air DTH service. Director General is the head of Doordarshan.

DD-National: DD national channel is the largest terrestrial network in the world covering about 92.0 per cent population and 82.0 per cent land area of the country. Being a Public Service Broadcaster the channel continues to make significant contribution to accelerate socio-economic changes, promote national integration, inculcate a sense of unity and fraternity and stimulate scientific temperament among the people. It also contributes to disseminate information for public awareness about family welfare, preservation of environment and measures for women and children welfare. It telecast programmes for children, physically handicapped and under privileged, helps preservation of artistic and cultural heritage of the country and promotes sports. Doordarshan is providing free-to-air DTH Service (Ku-band), "DD Direct +" in the country.

DD News: DD News is the only bilingual news channel in the country. News and Current Affairs programming forms an important component of the channel mix. Since its launch on November 3, 2003, DD News has been committed to present, news and current affairs in fair, balanced and objective manner away from sensationalism. The channel in its programming mix is covering a wide canvas of issues dealing with politics, business, sports, international news events, parliament proceedings, science and technology and crime. Discharging the mandate of public broadcaster, DD News specially highlights social issues like health, education and generates awareness among people about Central Government Flagship Schemes through news and programmes.

DD Sports: A dedicated Indian Sports channel of Doordarshan was launched on 18th March 1999. The channel gives vast coverage to national, international sports events too.

DD Bharati: DD Bharati was launched on 26th January, 2002. This channel has been telecasting programmes on Health, Children, Art and Culture, Music, Dance, Women, Education, Travelogue and preserving the country's cultural heritage and values.

DD Urdu: During the year 2010, DD Urdu commissioned of ace software. DD Urdu also arranged and telecast a national symposium of Urdu poets to show and conserve poetic trends of Urdu poetry.

DD India: The channel offers international viewers an update on the Indian social, cultural, political and economic scene. DD-India was launched with a **mission "to build bridges of communication with Indians living abroad and to showcase the real India, its culture, values, traditions, modernity diversity unity agony and ecstasy to the entire world through programmes of high quality."**

DD Commercial: Doordarshan Commercial Service based upon the relevant booking inputs provided by Marketing Division, Mumbai, prepares and forwards bills to agencies. It also watches revenue realization from agencies working out dues against the agencies and initiating legal action against defaulting agencies for recovery of dues and interest.

Marketing Division: Prasar Bharati has Marketing Divisions at Mumbai, New Delhi, Kolkata, Hyderabad, Bengaluru, Chennai, Thiruvananthapuram, Guwahati, Kochi & Jalandhar with a view to bolster the in-house marketing of programmes on DD-National Network, DD-Regional Kendras, DD-News and various other satellite channels beamed across the country.

Development Communication Division: Development Communication Division (DCD) handles all television campaigns of ministries, departments and PSUs of Government of India and NGOs, provides a single window service for consultancy, media planning, scheduling, monitoring, billing, receipts and clients servicing including observance of special days and weeks etc.

PRESS AND PRINT MEDIA

Registrar of Newspapers for India: The Office of the Registrar of Newspapers for India, more popularly known as RNI, came into being on 1st July, 1956, on the recommendations of the First Press Commission in 1953 and by amending the Press and Registration of Books Act 1867. Under statutory functions, the following jobs are covered:

1. Compilation and maintenance of a Register of Newspapers containing particulars about all the newspapers published in the country;
2. Issue of Certificate of Registration to the newspapers published under valid declaration;
3. Scrutiny and analysis of annual statement sent by the publishers of newspapers every year under section 19-D of the Press and Registration of Books Act containing information, circulation, ownership, etc.;
4. Informing the District Magistrates about availability of titles for intending publishers for filing declaration;

- 5 Ensures that newspapers are published in accordance with the provisions of the Press and Registration of Books Act;
- 6 Verification under section 19-F of the PRB Act, of circulation claims furnished by the publishers in their Annual Statements; and
- 7 Preparation and submission to the Government on or before 31st December each year, a report containing all available information and statistics about the Press in India, with particular reference to the emerging trends in circulation and in the direction of common ownership units, etc.

The following items fall under the Non-statutory functions:

- 1 Implementation of Newsprint Allocation Policy Guidelines and issue of Eligibility Certificates to the newspapers to enable them to import newsprint and also Entitlement Certificates to procure indigenous newsprint;
- 2 Assessing and certifying the essential need and requirement of newspaper establishments to import printing and composing machinery and allied materials.

As per the provision of the Press and Registration of Books (PRB) Act, 1867 and rules under it, the Registrar of Newspaper for India (RNI), commonly known as Press Registrar, is required inter alia to submit an Annual Report to the Government on the status of newspapers on or before 31st December every year. **Bombay Samachar**, a Gujrati daily published from Mumbai since 1822, is the oldest existing newspaper. **"Eenadu" Telugu Daily** published from Hyderabad was the largest circulated single edition daily with 16,74,305 copies.

PRESS INFORMATION BUREAU: The Press Information Bureau (PIB) is the nodal agency of the Government of India to disseminate information to the print and electronic media on government policies, programmes, initiatives and achievements. It functions as an interface between the Government and the media and also serves to provide feedback to the Government on people's reaction as reflected in the media. PIB disseminates information through different modes of communication, viz. Press Releases, Press Notes, Feature Articles, Backgrounders, Photographs and Database available on Bureau's website. PIB Officers also advise their respective Ministries on all matters pertaining to information needs of media and Ministries' publicity requirements. PIB has its Headquarters in New Delhi. It is headed by the Principal Director General (Media and Communication).

Media Outreach Programme and Publicity for Special Events: 'Bharat Nirman Public Information Campaigns' under 'Media Outreach Programme and Publicity for Special Events' disseminate information to the targeted beneficiaries focussing on the Flagship Programme of the Central Government all over the country. The campaign seeks to empower ordinary citizens particularly from the rural, remote, hilly and disturbed areas including SC/ST and Naxalite affected areas, so that they can avail the advantages of these programmes to improve the quality of their life.

Web Enabled Services: PIB is using social media such as Twitter & Youtube as they offer platform for two way communication and quick feedback on the issues of interest. The website of PIB (<http://www.pib.gov.in>) which is an important source of government information. It has an advanced search facility which provides information from the archived material that has been uploaded on the website in the past years on government plans, policies, programme initiatives and achievements.

NEWS AGENCIES

Press Trust of India: India's largest news agency, Press Trust of India (PTI) is a non-profit sharing co-operative owned by the country's newspapers with a mandate to provide efficient and unbiased news to all subscribers. Founded on 27 August, 1947, PTI began functioning from 1 February 1949. PTI offers its news services in English and Hindi languages. Bhasha is the Hindi language news service of the agency.

United News Of India: United News of India (UNI) was incorporated under the Companies Act, 1956 on 19 December, 1959 and started functioning effectively on 21 March, 1961.

In the past five decades, UNI has grown into a major news organisation in India and, with its vibrant presence, provided the much-needed spirit of competition in the vital areas of news gathering and dissemination. In June 1992, it launched the first-ever wire service in URDU.

Nam News Network : NAM News Network (NNN) is the Internet-based news and photo exchange arrangement of the news agencies belonging to member countries of the non-aligned movement. NNN replaces the Non-aligned News Agencies Pool (NANAP) which had acted as the news exchange mechanism among non-aligned countries for 30 years. With internet as a cheap and reliable mode of communication, NNN is expected to contribute to sustained flow of information in the 116 member non-aligned world.

PRESS COUNCIL OF INDIA: Press Council is a statutory quasi-judicial authority mandated by the Parliament to preserve the freedom of the press and maintain and improve the standards of newspapers and the news agencies in India. It is an autonomous body with equal quasi-judicial authority over the authorities and the press persons.

Press and Registration of Books: The Press Council of India has been entrusted by the Parliament with the additional responsibility of functioning as Appellate Authority under Section 8(c) of the Press and Registration of Books Act 1867 and the Appellate Board comprises of the Chairman of the Council and a member of the Council. The Board meets regularly and decides the Appeals placed before it.

Promotion of Official Language: The Council paid particular attention to the propagation of Hindi in its official use. All of its staff members already notified under **Section 10(4) of the Official Language Rules, 1976 (as amended, 1987)** are encouraged to work in Hindi.

NEW MEDIA WING (Formally known as Research Reference and Training Division): Set up in the year 1945, the Division functions as **information serving unit for the Ministry of Information & Broadcasting and various media units** under it. Earlier named as Research Reference and Training Division (RR&TD), its role has been to assist the media units of the Ministry in collection, compilation and preparation of material involving research to publish works of varied nature, building up a database on important subjects, and preparing background notes on current issues and other topics for the use of the Media Units. The Division studied trends in mass media and maintains reference and documentation services on mass communication. It provides reference and research material as well as background material for use of the Ministry, its media units and others engaged in mass communication.

Organisational Setup: New Media Wing has its headquarters at Sookhana Bhawan, CGO Complex, Lodhi Road, New Delhi and is headed by Additional Director General (ADG) and assisted by two Directors and supporting staff.

MAJOR ACTIVITIES

1. India-A Reference Annual
2. Mass Media in India: The New Media Wing brings out 'Mass Media in India', a comprehensive publication on Mass Media in the country.
3. Diary of Events: The Wing maintains a fortnightly Diary of Events. It focuses on important national and international events for record and reference.
4. Specialized Magazines' Monthly Report: The Wing prepares a monthly report on specialized magazines that have a share of FDI and are meant for specified subject only for which they have been given permission for publication in India.

5. Reference Library: The Wing has a well-stocked library with a large collection of documents on various subjects, bound volumes of selected periodicals and various reports of the Ministries, Committees and Commissions. Its collection includes specialized books on subjects pertaining to journalism, public relations, advertising and audio-visual media, prominent encyclopedia series, yearbooks and contemporary articles.
6. National Documentation Centre on Mass Communication: The National Documentation Centre on Mass Communication (NDCMC) was created in 1976 as a part of the Division on the recommendation of an expert committee set up by the Ministry for collecting, interpreting and disseminating information about the events and trends in mass media through its periodical services.
7. Monitoring of Bharat Nirman Phase I & II: Monitoring of Bharat Nirman Campaign Phase I in respect of 8 print media was undertaken. Monitoring of Bharat Nirman Phase II in respect of print media was undertaken.

PHOTO DIVISION: It was established on 16th October 1959 after the Government's decision for establishing a separate department keeping in view the importance of the medium, photographs being the most authentic & truthful record. Photo Division, an independent media unit meant **for the visual support of the varied activities of the Government of India, is the youngest and smallest subordinate office of the Ministry of Information and Broadcasting with a very important role in supporting most of the media units** as well as to fulfill the demand of all sectors including the individuals with important photo documentation.

The Division is **responsible for visual documentation and preparing photographs both in black & white and colour for both internal and external publicity on behalf of the Government of India.** Moreover, Photo Division **provides visuals (stills) to the media units of the Ministry of Information & Broadcasting for dissemination of information by means of day to day publicity** and also to use the photographs through systematic exhibition and publication. Images published on the PIB website for the publicity are the products of the Photo Division.

PUBLICATIONS DIVISION: The Publications Division is a repository of books and journals highlighting subjects of national importance and India's rich cultural heritage. It is publishing books in English and Hindi as well as in all major Indian languages at affordable prices. The subjects range from art, history, culture, biographies of eminent persons, land and people, flora and fauna, children's literature, science and technology and Gandhian literature to annual publications like India – A Reference Annual and Mass Media in India. The list of books published by the Publications Division is available at its website-www.publicationsdivisionnic.in

JOURNALS: Apart from books, the Division publishes 21 periodicals in English, Hindi and regional languages - Yojana in 13 languages, Kurukshetra in English and Hindi, Aajkal in Hindi and Urdu, Bal Bharati in Hindi, Employment News (Weekly) in English, Hindi and Urdu.

Employment News: Some of the special initiatives taken up by Employment News are:

- **E-Employment News:** To meet the long standing demand of the subscribers, Employment News successfully launched its E-version (Hindi, English & Urdu). With this, Employment News is now available anytime & anywhere to its subscribers. The e-paper is simple and is uploaded every week. For security reasons, it cannot be downloaded and saved, and also cannot be printed.
- **Incredible! North East:** To focus on employment opportunities and skill development programs started by union and State government in North Eastern Region, a new feature called "Incredible! North East" was launched. The objective is to strengthen human resources especially of the youth to make them skilled and employable and to create awareness about the jobs & business opportunities in the region.

Bharatendu Harishchandra Awards: In order to promote original writing in Hindi, the Division instituted by Ministry of I & B and implemented by DPD, the Bharatendu Harishchandra Awards 29 years back. These

prestigious awards are given annually in four categories namely Journalism and Mass Communication, Women's Issues, Children's Literature and National Integration.

FILMS DIVISION: The Films Division was constituted in January 1948 by rechristening the erstwhile Information Films of India and the Indian New Parade set up in 1943, primarily for war coverage. The **Cinematograph Act of 1918 was Indianised in 1952** which made the screening of documentary films compulsory throughout the country.

The Division has been motivating the broadest spectrum of the Indian Public with a view to enlisting their active participation in nation building activities. The **aims and objectives of the Division, focused on national perspectives, are to educate and motivate people in the implementation of national programmes and to project the image of the land and the heritage of the country to Indian and foreign audiences.** The Division also **aims at fostering the growth of the documentary film movement, which is of immense significance to India in the field of national information, communication and integration.**

The **Distribution Wing (DHO)** of the Films Division controls 10 Distribution Branch Offices situated in Bangalore, Chennai, Hyderabad, Kolkata, Lucknow, Madurai, Mumbai, Nagpur, Thiruvananthapuram and Vijayawada. The Distribution Wing also distributes prints of selected films of Films Division to the Indian Missions abroad through the External Publicity Division of Ministry of External Affairs. It also commercially exploits the films on royalty basis through sales of Stock Shots, Film Strips, Video clippings etc. and arranges the participation of FD films in National and International film festivals. It has been publishing **Documentary Today**, a quarterly magazine dedicated to the short film genre from 2007.

CENTRAL BOARD OF FILM CERTIFICATION (CBFC): The Central Board of Film Certification (CBFC), set up under the **Cinematograph Act, 1952**, certifies film for public exhibition in India. It consists of a Chairperson and sixteen other non-official members. The Board has its Headquarters at Mumbai and nine regional offices located at Bangalore, Kolkata, Chennai, Cuttack, Guwahati, Hyderabad, Mumbai, New Delhi and Thiruvananthapuram. The regional offices are assisted in the examination of films by advisory panels consisting of persons from different walks of life.

NATIONAL FILM DEVELOPMENT CORPORATION LIMITED: The National Film Development Corporation Limited (NFDC), incorporated in 1975, (100 per cent owned GOI body) was formed by the Government of India with the **primary objective of planning and promoting an organized, efficient, and integrated development of the Indian film industry.** NFDC was reincorporated in the year 1980, by merging the Film Finance Corporation (FFC) and Indian Motion Picture Export Corporation (IMPEC) with NFDC.

DIRECTORATE OF FILM FESTIVALS: The Directorate of Film Festivals was set up under the Ministry of Information and Broadcasting in 1973 with the prime objective of promoting good cinema. This is undertaken by organising a range of activities under these broad categories:

- (a) The International Film Festival of India
- (b) The National Film Awards and the **Dada Saheb Phalke Award**
- (c) Cultural Exchange Programme and organising screening of Indian films through the missions abroad
- (d) The selection of Indian Panorama
- (e) Participation in international film festivals abroad
- (f) Special film expositions on behalf of the Government of India
- (g) Print collection and documentation

DADASAHEB PHALKE AWARD

The **Dadasaheb Phalke Award** is India's highest award in cinema. It is presented annually at the National Film Awards ceremony by the Directorate of Film Festivals, an organisation set up by the Ministry of Information and Broadcasting. The recipient is honoured for their "outstanding contribution to the growth and development of Indian cinema" and is selected by a committee consisting of eminent personalities from the Indian film industry. As of 2014, the award comprises a *Swarna Kamal* (Golden Lotus) medallion, ashawl, and a cash prize of ₹1,000,000 (US\$16,000).

First presented in 1969, the award was introduced by the Government of India to commemorate Dadasaheb Phalke's contribution to Indian cinema. Phalke (1870–1944), who is popularly known as and often regarded as "the father of Indian cinema", was an Indian film-maker who directed India's first full-length feature film, Raja Harishchandra (1913).

The first recipient of the award was actress Devika Rani, who was honoured at the 17th National Film Awards. As of 2013, there have been 45 awardees. Among those, actor Prithviraj Kapoor is the sole posthumous recipient. His actor-filmmaker son, Raj Kapoor, accepted the award on his behalf at the 19th National Film Awards in 1971 and was himself a recipient in 1987 at the 35th National Film Awards ceremony. Bommireddy Narasimha Reddy (1974) and Bommireddy Nagi Reddy (1986); Raj Kapoor (1987) and Shashi Kapoor (2014); Lata Mangeshkar (1989) and Asha Bhosle (2000) along with Baldev Raj Chopra (1998) and Yash Chopra (2001) are the siblings who have won the award. The most recent recipient of the award is actor Shashi Kapoor who will be honoured at the 62nd National Film Awards ceremony.

NATIONAL FILM AWARDS: The National Film Awards are the largest and highest awards in the field of cinema continue to underline cinematic excellence. The awards have over the years brought the best talent in Indian Cinema to national limelight. The National Awards along with cinema's highest honour, the Dadasaheb Phalke Award, are presented by the President of India. To commemorate the release of the first Indian Feature Film, Raja Harishchandra on May 3rd, 1913, it has been decided to confer the National Awards on 3rd May of every year.

NATIONAL FILM AWARDS 2015

Kangana Ranaut bags her second National Award in The 62 National Film Awards for her brilliant performance in Queen. Shahid Kapoor & Aamir Khan were nominated for Haider & P.K but lost it to Kannada Actor Vijay.

Here is the list of The 62 National Film Award winners.

Best Feature Film: "Court" (Marathi, Hindi, Gujarati & English)

Best Actor: Vijay, "Nanu Avanalla Avalu" (Kannada)

Best Actress: Kangana Ranaut, "Queen" (Hindi)

Best Popular Film providing wholesome entertainment: "Mary Kom" (Hindi); Producer: Viacom 18 Motion Pictures; Director: Omung Kumar

Best Film on Environment Conservation/ Preservation: "Ottaal" (Malayalam)

Best Direction: Srijit Mukherji, "Chotushkone" (Bengali)

Best Supporting Actor: Bobby Simhaa, "Jigarthanda" (Tamil)

Best Supporting Actress: Baljinder Kaur, "Pagdi The Honour" (Haryanavi)

Best Male playback singer: Sukhwinder Singh "Haider" (Hindi) (Song: "Bismil")

Best Female playback singer: Uttara Unnikrishanan, "Saivam" (Tamil) (Song: "Azhagu")

Best Costume Designer: Dolly Ahluwalia, "Haider" (Hindi)

NATIONAL FILM ARCHIVE OF INDIA: The importance of preserving cinema as an art and historical document has been recognized all over the world. The task of preserving cinema in all its varied expressions and forms is best entrusted to a national organization having a permanent set-up and the confidence of the film industry and adequate resources and expertise. Thus, the National Film Archive of India was established as a

media unit under the Ministry of Information and Broadcasting in February, 1964 with the following aims and objectives :

1. To trace, acquire and preserve for posterity the heritage of national cinema and build up a representative collection of World Cinema
2. To classify and document data related to film, undertake and encourage research on cinema and publish and distribute them
3. To act as a centre for dissemination of films culture in the country and to ensure the cultural presence of Indian cinema abroad.

DISSEMINATION OF FILM CULTURE: Another important activity under dissemination of film culture is screen education scheme comprising of long and short term Appreciation courses, conducted in collaboration with FTII and other educational and cultural institutions.

CHILDREN'S FILM SOCIETY, INDIA: Children's Film Society India (CFSI) was established in 1955 to provide value-based entertainment to children through the medium of films. CFSI is engaged in production, acquisition, distribution/exhibition and promotion of children's films. The Head Office of the CFSI is located in Mumbai with branch offices at New Delhi and Chennai.

DIRECTORATE OF ADVERTISING & VISUAL PUBLICITY: The Directorate of Field Publicity Advertising and Visual Publicity (DAVP), established in 1955, is the nodal multimedia advertising agency of the Government of India. It informs and educates the people, both rural and urban, about the government's policies and programmes and motivates them to participate in developmental activities, through its various vehicles of communication, viz., print media advertising, audio visual advertising, printed publicity, exhibitions, outdoor publicity and mass mailing.

Organisational Set-up: The organizational set up of DAVP at the Headquarters consists of several wings like Campaign, Advertising, Outdoor Publicity, Printed Publicity, Exhibition, Electronic Data Processing Centre, Mass Mailing, Audio-Visual Wing, Design Studio, Administration and Accounts Wings. It has three regional offices at New Delhi, Bengaluru and Guwahati to coordinate the Directorate's activities in the regions.

DIRECTORATE OF FIELD PUBLICITY: The Directorate of Field Publicity, DFP is a Media Unit of Ministry of Information and Broadcasting. It is the only Directorate under Government of India engaged in interpersonal communication. DFP undertakes well conceived communication programmes among the targeted beneficiaries through interpersonal and micro level communication. DFP seeks to inform the people about their entitlements under various developmental and welfare programmes of the Government of India so as to enlist informed participation of targeted sections of the society in the implementation of such programmes.

Organizational Set-up: The Directorate of Field Publicity functions in three tiers, namely:

- (1) Headquarters at New Delhi
- (2) Regional Offices; and
- (3) Field Publicity Units.

SONG AND DRAMA DIVISION: The Song and Drama Division is a media unit of the Ministry of Information & Broadcasting engaged in inter-personal communication through live media utilizing wide range of performing arts such as Drama, Dance-Drama, Puppetry, Ballets, Operas, Folk and Traditional recitals, magic etc. for propagating various policies, programmes and schemes of the Central Government. The Division headed by Director functions at Delhi,

TRAINING

Film And Television Institute of India, Pune: The Film Institute of India was set up by the Government of India in 1960 under the Ministry of Information and Broadcasting. Following the addition of Television wing in 1974, the Institute was redesignated as Film and Television Institute of India. The Institute consists of two Wings, the **Film wing and the TV Wing**, and offers courses in both Film and Television. The Three-year Diploma Courses lead to a Post Graduate Diploma in Film Direction, cinematography, Audiography and Film Editing. The Institute also offers a two-year Post Graduate Diploma Course in Acting, a two-year Post Graduate Course in Art Direction and Production Design, and One- year Post Graduate Certificate Course.

Satyajit Ray Film And Television Institute, Kolkata: Satyajit Ray Film and Television Institute (SFRTI), Kolkata was established by the Government of India as an autonomous educational institution under the administrative control of Ministry of Information & Broadcasting, and was registered under the West Bengal Societies Registration Act, 1961. Located at Kolkata and named after the legendary film maestro Satyajit Ray, SFRTI is the second national level film training institute to be established by the Government of India. The institute offers three-year post-graduate diploma courses in Direction & Screenplay Writing, Cinematography, Editing and Audiography.

Indian Institute Of Mass Communication: The Indian Institute of Mass Communication (IIMC), registered as a society under the Societies Registration Act, 1860(XXI of 1860) came into existence on August 17, 1965. The Institute's basic objective is undertaking teaching, training and research in the area of mass communication. Beginning in 1969, the Institute has organized a Post-Graduate Diploma Course in Development Journalism for middle level working journalists from Asian, African, Latin American and East European countries under the auspices of the Ministry of External Affairs, Government of India since 1969.

Broadcast Engineering Consultants India Limited (Becil) Broadcast Engineering Consultants India Ltd. (BECIL), a profit making PSE was constituted on 24 March, 1995 to **provide the national broadcasters' expertise to the private broadcasters in India**. At present, BECIL is an established **consultancy agency, system integrator and turnkey solution provider in all spheres of Broadcast Engineering**. **BECIL also undertakes operation and maintenance of various types of broadcast systems**. BECIL has been offering services in India and Overseas. BECIL's clients include Government, Semi Government, Overseas and Private organisations.

The area of Specialisation of BECIL is as follows:

- Establishment of Radio and TV Transmitting facility including frequency and coverage planning, prediction etc.
- Setting up state-of-the-art studio facilities for Audio and Video including Ethernet connectivity capable of transmitting live content and data.
- Establishment of Cable TV systems and HITs (Head End In The Sky) and Wireline Broadcasting.
- Turnkey Solution for Establishing Community Radio Stations.
- Establishment from concept to commissioning of Electronic Media Monitoring solutions (Radio and TV Terrestrial or Satellite,) and security related Surveillance Set ups for GSM, CDMA and VSAT.
- Sales and support for all type of broadcast engineering equipment/system.
- Design and integration of outside broadcast vans (DSNG) with state-of-the- art technology.
- Providing professionals for O&M of broadcast stations, TV studios, satellite earth stations, Electronic Media Monitoring Centre.
- Supply and support for various type of monitoring, interception and encryption, decryption devices for forces and intelligence agencies.

CHAPTER TWENTY THREE | PLANNING

PLANNING in India derives its objectives and social premises from the Directive Principles of State Policy enshrined in the Constitution. Public and private sectors are viewed as complementary. The private sector covers, besides organized industry, small-scale industries, agriculture, trade and housing, construction and related areas. Individual efforts and private initiatives are considered necessary and desirable in the national endeavour for development with optimum voluntary cooperation.

The Planning Commission was set up by a Resolution of the Government of India in March 1950 in pursuance of declared objectives of the Government to promote a rapid rise in the standard of living of the people by efficient exploitation of the resources of the country, increasing production and offering opportunities to all for employment in the service of the community. The Planning Commission was charged with the responsibility of making assessment of all resources of the country augmenting deficient resources, formulating plan for the most effective and balanced utilization of resources and determining priorities. Jawaharlal Nehru was the first chairman of the Planning Commission. At present, Prime Minister of India, Narendra Modi is the Chairman of the Planning Commission.

FIVE YEAR PLANS

The first Five-year Plan was launched in 1951 and two subsequent five-year plans were formulated till 1965, when there was a break because of the Indo-Pakistan Conflict. Two successive years of drought, devaluation of the currency, a general rise in prices and erosion of resources disrupted the planning process and after three Annual Plans between 1966 and 1969, the fourth Five-Year plan was started in 1969.

The Eighth Plan could not take off in 1990 due to the fast changing political situation at the Centre and the years 1991-92 were treated as Annual Plans. The Eighth Plan was finally launched in 1992 after the initiation to structural adjustment policies.

For the first eight plans, the emphasis was on a growing public sector with massive investments in basic and heavy industries, but since the launch of the Ninth Plan in 1997, the emphasis on the public sector has become less pronounced and the current thinking of planning in the country in general is that it should increasingly be of an indicative nature.

FIRST PLAN: Keeping in view the large-scale import of food grains in 1951 and inflationary pressures on the economy, the **First Plan (1951-56)** accorded the highest priority to agriculture including irrigation and power projects. About 44.6 per cent of the total outlay was allocated for this purpose.

SECOND PLAN: The **Second Five-Year Plan (1956-57 to 1960-61)** sought to promote a pattern of development, which would ultimately lead to the establishment of a socialistic pattern of society in India. Its main aims were **(i) an increase of 25 per cent in the national income; (ii) rapid industrialization with particular emphasis on the development of basic and heavy industries; (iii) large expansion of employment opportunities; and (iv) reduction of inequalities in income and wealth and a more even distribution of economic power.**

THIRD PLAN: The **Third Plan (1961-62 to 1965-66)** aimed at securing a marked advance towards self-sustaining growth. Its immediate objectives were to : **(i) secure an increase in the national income of over five per cent per annum and at the same time ensure a pattern of investment which could sustain this rate of growth in the subsequent Plan periods; (ii) achieve self-sufficiency in food grains and increase agricultural production to meet the requirements of industry and exports; (iii) expand basic industries like steel, chemicals, fuel and power and establish machine building capacity so that the requirements of further industrialization could be**

met within a period of about 10 years mainly from the country's own resources; (iv) fully utilize the manpower resources of the country and ensure a substantial expansion in employment opportunities; and (v) establish progressively greater equality of opportunity and bring about reduction in disparities of income and wealth and a more even distribution of economic power.

ANNUAL PLANS: The situation created by the Indo-Pakistan conflict in 1965, two successive years of severe drought, devaluation of the currency, general rise in prices and erosion of resources available for Plan purposes delayed the finalization of the Fourth Five Year Plan. Instead, **between 1966 and 1969, three Annual Plans** were formulated within the framework of the draft outline of the Fourth Plan.

FOURTH PLAN: The **Fourth Plan (1969-74)** aimed at **accelerating the tempo of development of reducing fluctuations in agricultural production as well as the impact of uncertainties of foreign aid.** It sought to raise the standard of living through programmes designed to promote equality and social justice.

FIFTH PLAN: The **Fifth Plan (1974-79)** was formulated against the backdrop of severe inflationary pressures. The major objectives of the plan were to achieve self-reliance and adopt measures for raising the consumption standard of people living below the poverty line. This Plan also gave high priority to bring inflation under control and to achieve stability in the economic situation.

SIXTH PLAN: **Removal of poverty was the foremost objective of the Sixth Plan (1980-85).** The strategy adopted was to move simultaneously towards strengthening the infrastructure for both agriculture and industry. Stress was laid on tackling interrelated problems through a systematic approach with greater management, efficiency and intensive monitoring in all sectors and active involvement of people in formulating specific schemes of development at the local level and securing their speedy and effective implementation.

SEVENTH PLAN: The **Seventh Plan (1985-90)** emphasized on policies and programmes, which aimed at rapid growth in food grains production, increased employment opportunities and productivity within the framework of basic tenets of planning, namely, growth, modernization, self reliance and social justice. To reduce unemployment and consequently, the incidence of poverty, special programmes like **Jawahar Rozgar Yojana were launched in addition to the existing programmes.** Due recognition was accorded to the role, small-scale and food processing industries could play in this regard.

ANNUAL PLANS: The Eighth Five-Year Plan (1990-95) could not take off due to the fast-changing political situation at the Centre. The new Government, which assumed power at the Centre in June 1991, decided that the Eighth five-Year Plan would commence on 1st April 1992 and that 1990-91 and 1991-92 should be treated as separate Annual Plans.

EIGHTH PLAN: The **Eighth Five-Year Plan (1992-97)** was launched immediately after the **initiation of structural adjustment policies and macro stabilization policies, which were necessitated by the worsening Balance of Payments positions and the position of inflation during 1990-91.** The growth targets were planned to be achieved with relative price stability and substantial improvement in the country's Balance of Payments. Some of the salient features of economic performance during the Eighth Five-Year Plan indicate, among other things: **(a) a faster economic growth, (b) a faster growth of the manufacturing sector and agriculture and allied sectors, (c) significant growth rates in exports and imports, improvement in trade and current account deficit and a significant reduction in the Central Government's fiscal deficit.**

NINTH PLAN: The **Ninth Plan (1997-2002)** was launched in the fiftieth year of India's Independence. The Plan aimed at achieving a targeted GDP growth rate of seven per cent per annum and there was emphasis on the seven identified Basic Minimum Services (BMS) with additional Central Assistance. These included provision of safe drinking water, availability of primary health service facilities, universalization of primary education,

public housing assistance to shelterless poor families, nutritional support to children, connectivity of all villages and habitations and streamlining of the public distribution system with a focus on the poor. The Plan also **aimed at pursuing a policy of fiscal consolidation, whereby the focus was on sharp reduction in the revenue deficit of the Government.**

The Specific objectives of the Ninth Plan included : **(i) priority to agriculture and rural development with a view to generate adequate productive employment and eradication of poverty; (ii) accelerating the growth rate of the economy with stable prices; (iii) ensuring food and nutritional security for all, particularly the vulnerable sections of society; (iv) providing the basic minimum services of safe drinking water, primary health care facilities, universal primary education, shelter, and connectivity to all in a time-bound manner; (v) containing the growth rate of population; (vi) ensuring mobilization and participation of people at all levels; (vii) empowerment of women and socially disadvantaged groups such as Scheduled Castes, Scheduled Tribes and Other Backward Classes and minorities as agents of socio-economic change and development; (viii) promoting and developing people's participatory institutions like Panchayati Raj Institution, cooperatives and self-help groups; and (ix) strengthening efforts to build self-reliance.**

TENTH FIVE-YEAR PLAN: The Tenth Five-Year Plan (2002-07) further developed the NDC mandate objectives, of **doubling the per capita income in ten years and achieving a growth rate of eight per cent of GDP per annum.** Since economic growth is not the only objective, the Plan aims at harnessing the benefits of growth to improve the quality of life of the people.

The Tenth Plan has a number of new features that include, among others, the following:

- **Firstly**, the Plan recognises the rapid growth in the labour force. The Tenth Plan therefore aims at creating 50 million job opportunities during the period, by placing special emphasis on employment intensive sectors of agriculture, irrigation, agro-forestry, small and medium enterprises, information and communication technology and other services.
- **Secondly**, the Plan addresses the issue of poverty and the unacceptably low levels of social indicators. In the current Plan there are specific monitorable targets, which will need to be attained along with the growth target.
- **Thirdly**, since national targets do not necessarily translate into balanced regional development and the potential and constraints of each state differ vastly, the Tenth Plan has adopted a differential development strategy. For the first time, a statewise growth and other monitorable targets have been worked out in consultation with the states to focus better on their own development plans.
- **Finally**, considering the present market-oriented economy, the Tenth Plan has dwelt at length on the policies that would be necessary and the design of key institutions.

Key reforms for the agriculture sector include: Eliminating interstate barriers to trade and commerce; Essential Commodities Act to be amended; amending Agriculture Produce Marketing Act; Liberalizing agri-trading, agri-industry and exports; Encouraging contract farming and permitting leasing in and leasing out of agriculture lands; replacement of various acts dealing with food by one comprehensive 'Food Act'; permit futures trading in all commodities; removal of restrictions on financing of stocking and trading.

Some other key reform measures include repeal of SICA, and strengthening bankruptcy and foreclosure laws to facilitate transfer of assets; reform of labour laws; policy reforms for village and small scale sectors to improve credit, technology, marketing and skill availability, and a phased dereservation of small scale industries; Early enactment of Electricity Bill; Coal Nationalization Amendment Bill and Communication Convergence Bill; Abolish restrictions and encourage decontrol of private road transport passenger services and private sector participation in road maintenance; early adoption of a Civil Aviation Policy, establishment of a regulatory framework for the sector and development of major airports with active private participation.

ELEVENTH FIVE YEAR PLAN: The Eleventh Five Year Plan (2007-12) which was approved by the National Development Council on 19 December, 2007 provides a **comprehensive strategy for inclusive development, building on the growing strength of the economy, while also addressing weaknesses that have surfaced. It sets a target for 9 per cent growth in the five year period with acceleration during the period to reach 10 per cent by the end of the plan. It also covers 26 other major indices of performance relating to poverty, health education, women and children, infrastructure, and environment and sets monitorable targets in each of these.**

This plan outlines the new priorities for the public sector. These relate to reviving dynamism in agriculture and building the necessary supportive infrastructure in rural areas, expanding access to health and education, especially in rural areas, undertaking programmes for improving living conditions for the weaker section and for improving their access to economic opportunity.

There is a massive thrust in this Plan on access **to education and health**. In health, the Plan aims at providing improved broad based health care in rural areas through the National Rural Health Mission. The Rashtriya Swasthya Bima Yojana will provide the much needed insurance cover against illness to the population below the poverty line.

The Plan emphasized the need for energy conservation, increasing energy efficiency, and development of renewable sources of energy.

TWELFTH FIVE YEAR PLAN: The Broad vision and aspirations which the Twelfth Plan seeks to fulfill are reflected in the subtitle '**Faster, Sustainable, and More Inclusive Growth**'. The Twelfth Plan fully recognizes that the objective of development is broad-based improvement in the economic and social conditions of our people. Twelfth Plan envisaged that the current slowdown in GDP growth can be reversed through strong corrective action, including especially an expansion in investment with a corresponding increase in savings to keep inflationary pressures under control.

Twelfth Plan Strategy

The Twelfth Plan seeks to strengthen initiatives taken in the Eleventh Plan to expand the reach of health care and work towards the long term objective of establishing a system of Universal Health Coverage (UHC) in the country. This means that each individual would have assured access to a defined essential range of medicines and treatment at an affordable price, which should be entirely free for a large percentage of the population. Inevitably, the list of assured services will have to be limited by budgetary constraints. But the objective should be to expand coverage steadily over time.

Based on the recommendations of the High Level Expert Group (HLEG) and other stakeholder consultations, it is possible to outline the key elements of the strategy that should be followed in the Twelfth Plan. These elements should be seen as a part of a longer term plan to move towards UHC, which is a process that will unfold over two or three Plan periods.

1. There must be substantial expansion and strengthening of the public sector health care system if we are to meet the health needs of rural and even urban areas. The bulk of the population today relies upon private sector health providers, paying amounts which they cannot afford, because of the inadequate reach of the public sector. While the private sector can continue to operate for those who can afford it, an expansion of good quality affordable public sector care is essential. As supply in the public sector increases, it will cause a shift towards public sector providers freeing the vulnerable population from dependence on high cost and often unreachable private sector health care.
2. Health sector expenditure by the Centre and States, both Plan and Non Plan, will have to be substantially increased by the end of the Twelfth Plan. It has already increased from 0.94 per cent of GDP in the Tenth Plan to 1.04 per cent in the Eleventh Plan. The provision of clean drinking water the sanitation as one of the

principal factors in the control of diseases is well established from the history of industrialised countries and it should have high priority in health related resource allocation.

3. Financial and managerial systems will be redesigned to ensure more efficient utilization of available resource and to achieve better health outcomes. Coordinated delivery of services within and across sectors, delegation matched with accountability fostering a spirit of innovation are some of the measures proposed to ensure that more can be done from less for more for better health outcomes.
4. Efforts would be made to find a workable way of encouraging cooperation between the public and private sector in achieving health goals. This would include contracting in of services for gap filling and also various forms of effectively regulated and managed PPP, while also nursing that there is no compromise in terms of standards of delivery and that the incentive structure does not undermine health care objectives.
5. An important lesson from the Eleventh Plan is that the multiplicity of Central Sector and Centrally Sponsored Schemes addressing individual diseases, or funding activities or institutions, prevents a holistic health-system-approach, leads to duplication and redundancies and makes coordinated delivery difficult. This multiplicity also constrains the flexibility of States to make need based plans or deploy their resources in the most efficient manner.
6. The health system in the Twelfth Plan will continue to have a mix of public and private service providers. The public sector health services need to be strengthened to deliver both public health related and clinical services. The public and private sectors also need to coordinate for delivery of a continuum of care. A strong regulatory system would supervise the quality of services delivered. Standard treatment guidelines should form the basis of clinical care across public and private sectors, with adequate monitoring by the regulatory bodies to improve quality and control the cost of care.

HIGHLIGHTS OF BUDGETARY ALLOCATION OF ANNUAL PLAN 2013-14

The budget 2013-14 pegged the total expenditure of the Central Government at Rs. 16,65,297.32 crores or 14.6 per cent of the GDP. Plan Expenditure includes both revenue and capital expenditure of the government on the Central Plan, and Central assistance to State and Union Territory plans. The Plan expenditure constituted around 33 per cent of the total expenditure or 4.9 per cent of the GDP. Plan expenditure for the year 2013-14 was Rs. 5,55,322.00 crores. Central Assistance for States and UTs was at Rs. 1,36,254.00 crores in 2013-14, **which constituted 25 per cent of the Plan Expenditure and or 1.2 per cent of the GDP.**

CENTRAL PLAN OUTLAY

Budget Support for the Central Plan along with the Internal and Extra Budgetary Resources (IEBR) of Public Enterprises constitutes the Central Plan outlay. The Gross Budgetary Support constituted around 62 per cent of the Central Plan outlay. During the year 2013-14, the total Plan Outlay was kept at Rs. 6,80,123.39 crores.

CENTRAL PLAN OUTLAY BY HEADS OF DEVELOPMENT

The Central Plan Outlay by Heads of Development indicates that the Plan priorities have remained consistent, over the years. Social Services, Energy and Transport together constituted roughly 73 per cent of the total Central Plan Outlay in 2013-14 and it was around 72 per cent in 2012-13. During the first year of the Twelfth Five Year Plan, 23.77 per cent of total central Plan Outlay was allocated for the Energy Sector, 28.99 per cent for Social Services and 19.24 per cent for the Transport sector.

During the year 2013-14, the plan allocation for Energy, Social Services and Transport sectors was at 23.3 per cent, 30.4 per cent and 19.6 per cent, respectively. While the share of Social Services, Rural Development, Energy, General Economic Services, Agriculture and Allied Activities, Science Technology & Environment, Irrigation and Flood Control and General Services recorded a marginal increase and there was slight decline in the share of Industry and Minerals and Communications. A brief analysis for the heads of development is presented in the subsequent sections.

AGRICULTURE AND ALLIED ACTIVITIES

The Twelfth Five Year Plan (2012-17) envisaged 4 per cent per annum growth in the GDP from Agriculture and Allied Sectors. This target is an important element for 'inclusiveness. About half of the population is either wholly or significantly dependent for their livelihoods on Agriculture and Allied Activities like crop agriculture, horticulture, animal husbandry and fisheries. Thus, the objective of inclusive growth can only be realized with the revitalization of this sector and by transforming the present agricultural scenario.

Rural Development

The Outlay for the Rural Development Sector had increased by 4.92 per cent between the years 2012-13 and 2013-14. The Central Plan Outlay for this sector was at Rs. 40,763.45 crores during the year 2012-13, which was increased to Rs. 42,772.55 crores during the year 2013-14.

AGRICULTURE DIVISION

The Agriculture Division in the Planning Commission has been mandated for working on the policy framework of the development in agriculture & allied sectors in the country. The Division scrutinizes programmes/schemes and recommends the allocation of funds required for implementing such programmes. To improve the quality of implementation, the division also monitors and reviews the implementation of programmes and recommends midterm corrections, if needed.

The Agriculture Division has reviewed the State Plans as they referred to agriculture and allied sectors and monitored the performance of the plan schemes in consultation with Departments of Agriculture & Cooperation, Animal Husbandry, Dairying and Fisheries by holding meetings with States and conducting annual plan discussions with the concerned departments. Against the target of 4 per cent growth in agriculture sector during the Eleventh Plan period, a growth rate of 4.1 percent has been achieved. The target of growth of the sector remains at 4 per cent during the Twelfth Plan. The scenario of food grain production has been very impressive with a record level of 259.29 million tons during 2011-12. As per second Advanced Estimates 2013-14, foodgrains' production of horticulture is also estimated at an all time record of 266 million tons during 2012-13. A fillip has been provided to the sector by launching Mission for Integrated Development of Horticulture (MIDH) during 2013-14.

A National Mission for Sustainable Agriculture (NMSA), besides focusing on water positive technologies and integrated farming will also focus on programmatic interventions as per land capability and conducive to climatic parameters in select blocks as pilots, for ensuring integrated development through dissemination and adoption of rainfed technologies with greater reach in disadvantaged areas & location specific planning by way of coordination, convergence and leveraging investments from other Schemes/Missions like MGNREGS, IWMP, RKVY, National Food Security Mission (NFSM), National Horticulture Mission (NHM), National Mission for Agricultural Extension & Technology (NMAE&T) etc. A consortium approach will be evolved with various stake holders including knowledge partners like State Agricultural Universities (SAUs), Krishi Vigyan Kendras (KVKs), Indian Council of Agricultural Research (ICAR) Centres etc. to provide single window service/ knowledge provider system for the benefit of farming community.

National Oilseed and Oil palm Mission (NMOOP) envisaged increase in production of vegetable oils sourced from oilseeds, oil palm and Tree Borne Oilseeds from 7.06 million tons to 9.51 million tons by the end of Twelfth Plan (2016-17). The National Mission on Agriculture Extension and Technology also includes Seed and Planting Materials, Agricultural Mechanization and Plant Protection & Plant Quarantine. Major Restructured Central Sector Schemes viz., integrated schemes on Agricultural Marketing, Agricultural Census, Economics & Statistics and Cooperation have been approved by the Cabinet.

Department of Animal Husbandry, Dairying and Fisheries is implementing restructured Centrally Sponsored Schemes viz., National Programme for Bovine Breeding and Dairy, Livestock Health & Disease control and

National Livestock Mission. For development of Fisheries a National Fisheries Department Board (NFDB), which was launched in the year 2006 or fostering integrated development of fisheries sector, would be strengthened further by bringing almost all schemes relating to development of fisheries into its fold with focus on management of fish diseases and creation of related 'infrastructure.

Social Justice and Social Welfare Division

The Constitution of India in its Preamble, Fundamental Rights, Directive Principles of State Policy and Other Social Legislations/Provisions there under confirms India, as a welfare state with commitment for the cause and inclusive growth of its people in general and of vulnerable in particular. Since the socioeconomic and educational backwardness of certain vulnerable and weaker sections in Indian society are lagging much behind in terms of health, education, employability, housing, participation in economic activities and availability of basic infrastructure etc., the successive Governments of Independent India have committed to planned and more inclusive welfare and empowerment by reducing inequality in income, social status, and opportunities.

The Social Justice and Social Welfare (SJ&SW) Division in the Planning Commission is responsible for providing overall guidance for formulation of policies, plans and programmes/schemes with principle objectives to protect & safeguard the interest of these sections and ensure their welfare, empowerment and development in the quality of life.

Welfare & Empowerment Scheduled Castes

Article 366(24) of Constitution defines the 'Scheduled Castes' means such castes, races or tribes or parts of or groups within such castes, races or tribes as are deemed under article 341 to be Scheduled Castes for the purpose of the Constitution. Scheduled Castes are constitutionally declared as group of castes and sub castes, which suffered from the practice of untouchability.

The strategies incorporated in the 12th Five Year Plan for inclusive growth of SCs, STs envisages for the following measures:

- Ensure the security and dignity of all persons belonging to the scheduled castes, especially women and put a complete end to all forms of 'untouchability' and discrimination against them.
- Bring members of the SCs-both men and women at par, to the maximum possible extent, with their non-SC/ST counterparts, in terms of all developmental indices viz., education, health, nutrition, housing, income generation and employability.
- Empower SCs to participate in society and in nation-building, on an equal basis with others.
- Effectively implement SCSP as the essential instrument for accomplishing inclusive growth.
- Education is considered as the most important instrument to empower the status of Scheduled Castes. It is proposed to promote educational development by providing needed support in the form of scholarships at different levels of education, increasing the hostel facilities for boys and girls students and setting up of a network of residential schools of high quality throughout the country.

MAINSTREAMING & EMPOWERMENT OF SCHEDULED TRIBES

Article 366(25) of the Constitution defines that Scheduled Tribes means "those tribal communities or parts of or groups with in such tribes or tribal communities or parts or groups within such tribes or tribal communities."

There are 705 tribes that are included as Scheduled Tribes in India in the list of Scheduled Tribes. As per 2011 census, tribal population of the country is 10.43 crores, **constituting 8.61 per cent of the total population. 91.7 per cent of them live in rural areas and 8.3 per cent in urban areas.**

About 15 per cent of the country's area is inhabited by the tribal communities, who live in various ecological and geo-climatic conditions ranging from plains to forests and hills to inaccessible areas. **The highest proportion of**

ST population have reported from Madhya Pradesh (14.51 per cent) followed by Maharashtra (19.7 per cent) and Odisha (9.66 per cent) and other distinct areas are the North Eastern states.

The decadal literacy rate of STs has gradually increased from 8.53 percent in 1961 to 59 percent, in 2011. In respect of health and nutrition, indicators like Infant Mortality Rate (IMR), Child Mortality' Rate (CMR) and Maternal Mortality Rates (MMR) are comparatively higher than that of general population. NHFW survey revealed that barely 18 per cent of STs had deliveries in a health facility, compared to 51 per cent among other communities. 81.56 per cent of the tribal workers are engaged in primary sectors. The level of rural poverty amongst the STs on all-India basis is 47.4 per cent (2009-10) which is significantly higher than the average across different social groups. The various development indices indicate that the STs continue to lag significantly behind the other communities.

Empowerment of Other Backward Classes

Other Backward Classes (OBCs) comprise the castes and communities which are found common in the lists of the Mandal Commission Report. The Mandal Commission covered more than 3000 communities/castes and sub castes under Other Backward Classes (OBCs). **OBCs form around 52 per cent of the country's population. The National Sample Survey conducted during 2004-05 (61st Round), puts the figure at 41 per cent.** Generally, Other Backward Classes consists of Small & Marginal Farmers, Agricultural Labourers, Artisans, Pastoral Communities and similar groups who have been considered as educationally and economically backward.

Economic advancement plays a key role in social empowerment of OBCs. Since the economic status of OBCs is not much better than general population, Ministry of Social Justice and Empowerment is implementing certain schemes for improving socio-economic conditions of OBCs, such as Assistance to Voluntary Organizations working for welfare of OBCs, Skill Development and subsidized loans through National Backward Classes Finance and Development Corporation.

Bharat Nirman

To unlock the huge development potential of rural India, the Government of India launched a time bound programme, namely, Bharat Nirman in 2005, initially for a period of four years i.e. between the years 2005-2009. The programme was initiated by the Government of India, in partnership, with State Governments and Panchayati Raj Institutions with the objective to build rural infrastructure and provide basic amenities in rural areas. Under the scheme, projects are taken up in the areas of irrigation, road, housing, water supply, telecommunication connectivity and electrification. Specified goals and targets were set in each of these areas. Under Bharat Nirman, the effort is in imparting urgency towards the fulfillment of these goals, and making the programmes time-bound, transparent and accountable. Phase I of the programme was implemented in the period 2005-06 to 2008-09 and, on the basis of the outcome, Phase II was implemented in the year 2009-10.

Some of the major achievements made through Bharat Nirman in the last year are given below:

- The irrigation potential created was 7.32 million hectare against a target of 10 million hectares during the Phase-I and a cumulative of 13.45 million hectares irrigation potential was created under BNP upto March 2014.
- Out of the 1,78,184 eligible habitations; 1,32,499 habitations were cleared and 93,201 habitations were connected under the Bharat Nirman component of PMGSY (Pradhan Mantri Gram Sadak Yojana).

Rashtriya Uchhtar Siksha Abhivan (RUSA)

The Central funding for State higher education is very small; its reach is very limited and its impact insignificant. During the year, the draft guidelines for RUSA were examined in the Higher Education unit and necessary inputs were provided to MHRD. The Central funding of States' higher education would benefit from the synergies between the States and Central funding. EFC memorandum and CCEA notes on RUSA were examined in the Higher Education Unit. The Annual Plan (2013-14) review was also conducted during the year.

Youth Affairs and Sports

India is a nation of young people and blessed with the population of about 70 per cent of persons below the age of 35 years. This 'Demographic Dividend' is seen as offering a window of opportunity to accelerate the country's rate of growth. To harness the "Yuva Shakti" in nation-building, various programmes / schemes are being implemented by the Ministry of Youth Affairs & Sports. Therefore, the 12th Plan focuses on the problems related to adolescent and youth.

Economics Division

The work of Economics Division is mainly related to the external sector of the economy of India. This encompasses foreign trade, balance of payments, foreign investments and international cooperation in the contest of the planning process. The Division coordinates with various Ministries and Organizations on various aspects relating to bilateral and multilateral economic cooperation. The other subject matters pertaining to this sector are bilateral and multilateral technical cooperation involving various international organizations such as World Bank (WB), International Monetary Fund (IMF), Asian Development Bank (ADB), United Nations Conference on Trade and Development (UNCTAD) and World Trade Organization (WTO) as well as regional arrangements such as Economic and Social Commission for Asia and the Pacific and South Asian Association for Regional Cooperation. In this context, the Division is engaged in analyzing the trends and issues in the international economy. The Division also handles among others, Plan allocation for projects under the Plan Schemes of Ministry of External Affairs (MEA) and Ministry of Overseas Indian Affairs (MOIA).

Financial Resources Division

The Financial Resources Division has assessed the financial resources of all States and UTs for the Annual Plan 2013-14 and worked out CBS and its allocation to Central Ministries and Departments for the Annual Plan 2014-15. While formulating the Annual Plan for 2013-14, performance of Annual Plans of previous years has been evaluated.

For the Annual Plan 2014-15, it has been decided to restructure Centrally Sponsored Schemes (CSS) into 66 Schemes and block grants and has also decided as follows:

- i) These schemes will be classified as Central Assistance to State Plan;
- ii) The funds will be placed with Ministries for transfer to States through consolidated fund route.

The Official Level discussion on Financial Resources (FR) estimates for Annual Plan 2014-15 in respect of all the States & UTs started from 10th January, 2014 and completed in February, 2014.

Priorities for Health in the Twelfth Plan

The priority areas for the Health in the Twelfth Five Year Plan are as follows:

Financing : Funding as an instrument of incentive and reform. The 12th Plan promotes enhanced funding with flexibility in central funding to incentives States to expand their health budgets appropriately.

National Health Mission: Paradigm shift towards building a holistic health systems-approach. National Rural Health Mission expanded into a comprehensive National Health Mission ensuring the principles of universal coverage, achieving quality standards, continuum of care, effective governance, structures and decentralized Planning.

Convergence and coordinated delivery of services within and across sectors.

Promotion of essential, generic medicines, and to make these universally available free of cost to all patients in public facilities. A National List of Such Essential Medicines to be made operational with the introduction of Standard Treatment Guidelines, including for AYUSH.

Universal Health Coverage: The long term objective will be to establish a system of Universal Health Coverage (UHC). LTHC pilots will be taken up in minimum one to a maximum of three districts in each State. Such

districts are likely to be representative sample of the State and also where the existing systems are robust enough to allow the testing and measurement of the service package and other institutional innovations on the basis of key health indicators such as IMR, MMR, TFR, full immunization, safe delivery and Child Sex Ratio. Department of Health & Family Welfare has identified three districts in each state and the same has been circulated to all the states with a request to initiate the pilot in one of these districts. However, the states may propose an alternative district for UHC pilot with a rationale to justify their choice of the district. These UHC pilots will be funded under National Health Mission (NHM). This division coordinated the meeting of DCH with Chief Ministers of North Eastern States regarding the preparations for UHC pilots.

Housing and Urban Affairs Division

The Economic development and urbanization are closely and causatively linked. Cities in India are emerging as the country's engines of economic growth, with a contribution of more than 60 per cent to the GOP. As per the Census of India, 2011, India's urban population has grown from 290 million in 2001 to 377 million in 2011; accounting for over 31 per cent of the country's population. The number of towns increased from 5161 in 2001, to 7935 in 2011. This rapid urbanization has shown significant positive linkages with economic growth. The growth in urban areas also creates opportunities for the rural economy and helps improve its productivity, especially in rural areas adjacent to urban centres.

The Government has stepped up its focus and launched multiple schemes to facilitate urban renewal and development. These include the following:

- Jawaharlal Nehru National Urban Renewal Mission (JNNURM), which is now a Centrally Sponsored Scheme.
- Interest Subsidy Scheme for Housing the Urban Poor (ISHUP) revised and revamped as Rajiv Rinn Yojana (RRY) as a Central Sector Scheme w.e.f October, 1, 2013.
- The National Mission on Sustainable Habitat (NMSH) approved to bring synergy between different Ministries in Central and State Governments to foster projects/activities which encourage sustainable development of cities and reduce their energy footprint.

Labour, Employment and Manpower Division

The LEM Division primarily deals with matters relating to employment and skill development, including framing of strategies and policies. The Division also examines schemes/programmes and issues concerning social security measures, child labour, occupational safety & health, rights of workers and legislative matters on these matters. Issues/conventions related to the International Labour Organization (ILO) are also dealt with by the Division.

Estimates of labour force, work force, employment and unemployment in the country are integral part of the planning exercise. Estimates are made on the basis of NSSO surveys and on the basis of these surveys and other assumptions, employment projections are made. The LEM Division is responsible for assessment of employment and unemployment in the country for the Five Year Plans.

Planning Commission prepared the Report of the Inter-Ministerial Group to examine the National Advisory Councils recommendations on the issues relating to Social Security for unorganized sector workers as was recommended by the Committee of Secretaries in March 2013. Subsequently, the Department of Financial Services had circulated the Report on Comprehensive Social Security for the Unorganized Sector workers finalized by the Integrated Financial & Management Research (IFMR) on which LEM Division had given its comments.

Panchayati Raj

The involvement of the community in planning, execution and monitoring of the developmental programmes is imperative for planning and effective programme implementation. The Government has taken a number of steps to promote people's participation in decision-making processes in areas that impinge on daily lives of people. Panchayati Raj Institutions have emerged as an important vehicle for community participation in development programmes. **The 73rd and 74th Constitution Amendment Acts provided constitutional status to the Panchayati Raj Institutions and clearly articulated their role in governance of the country.**

The State Governments were expected to empower Panchayati Raj Institutions by devolving adequate functions, functionaries and financial resources in consonance of functions assigned to each tier of the Panchayati Raj set up. The Ministry of Panchayati Raj, set up to carry forward the process of empowerment of PRIs, has played an active role in sensitizing the Central Ministries and the State Governments on the need to recognize the centrality of the panchayats in their sphere of activity and to provide space to the PRIs in their programmes.

A new scheme namely the Rajiv Gandhi Panchayat Sashaktikaran Abhiyan (RGPSA) has been launched to strengthen Panchayats across the country. Three important activities which are to be funded are:

- i) Provision of administrative and technical support at the gram panchayat level which will fill most critical gaps in the functioning of Panchayats.
- ii) Strengthening of the institutional structure for training.
- iii) Capacity building of gram sabhas.

Minorities Division

A new Minorities Division was created in the Planning Commission in December, 2012. The Division is primarily responsible for providing overall policy and guidance in formulation of plans and programmes towards social, educational and economic empowerment of Minorities.

CHAPTER TWENTY FOUR | RURAL AND URBAN DEVELOPMENT

INDIA has been a welfare state since independence and the primary objective of all governmental endeavours has been the welfare of its people. The policies and programmes have been designed with the aim of alleviation of rural poverty, which has been one of the primary objectives of planned development in India. It was realized that a sustainable strategy of poverty alleviation has to be based on increasing the productive employment opportunities in the process of growth itself. Elimination of poverty, ignorance, diseases and inequality of opportunities and providing a better and higher quality of life were the basic premises upon which all the plans and blue-prints of development were built.

Rural development implies both the economic betterment of people, as well as greater social transformation. In order to provide the rural people with better prospects for economic development, increased participation of people in the rural development programmes, decentralization of planning, better enforcement of land reforms and greater access to credit are envisaged.

Initially, main thrust for development was laid on agriculture, industry, communication, education, health and allied sectors but later on it was realized that accelerated development can be provided only if governmental efforts were adequately supplemented by direct and indirect involvement of people at the grass root level. Accordingly, on 31 March, 1952, an organization known as Community Projects Administration was set up under the Planning Commission to administer the programmes relating to community development. The Community Development Programme, inaugurated on October 2, 1952, was an important landmark in the history of rural development. This programme underwent many changes and was handled by different ministries.

Major programmes for Rural Development

The following major programmes are being operated by the Ministry of Rural Development in rural areas, (i) Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), (ii) National Rural Livelihoods Mission (NRLM), (iii) Indira Awas Yojana (IAY), (iv) Pradhan Mantri Gram Sadak Yojana (PMGSY) and (v) National Social Assistance Programme (NSAO).

MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE ACT (MGNREGA)

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is a rights based wage employment programme implemented in rural areas of the country. This programme aims at enhancing livelihood security by providing not less than one hundred days of guaranteed wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work. In the first phase, MGNREGA was implemented in 200 most backward districts with effect from February 2, 2006 and was extended subsequently to additional 113 and 17 districts with effect from 1st April, 2007 and 15th May, 2007 respectively. The remaining districts were included under the Act with effect from April 1, 2008. Thus the Act now covers all the rural districts (644) of the country.

Objectives

The core objectives of the Scheme are: Providing not less than one hundred days of unskilled manual work as a guaranteed employment in a financial year to every household in rural areas as per demand, resulting in creation of productive assets of prescribed quality and durability. Strengthening the livelihood resource base of the poor; proactively ensuring social inclusion and Strengthening Panchayati Raj Institutions.

Aajeevika

During 1980s, Integrated Rural Development Programme (IRDP) used to be one of the major programmes of this Ministry that directly targeted poor families for creation of assets, skill development and self-employment. The Planning Commission set up a committee under the chairmanship of Prof. SR Hashim in 1997, the report of which formed the basis for shifting from an individual beneficiary approach to a group-based approach for poverty alleviation. The Swamjayanti Gram Swarozgar Yojana (SGSY), became major sustainable income generation through self employment and micro-enterprise development programme to be implemented by the states, with effect from April, 1999. The cornerstone of the SGSY strategy was that the poor need to be organized into Self Help Groups (SHGs) and their capacities built up systematically so that they can access self-employment opportunities and establish effective linkages between the various components of the programme, such as availability of credit, technology transfer/up-gradation, marketing and infrastructure.

Prof. Radhakrishna Committee on Credit Related Issues related to SGSY, set up by the Ministry of Rural Development in April, 2008 reported the shortcomings in implementation of SGSY, like mobilisation of rural poor and formation of SHGs across the States, insufficient capacity building of beneficiaries, low credit mobilization and lack of professionals to implement the programme. Based on the findings of the report, SGSY was restructured as National Rural Livelihoods Mission (NRLM), subsequently renamed as 'Aajeevika', to implement it in a mission mode across the country. The programme was formally launched on 3rd June, 2011. A further restructuring of NRLM based on the lessons from early implementation took place in May, 2013.

Key Features of NRLM

The distinguishing features of NRLM are as follows:

- i. **Universal Social Mobilization:** At least one woman member from each identified rural poor household is brought under the Self Help Group (SHG) network in a time bound manner. Special emphasis is on the poorest of the poor and most vulnerable communities, such as manual scavengers, victims of human trafficking, Particularly Vulnerable Tribal Groups (PVTGs), Persons with Disabilities (PwDs) and bonded labour. NRLM has devised special strategies to reach out to these communities and help them come out of poverty.
- ii. **Participatory Identification of Poor (PIP):** The target group under NRLM is determined by a well-defined, transparent and equitable process of participatory identification of poor, at the level of the community. All households identified as poor through the PIP process are part of NRLM Target Group and are eligible for all the benefits under the programme. The NRLM Target Group derived through the PIP is de-linked from the BPL list. The PIP exercise is carried out by the primary federation, i.e. at least 6-12 months after village entry.
- iii. **Funds to the community as Resources in Perpetuity:** NRLM provides Revolving Fund and Community Investment Fund (CIF) as Resources in Perpetuity to the institutions of the poor to strengthen their institutional and financial management capacity and build their track record to attract mainstream bank finance. The funds provided to community institutions are based on micro- planning process and it is treated as loans to individual SHG members but it is a grant to the Community institutions. Funds are disbursed to these institutions in multiple tranches based on triggers and milestones achieved and not merely their chronological age and time-period.
- iv. **Universal Financial Inclusion:** NRLM works on both demand and supply sides of financial inclusion. On the demand side, it promotes financial literacy among the poor and provides catalytic capital to the SHGs and their federations. On the supply side, it coordinates with the financial sector and encourages use of business correspondents (and community facilitators like Bank Mitras') Information & Communication Technology (ICT) based financial technologies, business correspondents and community facilitators like 'Bank Mitras'. It also works towards universal coverage of rural poor against loss of life, health and assets. Further, it works on remittances, especially in areas where migration is endemic.

Pradhan Mantri Gram Sadak Yojana

The Government of India, as part of poverty reduction strategy, launched the Pradhan Mantri Gram Sadak Yojana (PMGSY) on 25th December, 2000 as a Centrally Sponsored Scheme to assist States, though roads other than National Highways are in the State List under the Constitution. The primary objective of the programme is to provide good all weather connectivity to all eligible unconnected habitations in the core network with a population of 500 (Census-2001) and above. In respect of the hill States (North-East, Sikkim, Himachal Pradesh, Jammu & Kashmir and Uttarakhand), desert areas (as indentified in the Desert Development Programme), and tribal (Schedule V) areas and selected tribal and backward districts (as identified by Ministry of Home Affairs and Planning Commission), the objective is to connect habitations with a population of 250 (Census 2001) and above.

Indira Awas Yojana

As part of a larger strategy of the Ministry's poverty eradication effort, Indira Awas Yojana (IAY), a flagship scheme of the Ministry of Rural Development, has since inception been providing assistance to the BPL families who are either houseless or having inadequate housing facilities, for constructing a safe and durable shelter.

Ministry's commitment of "shelter for all" gained momentum when India became a signatory to the Istanbul Declaration on Human Settlement in June, 1996 recognizing thereby the need for access to safe and healthy shelter and economic well being. The objective of the habitat approach is to achieve adequate shelter for all, especially the deprived urban and rural poor through an enabling approach leading to development and improvements in access to basic facilities like infrastructure, safe drinking water, sanitation, electricity etc.

The Central Government has been implementing IAY as part of the enabling approach to 'shelter for all', taking cognizance of the fact that rural housing is one of the major anti-poverty measures for the marginalized. The house is recognized not merely as a shelter and a dwelling place, but also as an asset which supports livelihood, symbolizes social position and is also a cultural expression.

National Social Assistance Programme

Article 41 of the Constitution of India directs the States to provide public assistance to its citizens in cases of unemployment, old age, sickness and disablement and also in other cases within the limit of its economic capacity and development. It is in accordance with these noble principles that the Government of India on 15th August, 1995 included the National Social assistance Programme (NSAP) in the Central Budget for 1995-96.

LAND REFORMS**Integrated Watershed Management Programme (IWMP)**

About 60% of cultivated area in the country is under rainfed. Rainfed areas are the hot-spots of poverty, water scarcity, low productivity; malnutrition and are prone to severe land degradation. Watershed development programme is considered and adopted as an effective tool to address problems of rainfed / degraded areas in the country. The Department of Land Resources, Ministry of Rural Development has been implementing three area development programmes viz. Integrated Wastelands Development Programme (IWDP), Drought Prone Areas Programmes (DPAP) and Desert Development Programme (DDP) since 1995-96 on watershed basis. These three programmes have been integrated and consolidated into a single modified programme called Integrated Watershed Management Programme (IWMP) and launched in 2009-10. This programme is being implemented as per the Common Guidelines for Watershed Development Projects, 2008 (Revised Edition-2011). The major activities undertaken under IWMP, since its inception in 2009-10 inter alia, include preparation of detailed project reports, institution and capacity building, entry point activities, ridge area treatment, drainage line treatment, soil and moisture conservation, rain water harvesting, nursery raising, afforestation, horticulture, pasture development, livelihood activities for the asset-less persons and production system and micro enterprises for small and marginal farmers.

1. The main features of the programme are:
 - (a) **Enhanced Cost Norms:** The cost norm for IWMP is 15000/- per ha for hilly and difficult areas, 12000/- per ha for other areas and upto 15000/- per ha for IWMP projects in Integrated Action Plan (IAP) Districts.
 - (b) **Funding Pattern:** The funding pattern under the scheme is in the ratio of 90:10 between the Central Government and State Government.
 - (c) **Cluster Approach:** The IWMP envisages taking up a cluster of contiguous micro-watersheds, physical extent ranging from 1,000 ha to 5,000 ha for various interventions under the programme.
 - (d) **Dedicated Institution:** There are provisions of dedicated implementing agencies of State Level Nodal Agencies (SLNAs), Watershed Cell cum Data Centres (WCDCs), Project Implementing Agencies (PIAs) and Watershed Committees (WCs) at state, district, project and village level, respectively.
 - (e) **Scientific Inputs:** The programme emphasizes utilizing the information technology, remote sensing techniques, GIS facilities, with spatial and non-spatial data into planning, implementation, monitoring and evaluation of the projects.
 - (f) **Institution and Capacity Building:** A component of Institution and Capacity Building (5% of the total project cost) has been provided to establish institutional mechanism at State, District, Project and Village levels and to build the capacity of the stakeholders.
 - (g) **Centrality of Community Participation:** Involvement of primary stakeholders in the form of grass-root community organizations is at the centre of planning, budgeting, implementation and management of watershed projects.
 - (h) **Detailed Planning:** To emphasize proper planning for better and systematic implementation of project, 1% of the project cost is provided for preparation of Detailed Project Report (DPR).
 - (i) **Phases of Implementation:** The activities to be taken up under IWMP are spread over three phases. The Preparatory Phase (1 to 2 years) mainly involves preparation of DPR, entry point activities and institution and capacity building. The Watershed Works Phase (2 to 3 years) involves the watershed development works livelihood activities for the asset-less persons and production system and Micro Enterprises. The Consolidation and Withdrawal Phase (1 to 2 years) involves consolidation and completion of various works.
 - (j) **Livelihood Orientation:** 9% of the project cost is earmarked for development of sustainable livelihood options for asset-less people whereas, 10% of the project cost is dedicated for productivity enhancement and development of micro enterprises for small and marginal farmers.
 - (k) **Monitoring and Evaluation:** 2% of the total project cost is earmarked for ensuring monitoring and evaluation in order to undertake mid-course corrections, if required, to achieve the objectives of the programme.

The National Land Records Modernization Programme (NLRMP)

With a view to assist the States/UTs in the task of computerization of land records and strengthening their revenue administration and training infrastructure for survey and settlement, two Centrally-sponsored schemes, e.g. (i) Strengthening of Revenue Administration and Updating of Land Records (SRA&ULR) and (ii) Computerization of Land Records (CLR) were being implemented by the Department of Land Resources (DoLR) since the year 1987-88 and 1988-89 respectively.

A major focus of the programme is on citizen services, such as providing computerized copies of the RoRs (Records of Rights) with maps; other land-based certificates such as caste certificates; income certificates (particularly in rural areas); domicile certificates; information for eligibility for development programmes; land passbooks; and free access of property owners to their records as the records will be placed on the websites with proper security IDs. Abolition of stamp papers and payment of stamp duty and registration fees through banks, etc., e-linkages to credit facilities, automatic mutations would be possible.

RURAL DRINKING WATER SUPPLY

Provision of safe drinking water is a basic necessity. Rural drinking water supply is a State subject and has been included in the Eleventh Schedule of the Constitution among the subjects that may be entrusted to the Panchayats by the States. The Ministry of Drinking Water and Sanitation is mandated to provide safe drinking water in all rural habitations. To achieve this objective, the Ministry is implementing the flagship programme of National Rural Drinking Water Programme (NRDWP) to assist States in provision of drinking water supply to all rural habitats.

The Accelerated Rural Water Supply Programme (ARWSP) was started in 1972-73 to assist States and UTs with 100 per cent grants-in-aid to implement drinking water supply schemes in problem villages. A Mission approach was given to the entire programme when a Technology Mission on Drinking Water Management, named as the National Drinking Water Mission (NDWM) was introduced in 1986. The NDWM was renamed as Rajiv Gandhi National Drinking Mission (RGNDWM) in 1991 and the Department of Drinking Water and Sanitation came into existence during August, 2011.

National Rural Drinking Water Programme (NRDWP)

The Centre is implementing the National Rural Drinking Water Programme (NRDWP) to support States and UTs with financial and technical assistance to implement drinking water supply schemes in all rural habitations. The vision and objectives of NRDWP are:

Vision

Safe drinking water for all, at all times, in rural India.

Objectives

To ensure provision of safe and adequate drinking water supply to all uncovered, partially covered and quality affected habitations in the rural areas of the country; to ensure that all schools and anganwadis have access to safe drinking water; to provide enabling support and environment for PRIs and local communities for this purpose; enable rural communities to monitor and keep surveillance on their drinking water sources, water supply and initiate corrective action to have contaminants free water; ensure equity- high priority in coverage/investment habitations with high SCs/STs and minority population; promote participatory integrated water resources management with a view to ensure drinking water security—water availability supply and consumption to be measured; provide access to information through online reporting system with information in public domain to bring in transparency and informed decision making; ensuring household level drinking water security through water budgeting and preparation of village water security plans; consciously move away from high cost treatment technologies for tackling arsenic and fluoride contamination to development of alternative sources in respect of arsenic and alternate sources/dilution of aquifers through rainwater harvesting for tackling fluoride contamination; and encourage handing over of management of Rural Drinking Water Schemes (RWS) to the Panchayati Raj Institution.

Panchayati Raj

Panchayats were given Constitutional status through the 73rd Constitutional Amendment which became law on 24th April, 1993. This Constitutional Amendment has inserted Part IX which sets out mandatory provisions regarding structure, composition and election to Panchayats. This Article provides for:-

Constitution of Gram Sabha or village assembly; a three tier Panchayati Raj structure with Panchayats at village, intermediate and district level (except in States with population less than 20 lakh, where there may be two tiers of Panchayats); a five year term for Panchayats and conduct of elections under the supervision and control of State Election Commission; one third reservation for women and reservation for SCs and STs in proportion to their population; constitution of State Finance Commissions to recommend distribution of resources between the State and the Panchayats; and constitution of District Planning Committees (DPCs) to consolidate plans of rural and urban governments in the district etc.

States play a major supporting role in the development and strengthening of the Panchayat Raj System. They are responsible for bringing out legislations regarding:

Powers and functions of gram sabha; composition of Panchayats; powers to Panchayats to impose taxes; and also to provide grant-in-aid to fund devolution of functions, functionaries, and funds to Panchayats and maintenance of accounts and audit.

The Constitution lists 29 subjects in the Eleventh schedule which are suggested for devolution to Panchayats. These include agriculture, rural, housing, drinking water, roads, women & child development, education, health, poverty alleviation programme etc. The major programmes and important issues relating to the Ministry of Panchayati Raj are elucidated below:-

Backward Regions Grant Fund (BRGF)

The BRGF programme is designed to redress regional imbalances in development. The fund provides financial resources for supplementing and covering existing developmental inflows into 272 identified districts so as to:-

Bridge critical gaps in local infrastructure not being adequately met through existing inflows; strengthen Panchayat and Municipal level governance with more appropriate capacity building to reflect local felt needs; provide professional support to local bodies for planning, implementation and implementation of the scheme. Activities that can be included in State plans under RGPSA are administrative and technical support, GP buildings, capacity building and training of elected representatives and functionaries, institutional structure for training at State, District and Block levels, e-Enablement of Panchayats, support to Panchayat processes and procedures in Panchayats with inadequate revenue base, Programme Management, information, education, communication, Strengthening of State Election Commission (SECs) and innovative activities in States. This Scheme will be applicable to all States/UTs, including those which presently are not covered by Part IX of the Constitution. The financing pattern of the scheme is in the ratio of 75:25 between the State Government and the Central Government. However, in the case of North Eastern States, it is in the ratio of 90:10 between the North Eastern States and the Central Government.

e-Panchayat Mission Mode Project

The Ministry of Panchayati Raj (MoPR) is promoting e-Governance in Panchayats through implementation of e-Panchayat Mission Mode Project (MMP), that addresses all aspects of Panchayats functioning including planning, monitoring, implementation, budgeting, accounting, social audit and delivery of citizen services like issue of certificates, licenses etc. Six more applications, namely area profiler, service plus, asset directory, action soft, social audit and trainings management were launched on the occasion of National Panchayat Day on 24th April, 2012 and trainings are being imparted on these applications to States/UTs before their adoption.

State Finance Commissions (SFCs)

State Finance Commissions have an effective role to play in the scheme of fiscal decentralization, while arbitering on the claims of resources by Local Bodies and the State Governments, and at the same ensuring greater stability and credibility to the transfer mechanism to strengthen Local Rural Bodies.

- Article 243-I (1) of the Constitution of India mandates the constitution of a State Finance Commission (SFC) at the expiration of every fifth year. Under this provision, the SFCs are entrusted with advising the State Governments on the principles to be applied in determining the distribution between the States and the Panchayats of net proceeds of taxes, duties etc. levied by the State and the range of taxes and non-taxes to be devolved to Panchayats, etc.
- There has been a growing concern about the weak functioning of the SFCs in many of the States. The successive Central Finance Commissions have also been recommending measures to strengthen the Functioning of the SFCs to avoid adhoc grants to the Local bodies.

- A Task Force was constituted in the Ministry of Panchayati Raj to look into all the issues afflicting the SFCs and suggest measures to strengthen these Institutions to enable them to discharge their functions as mandated by the Constitution. Report of the Task Force is being finalized.

Gender Responsive Panchayats

The Ministry has initiated steps to make Panchayats gender responsive and take up issues which are faced by women. Special Gram Sahha meetings are held during August in which matters like anganwadi centres, health, sanitation, drinking water, agriculture, horticulture, dairy etc. are discussed so that people can improve access to Government sponsored programmes and can also improve food security in their area. Mahila Gram Sabha meetings have been recommended to be conducted all over the country to facilitate frank discussion on sensitive issues faced by women. Some of these issues, which have been taken up by Mahila Sabhas recently, are the problem of sex determination of foetus, female foeticide and adverse child sex ratio.

Decentralised Planning

Integrated and participatory planning is the only way to ensure synergetic convergence of plethora of schemes and resources, and to achieve better outcomes. Ministry has, therefore, issued comprehensive guidelines in continuation of Planning Commission guidelines of 25th August, 2006 in this regard and is pursuing Union Ministries and the States to make it happen. Such planning is already mandated for BRGF programme. However, for want of instructions from Union Ministries and State Departments, such plans remain largely BRGF plans.

Moreover, support to the planning process at district and below level is very weak and a scheme approved for the 11th plan for this purpose, could not take off. A positive development has been **Basic Statistics for Local Level Development (BSLLD)** being compiled under the scheme of MoStatistics through the Panchayats is to be uploaded on National Panchayat Profiler (an application under e-Panchayat) for universal use.

Devolution of 3Fs (Funds, Functions and Functionaries)

The devolution of powers, responsibilities and resources to Panchayats is considered essential for sustainable decentralization and inclusive development. As such the Ministry encourages States to devolve powers (Functions, Functionaries and Finances i.e. 3Fs) to Panchayati Raj Institutions (PRIs). MoPR is continuously persuading State governments for devolving powers to Panchayats by providing assistance to States for capacity building of Panchayats, to enable them to perform devolved functions effectively and efficiently.

Under the scheme Rajiv Gandhi Panchayat Sashaktikaran Abhiyan (RGPSA), MoPR intends to provide funds to only those states that have fulfilled the following mandatory criteria: regular elections to Panchayats or local bodies in non-Part IX areas under the superintendence and control of the State Election Commission (SES); at least one third reservation for women in Panchayats or other local bodies; constitution of SFC (State Finance Commission) every five years, and placement of Action Taken Report on the recommendations of the SFC in the State legislature and constitution of District Planning Committees (DPCs) in all districts and issuing of guidelines/rules to make these functional.

Urban Development

Urbanisation is a major ingredient of economic development and progress. Urban population recorded annual growth rate of 2.76 per cent during 2001-11 compared to a growth rate of 2.74 per cent during the previous decade. The number of town dwellers is growing by around 5 million a year. Historically, most urban growth has been due to natural increase and not migration. That is changing as villagers seek opportunities. In future, therefore, India's urban population will rise much faster, doubling by 2050.

The Twelfth Five Year Plan (FYP) envisages that urbanisation would be central to India's strategy of achieving faster and more inclusive growth, because agglomeration and densification of economic activities and habitations in urban conglomerations stimulate economic efficiencies and provide more opportunities for earning

livelihoods. Urban areas are now acknowledged as 'engines of economic growth' and more than 60 per cent of India's Gross Domestic Product (GDP) emanates from urban areas.

In India, urban areas are defined on the basis of two criteria. First, the state government grants municipal status, viz. Corporations Municipal Council, notified town area committee or Nagar Panchayat, etc. to an existing settlement. Such settlements are known as statutory or municipal towns in the census definition of urban areas. Second, if a settlement does not have an urban civic status, but satisfies demographic and economic criteria, like population more than 5,000, density more than 400 persons per square kilometre and 75 per cent workforce in the non-agricultural sector, it can be termed as a census town.

ELEMENTS OF PLANNED URBANISATION

Planning

Absence of long term planning prevents development of "good cities" in which all the parts of the system—urban services, transportation, housing, commercial activities fit together harmoniously. Urbanisation planning policies aim at enhancing productivity, mobility and livability of urban areas. The 12th FYP's vision of economically vibrant, inclusive and sustainable cities will broadly inform all the other urban sector plans down the line i.e. Master Plans, City Development Plans, City Sanitation Plans, City Mobility Plans etc. India's urbanisation efforts have suffered from disjointed projects/activities without adequate planning for the urban area as a whole. For example the 'Master Plan' approach should not focus only on the core areas of the city and should have linkages to a viable financial and operating strategy. Instead of being used as a regulatory tool, it could also provide a blue-print for development of dynamic and smart cities. A master plan typically freezes the land use pattern and building bye-laws and determines the permissible limits of Floor Space Index (FSI) and minimum setback areas. Often these provisions do not take into account the potential of the city to grow, especially where trunk infrastructure has been laid. This may result in sub-optimal use of land, as well as, other urban Infrastructure.

Rajiv Awas Yojana (RAY)

In pursuance of Government's vision of "Slum Free India", Rajiv Awas Yojana (RAY) was launched in June, 2011 in two phases; the Preparatory Phase for a period of two years which ended in June, 2013 and the Implementation Phase.

There will be two fold strategy to tackle slums—(a) Curative Strategy for slum redevelopment of all existing slums; and (b) Preventive Strategy for containment of growth of further slums.

Jawaharlal Nehru National Urban Renewal Mission (JNNURM): Basic Services to the Urban Poor (BSUP) and Integrated Housing and Slum Development Programme (IHSDP)

Cities and towns of India constitute the world's second largest urban system. They contribute over 50 per cent of country's Gross Domestic Product (GDP) and are central to economic growth. For these cities to realize their full potential and become true engines of growth, it was necessary that focussed attention is given to the improvement of infrastructure and basic services to the poor therein. For achieving these objectives, a Mission Mode Approach was essential. Accordingly, the Jawaharlal Nehru National Urban Renewal Mission (JNNRM) was launched on 3rd December, 2005.

Rajiv Rinn Yojana (RRY)

Rajiv Rinn Yojana (RRY) is an instrument to address the housing needs of the EWS/ LIG segments in urban areas, through enhanced credit flow. RRY has been formulated by modifying the Interest Subsidy Scheme for Housing the Urban Poor (ISHUP) piloted in the 11th Plan period with enhanced scope and coverage. RRY is a 100 per cent Central Sector Scheme to be applicable in all the urban areas of the country. It provides an interest subsidy of 5 per cent on loans granted to EWS and LIG categories to construct their houses or extend the existing

ones. Although the loan upper limit is Rs. 5 lakh for EWS and Rs. 8 lakh for LIG, but interest subsidy would be limited to the first Rs. 5 lakh of the loan amount, in case the loan exceeds this amount.

Urban Local Bodies have a very significant role in the implementation of this Scheme. Financial incentives have been built in to attract the State Government facilitators and Banks/HFCs. States can also dovetail their State Schemes with RRY. In the selection of beneficiaries, preference would be given to women, SCs, STs, minorities and persons with disabilities.

National Urban Livelihoods Mission (NULM)

The Ministry of Housing and Urban Poverty Alleviation launched National Urban Livelihoods Mission (NULM) on 23rd September, 2013, in the 12th Five Year Plan, which will replace the existing Swama Jayanti Shahari Rozgar Yojana (SJSRY). The NULM would focus on organizing urban poor in self help groups, creating opportunities for skill development leading to market-based employment and helping them to set up self-employment ventures by ensuring easy access to credit. The Mission would aim at providing shelter equipped with essential services to the urban homeless in a phased manner. In addition, the Mission would also address livelihood concerns of the urban street vendors.

Ten per cent Lump-sum provision for the Benefit of NER (North-Eastern region) including Sikkim

As per the extent decision of the Government of India, 10 per cent of the total budget provision for the Ministries/Departments needs to be spent on the projects/schemes of development for the North Eastern Region including Sikkim. The Scheme of 10 per cent Lump-sum provision for the benefit of North Eastern Region, including Sikkim, has been operational in the Ministry of Housing and Urban Poverty Alleviation (HUPA) from the year 2001-2002.

National Policy on Urban Street Vending, 2009

Street vendors constitute an important segment of the urban population at the bottom of the pyramid. Street vending provides a source of self-employment and thus acts as a measure of urban poverty alleviation without major Government intervention. It also acts as an instrument to provide affordable as well as convenient services to a majority of urban population. Street vendors have a prominent place in the urban supply chain and are an integral part of the economic growth process without urban areas. Given the pace of and the opportunities presented through the development of urban areas, the growth of street vendors' population is likely to have an upward trend. It is vital that these vendors are enabled to pursue their livelihoods in a congenial and harassment free atmosphere.

Socio-Economic and Caste Census, 2011

Socio-Economic and Caste Census (SECC)-2011 was a comprehensive door to door enumeration, for both rural and urban areas with common enumeration approach but different questionnaire. The objectives of SECC-2011 were:

1. To enable households to be ranked based on their socio-economic status. State Governments can then prepare a list of families living below poverty line.
2. To make available authentic information that will enable caste wise population enumeration of the country.
3. To make available authentic information regarding socio-economic condition and education status of various castes and sections of population.

Different Stages of SECC-2011 comprised enumeration, supervision, verification, correction, publication of draft list, invitation/disposal of claims and objections, and preparation of the final list. As of September 2013, Haryana, Nagaland and Daman & Diu have published Draft List (urban).

National Urban Housing and Habitat Policy, 2007 (NUHHP)

Shelter is a basic human need next to food and clothing. At the end of the 11th Five Year Plan, the housing shortage is estimated to be 18.78 million. However, urban areas in our country are also characterized by severe shortage of basic services, like potable water, well laid out drainage system, sewerage network, sanitation facilities, electricity, roads and appropriate solid waste disposal. It is these shortages that constituted the rationale for policy focus on housing and basic services in urban areas. This policy intends to promote sustainable “development of habitat in the country with a view to equitable supply of land, shelter and services at affordable prices to all sections of the society’. Given the magnitude of the housing shortage and budgetary constraints of both the Central and State Governments, it is amply clear that Public Sector efforts do not suffice in fulfilling the housing demand.

National Buildings Organisation (NBO)

The National Buildings Organisation (NBO), an attached office of the Ministry of Housing and Urban Poverty Alleviation has been functioning as an apex organization in the country for collection, compilation and dissemination of statistical information on housing and building construction activities. Having regard to the changing requirements under various socio-economic and statistical functions connected with Housing, Construction, Slum development, Urban Poverty Alleviation and related activities, and also to ensure that the schemes of the Ministry of Housing and Urban Poverty Alleviation (M/o HUPA) are supported with appropriate database, the National Buildings Organisation was restructured in March, 2006.

Housing and Urban Development Corporation Limited (HUDCO)

The Housing and Urban Development Corporation Ltd. (HUDCO), the premier techno-financing public sector enterprise, in the field of housing and infrastructure development in our country, was incorporated as a fully-owned Government of India enterprise in 1970 under section 4A of the Companies Act, 1956, with an authorized capital of Rs. 2500 crore.

The cardinal objectives of HUDCO, among others are: to provide long term finance for construction of houses for residential purposes or finance or undertake housing and urban development programmes in the country; to finance or undertake, wholly or partly, the setting up of new or satellite towns; to subscribe to the debentures and bonds to be issued by the State Housing (and/or Urban Development) Boards, Improvement Trusts, Development authorities etc., specifically for the purpose of financing housing and urban development programmes; to finance or undertake the setting up of industrial enterprises of building material; to administer the money received, from time to time, from the Government of India and other sources as grants or otherwise for the purposes of financing or undertaking housing and urban development programmes in the country.

Building Materials and Technology Promotion Council (BMTPC)

Building Materials and Technology Promotion Council (BMPTC), an autonomous body under the aegis of the Ministry of Housing and Urban Poverty Alleviation, Government of India, has been working towards smooth transfer of cost effective, energy-efficient, environment-friendly and disaster resistant building materials and construction technologies from lab to field since 1990.

The Council is working towards bringing emerging technologies, like Rapidwall Construction System, Monolithic Construction System and several other precast prefabricated construction system, which are successful elsewhere in the world, to bring cost, economy, quality, environmental protection and speed in housing construction.

With the efforts of the Council, a number of Indian Standards have been formulated in close association with the Bureau of Indian Standards (BIS) on cost effective technologies such as flyash bricks, RCC planks and joist, bamboo mat corrugated roofing sheets etc. Through Performance Appraisal Certification Scheme (PACS), the Council is carrying out performance evaluation of new and emerging materials, technologies and construction

systems, on which there are no standards available. The Council is playing a proactive role towards disasters mitigation and management.

Hindustan Prefab Limited

Creation of Hindustan Prefab Limited (HPL), a Civil Engineering Company presently engaged in Project Management Consultancy Services, including Housing and Urban Infrastructure Projects across the country, was the brainchild of Pt. Jawaharlal Nehru, to meet the immediate housing need for displaced persons migrated from West Pakistan. Thereafter, it has come off age and earned its name and fame by pioneering the PRC railway sleepers which have replaced the wooden, as well as, stainless steel sleepers in Indian Railways. At present it is engaged on project management basis.

CHAPTER TWENTY FIVE | SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENTS

INDIA has a long and distinguished tradition in science and technology from the ancient times. The great achievements during the last century, the latter half prior to independence, have been related largely to pure research at the time of independence, our scientific and technological infrastructure was neither strong nor organized, as compared to the developed world. This had resulted in our being technologically dependent on the skills and expertise available in other countries. In the past four decades, an infrastructure and capability largely commensurate with meeting national needs has been created, minimising our dependence on other countries. A range of industries, from small to the most sophisticated, has been established covering a wide range of utilities, services and goods. There is now a reservoir of expertise well acquainted with the most modern advances in basic and applied areas that is equipped to make choices between available technologies, to absorb readily new technologies and provide framework for future national development.

Department of Science and Technology

Department of Science and Technology, in its endeavour to strengthen national Science and Technology capacity and capability kept its pace to implement several planned initiatives to enable Indian Science & Technology community to increase scientific and technological outputs. Some of the important domains in which the Department devoted its attention during the year are: Strengthening the pool of scientists and technologists for carrying out globally competitive R & D in cutting edge areas of science; nurturing R & D institutions and building infrastructural facilities for enhancing global ranking of India in scientific research; support for the establishment of multi-stakeholder mechanisms for partnerships for promoting science; and deploying technology through national missions; developing capacity of institutions and industry for technology commercialization for solving national challenges; providing S&T inputs to society for its socio-economic benefits; and evidence based policy formulation for S&T sector.

Science, Technology and Innovation Policy

The new Science, Technology and Innovation (STI) Policy unveiled in 2013 by the then Prime Minister includes a thrust for innovations in science and technology sector. STI policy reveals an aspiration of India to gain global competitiveness and link science sector to the developmental agenda of the country.

Science and Engineering Research Board

Science and Engineering Research Board (SERB) has intensified its activities for human capacity building through science and engineering research. Besides supporting individual scientist centric R&D projects through 19 programme advisory committees, the Board has launched several new initiatives during the year viz., Empowerment and Equity opportunities for Excellence in Science for enhancing participation of scientists from the weaker sections of the society; SERB Women Excellence Award to enroll large number of women into S&T activities; SERB Distinguished Fellowship Scheme.

Women Scientists Scheme

Women Scientists Scheme has completed a decade of support and encouragement to women scientists having break in their career and provides them opportunity to come back in main stream of science by pursuing research in science and engineering. This year, the Department received a total of 1037 new proposals against which a total number of 222 projects were sanctioned. Support towards augmenting higher education and research at university and academic sector for basic infra structural facilities for teaching and research was provided to 152 institutions/departments during the year.

Attraction of talent for Science and Research is being pursued through Innovation in Science Pursuit for Inspired Research (INSPIRE) programme since 2009-10. More than 10 lakh students in the age group of 10-15 have been provided INSPIRE awards from whom more than 230 innovations are being processed for provisional patenting.

The Department continued to play an active role to develop and deliver need based S & T interventions at the grassroot level for socio-economic development, specially for weaker sections of the society. To encourage grass-root innovators, National Innovation Foundation was able to scout about 14000 ideas, innovations and traditional knowledge practices from different parts of the country during 2013-14. 43 applications for intellectual property protection were filed nationally. A company named Yuvan Long Life was registered in collaboration with Pune based Ensign Biosciences for commercialisation of grassroot technologies.

National Geographical Information System

National Geographical Information System (NGIS) offering services and imageries on cyber space has been prioritized. A major initiative to launch NGIS with 41 layers of information products on spatial maps was initiated. NGIS is expected to offer a unique set of services for people by providing GIS data products of high utility value. Taking into account of the one of the objectives of the Government of India for main streaming developmental processes in North Eastern Region, the Department of Science and Technology has established.

North-East Centre for Technology Application and Research

North East Centre for Technology Application and Research (NECTAR), the centre would strive to connect technology assets emanating from various scientific departments and their institutions to the developmental processes of state government of the North East Region. The centre has already piloted several projects to provide an extension mechanism for technologies for development for state governments in the North Eastern Region.

National Mission of Nano Science and Technology

National Mission of Nano Science and Technology - an umbrella programme - was launched in 2007 to promote R&D in this emerging area of research in a comprehensive fashion. The main objectives of the Nano Mission are - basic research promotion, research infrastructure development, nano application and technology development, human resource development, international collaboration and orchestrating national dialogues. During the year 2013-14, India secured third position in the world in terms of scientific publications in nano science and technology. It is widely acknowledged in the country that Nano Mission's activities played an important role in achieving this milestone.

National Mission on Climate Change

National Mission for Sustaining the Himalayan Ecosystem (NMSHE) and National Mission for Strategic Knowledge on Climate Change (NMSKCC) launched under the National Action Plan for Climate Change (NAPCC) are under implementation by the Department. As part of deliverables of these national missions, 6 major research programmes have been initiated and supported during 2013-14. The Department is poised to make every effort to take India to a much higher level globally in the arena of science and technology, and thereby contribute to the overall socio-economic empowerment of the society.

Survey of India

Survey of India (SOI), the national survey and mapping organisation under the Ministry of Science and Technology, was set up in 1967. In its assigned role as the National Principal Mapping Agency, Survey of India bears a special responsibility to ensure that the country's domain is explored and mapped suitably to provide base maps for expeditious and integrated development, and ensure that all resources contribute their full measure to the progress, prosperity and security of India.

National Atlas and Thematic Mapping Organisation

While Survey of India meets the national needs in cartography, some specialised thematic maps required to meet the needs of the specific users, are taken care of by the National Atlas and Thematic Mapping Organisation (NATMO), operating under the Department. It also concentrates its attention in a number of areas to integrate resource maps with other relevant socio-economic data and represent them in spatial forms, useful for developmental planning. NATMO is trying to develop the new technology of reverse printing for NATMO maps on experimental basis. It is also trying to introduce the technique of using metallic colours in map printing. These facilities are also being modernised.

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH (DSIR)

The Department of Scientific and Industrial Research (DSIR) is a part of the Ministry of Science and Technology with the mandate for indigenous technology promotion, development and utilization. The primary endeavour of DSIR is to encourage industry to increase their share in country's R&D expenditure, to nurture the innovative spirit of individuals by helping them to convert their innovative ideas into models/prototypes and to support industrial units to develop and demonstrate state-of-the art globally competitive technologies of high commercial potential.

Technology Utilization Programme

Under Technology Utilization Programme during 2009-10, Technology Management Training Programme on Herbaceuticals, Herbal Cosmetology and Aromatic was organized at Patna under Technology Management Centre; A Workshop on 'Technology and Innovation Management Issues in North West India' was organized at Shimla under Technology Management Centre by IHBT, Palampur; Ninth edition of Compendium on technology exports was brought out; a research study on Technology Branding in SMEs was completed; and Wood Insect Database and Database of Traditional Knowledge in Andhra Pradesh was completed.

National Research Development Corporation (NRDC)

NRDC is a Public Sector Enterprise under the Department of Scientific & Industrial Research, Ministry of Science & Technology, Government of India, established in 1953 under Section 25 of the Companies Act, to promote, develop and commercialize technologies/know-how/ inventions/ Patents/ Processes emanating from various national R&D institutions.

Central Electronics Limited (CEL)

CEL is a Public Sector Enterprise under the Department of Scientific & Industrial Research, Ministry of Science & Technology, Government of India, established in 1974 with an objective to commercially exploit the indigenous technologies developed by National Laboratories and R&D Institutions in the country.

CEL's operations are grouped into three major areas i.e., Solar Photovoltaics, Strategic Electronics (Microwave Electronics & Piezo Electronic Ceramics) and Railway Safety and Signalling Electronics. CEL is a manufacturer and supplier of solar photovoltaic cells modules, home lighting systems, street lighting systems, etc., nationally, as well as, internationally. CEL is a leader in the development, manufacturing, supply and commissioning of signalling and safety equipment to Indian Railways to meet their existing and emerging modernization needs. CEL is the only indigenous manufacturer of Phase Control Modules (PCMs), a key element of Phased Array Radar.

CEL successfully executed a project for electrification of villages in Afghanistan. It also entered into an agreement with the Government of Mali for export of SPV modules and systems for next five years, valued at US\$ 4.2 million and signed an MoU with Mozambique for Technology Transfer for Solar Modules manufacturing line.

Consultancy Development Centre

Consultancy Development Centre (CDC) is an autonomous institution under Department of Scientific & Industrial Research, Ministry of Science and Technology, Government of India, established in 1986, with the objective of promoting and developing consultancy profession.

Council of Scientific & Industrial Research (CSIR)

CSIR is an autonomous, non-profit publicity funded R&D organization under the Department of Scientific & Industrial Research, Ministry of Science and Technology, Government of India, established in 1942 with objectives to provide scientific and industrial R&D that maximizes the economic, environmental and societal benefits for the people of India.

CSIR has a network of 37 national laboratories and 39 outreach centres attached to them, with pan-India footprint. Since its inception, it has been a source of indigenous technologies for industrial competitiveness, S&T base for strategic sector, technology for common mass and science for advancement of knowledge. It has been providing yeoman services to foster, sustain and upgrade stock of highly specialized scientists, engineers and technologists in diverse disciplines of science and technology in the country. CSIR envisages creating few translational research centres named as 'Innovation Complexes' across the country at certain strategic locations, viz., New Delhi, Pune, Kolkata, Chennai, Ahmedabad and Bengaluru. These complexes aim to expand innovation capacity vertically and horizontally.

ATOMIC ENERGY: The Department of Atomic Energy (DAE), established on 3 August 1954 is engaged in the development of nuclear power technology, applications of radiation technologies in the fields of agriculture, medicine, industry, and basic research. Its **mandate is to: increase the share of nuclear power through deployment of indigenous and other proven technologies and also develop fast breeder reactors and thorium reactors with associated fuel cycle facilities; Build and operate research reactors for production of radioisotopes and carry out radiation technology applications in the field of medicine, agriculture and industry; Develop advanced technologies such as accelerators, lasers etc. and encourage transfer of technology to industry; Provide broad based research to support the Atomic Energy Programme; and Contribute towards National Security.**

The Department comprises five research centres, three Industrial Organisations, five Public Sector Undertakings and three Service Organisations. Following is the profile of DAE's achievements and activities under its major programmes.

NUCLEAR POWER PROGRAMME : DAE has been pursuing the following 3-stage Nuclear Power Programme:

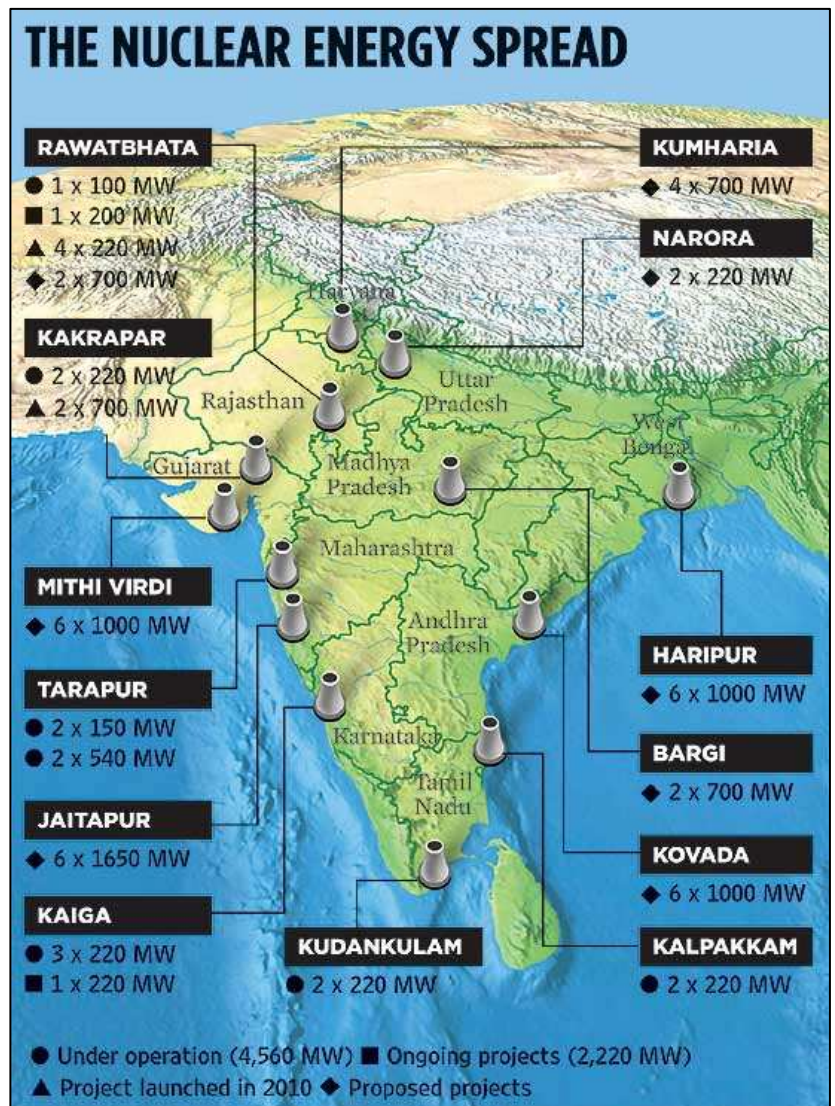
- The first stage comprises setting up of Pressurised Heavy Water Reactors (PHWRs) and associated fuel cycle facilities. PHWRs use natural uranium as fuel and heavy water as moderator and coolant.
- The second stage envisages setting up of Fast Breeder Reactors (FBRs) backed by reprocessing plants and plutonium-based fuel fabrication plants. Plutonium is produced by irradiation of uranium-238.
- The third stage is based on the thorium-uranium-233 cycle. Uranium-233 is obtained by irradiation of thorium.

The Nuclear Power Corporation of India Ltd. (NPCIL), a public sector undertaking of DAE, is responsible for the design, construction and operation of nuclear power reactors. The company operates 20 reactors- (2 Boiling Water Reactors and 18 Pressurised Heavy Water Reactors) with a total capacity of 4780 MWe. Six nuclear reactors are under construction in the first stage. These include two 1000 MWe Pressurised Water Reactors at Kudankulam, Tamil Nadu nearing completion and four 700 MWe PHWRs (2 each at Kakrapar, Gujarat and Rawatbhata, Rajasthan)

The Fast Breeder Programme is in the technology demonstration stage. To gain experience in the second stage, the Indira Gandhi Centre for Atomic Research (IGCAR) has been engaged in the design and development of liquid sodium cooled fast breeder reactors. The third stage of the Nuclear Power Programme is in technology development stage. The ongoing development of 300 MWe Advanced Heavy Water Reactor (AHWR) at BARC aims at developing expertise for thorium utilization and demonstrating advanced safety concepts.

NUCLEAR POWER PROGRAMME: STAGE-I PRESSURISED HEAVY WATER REACTORS: The first two

PHWRs, at Rawatbhata, Rajasthan, started commercial production in 1973 and 1981. The first unit (RAPS-1) was built with the help of the Atomic Energy of Canada Ltd. (AECL). This success followed commissioning of the two 220 MWe reactors at Kalpakkam near Chennai, Tamil Nadu, in the years 1984 and 1986. Later, the design of the 220 MWe PHWR was standardized and two reactors of this design were commissioned at Narora, Uttar Pradesh, in 1991 and 1992. This technology of PHWR reached commercial maturity with the commissioning of two 220 MVVe PHWRs at Kakrapar (Gujarat) in 1993 and 1995. In the year 2000, four state-of-the-art 220 MWe PHWRs, two each at Kaiga (Karnataka) and Rawatbhata (Rajasthan) came online. One more 220 MWe PHWR was commissioned at Kaiga in May 2007. In 2010 two 220 MWe PHWRs were commissioned at Rawatbhata (Rajasthan). Recently, in January 2011, one more 220 MWe PHWRs was commissioned in Kaiga (Karnataka). The reactor design of 220 MVVe PHWR was successfully scaled up to 540 MWe. Two reactors of this scaled-up design have been successfully commissioned at Tarapur, in the years 2005 and 2006.



ONGOING PROJECTS: A total capacity of 5300 megawatt is under construction. It comprises four PHWRs of 700 MWe each at Kakrapar (Gujarat) and Rawatbhata (Rajasthan), two Pressurised Water Reactors (PWRs) of 1000 MWe each at Kudankulam and one 500 MWe Prototype Fast Breeder Reactor (PFBR) at Kalpakkam.

NEW PROJECTS: The Government of India has accorded 'in principle', approval for five green field sites including two inland sites (Kumharia, Haryana and Bargi, Madhya Pradesh) for setting up six 700 MVVe indigenous PHWRs and three coastal sites (Haripur, West Bengal, Mithi Viridi, Gujarat and Kovvada, Andhra Pradesh) for setting up eighteen 1000 MVVe or larger size Light Water Reactors (LWRs) based on international co-operation. Another such site at Jaitapur in Maharashtra was approved by the Indian Government earlier. All these are steps towards reaching an installed nuclear power capacity of more than 60 GWe by 2032.

THE NUCLEAR FUEL CYCLE

Survey and Exploration: The Atomic Minerals Directorate for Exploration and Research (AMD) is engaged in survey, exploration and evaluation of resources of uranium, thorium, niobium, tantalum, beryllium, zirconium, lithium, yttrium and rare earth elements required for the indigenous atomic energy programme of the country. The geological studies related to the selection of nuclear power plant sites and repositories for the disposal of nuclear wastes are carried out by AMD in collaboration with the Nuclear Power Corporation of India Ltd. (NPCIL). Over the years, uranium deposits have been located at Jaduguda, Bhatin, Narwapahar, Turamdih (East and South), Banduhuran (Turamdih West), Central Keruadungri, Bagjata, Kanyaluka, Mohuldih and Nandup in Jharkhand; Domiasiat and Wahkyn in Meghalaya; Lambapur-Peddagattu, Koppunuru and Tummalapalle in Andhra Pradesh; Gogi in Karnataka and Rohil in Rajasthan. A number of beach sand deposits, containing ilmenite, rutile and leucoxene (titanium), zircon (zirconium), monazite (thorium and LREE), sillimanite and garnet have also been established in the East and West coasts in parts of Orissa, Andhra Pradesh, Tamil Nadu, Kerala, and Maharashtra, as well as in the inland Teri sand of Tamil Nadu and riverine places of Bihar and West Bengal.

Mining and Ore Processing: Underground uranium mines are located at Jaduguda, Bhatin, Narwapahar and Turamdih all in Singbhum (East), Jharkhand state. A new open cast mine was also commissioned at Banduhurang in Singbhum in 2007. These mines, being operated by the Uranium Corporation of India Ltd. (UCIL), a public sector undertaking of DAE, have been meeting the needs of the Indian Nuclear Power Programme.

To meet the projected demand of the nuclear power programme, UCIL has taken up the work to develop mines at Lambapur (Andhra Pradesh) and Domiasiat (Meghalaya). The research and development in the field of ore processing and uranium metal production is done at Trombay. A uranium metal production facility for production of uranium ingot operates at Trombay.

Nuclear Fuel Fabrication: NFC, now an ISO 9001 organisation, manufactures **zircaloy-4 clad natural and depleted uranium oxide and thoria bundles for pressurised heavy water reactors, zircaloy-2 clad enriched uranium oxide fuels** for boiling water reactors and stainless steel clad thoria and depleted uranium oxide blanket sub-assemblies for liquid metal-cooled fast breeder reactor. NFC produces seamless stainless tubes, hexcans and other structurals for fast reactor core assemblies and special alloy tubes. It also caters to the demand of high quality stainless steel tubes and pipes for critical and strategic applications in nuclear power plants and re-processing plants in atomic energy.

Heavy Water Production and Upgrading: The Heavy Water Board (HWB) of DAE **is responsible for building and operating heavy water plants in the country.** The Bureau of Energy Efficiency of the Ministry of Power, assigned to the Board plays a lead role to carry out energy management and conservation for fertilizer, petroleum and chlor alkali sector industries to achieve the national goal of energy conservation.

Nuclear Waste Management: The high level wastes, generated in very small quantities, are fixed in a glass matrix. **Vitrification, a** complex technology possessed by a few nations only, has been successfully developed at Trombay. BARC has constructed an Advanced Vitrification System at Tarapur for high level waste immobilisation based on Joule Melter Technology. India has become one of the six countries who have developed the Joule Heated Ceramic Mixer (JHCM) and set up such facilities for vitrification of high level waste.

Vitrified waste is stored in a specially designed Solid Storage Surveillance Facility (SSSF) for about 30 years prior to its disposal in deep geological formation. The first such facility has been in operation at Tarapur since 1999. One more such facility is under design and development at Kalpakkam.

R&D Support to Nuclear Power: The research and development relating to PHWR programme encompasses practically all the aspects of design, manufacture, construction, commissioning, operation and maintenance of

power plants. The technologies that emerged from the research and development include automation, monitoring, inspection, and repair systems, equipment and gadgets. Special Purpose Machines have been designed, developed and successfully used for carrying out in-situ precision machining and cutting operations for the upgradation/maintenance of reactors.

Robotics is one of the major thrust areas of the R&D programmes at BARC and IGCAR. A five-degree-of-freedom Robot, for deployment in radioactive chemical laboratories, a six-degree-of-freedom Robot and a mobile Robot have been developed at Trombay. At IGCAR, for automation of non-destructive evaluation, various devices have been developed. These include a Mobile Scanner (MOBSCAN), a Remotely Operated Power Manipulator (ROPMAN), and a Robot for capping and decapping bottles.

A Remotely Operated Hydraulic Trolley & Manipulator (ROHYTAM) developed for handling of nuclear power plant emergencies.

Electronics & Instrumentation: The know-how and the products developed at Trombay in the area of electronics have led to the setting up of the Electronics Corporation of India Ltd. (ECIL) at Hyderabad in 1967. The company pioneered the electronics and computer revolution in India. ECIL is now a multi-product and multi-disciplinary organisation providing **key technology inputs, system integration and system solutions in the areas of information technology, strategic electronics, communications, control and automation, instrumentation and components.**

NUCLEAR POWER PROGRAMME - STAGE: II

Fast Breeder Reactor Programme: IGCAR started the breeder programme with the setting up of a Fast Breeder Test Reactor (FBTR) at Kalpakkam, Tamil Nadu in October 1985. This reactor, operating with indigenously developed mixed uranium-plutonium carbide fuel has achieved its technology objectives. Based on the experience gained with the FBTR, the Bharatiya Nabhikiya Vidyut Nigam Ltd. (BHAVINI - formed in October 2003) is constructing a 500 megawatt (e) Prototype Fast Breeder Reactor (PFBR) at Kalpakkam, Tamil Nadu. It is a pool type reactor using a mixed oxide of uranium and plutonium as fuel, the design and technology of which were developed at IGCAR.

Fast Reactor Fuel Fabrication: The Mark-I mixed carbide fuel core, with high plutonium content, has been developed for the first time in the world. Fabrication of Mark-II core is progressing at Trombay.

Fast Reactor Fuel Reprocessing: Compact Reprocessing facility for advanced fuels in Lead cells (CORAL), commissioned at Kalpakkam, aims to establish the fast reactor reprocessing process flow sheet. IGCAR is setting up the Fast Reactor Fuel Reprocessing Plant (FRFRP).

NUCLEAR POWER PROGRAMME-STAGE III

Thorium Based Reactors: Thorium utilisation is the long term core objective of the Indian Nuclear Power Programme for providing energy security for the country on a sustainable basis. The third stage of the Indian Nuclear Power Programme is based on the thorium-uranium-233 cycle. The research reactor KAMINI operating up to a nominal power of 30kW for neutron radiography of various materials, at Kalpakkam, uses uranium-233 fuel derived from thorium.

BARC is engaged in developing 300MWe Advanced Heavy Water Reactor (AHWR). This endeavour aims at developing expertise for thorium utilization and demonstrating advanced safety concepts. Its reactor physics design is tuned to generate about 75% power from thorium. Mixed Thoria-Urania and Thoria-Plutonia are the candidate fuels for the AHWR. The fuel pellets have been successfully fabricated by the conventional power metallurgy route.

For breeding fissile uranium-233 from thorium, **development of Accelerator Driven Sub-Critical Systems (ADS) for nuclear reactor is the latest addition to the Indian nuclear programme.** ADS can provide a strong technology base for large-scale thorium utilization

Safety & Environment: The safety operations through the entire nuclear fuel cycle, from prospecting and mining of ores to management of waste, encompass all the aspects of safety, viz. radiological safety, industrial safety, occupational health, fire safety and environmental protection. An independent body, the Atomic Energy Regulatory Board (AERB) monitors safety. The safety standards formulated by AERB are at par with those recommended by the international organisations such as the International Atomic Energy Agency (IAEA) and the International Commission on Radiological Protection (ICRP). At different sites, the Environment Survey Labs (ESLs) of BARC continuously monitor environment, and collect site-related meteorological data. Sophisticated weather monitoring SODAR systems are operational at Kaiga, Kalpakkam, Tarapur and Trombay.

IREMOM, a nationwide network of environmental radiation monitoring stations detects radiation releases. Interfaced with global positioning system, a Compact Aerial Radiation Monitoring System (CARMS) for estimation of large area contamination using unmanned aerial vehicle, is also in operation at Trombay. The **Nisarga-Runa technology** developed at BARC converts biodegradable solid waste into useful manure and methane. So far about 125 such plants have been set up.

Research Reactors: The research reactor programme of DAE produces radioisotopes for use in health care, agriculture, industry and research, and provides manpower training. The research reactors set up by DAE so far, have been Apsara (1mW, Fuel: Enriched Uranium-Aluminium alloy), CIRUS (40MW, Fuel: Natural uranium), Zerlina (zero energy, Natural Uranium), Purnima I-III (Fuel: Plutonium/Uranium-233), Dhruva (100 MW, Fuel: Natural Uranium) at Trombay (Maharashtra), and Kamini (30kW, Fuel : Uranium-233-A1 alloy) and Fast Breeder Test Reactor (40MW, Fuel : Uranium-Plutonium carbide) at Kalpakkam (Tamil Nadu). Of the research reactors, Zerlina was decommissioned in 1984, and Purnima series made way for Kamini. Dhruva, CIRUS and Apsara are used for producing radioisotopes besides their use in research and development relating to nuclear technologies and materials, applied and basic research, and training. KAMINI is used mainly for radiography of various materials, and FBTR is the test bed for the development of fuel, blanket and structural materials for fast breeder reactor programme.

Nuclear Agriculture: The Nuclear Agriculture Programme of DAE focuses on the use of radiation technology for the development of high yielding crop seeds, radiation processing of food items, fertilizer and pesticide-related studies, and other areas.

Crop Improvement

- BARC has successfully developed green manure crop - *Sesbania rostrata* that is proving highly cost-effective for small farmers. A tissue culture-based protocol for rapid multiplication of some commercial cultivars of banana has been developed here. This technology has been transferred to the Maharashtra State Seeds Corporation.
- Using micro-propagation technology, BARC has standardised large-scale multiplication of pineapple. Micro propagation protocol has also been standardized in three varieties of sugarcane.
- Here, several insect pheromones have also been standardized and techniques for determination of nutrients in soils have been developed.
- Two patents were granted for biofertilizer formulations: Zn fertilizer formulations are more efficient when applied to the soil and consequently improve the yield of the crops and ensure availability of residual fertilizer to the next crop, thereby reducing the cost of the fertilizers.

Food processing: Radiation Processing Plant set up by BRIT at Navi Mumbai is for high dose radiation processing of spices, and KRUSHAK (Krishi Utpadan Sanrakshan Kendra), set up by BARC at Lasalgaon near Nashik, for low dose applications of radiation for food preservation. This plant processes onion, pulses, rawa and turmeric.

Nuclear Medicine and Health care: Radioisotopes and their formulations find wide applications in diagnosis, therapy and health care. BARC and BRIT are the main centres of this activity. At BARC, Cesium-137 based brachy therapy sources are routinely produced. For treatment of cancer of eye, radiation sources of the size of rice grain, containing 2-3 milli curie of Iodine-125, have been produced here. BARC has successfully developed radiation-processed hydrogel for treating burns, wounds and leprosy; Holmium-166-Hydroxy Apatite (HoHa) and Samarium-153-Hydroxy Apatite (SmHa) radiopharmaceuticals for treatment of arthritis, and radiolabelling of phosphonates with Luthinium-177 for internalised radiotherapy. For detection of the disease infection, BARC developed a sero-diagnostic test-kit with X-ray imaging using a three dimensional cone-beam tomography which is another important development.

BARC's Radiation Medicine Centre (RMC) in Mumbai offers diagnostic and therapeutic services using radioisotopes, and promotes human resource development in nuclear medicine. It is a regional referral centre of the World Health Organisation, and the International Atomic Energy Agency (IAEA **Radioimmunoassay (RiA)** is a versatile in vitro technique for the measurement of hormones, vitamins, drugs and other substances present in biological fluids. Another technique known as immuno-radiometric assay (IRMA) is also used for such estimations. To provide a low cost alternative teletherapy unit for the expensive imported teletherapy unit, a **Cobalt-60 Teletherapy Machine has been developed at BARC**. The first unit of Bhabhatron installed at Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Navi Mumbai is used regularly for treating cancer patients.

Industrial applications of Radioisotopes: Gamma scanning technology developed at Trombay is used for trouble shooting and process optimization in a number of process industries in the country. This has resulted in minimizing production losses. The radiation technology equipment manufactured by BRIT for use in industry include radiography camera for ascertaining internal defects of welding, casting etc., **Gamma chamber**, a compact self- shielded Cobalt-60 research irradiator for irradiating samples, and Blood Irradiator for radiation processing of blood and blood products by gamma rays to eliminate the risk of post transfusion graft versus host disease. **Blood irradiator** developed at BRIT is used in hospitals and blood banks, of Delhi & Bengaluru. It supplies Iridium-192 sealed sources and remotely operated radiography cameras (ROLI-1).

Beam Technologies: The DAE's research organisations, viz. Raja Ramanna Centre for Advanced Technology (RRCAT) in Indore, Madhya Pradesh and Bhabha Atomic Research Centre (BARC) in Mumbai, are engaged in the development of applications in the areas of Laser systems, Electron Beam processes and devices, and Plasma devices. BARC has successfully developed a 500 keV, DC Accelerator, housed at BRIT Complex, Vashi, Navi Mumbai. BARC and IIT-Madras, Chennai are pursuing radiation damage studies of materials by using 500keV accelerator beams.

High Power Pulsed Electron Accelerators: High Power pulsed electronic accelerators are used for producing Flash X Rays (FXR) and High Power Microwaves (HPM). These accelerators have many applications in the industry, nuclear power sector and the strategic areas. Kali 200, Kali 1000 and Kali 5000 belong to the single shot and the Linear Induction Accelerator (LIA) to the repetitive type. Kali 200 has been handed over to DRDO, MTRDC Bangalore.

High Power Electron Beam Units for Thermal Processing: BARC has developed a number of High Power Electron Beam (EB) machines for evaporation, melting and welding of reactive and refractory metals and their compounds. One 150 kV, 6 kW welder has been supplied to Machine Tool Prototype Factory of Ministry of Defence, Ambernath.

Plasma Devices and Systems: BARC has developed a large number of atmospheric plasma torches and processing systems for cutting, melting, spraying and other high enthalpy applications. A few notable examples are the joint work with Department of Space culminating in establishment of a plasma jet assisted thermal protection materials testing system at Thiruvananthapuram, underwater plasma cutting systems and plasma assisted aerosol generator for BARC.

Water Management: BARC has developed desalination technologies based on multi-stage flash (MSF) evaporation, reverse osmosis (RO) and low temperature evaporation (LTE) to provide potable water in rural areas and on ships, and water for industrial uses. BARC is setting up a 6300 cubic metre/day combined MSF-RO Nuclear Desalination Demonstration Plant (NDDP) at Kalpakkam, Tamil Nadu, to utilize seawater, steam and power from Madras Atomic Power Station (MAPS) for achieving cost effective desalination of seawater.

BASIC RESEARCH

Mathematics & Computation: In the field of mathematics and computation science, TIFR pursues academic programmes in algebra, algebraic geometry, Lie group, ergodic theory, number theory, combinatorics and topology at Mumbai. **The Harish Chandra Research Institute, Allahabad**, carries out research in advanced fields of mathematics and theoretical physics including astrophysics, high-energy physics, condensed matter physics and mathematical physics, and the **Institute of Mathematical Sciences at Chennai, Tamil Nadu** is engaged in research in the fields of Theoretical Physics, Mathematics and Computer Science.

The **Anupam-Ameya supercomputer developed by BARC** has 288 dual core dual CPU computing nodes (1152 CPU cores) with each processor running at 2.66 GHz with 4 Giga Byte of main memory, having a sustained speed of 9.036 TeraFLOPS is the largest and fastest in the ANUPAM series.

Physics: The School of Physics of TIFR is engaged in basic research in various fields of physics. The Institute of Physics, Bhubaneswar conducts research in condensed matter and high energy, nuclear, atomic and accelerator based physics and the Ion Beam Accelerator. Recently, BARC commissioned a Phase Contrast imaging Facility capable of revealing light element profile in a matrix of heavy elements, and a Neutron Induced Electron Radiography Facility for inspecting documents, paintings and biological samples. A novel phenomenon of "multiple splits" in the spectra of neutrinos from a supernova has been discovered and analytically investigated at TIFR.

Superconductivity: At VECC, test facility has already been created and successfully used to characterize superconducting cables and their joints. IGCAR is also working towards the development of SQUID based systems for material technology including non-destructive testing.

Astronomy: In the field of radioastronomy, a **Radiotelescope Array, set up in the Nilgiri Hills near Ootacamund**, Tamil Nadu, has been in use for decades. It is used in the studies of distant extragalactic radio-sources and interplanetary objects. At Narayangaon, near Pune, Maharashtra, the **Giant Metre Wave Radio-Telescope (GMRT)** with 30 gigantic parabolic dishes, has been in operation. GMRT is now a full fledged international observational facility for radioastronomy. Another international class astronomy-research facility **GRACE has been set up by BARC at Mount Abu, Rajasthan**. It includes TACTIC (Tera-electron-Volt Atmospheric Cerenkov Telescope with Imaging Camera).

Chemistry: The Centre also offers specialised analytical chemistry services to various user organizations within DAE and outside. The type of samples include metals and alloys, organic and organometallic compounds, inorganic compounds, rocks and minerals, nuclear and strategic materials, high purity materials, environmental and biological materials and others. BARC's **Centre for Compositional Characterization of Materials (CCCM) in Hyderabad** provides high quality analytical services to various departmental, governmental and private institutions. Efforts are on to develop bio-sensors.

Biology: The research in bio-sciences is focussed upon high yielding food crops, delaying or preventing post-harvest losses by increasing shelf life, developing modalities for low dose cancer radiotherapy and employing molecular and isotope techniques in basic biology for disease diagnosis and finger printing of individuals and population.

INDIAN SPACE PROGRAMME: The primary objective of the Indian Space Programme is to promote the development and application of space technology and space science for the socio-economic benefit of the nation through establishment of operational space services in a self-reliant manner.

Overview of India's Space Programme: India has established two major space systems viz., **Indian National Satellite (INSAT) system for communication, television broadcasting and meteorological services, and Indian Remote Sensing (IRS) satellites system for natural resources monitoring and management.** ISRO has developed and operationalised two satellite launch vehicles, Polar Satellite Launch Vehicle (PSLV) and Geosynchronous Satellite Launch Vehicle (GSLV), to place IRS and INSAT satellites respectively in the required orbits. India's first mission to Moon – Chanrayaan-1 made remarkable contributions in understanding the Moon's surface including the detection of water.

Satellite Communications and Navigation: Indian National Satellite (INSAT) system, established in 1983, is the largest domestic communication satellite system in the Asia Pacific Region with nine satellites in operation viz., INSAT-2E, INSAT-3A, INSAT-3C, INSAT-3E, GSAT-2, INSAT-4A, INSAT-4B, INSAT-4CR and GSAT-8. GSAT-12 was launched on July 15, 2011.

Earth observation Missions: The Indian Remote Sensing satellite system (IRS) is one of the largest constellations of remote sensing satellites in operation in the world today. Currently, ten operational satellites are in orbit - TES, RESOURCESAT-1, CARTOSAT-1, CARTOSAT-2, CARTOSAT-2A, CARTOSAT-2B, IMS-1, RISAT-2, OCEANSAT-2 and the recently launched RESOURCESAT-2 IRS series of satellites provide data in a variety of spatial, spectral and temporal resolutions (better than 1 m).

ISRO provides space infrastructure for meteorological observations and currently **INSAT-3A and KALPANA-1 are in operation.** Some of the major application projects, carried out during the year, are Forecasting Agricultural output using Space, Agrometeorology and Land based observations (FASAL), Groundwater Prospects Mapping, Water Resources Information System, Potential Fish Zone Mapping, Forest Mapping, Watershed Management, Accelerated Irrigation Benefit Program, Natural Resources Census, Snow and Glacier Studies, Wastelands Monitoring and Space based Information System for Decentralised Planning (SIS-DP).

Space Transportation Systems: The first experimental Satellite Launch Vehicle (SLV-3) was developed in 1980. An Augmented version of this, ASLV, was launched successfully in 1992. India has made tremendous strides in launch vehicle technology to achieve self-reliance in Satellite launch vehicle programme with the operationalisation of Polar Satellite Launch Vehicle (PSLV) and Geosynchronous Satellite Launch Vehicle (GSLV).

Polar Satellite Launch Vehicle (PSLV): PSLV is the first operational launch vehicle of ISRO. PSLV is capable of launching 1600 kg satellites into 620 km sun-synchronous polar orbit and 1050 kg satellite in geo-synchronous transfer orbit. PSLV has proved its multi-payload, multi-mission capability in a single launch and its geosynchronous launch capability. In the recent Chandrayaan-1 mission, another variant of PSLV with an extended version of strap-on motors, the payload haul was enhanced to 1750 kg in 620 km SSPO. PSLV has become the workhorse launch vehicle of ISRO.

Geosynchronous Satellite Launch Vehicle (GSLV): Geosynchronous Satellite Launch Vehicle (GSLV), is capable of placing INSAT-II class of satellites (2000-2,500 kg) into Geosynchronous Transfer Orbit (GTO). GSLV is a three stage vehicle. The first flight of GSLV took place from Satish Dhawan Space Centre Sriharikota on April 18, 2001 by launching 1540 kg GSAT-1. Since then, it has successfully launched GSAT-2, EDUSAT and INSAT-4CR satellites into orbit. **GSLV MK-III: India's Next generation Launch Vehicle**

Space Science and Planetary Exploration: The space science research activities are carried out mainly at ISRO laboratories such as Physical Research Laboratory (PRL) Ahmedabad, Space Physics Laboratory (SPL) Thiruvananthapuram, National Atmospheric Research Laboratory (NARL), Gadanki and ISRO Satellite Centre (ISAC), Bangalore. **ASTROSAT** is multi-wavelength space borne astronomy observatory, which would enable simultaneous observations of the celestial bodies, cosmic sources in X-ray and UV spectral bands. The uniqueness of ASTROSAT lies in its wide spectral coverage extending over visible (3500-6000A), UV (1300-3000A), soft X and hard X-ray regions (0.5-8 keV, 3-80 keV). **Aditya-1 project**-Aditya-1 will be India's first space based solar coronagraph mission for research in the field of solar astronomy.

Space Commerce: Antrix Corporation, the commercial arm of Department of Space, has been marketing the Indian space products and services in the global market. Under a commercial contract with Antrix, in the year 2012, two commercial satellites, namely, SPOT-6 of France and PROITERES of Japan, were launched on board PSLV-C21 mission.

Indian Institute of Space Science and Technology: is a deemed university, was established towards capacity building in human resources and to meet the growing demands of the Indian Space Programme. The Institute has started functioning from its permanent campus at Valiamala in Thiruvananthapuram. Meritorious students amongst them have been inducted to various ISRO Centers/Units.

EARTH SCIENCES: The Earth System Science Organization (ESSO) operates as an executive arm to implement policies and programmes of the Ministry of Earth Sciences (MoES). It encompasses four branches of Earth Sciences, viz. **(i) Atmospheric and Climate Science, (ii) Ocean Science and Technology, (iii) Polar Science and cryosphere and (iv) Geosciences.** The overall vision of the ESSO is to excel in knowledge and technology enterprises for the earth system science realm towards socio-economic benefit of the Indian sub-continent and in the Indian Ocean region.

The Policies and Programmes of the Ministry are being pursued through its following eight centers (autonomous bodies/sub-ordinate offices/attached offices):

- India Meteorological Department (IMD) New Delhi,
- Indian Institute of Tropical Meteorology (IITM), Pune,
- National Centre for Medium Range Weather Forecasting (NCMRWF), NOIDA,
- National Institute of Ocean Technology (NIOT), Chennai,
- National Centre for Antarctic and Ocean Research (NCAOR), Goa,
- Indian National Centre for Ocean and Information Services (INCOIS), Hyderabad,
- Integrated Coastal and Marine Area Management (ICMAM), Chennai and

- Centre for Marine Living Resources and Ecology (CMLRE), Kochi.

INTERNATIONAL COOPERATION Cooperation with NOAA, USA: Recognizing the importance of scientific and technical cooperation in Earth Observations and Sciences, a MoU was signed on the Earth sciences and Observations by ESSO-MoES (on behalf of Govt. of India), and NOAA (on behalf of US Government) on 16th April 2008 under the broad umbrella Agreement of 2005 on Science and Technology between the two countries.

South Asian Regional Reanalysis (SARR): Sensitivity experiments with data and physics options (convection, PBL and land surface) have been carried out. It is seen that just downscaling of coarse resolution global reanalysis is not sufficient for accurate representation of the Indian monsoon hydroclimate which is possible with regional high-resolution assimilations.

India-US Cooperation on Weather and Climate Forecasting and Agriculture- Agro-Climatological and Water Resource Availability Modeling for Agricultural Management: Under the framework for India-US Cooperation on Weather and Climate Forecasting and Agriculture, three demonstration projects were identified (a) Agricultural cropland monitoring and determination of crop water productivity in India; (b) Applying satellite observations for current season agro-climatological monitoring; Predicting the impact of weather on food production; and (c) Modeling groundwater and surface water availability in an agricultural area.

Cooperation with UKMO, UK

BIOTECHNOLOGY: The department has been continuously promoting biotechnology in the country by paying attention on creating an institutional framework for biological science and biotechnology, human resources at Ph.D and Post-Doctoral level and nurturing scientific and technology community for advancement in their respective fields. The Human Resource Development programme of the Department of Biotechnology has made tremendous impact on the overall development of Biotechnology in the country. Department of Biotechnology is implementing integrated HRD Programs in Biotechnology comprising of postgraduate teaching programme, fellowship programmes for Ph.D (DBT-JRF) and Post-doctoral research (DBT-RA), training programmes for mid-career scientists.

Bamalingaswami Re-entry Fellowship: The scheme was initiated in 2006 by the department for Indian scientists who are working in overseas institutions/universities and would like to return to India to pursue their research interests.

Rapid Grant for Young Investigator (RGYI): With an aim to provide early funding to groom young scientists as first grant to establish the lab and initiate research in the frontier areas of biotechnology, DBT initiated Rapid Grant for Young Investigators for young investigators below the age of 40 years. The scheme is under implementation since 2006-2007 supporting young investigator in various disciplines such as Agriculture, Medical, Environment, Industry, Animal Biotechnology etc. During this year around 500 proposals were received and 141 implemented in various fields of biotechnology.

Agriculture Biotechnology: Some of the significant achievement are : Under network projects i.e., Functional analysis of genes related to Yield and Biotic Stresses in rice, Fine mapping of yield enhancing QTLs from wild rice. In an R&D project, validation of immunoassays for detection and determination of fungal entities for seed certification and screening resistance. In maize, QPM version of FQH 38 hybrid of an elite short duration hybrid. Vivek Maize Hybrid 21- recently released for commercial cultivation. For combining heat tolerance components in wheat, doubled haploids have been produced and planted for their screening in the field.

Biofertilizers: A number of research projects have been supported in the specific area of the solubilization and mobilization of nutrients by phosphobacteria and mycorrhiza and their role as bioinoculants. Novel biofilms have been developed using cyanobacterium *Anabaena torulosa* as a matrix for agriculturally important bacteria and fungi. Beneficial microorganisms viz. *Azotobacter chroococcum* and *Bacillus megaterium* which were compatible with Biocontrol agents were used together to develop a consortium which improved the yield and reduced losses due to diseases in an ecofriendly manner.

Biopesticides: Under the biological control of pests disease and weeds programme, continuous efforts are being made to standardize and upscale the production of various microbial pesticides and natural enemies. A national network programme was implemented on the integrated approach for the management and other important aspects of *Parthenium hysterophorus*. The mycoherbicidal agents have been successfully mass produced through solid substrate fermentation on low cost effective agro waste. An elicitor (*Fusarium oxysporum* f.sp) based technology was developed to combat Panama disease of banana. Pheromone Application Technology (PAT) for control of bollworms was successfully demonstrated in cotton crop by involving farmers. Molecular characterization of antibiotic producing novel PGPR *Acinetobacter* species, its cloning, sequencing and purification of antibiotic and its role in biocontrol of phytopathogens is being established.

National Bio resource Development Board: National Bio-resource Development Board (NBDS) focuses on improvement of economically important bio-resources, major area of support are inventorisation and characterization both spatial and non-spatial, prospecting of bio-resources for novel genes and genes products, biomolecules and compounds, technology development of value added products from natural resources and capacity building including strengthening of infrastructure. Phase-I Microbial Mission Programme was completed successfully and contributed largest collection of bacteria of Indian origin, a valuable resource for many other biotechnologically useful products and has been stored in the International Depository Authority at the National Centre for Cell Science, Pune.

Plant Biotechnology: Various projects have been supported under Plant Biotechnology Programme under Basic Research, Forestry, Horticulture, Plantation, Metabolomics etc and some the significant achievement are: Changes in transcriptome and proteome in transgenic Brassica Juncea plants with altered expression of genes involved in Osmosensing (BjHKi) and ion homeostasis, gene pyramiding has been undertaken resulting in improved stress tolerance. India had been part of a consortium that has been sequencing the Tomato Genome. Over 300 scientists from 14 countries have been involved in the sequencing of the genome of the domesticated tomato (*Lycopersicon esculentum*) and its wild ancestor, *Solanum pimpinellifolium*.

Under saffron Network Programme four network projects have been supported involving 7 partner institutes and 14 investigators with a focus on developing a tissue culture protocol for corm production of desired size, and develop complete agro technology for use of cormlets of small size. The focus is also on characterization of microflora of rhizosphere associated with Saffron crop to develop consortia of beneficial microbes. Studies have also been supported to induce variability for genetic improvement of Saffron and functional genomics approaches in understanding the regulation of synthesis and accumulation of apocarotenoids.

Animal Biotechnology: Efforts were also made to develop pregnancy associated glycoprotein based immuno-diagnostics for buffalo by producing a recombinant protein to confirm pregnancy. Genetic improvement of local sheep breed, using Fec B gene, was successfully carried out at farmers' level. High throughput exome sequence of three breeds of buffaloes was carried out to detect SNPs. The effect of supplementation of micronutrients and vitamins showed improvement in growth, productivity, reproduction and immunity of cattle. The role of microorganisms in degradation of lignocellulosic feed in the rumen of livestock and also enhancing the performance of animals was confirmed and potential superior bacterial and fungal isolates were identified. A sex determination test for Emu was also developed and the technology was transferred to the industry.

Animal Health: The department supports research and development programmes for development of affordable new generation vaccines and diagnostics against viral, bacterial, parasitic and other diseases of animals. The emphasis is given to establish collaborative research for translation of existing candidate vaccine and diagnostics for field use.

Aquaculture & Marine Biotechnology: The Department of Biotechnology has supported programmes and projects in the areas of aquaculture and marine biotechnology to explore marine resources sustainably through the sanction and implementation of various R&D projects. The research was targeted towards development of enzym based aquaculture feed, spawning agents, surveillance, study on molecular markers and epidemiology for disease resistance, development of viral diagnostics, immunostimulants and areas on marine genomics and proteomics and extremophiles have also received attention. Marine biotechnology to harness new pharmaceutical, enzymes, biomolecules, therapeutic proteins, bio-markers, bio-sensors and bio-prospecting received greater attention.

Infectious Disease Biology: The Department continued supporting tuberculosis research as a priority with focus on host-parasite interaction; biology of host response; drug resistance; target-identification; drug design; improved diagnostics trials etc. Programme support was given to develop preventive, therapeutic and diagnostic tools for infectious diseases such as hepatitis, influenza Chikungunya Malaria, Leishmaniasis, Tuberculosis, Cholera, HIV /AIDS, and Dengue etc. Zinc was demonstrated as an adjunct treatment in addition to standard antibiotic therapy in children for serious bacterial infectious. An ELISA based diagnostic assay system was developed for detection of celiac disease and is in the process of commercialization. A programme on developmental disease biology related to pregnancy, foetal life, neonatal and early years and biology and ageing has been initiated.

Vaccine Research & Development: The department has made concerted efforts to develop human vaccines through Medical Biotechnology Task Force and also through National Jai Vigyan Mission on S&T for generation of new and improved vaccines for the past 25 years. The Vaccine Grand Challenge Programme (VGCP), was initiated as a new governing model for accelerated development of vaccines from the available candidates.

Human Genetics & Genome Analysis: The programme is under implementation since 1990-91 with objectives to identify, mapping and characterizing genes associated with genetic disorders prevalent in India and also to exploit the knowledge created by available human, microbial and parasitic genomic sequences so as to develop molecular medicine tools for better management of diseases and disorders. The programme supported genetic services which were provided to a large number of families including prenatal diagnosis and counseling to affecting families and awareness among public regarding prevalence of common genetic disorders in order to reduce the genetic disorder burden in the country. The programme is also implementing a major International Consortium (ICGC) project on Oral Cancer along with 15 countries at NIBMG, Kolkata and ACTREC, Mumbai.

Stem Cell Research: Keeping in view the potential therapeutic applications of stem cells, the Department initiated implementing programmes in this area since 2001. The strategy was formulated in consultation with national and international experts. This includes; basis research, early and late translational research, public-private partnership, networking, policy/guidelines. According to the scientific strategy formulated in this area, a number of programmes have been implemented on various aspects of embryonic, induced pluripotent stem cells, and adult stem cells.

Bioengineering: Bioengineering, one of the potential and emerging areas of biotechnology is a fusion of engineering and biological sciences. The Department aims nurturing this multi-disciplinary area of research

through promotion of research efforts in interdisciplinary fields for development of new biomedical technologies and therapies. During this year several projects have been implemented in the key and niche areas and challenges also been addressed in gap areas.

Biodesign Programme: The Department has taken an initiative to promote medical technology innovation in the country and also to enhance the innovative ability of the institutions with well developed programmes for medical technology innovation. A biodesign programme focused on medical devices and implants was implemented as pilot programme, the programmes have been implemented with overall aim to develop medical technology innovators/leaders in to foster and promote medical technology innovation in India. The objective of biodesign programme is to expand Biodesign concept in other medical and engineering schools; establish linkages with other national and international partners and training of trainers with the international partners to achieve self-sufficiency.

Healthcare Technology Innovation Centre has been established by the Department and inaugurated on 29th September, 2012 at IIT, Madras. The vision of HTIC is to develop technologies that create impact and drive innovation in healthcare and be a leader known for technical excellence and collaborative spirit.

A National Biodesign Alliance has been established by the Department with various partners such as IIT-Delhi; AIIMS, Delhi; RCB, Faridabad; THSTI, Faridabad; ICGEB, Delhi; IIT-Madras; IISc, Bangalore; and CMC, Vellore to coordinate with the biodesign programmes in the country.

Environmental Biotechnology: The Environmental Biotechnology programme aims to solve environmental problems in a sustainable way through the use of biotechnology. Main focus of the programme is on the development of biological treatment process for the industrial effluent, bioremediation technologies for xenobiotic compounds, bio-restoration technologies for restoration of degraded habitats and biodiversity conservation and characterization. Nano-science Biotechnology

Nanobiotechnology is a new frontier for scientific and technological opportunity to exploit the structures and processes of biomolecules for novel functional materials and may contribute to address various issues related to health, agriculture energy and environment. DBT has been engaged in promoting interdisciplinary research, fostering innovations and promoting the development of translational research in various areas of Nano biotechnologies.

RNAi Technology Platforms: DBT has been engaged in advancing research in the areas of RNAi biology, foster innovations and promote the development of translational research in collaboration with industries, to address various issues in the areas related to health, agriculture, food and environment using RNAi science/technology approaches. A tool for the prediction of mirtrons (a novel class of miRNAs) has been developed for predicting mirtrons in rice. A novel nematode management technology was designed through functional genomics of ESTs of *Meloidogyne incognita* (root knot nematode) using RNAi technology. Application of RNAi technology for augmenting broiler production was explored to enhance market body weight of the broiler chicken.

Energy Bioscience Programme: Under Energy Biosciences program, the Department has been supporting programme on Biofuels and Bioenergy with a focus on using Lignocellulosic material for ethanol and improved feedstock for biodiesel production. Three Bioenergy Centres- DBT-ICT Centre, DBT-IOC Centre and DBT-ICGEB Centre for Advanced Bioenergy Research have been set up in the country specifically to strengthen the research base in the country in biofuel area and to promote transesterification process and technologies from research to scale up and commercialization.

Biotechnology Industry Research Assistance Council: Biotechnology Industry Research Assistance Council (BIRAC) a Section 25 "Not-for-Profit Company" of Government of India was incorporated on 20th March, 2012.

It is Department of Biotechnology's interface agency, which serves as a single window for the emerging biotech industries. During the year BIRAC has become operational and initiated activities in each of its specific mandated area.

Biotech Product and Process Development: Biotech Product and Process Development programme of the Department caters to research efforts with relevance to industrial sector laying emphasis on optimization and scale-up of bioprocesses for specific biotech product development/establishment of bioprocess strategies so that the technologies developed under the programme could be transferred to or commercialized by the industries.

Biotechnological Approaches for Food and Nutritional Security: The department continued research initiatives on the addressal of micronutrient deficiencies, probiotics holistic health, Nutraceuticals and functional foods, foods from underutilized plant resources, food safety and food processing. Supplementation of nutrient bar enriched with vitamin B12 and multiple micronutrients led to reduced vitamin B12 insufficiency in school children. Milk was fortified either with iron plus vitamin A or calcium plus vitamin D. A health drink developed from cactus pulp showed free radical scavenging activity. A real time microchip platform for dielectrophoresis based capture of bacterial cells and genetic confirmation of captured cells and genetic confirmation of captured cells by polymerase chain reaction has been fabricated.

Biosafety Issues: The program envisages and ensures safety from the use of Genetically Engineered (GE) Organisms and products thereof in research and development to the users as well as to the environment, following rules for the manufacture, use/import/ export and storage of hazardous microorganisms/genetically engineered organisms or cells, 1989 of Environment (Protection) Act, 1986. A three tier mechanism comprising Institutional Biosafety Committees (IBSCs), which operates directly from the premises of the institution and ensures on-site assessment and monitoring of adherence to the biosafety guidelines with overall oversight of the regulatory process, at the institutional level, the Review Committee on Genetic Manipulation (RCGM) functioning from the Department of Biotechnology, and the Genetic Engineering Appraisal Committee (GEAC) in the Ministry of Environment & Forests (MoEF).

Patent Facilitation Cell: The main objectives of Biotechnology Patent Facilitating Committee (BPFC) of the Department of Biotechnology (DBT) is creation of awareness and understanding related to Intellectual Property Rights (IPR) among students, scientists and faculty of colleges, universities and research institutes and to assist investigators in filing of patent applications in IPO, USPTO and other countries.

Biotechnology Information System Network: The Biotechnology Information System Network of the Department is spread across the country with 168 centres at various levels. The network also houses the super computer facility for Bioinformatics and Interactive Graphics Facility and large members of R&D Projects are also being supported. A high end data centre with multi-tera facility was established at IIT-Delhi.

Biotechnology Park and Incubators: The Department of Biotechnology establishes biotech parks in various parts of the country to facilitate biotech product development, research and innovation and the development of biotechnology industrial clusters. Setting up of Biotech Parks and incubators helps to produce a pool of biotechnologists and entrepreneurs who have a strong foundation in research and innovation.

International Collaboration: DBT and Bill & Melinda Gates Foundation have signed in MoU for collaboration in scientific and technological research to alleviate some of the world's most critical global health and development issues over a period of five years for the benefit of people in India and developing countries worldwide. A Programme of Cooperation (PoC) was signed between DBT and German Research Foundation (DFG) to fund major initiatives under the CRC and RIGS modes.

National Institute of Immunology (NII): NII, New Delhi has continued high quality research in immunology and related areas of infection and immunity, molecular design, reproduction and development and gene regulation. An improved tuberculosis vaccine formulation endowed with long term protection as compared to BCG was generated. A contraceptive vaccine for dogs showed significant reduction in fertility in immunized animals. Structure of histidinol phosphate aminotransferase (HisC2) from *Mycobacterium tuberculosis* has been elucidated. Bromo-benzothiophene carboxamide derivatives were found to be potent and have promise for the development of potent antimalarial.

National Centre for Cell Science: The NCCS has given emphasis in the areas of cell biology, signal transduction, cancer biology, diabetes, biodiversity, infection and immunity, chromatin architecture and gene regulation, stem cell, proteomics, bioinformatics and regenerative biology. It also serves as a National Cell Repository and a training centre for animal cell and tissue culture.

National Brain Research Centre: The National Brain Research Centre's main mandate is to evolve as a Centre for Excellence in Neuroscience Research and to promote neuroscience research and education throughout the country. The centre strives to provide state-of-art facilities to scientists and students to carry out interdisciplinary research in neuroscience and promotes neuroscience in India through networking among institutions across the country. The centre has recently completed a decade as a University and as a March 31st, 2012, has awarded the degree of Doctor of Philosophy to 31 students.

Centre for DNA Fingerprinting and Diagnostics: The Centre for DNA Fingerprinting and Diagnostics (CDFD) has been successful in uniquely combining two kinds of activities, i.e. services and training in the areas of DNA profiling and diagnostic testing for genetic diseases, and also spearheading basic research in diverse areas of molecular biology. CDFD is undertaking futuristic work in understanding the mechanisms of pathogenesis of HIV-1 during *M. tuberculosis* co-infection. The Genomics and Profiling Applications group of CDFD has been working towards devising a single nucleotide polymorphism based panel for human identification which would be highly useful in genotyping the degraded forensic samples.

National Institute of Plant Genome Research: The research programmes being pursued in the institute are grouped in the areas like computational Biology, Genome Analysis & Molecular Mapping, Molecular Mechanisms of Abiotic Stress Response, Nutritional Genomics, Plant Development and Architecture, Molecular Breeding. A major approach has been the improvement of the amino acid composition of carbohydrate-rich staple crops by overexpressing seed protein gene AmA1. Stable lines of several crops including rice and potato, over expressing AmA1 have been generated, and their different generations are being analyzed. Research in the area of computational biology revolves around the complex dynamic systems governing the patterns observed across various processes in the life of a plant.

Institute of Life Sciences (ILS): Scientific activities continued to flourish at ILS by doing research on three major areas: infectious disease biology, gene function and its regulation and translational research through Technology development had performed well.

Institute of Bioresources and Sustainable Development (IBSD): IBSD, Imphal has continued its efforts to discover and describe the unique bioresources of the Indian region of Indo-Burma Biodiversity hotspot and also to develop product and process of economic values through scientific intervention on these bioresources.

Rajiv Gandhi Centre for Biotechnology: RGCB has divided its activities into three domains: Services; applied research and basic biology research. Institute provides services for Molecular Diagnostics for infectious diseases,

cancer and cardiovascular disease; DNA Fingerprinting to cater to social & criminal justice systems; and DA Barcoding for Plants and Wildlife.

Institute for Stem Cell Science and Regenerative Medicine (InStem): The focus of Instem is on stem cells and regeneration, cardiovascular biology and disease, chemical biology and therapeutics, signaling and cancer, molecular and materials engineering, neurodevelopmental synaptopathies, etc. This institute has also created biological platforms recognizing that rapid strides in research.

Translational Health Science and Technology Institute (THSTI): The institute is designed to be a dynamic and interactive organization with a mission to conduct innovative translational research and develop research collaborations across disciplines and professions to accelerate the development of concepts into tangible products to improve human health.

National Institute of Biomedical Genomics: IBMG's working theme is "Accelerating Genomics for Health". While the Institute has initiated research activities on Genomics, Epigenomics and Transcriptomics of cancer, Genomics and Epigenomics of chronic disease; Genomics and Proteomics and infectious disease, and Statistical and Computational Genomics, its flagship programme on oral cancer as a part of the International Cancer as a part of International Cancer Genome Consortium has made notable progress.

National Agri-Food Biotechnology Institute: National Agri-Food Biotechnology Institute (NABI), an autonomous institution of the department was set up in 2010, with the objective of carrying out research in the areas of agriculture, food and nutritional biotechnology. Research programmes under progress include nutritional enhancement of cereal crops, design of plant derived functional foods, and development of bioinformatics tools for plant genome analysis.

National Institute of Animal Biotechnology: National Institute of Animal Biotechnology (NIAB), a new autonomous institution of DBT, is being established in Hyderabad. The institute will focus on translation science and capacity building in the area of livestock sector.

Bioclusters: Globally, clusters have been drivers of high quality innovation and entrepreneurship in the region. However in India, DBT as a part of its biotech strategy has proposed creation of multi-institutional regional clusters at Faridabad, Bangalore, and Mohali as an initial step for addressing this issue. The purpose of the establishment of Biotech Science Clusters is to harness validation and transfer of technologies to enterprises with a view to take them to markets to address affordable solutions in the areas of agriculture and health care as two important components of sustainable growth of national economy revolving upon interactive participation of enterprises with diversity of perspectives.

International Centre for Genetic Engineering and Biotechnology: ICGEB, New Delhi has made significant progress in high quality research and training in the area of health, agriculture and bioenergy during the year. Several new initiatives undertaken by the institute include setting up of Advanced Bioenergy Research Centre and establishment of Biotechnology Strategic Planning and Analysis Centre (Bio-Space). The recombinant malaria vaccine candidate-JAIVAC-1 has complete Phase-I, first-in-man clinical trials.

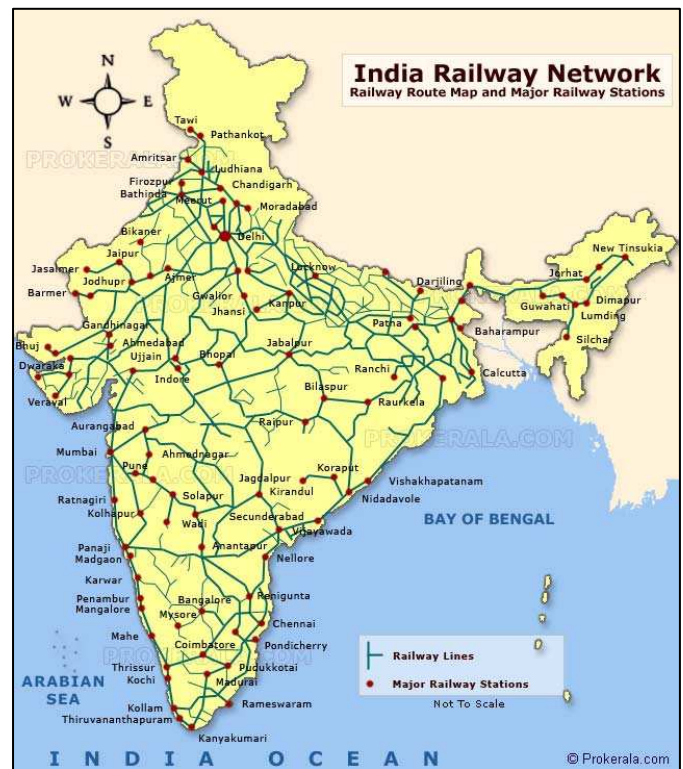
Centre for Cellular and Molecular Platforms, Bangalore: C-CAMP was instituted in June 2009, with the unique mandate of enabling cutting-edge research by making available state-of-the-art technologies and providing training on these platforms. The core objectives and goals of C-CAMP are : to develop and establish novel high-end technologies via research/technology-based collaborations within the outside the Bangalore bio-cluster; to make available scientific technologies and expertise to researchers in academic and industry thus promoting scientific excellence and success;

CHAPTER TWENTY SIX | TRANSPORT

A well-knit and co-ordinated system of transport plays an important role in the sustained economic growth of a country. The present transport system of the country comprises several modes of transport including rail, road, coastal shipping, air transport, etc. Transport has recorded a substantial growth over the years both in spread of network and in output of the system. The Ministry of Shipping and the Ministry of Road Transport and Highways are responsible for the formation and implementation of policies and programmes for the development of various modes of transport save the railways and the civil aviation.

RAILWAYS

The Railways in India provide the principal mode of transportation for freight and passengers. It brings together people from the farthest corners of the country and makes possible the conduct of business, sightseeing, pilgrimage and education. The Indian Railways have been a great integrating force during the last more than 155 years. It has bound the economic life of the country and helped in accelerating the development of industry and agriculture. From a very modest beginning in 1853, when the first train steamed off from Mumbai to Thane, a distance of 34 km, the Railways have grown into a vast network of 7,030 stations spread over a route length of 64,015 km. The growth of Indian Railways in the 150 years of its existence is thus phenomenal. It has played a vital role in the economic, industrial and social development of the country. The network runs multigauge operations extending over 64,600 kilometres.



RAILWAY ZONES

Zonal Railways	Headquarters
Central	Mumbai CST
Eastern	Kolkata
East Coast	Bhubaneshwar
East Central	Hajipur
Northern	New Delhi
North Central	Allahabad
North Eastern	Gorakhpur
Northeast Frontier	Maligaon (Guwahati)
North Western	Jaipur
Southern	Chennai

South Central	Secunderabad
South Eastern	Kolkata
South East Central Railway	Bilaspur
South-Western Railway	Hubli
Western	Mumbai
West Central Railway	Jabalpur

The main objective of railways planning has been to develop the transport infrastructure to carry the projected quantum of traffic and meet the developmental needs of the economy. Since the inception of the Planned era in 1950-51, Indian Railways have implemented eleven five-year plans, apart from annual plans in some years. During the Plans, emphasis was laid on a comprehensive programme of system modernization. With capacity being stretched to the full, investment of cost-effective technological changes become inescapable in order to meet the ever-increasing demand for rail transport. Along with the major thrust directed towards rehabilitation of assets, technological changes and upgradation of standards were initiated in important areas of track, locomotives, passenger coaches, wagon-bogie designs, signalling and telecommunication.

Public Sector Undertakings

There are eleven public undertakings under the administrative control of the Ministry of Railways, viz.: (i) Rail India Technical and Economic Services Limited (RITES), (ii) Indian Railway Construction (IRCON) International Limited, (iii) Indian Railway Finance Corporation Limited (IRFC), (iv) Container Corporation of India Limited (CONCOR), (v) Konkan Railway Corporation Limited (KRCL), (vi) Indian Railway Catering and Tourism Corporation Ltd. (IRCTC), (vii) Railtel Corporation of India Ltd. (Rail Tel), (viii) Mumbai Rail Vikas Nigam Ltd. (MRVNL), (ix) Railway Vikas Nigam Ltd. (RVNL) (x) Dedicated Freight Corridor Corporation of India Limited (DFCCIL), and Bharat Wagon and Engineering Co. Ltd. (BWEL).

Research and Development

The Research, Design and Standards Organization (RDSO) at Lucknow is the R&D wing of Indian Railways. It functions as a consultant to the Indian Railways in technical matters. It also provides consultancy to other organizations connected with railway manufacture and design.

ROADS

Road Transport is a critical infrastructure for economic development of a country. It influences the pace, structure and pattern for development. **In India, Road infrastructure is used to transport over 60% of total goods and 85% of total passengers traffic.**

National Highways / Expressways	92,851 km
State Highways	1,42,687 km
Other Roads	46,49,462 km

Single Lane	24 percent
Double Lane	52 percent
Four Lane / Six Lane / Eight Lane	24 percent

Research and Development

The role of research and development in the road sector is to update the specifications for road and bridge works,



for effective quality control in projects, to introduce emerging construction materials in projects and to recommend new techniques for highway construction and maintenance. With the availability of modern construction machinery in the country, the specifications for the road works need periodic review. New testing equipments for checking quality of executed works are quick and reliable. These equipments need to be calibrated and understood before being put to use. Likewise, new materials and construction techniques before those are put to use in various projects, need to be tested in a pilot research study. The dissemination of research findings is done through Indian Roads Congress (IRC) by publication of Research Digest in Indian Highways and by incorporation of these findings in their guidelines, codes of practice, compilation of state-of-the-art reports and instructions/ circulars issued by this Ministry, etc.

BORDER ROADS ORGANISATION

The Border Roads Organization (BRO) is a road construction executive force, integral to and in support of the Army. It started operations in May, 1960 with just two projects—Project Tusker (renamed Project Vartak) in the East and Project Beacon in the West. It has now grown into a 15-project executive force. The BRO is entrusted with the task of construction and maintenance of roads in the border areas, classified as general staff roads, in keeping with defence requirements. Besides, they also execute agency works entrusted to it by the other central government ministries/ departments.

SHIPPING

Ministry of Shipping was formed in 2009 by bifurcating the erstwhile Ministry of Shipping, Road Transport and Highways into two independent Ministries. Maritime Transport is a critical infrastructure for the economic development of a country. It influences the pace, structure and pattern of development. The Ministry of Shipping encompasses within its fold shipping and port sectors which also include shipbuilding and ship repair, major ports and inland water transport. The Ministry has been entrusted with the responsibility to formulate policies and programmes on these sectors and their implementation.

MARITIME DEVELOPMENT

The Maritime Sector comprises ports, shipping, shipbuilding and ship repair and inland water transport systems. India has 12 major ports and about 187 minor ports. Indian shipping industry has over the years played a crucial role in the transport sector of the economy. Approximately 90 per cent of the country's trade by volume and 70 per cent by value is moved through Maritime Transport. Therefore, shipping and ocean resources, ship design and construction, ports and harbours, issues relating to human resource development, finance, ancillaries and new technologies need to be developed in the light of the emerging scenario. Shipping continues to remain unchallenged as the world's most efficient means of transportation and there is a need to recognize, reward and promote quality within the industry.

Geographical features

India has a long coastline of about 7517 km. spread on the western and eastern shelves of the mainland and also along the Islands. It is an important natural resource for the country's trade.

Coastal Shipping

Coastal Shipping is an energy efficient, environmental friendly and economical mode of transport in the Indian transport network and crucial component for the development of domestic Industry and trade. India, with her 7,517 km. long coastline studded with major ports and non-major ports providing congenial and favourable conditions for the development of this alternate mode of transport.

Indian Maritime University

The Ministry of Shipping has set up an Indian Maritime University (IMU) on 14 November, 2008 in Chennai with campuses at Chennai, Kolkata and Visakhapatnam as a Central University through (IMU Act, 2008 (22 of 2008)). The existing seven government and government aided maritime training and research institutes viz. **Marine Engineering and Research Institute, Kolkata, Marine Engineering and Research Institute, Mumhai, Lal Bahadur Shastri College of Advanced Maritime Studies and Research, Mumbai, T.S. Chanakya, Navi Mumbai, National Maritime Academy, Chennai, Indian institute of Port Management, Kotkata as well as National Ship Design and Research Centre, Visakhapatnam** have been merged with the IMU.

MAJOR PORTS IN INDIA

Kolkata Port

Kolkata Port is the only riverine major port in India having an existence of about 138 years. It has a vast hinterland comprising the entire Eastern India including West Bengal, Bihar, Jharkhand, UP, MP, Assam, North East Hill States and the two landlocked neighbouring countries namely, Nepal and Bhutan. The port has twin dock systems viz., Kolkata Dock System (KDS) on the eastern bank and Haldia Dock Complex (HDC) on the western bank of river Hooghly.

Paradip Port

Paradip Port is one of the major ports in India. Pandit Jawaharlal Nehru, ExPrime Minister of India, laid the foundation stone of the Port on 3rd January, 1962 near the confluence of river Mahanadi on the east coast of Bay of Bengal in Odisha. Government of India took over the management of the port from the state government on 1st June, 1965. The construction of Iron Ore Berth was completed and INS "INVESTIGATOR" had the privilege of maiden berthing in the port in March, 1966. The port was declared open by Mr. Peter Stambolic, the then Prime Minister of Yugoslavia on the same day. The Government of India declared Paradip Port Trust (PPT) as the eighth major port in India on 18th April, 1966 making it the first major port in the East Coast commissioned in independent India.



New Mangalore Port

New Mangalore Port was declared as the ninth major port in May, 1974 and was formally inaugurated on 11th January, 1975. The provisions of Major Port Trusts Act, 1963 were extended to the New Mangalore Port and a Port Trust Board was formed in 1980.

Cochin Port : The modern port of Cochin was developed during the period 1920-1940 due to the untiring efforts of Sir Robert Bristow. By 1930-31 the port was formally opened for vessels up to 30 feet draught. Cochin was given the status of a major port in 1936. The administration of the port got vested in a Board of Trustees on 29th February, 1964 under the Major Port Trusts Act, 1963.

Jawaharlal Nehru Port

Constructed in the mid 1980's and commissioned on 26th May, 1989, Jawaharlal Nehru Port has come a long way by becoming a world-class international container handling port. JN Port is a trendsetter in the matter of port development in India through new initiatives like private sector participation.

Mumbai Port

Mumbai Port is a fully integrated multi-purpose Port handling container, dry bulk, liquid bulk and break bulk cargo. The Port has extensive wet and dry dock facilities to meet the normal needs of ships using the port.

SHIPPING CORPORATION OF INDIA LTD.

The Shipping Corporation of India Ltd. (SCI) was formed in 1961. Presently, the authorised capital of the Company is Rs. 450.00 crore and the paid up capital is Rs. 423.45 crore. The status of SCI has been changed from a Private Limited Company to Public Limited Company from 1992. The SCI was conferred the "Navratna" status by the Government of India in August, 2009. Presently, the Government is holding 80.12 per cent of the share capital and the balance is held by Financial Institutions, Public and others (NRIs, Corporate Bodies etc.). SCI has been signing the Memorandum and Understanding with the Ministry of Shipping, Government of India, and has received "Excellent" rating consistently for 18 years upto the year 2008-09.

SETHUSAMUNDRAM SHIP CHANNEL PROJECT

The Government of India through Ministry of Shipping has set up a "Special Purpose Vehicle" (SPV) in the name and style "Sethusamudram Corporation Limited" (SCL) to raise finance and to undertake such other activities as may be necessary to facilitate creation and operation of a navigable channel from Gulf of Mannar to Bay of Bengal through Palk Bay (Sethusamudram Ship Channel). This Project is funded by way of equity contributions from various PSUs and Ports.

COCHIN SHIPYARD LIMITED, KOCHI

Situated in the south western coast of India in Kochi, Kerala, Cochin Shipyard is the largest shipyard in the country. Incorporated in the year 1972, Cochin Shipyard can build ships upto 1,10,000 DWT and repair ships upto 1,25,000 DWT. The yard has built varied types of ships including tankers, bulk carriers, port crafts, offshore vessels, tugs and passenger vessels.

HOOGHLY DOCK AND PORT ENGINEERS LTD.

Hooghly Dock and Port Engineers Limited (HDPEL), Kolkata became a Central Public Sector undertaking in 1984. The Company has two working units in Howrah District of West Bengal, one at Saikia and another at Nazirgunge. The installed capacity in shipbuilding is 1,100 tonnes per annum and in ship-repairs 125 ships per annum.

CARGO SUPPORT TO INDIAN LINES

As per the existing Government policy, all import contracts are to be finalized on FOB (Free On Board) basis in respect of Government owned/controlled cargos on behalf of Central government department/state government departments and public sector undertakings under them with a view to retain control over shipping arrangements with the country and for providing cargo support to Indian flag vessels by providing first right of refusal. For meeting the above objective the policy provides for centralized shipping arrangements through the Chartering Wing in the Ministry of Shipping.

As regards to chartering of vessel for movement of cargos on private account, the same is regulated through the Director General of Shipping by granting permission to the private charters after taking into consideration the availability of Indian flag vessels by granting first right of refusal to Indian flag vessels.

INLAND WATER TRANSPORT

India has one of the longest navigable and inland water networks. There is over 14000 kms length of navigable river. But cargo transport through these inland waterways is, presently less than 1 per cent of the total cargo payment in the country. The Government, therefore, is encouraging users to make use of navigable rivers by taking a comprehensive approach to development of Inland Water Transport (IWT) sector.

CRUISE SHIPPING

Another important maritime area that promises immense potential for growth is cruise shipping. In the absence of Indian flags sailing in this segment, the Ministry has relaxed cabotage to allow foreign flag cruise vessels do coastal legs without hassle. The government is working on simplifying cruise shipping affairs and this invites greater interest among global cruise operators.

CENTRAL INLAND WATER TRANSPORT CORPORATION LTD

Central Inland Water Transport Corporation Ltd. (CIWTC) was incorporated on 22nd February, 1967 by taking over all the assets of the erstwhile River Steam Navigation Co. Ltd. The principal activity of the Corporation is the transportation cargo by barges through Inland Waterways in the country and through the routes identified in the Protocol on Inland Water Transport between India and Bangladesh.

DREDGING CORPORATION OF INDIA LTD

Dredging Corporation of India Limited (DCI) was established in 1976 to provide integrated dredging service to the major ports of the country. DCI is a *Miniratna* Category-I Public Sector Undertaking under the administrative control of Ministry of Shipping. The Company is a Schedule "B" Company. Clients include major ports, non-major ports, Indian Navy, state government etc.

CIVIL AVIATION

The Ministry of Civil Aviation is responsible for the formulation of national policies and programmes for development and regulation of civil aviation and for devising and implementing schemes for orderly growth and expansion of civil air transport. Its functions also extend to overseeing the provision of airport facilities, air traffic services, carriage of passengers and goods by air, safeguarding civil aviation operations, regulation of air transport services, licensing of aerodromes, air carriers, pilots and aircraft maintenance engineers.

India has been a member of the international Civil Aviation Organisation (ICAO) and is also on the Council of ICAO since its inception. The civil aviation sector has three main functional divisions-regulatory, infrastructural and operational. The civil aviation sector in India has seen an unprecedented growth in the recent years. As on date there are a large number of companies providing passenger transport and cargo handling services in the country. The Air Transport Companies are both in the public sector and in the private sector. In the public sector,

there are National Aviation Company of India Limited (Air India) and its subsidiaries viz., Alliance Air, Air India Charters Ltd, (Air India Express), – etc.

DIRECTORATE GENERAL OF CIVIL AVIATION

The Directorate General of Civil Aviation (DGCA) is the regulatory body in the field of Civil Aviation, It is responsible for:

- Regulating of air transport services to / from and within India in accordance with the provisions of Aircraft Rules, 1937
- Licensing of Pilots, aircraft maintenance engineers and monitoring of flight crew standards.
- Regulation of Civil aircraft.
- Laying down airworthiness requirements for civil aircraft registered in India and grant of certificate of airworthiness to such aircraft.
- Coordination of the work relating to International Civil Aviation Organisation.
- Investigation of minor air accidents and incidents and rendering technical assistance to the courts/committees of inquiry appointed by the government.
- Supervision of training activities of Flying/Gliding Clubs.
- Licensing of aerodromes and air carriers.
- Safety oversight and surveillance of air carriers and aerodromes.
- Rendering advice to government on matters pertaining to air transport including bilateral air services agreements with foreign countries.
- Processing amendments to the Aircraft Act, 1934 and the Aircraft Rules, 1937, and other Acts relating to Aviation, with a view to implementing in India the provisions of the Chicago convention and Annexes thereto and other International conventions relating to aviation.
- Type certification of aircraft.

BUREAU OF CIVIL AVIATION SECURITY

The Bureau of Civil Aviation Security (BCAS) was initially set up as a Cell in the DGCA in January, 1978 on the recommendation of the **Pande Committee constituted in the wake of the hijacking of an Indian Airlines flight in September, 1976**. The role of the Cell was to coordinate, monitor, inspect and train personnel in Civil Aviation Security matters. It was reorganized into an independent Department in April, 1987 under the Ministry of Civil Aviation following the Kanishka Tragedy in June, 1985.

The main responsibility of BCAS is to lay down standards and measures in respect of security of civil flights at International and domestic airports in India and Indian aircraft operators at foreign airports. It is the regulator for civil aviation security in the country and is responsible for laying down the standards for pre-embarkation security and anti-sabotage measures in respect of civil flights and ensuring their compliance through regular inspections and security audits. The aim of BCAS is to safeguard Civil Aviation operations against acts unlawful interference and it is the regulatory authority for discharging all relevant national and international obligations in respect of training of personnel in aviation security responsibilities which include, inter alia, planning and coordination of all aviation security related activities, operational emergencies and crisis management.

INDIRA GANDHI RASHTRIYA URAN AKADEMI

The Indira Gandhi Rashtriya Uran Akademi (IGRUA) was set up at Fursatganj, Raebareli (Uttar Pradesh) to bring about a quantum improvement in the standards of flying and ground training of commercial pilots in the country. The Akademi is equipped with most modern and sophisticated trainer aircraft, up-to-date audio-visual training aids and other facilities for effective ground training. It employs qualified flying and ground instructors, with long experience in the field of aviation and flying training. The aim at IGRUA is not only to train to make a pilot but also to make one an effective systems manager in aeronautics. The flying trainees of the Akademi acquire the standards required for their transit with ease into the cockpits of the airlines. The Akademi is an Autonomous Body under the control of the Ministry of Civil Aviation. The Governing Council with

Secretary, Civil Aviation as its Chairman, is the highest body of the organization. It is headed by a Director who is assisted by Departmental Heads, such as, Chief Flying Instructor, Chief Ground Instructor, Chief Engineer and Manager-HR, Manager-Services and Manager-Finance.

AIRPORTS AUTHORITY OF INDIA

Airports Authority of India (AAI) is a leader in building airport infrastructure along the length and breadth of the country including remote and far flung areas. **Airports Authority of India came into being in April, 1995. AAI manages 115 airports including 23 civil enclaves. In addition, AAI provides CNS-ATM facilities at 11 other airports.** About 2.8 million nautical square mile area of the national airspace covering the Bay of Bengal and the Arabian Sea has been signed to AAI for provision of Air Traffic Services.

Gagan Project

GPS Aided Geo Augmented Navigation (GAGAN) is an augmentation system to enhance the accuracy and integrity of GPS signals to meet precision approach requirements in Civil Aviation and it is being implemented jointly by AAI and ISRO in three phases. Technology Demonstration System will be upgraded to a full operational capability system in the second and third phase. GSAT IV being fabricated by ISRO will carry GAGAN payload. The footprint of this satellite will cover a vast geographical area from Africa to Australia and hence would facilitate expansion of the service area of GAGAN far beyond Indian airspace. When implemented, this would replace most of the ground based navigational aids and it would be possible to provide precision approach and landing guidance up to category I to aircraft hitherto not available due to terrain conditions precluding the provision of Instrument Landing System.

GREENFIELD AIRPORTS

Bengaluru International Airport, Devanahalli, Bengaluru: A Greenfield airport project at Devanahalli near Bengaluru has been implemented on a Build Own Operate and Transfer (BOOT) basis for 30 years with Public-Private - Participation.

Rajiv Gandhi International Airport, Shamshabad, Hyderabad: A Greenfield airport has been developed in Shamshabad, near Hyderabad on Build Own Operate and Transfer (BOOT) basis with Public Private Participation (PPP) by the Government of Andhra Pradesh.

Policy for Greenfield Airports

The Government promulgated the Policy for Greenfield Airports in 2008. This policy aims to streamline the approval process to facilitate strengthening and augmenting of airports infrastructure in the country. It also attempts to make the approval process more transparent and predictable. The policy does not attempt to undermine the authority of the Government/Union Cabinet. Pursuant to Policy for Greenfield Airports, a Steering Committee was constituted to monitor and facilitate the approval process of proposals received for setting up of the airport.

Airport Economic Regulatory Authority (AERA)

AERA was established in May, 2009 with the prime objective to create a level playing field and foster healthy competition among all major airports, encourage investment in airport facilities, regulate tariffs of aeronautical services, protection of reasonable interest of users, operate efficient, economic and viable airports at notified airports.

NATIONAL AVIATION COMPANY OF INDIA LTD (AIR INDIA)

Air India and Indian Airlines merger attained its official status on the formation of National Aviation Company of India Ltd. (Air India) in 2007. Post merger the new entity is known as Air India while its mascot is retained as 'Maharajah'.

HCI : The Hotel Corporation of India Limited (HCI) is a public limited company wholly owned by Air India Limited and was incorporated on July 8, 1971 under the Companies Act, 1956 when Air India decided to enter the hotel industry in keeping with the then prevalent trend among world airlines. The objective was to offer to the passengers a better product, both at the international airports and at other places of tourist interest, thereby also increasing tourism to India.

PAWAN HANS HELICOPTERS LIMITED (PHHL)

Pawan Hans Helicopters Limited (PHHL) was incorporated in October, 1985 and commenced its operations within one year of its incorporation to provide helicopter services to the oil sector, operate in hilly and inaccessible areas and make available charter flights for promotion of travel and tourism.

The Company has undertaken a pilot project for M/s Power Grid Corporation of India Ltd. for hotline washing of insulation of the power transmission lines for five months. These operations were successfully carried out for the first time in India. The Company has also got Operation and Maintenance Contract of a Dauphin N3 helicopter of Government from Gujarat, 2 Dhruv helicopters of ONGC with M/s HAL and 4 Dhruv helicopters owned by MHA with M/s HAL.

CHAPTER TWENTY SEVEN | WATER RESOURCES

Ministry of Water Resources, Government of India is responsible for development, conservation and management of water as a national resource; overall national perspective of water planning and coordination in relation to diverse uses of water, general policy, technical assistance, research and development, training and matters relating to irrigation and multipurpose projects, ground water management, use of surface and ground water, command area development, flood management including drainage, flood-proofing, water logging, sea erosion and dam safety. The Ministry has also been allocated the subject of regulation and development of inter-State rivers, implementation of awards of Tribunals, water quality assessment, bilateral and external assistance and cooperation programmes in the field of water resources and matters relating to rivers common to India and the neighbouring countries.

Water is one of the most precious natural resources, without which it is impossible to sustain life. **India has 4% of water resources of the world, while it has to support 16% of world population and 15% of livestock. The annual precipitation including snowfall, which is the main source of water in the country, is estimated to be of the order of 4000 Billion Cubic Metres (BCM).**

Namami Gange Programme

Union Budget 2014-15 has taken cognizance of the substantial amount of money spent in the conservation and improvement of the Ganga, which has a very special place in a collective consciousness of this country. However, the efforts have not yielded desired results because of the lack of concerted efforts by all the stakeholders.

Accordingly, an Integrated Ganga Conservation Mission called "Namami Gange" has been proposed to be set up and a sum of 2,037 crores has been set aside for this purpose. In addition a sum of 100 crores has been allocated for developments of Ghats and beautification of River Fronts at Kedarnath, Haridwar, Kanpur, Varanasi, Allahabad, Patna and Delhi in the current financial year.

Accordingly, Namami Gange approaches Ganga Rejuvenation by consolidating the existing ongoing efforts and paving for a concrete action plan for future. The interventions at Ghats and River fronts will facilitate better citizen connect and set the tone for river centric urban planning process.

Recognizing the multi-sectorial, multi-dimensional and multi-stakeholder nature of the Ganga Rejuvenation challenge, the key Ministries comprising of (a) WR, RD & CR, (b) Environment, Forests & Climate Change, (c) Shipping, (d) Tourism, (e) Urban Development, (f) Drinking Water supply and Sanitation and Rural Development have been working together since June, 2014 to arrive at an action plan.

Nirmal Dhara - ensuring sustainable municipal sewage management

- Project prioritization in coordination with Ministry of Urban Development.
- Incentive for states to take up projects on Ganga Main-stream by providing an additional share of central grants for sewerage infrastructure.
- Uniform standards for both MoUD scheme and Namami Gange programme, 10 years mandatory O&M by the same service provider at par with NGRBA programme and PPP, Mandatory reuse of treated water.
- Expanding coverage of sewerage infrastructure in 118 urban habitations on banks of Ganga-estimated cost by MoUD is 51000 Crores.

National Mission for Clean Ganga (NMCG)

National Mission for Clean Ganga (NMCG) is the implementation wing of National Ganga River Basin Authority (NGRBA). It is a registered society originally formed by Ministry of Environment, Forests and Climate Change

(MoEFCC) on 12th August, 2011 under the Societies Registration Act, 1860. As per the 306th amendment in the Government of India (Allocation of Business) Rules, 1961, both NGRBA and NMCG are allocated to the Ministry of Water Resources, River Development and Ganga Rejuvenation (MoWR, RD & GR).

Accordingly the General Body of NMCG is being reconstituted. The Secretary to the Government of India, MoWR, RD & GR is the current chairman of the Government Council of NMCG. As per the approval of the Cabinet Committee on Economic Affairs (CCEA), the mandate of NGRBA is being implemented by the National Mission for Clean Ganga (NMCG). At national level NMCG is the coordinating body and is being supported by States Level Program Management Groups (SPMGs) of UP, Uttarakhand, Bihar and West Bengal which, are also registered as societies under Societies Registration Act, 1860 and a dedicated Nodal Cell in Jharkhand.

The area of operation of NMCG shall be the Ganga River Basin, including: the states through which Ganga flows, as well as the National Capital Territory of Delhi. The area of operation may be extended, varied or altered in future, by the Governing Council to such other states through which major tributaries of the river Ganga flow, and as the National Ganga River Basin authority (NGRBA) may decide for the purpose of effective abatement of pollution and conservation of the river Ganga.

The Mission Director of NMCG is a Joint Secretary (JS) in Government of India. For effective implementation of the projects under the overall supervision of NMCG, the State Level Program Management Groups (SPMGs) are, also headed by senior officers of the concerned States.

NATIONAL WATER MISSION

The Government of India launched National Action Plan on Climate Change (NAPCC) on 30th June, 2008, which inter-alia, envisages the approach to be adopted to meet the challenges of impact of climate change through eight National Missions, namely : (a) National Solar Mission, (b) National Mission for Enhanced Energy Efficiency, (c) National Mission on Sustainable Habitat, (d) National Water Mission, (e) National Mission for Sustaining the Himalayan Ecosystem, (f) National Mission for a Green India, (g) National Mission for Sustainable Agriculture, and (h) National Mission on Strategic Knowledge for Climate Change.

NATIONAL WATER POLICY

The first National Water Policy (NWP) was adopted by the National Water Resources Council under the Chairmanship of Hon'ble Prime Minister during its 2nd meeting held on 9th September, 1987. This policy guided the formulation of policies and programmes for water resources development and its management.

ACCELERATED IRRIGATION BENEFITS PROGRAMME (AIBP)

The Accelerated Irrigation Benefits Programme (AIBP) was launched during 1996-97 to provide loan assistance to the States to help them complete some of the incomplete major/medium irrigation projects which were at an advanced stage of completion and thereby create additional irrigation potential in the country. The surface minor irrigation schemes of North-Eastern States, Hilly States of Sikkim, Uttarakhand, Jammu and Kashmir, Himachal Pradesh and Koraput, Bolangir and Kalahandi districts of Odisha have also been provided Central Loan Assistance (CLA) under this programme since 1999-2000.

COMMAND AREA DEVELOPMENT & WATER MANAGEMENT (CADWM)

The Central Sponsored Command Area Development (CAD) Programme was launched in 1974-75 for development of adequate delivery system of irrigation water up to farmers field to enhance water use efficiency and production and productivity of crops per unit of land and water for improving socio-economic conditions of farmers. The programme envisages integration of all activities relating to irrigated agriculture in a coordinated manner with multi disciplinary team under a Command Area Development Authority.

Initially, 60 major and medium irrigation projects were taken up under the CAD programme, covering a Culturable Command Area (CCA) of about 15 million hectares. After inclusion of new projects, deletion of completed projects and clubbing of some projects, there are now 149 projects under implementation. The programme was restructured and re-named as Command Area Development and Water Management (CADWM) programme w.e.f. 1st April, 2004. Now, the scheme is being implemented as a State Sector Scheme during the XI Five Year Plan (2008-09 to 2011-12).

GROUND WATER MANAGEMENT & REGULATION

Central Ground Water Authority has been constituted under Section 3(3) of the Environment (Protection) Act, 1986 to regulate and control development and management of ground water resources in the country.

The Authority has been conferred with the following powers:

- (i) Exercise of powers under section 5 of the Environment (Protection) Act, 1986 for issuing directions and taking such measures in respect of all the matters referred to in sub-section (2) of section 3 of the said Act.
- (ii) To resort to penal provisions contained in sections 15 to 21 of the said Act.
- (iii) To regulate and control, management and development of ground water in the country and to issue necessary regulatory directions for the purpose.
- (iv) Exercise of powers under section 4 of the Environment (Protection) Act, 1986 for the appointment of officers.

FLOOD FORECASTING

During Xlth Plan, a Central Sector Scheme, namely, 'Flood Forecasting' was prepared by amalgamating two on-going schemes of Xth Plan, namely, Establishment and Modernization of Flood Forecasting Network in India including Inflow Forecast and Strengthening and Modernization of Flood Forecasting and Hydrological observation Network in the Brahmaputra and Barak Basin. Under the combined scheme, it is proposed: (i) to modernize the flood forecasting network by installing automatic water level and rainfall sensors at all the observation sites and satellite based transmission system for getting real time flood data expeditiously and (ii) to develop appropriate software/ models for flood/inflow forecasting to reduce the time for analysis of data. It is also proposed to extend the flood forecasting network in uncovered areas and integrate with the network of State Governments/Projects Authorities/National Disaster Management Authorities (MHA).

CAUVERY WATER DISPUTES TRIBUNAL (CWDT)

The Cauvery Water Disputes Tribunal (CWDT) was constituted by the Government of India on 2nd June, 1990 to adjudicate the water dispute regarding inter-State river Cauvery and the river valley thereof. The term of CWDT has been extended by the Government upto 02.11.2012 as per provisions of ISRWD Act, 1956.

KRISHNA WATER DISPUTES TRIBUNAL

The Krishna Water Disputes Tribunal (KWDT) was constituted on 2nd April, 2004 for adjudication of the dispute relating to sharing of waters of Inter-State River Krishna and river valleys thereof. In the Writ Petition No. 408 of 2008 the Hon'ble Supreme Court has ordered that the effective date of constitution of the Tribunal will be 1st February, 2006. Consequently, the term of the Tribunal was extended upto 31st December, 2010 as per provisions of ISRWD Act, 1956. The report and the decision by the Tribunal under Section 5(2) of the Act were forwarded to the Ministry of Water Resources on 30th December, 2010.

MAHADAYI/MANDOVI RIVER WATER DISPUTES

The Central Government issued a Notification on 16th November, 2010 constituting a Tribunal called as "the Mahadayi Water Disputes Tribunal" for the adjudication of water disputes relating to the inter-State river Mahadayi and the river valley thereof, consisting of: (1) Hon'ble Mr. Justice J.M. Panchal, Supreme Court of India as Chairman, (2) Hon'ble Mr. Justice Vinay Mittal, High Court of Madhya Pradesh as Member and (3) Hon'ble Mr. Justice P.S. Narayana, Former Judge, High Court of Andhra Pradesh as Members.

RAVI & BEAS WATER TRIBUNAL

The Ravi & Beas Tribunal which was constituted on 2nd April, 1986 had submitted its report on 30th January, 1987. The report was circulated in May, 1987. A reference was made to the Tribunal in August, 1987 comprising reference from the Central Government and references received from Governments of Punjab, Haryana and Rajasthan, seeking explanation/guidance on certain points in the report. The three major river systems of India, namely, Ganga, Brahmaputra and Indus cross international borders. This Ministry is responsible for strengthening international cooperation on matters relating to these rivers by way of discussions with neighbouring countries concerning river waters, water resources development projects and operation of international treaties relating to water.

INTERNATIONAL COOPERATION

The three major river systems of India, namely, Ganga, Brahmaputra and Indus cross international borders. This ministry is responsible for strengthening international cooperation on matters relating to these rivers by way of discussions with neighbouring countries concerning river waters, water resources development projects and operation of international treaties relating to water.

Indo-Bangladesh Joint Rivers Commission

An Indo-Bangladesh Joint Rivers Commission (JRC) has been functioning since 1972 with a view to maintain liaison in order to ensure the most effective joint efforts in maximizing the benefits from common river systems. It is headed by Ministers of Water Resources of both the countries.

INDIA-BHUTAN COOPERATION

A scheme titled 'Comprehensive Scheme for Establishment of Hydrometeorological and Flood Forecasting Network on rivers common to India and Bhutan' is in operation. The network consists of 32 hydro-meteorological/ meteorological stations located in Bhutan and are being maintained by the Royal Government of Bhutan with funding from India. The data received from these stations is utilized in India by the Central Water Commission for formulating flood forecasts.

MoU on River Sutlej

During the visit of Hon'ble Prime Minister of China to India in December, 2010, a new MoU upon provision of hydrological information of Sutlej /Langquin Zangbu river in flood season by China to India with a validity of five years has been signed with China in 2010. The Implementation Plan containing technical details of provision of hydrological information, data transmission method and cost settlement in respect of the MoU on Sutlej was signed between the two countries during the 5th ELM held in April, 2011 in Beijing, China. The hydrological information during the flood season, 2012 is being received in terms of the signed implementation plan.

INDIA-NEPAL COOPERATION

India-Nepal Joint Committee on Water Resources (JCWR)

The 6th meeting of India-Nepal Joint Committee on Water Resources (JCWR) was held on 24 to 25 November, 2011 in New Delhi. During the meeting, all issues related to co-operation in water resources including Mahakali Treaty were discussed. **Pancheshwar Multipurpose project is a part of the Mahakali Treaty.**

JCWR agreed for initiating the process of establishment of Pancheshwar Development Authority (PDA) for implementation of Pancheshwar Multipurpose Project. Progress of investigation of Sapta Kosi High Dam Project and Sun Kosi Storage-cum-diversion Scheme were also reviewed and measures for expediting were agreed upon. All other issues concerning floods and irrigation on common border areas were discussed and it was agreed to resolve them mutually.

INDIA-PAKISTAN CO-OPERATION

Under the Indus Water Treaty, 1960, India and Pakistan each have created a permanent post of Commissioner for Indus Waters. Each Commissioner is the representative of his Government for all matters arising out of the Treaty and is to serve as the regular channel of communication on all matters relating to implementation of the treaty.

IMPORTANT ORGANIZATIONS

Central Water Commission

Central Water Commission with its Headquarters in New Delhi is a premier Technical Organization in the country in the field of Water Resources since 1945. The Commission is entrusted with the general responsibility of initiative, coordinating and furthering, in consultation with the State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country for the purpose of Flood Control, Irrigation, Drinking Water Supply and Power Development. **Central Water Commission is headed by the Chairman with status of an Ex-Officio Secretary to the Government of India.** The Commission has three Technical Wings, namely:

- Designs and Research wing
- Water Planning and Projects wing
- River Management Wing

The Activities of CWC may be summarized as follows:

- Flood Forecasting and Assistance to State Governments in Flood Management; Collection and Analysis of Hydrological Data; TechnoEconomic Appraisal of Projects; Monitoring of Projects and Projects receiving Central Assistance; Design of Projects; Surveys, Investigations and Preparation of DPRs; Studies on Environmental and Socio-Economic Issues; Studies Related to Irrigation Planning and Water Management; Basin Planning and Management; National Water Resources Assessment; Assistance in Resolution of Inter-State Water Disputes; Construction Equipment Planning; Studies on Dam Safety; Research and Development; Standardization of Engineering Practices; Operation of Reservoirs; Training and Capacity Building; International Cooperation in Water Sector.

CENTRAL SOIL AND MATERIALS RESEARCH STATION (CSMRS)

The Central Soil and Materials Research Station (CSMRS), New Delhi, is a premier organization in the country dealing with field explorations, laboratory investigations, and basic and applied research in the field of geotechnical engineering and civil engineering materials, particularly for construction of river valley projects and safety evaluation of existing dams. The Research Station primarily functions as an advisor and consultant to the various Departments of Government of India, State Governments and Government of India undertakings.

The sphere of activities of the Research station is covered under the following main areas:

- Soil Mechanics and allied areas, including soil dynamics, geotextiles, soil chemistry and rockfill technology and foundation engineering
- Concrete Technology including construction materials survey, nondestructive testing and concrete mix design
- Rock Mechanics including laboratory testing, field testing, instrumentation, engineering geophysics drilling technology for subsurface characterisation.
- Concrete Chemistry, Electronics and information Technology.

CENTRAL WATER AND POWER RESEARCH STATION

The Central Water and Power Research Station (CWPRS), established in 1916, is the premier hydraulic research institute offering comprehensive R&D support to a variety of projects dealing with water, energy resources

development and waterborne transport; disseminating expertise and research findings amongst hydraulic research fraternity; and aiding and promoting research activities, besides training of research manpower. CWPRS is recognized as the Regional Laboratory for Economic and Social Committee for Asia and Pacific (ESCAP) since 1971. The institution, with an interdisciplinary approach to its activities, provides unique R&D services to its national and international clientele.

GANGA FLOOD CONTROL COMMISSION

Ganga Flood Control Commission was established in 1972 with its headquarters at Patna. The Commission has been assigned the task of preparing comprehensive plans for flood management of the river systems in the Ganga basin, phasing/sequencing of programme of implementation, monitoring, performance evaluation of various flood management schemes, assessment of adequacy of waterways under road and rail bridges and providing technical guidance to the basin states, namely, West Bengal, Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, Chhattisgarh, Madhya Pradesh, Delhi, Haryana, Himachal Pradesh and Rajasthan on flood management. The Commission also accords technical clearance of flood management schemes of the Ganga basin states.

FARAKKA BARRAGE PROJECT

The Farakka Barrage Project was commissioned in 1975 for preservation & maintenance of the Calcutta Port and for increasing the navigation depth of the Bhagirathi-Hooghly waterway. The Farakka Barrage Project comprises of 2255m long barrage across river Ganga at Farakka in Murshidabad district of West Bengal; a canal head regulator at Farakka for diverting water to Feeder Canal; 38.38 km long Feeder Canal and Jangipur Barrage at river Bhagirathi-Hooghly system, besides the road-cum-rail bridge across Ganga at Farakka; Navigation Locks at Farakka, Jangipur and Kalindri (Nurpur/Malda); a road-cum-rail bridge across the Feeder Canal; Townships at Farakka, Ahirom and Khejuriaghat having 4000 dwelling units. Its appurtenant works include flood emhankments, marginal bunds, afflux bunds and guide bunds.

BANSAGAR CONTROL BOARD

The Bansagar Control Board was set up by the Government of India through a resolution in January 1976. The resolution was amended in 1990. The resolution was in accordance with an agreement reached between the Governments of Madhya Pradesh, Uttar Pradesh and Bihar on the 16th September, 1973 for sharing the waters of river Sone and the cost of the Bansagar dam. After amendment, the main features of the resolution are as follows: "In consultation with the Governments of Madhya Pradesh, Bihar and Uttar Pradesh, it has been decided to set up the Bansagar Control Board with a view to ensure the efficient, economical and early execution of Bansagar dam including all connected works in Madhya Pradesh, but excluding the canal systems which will be executed by respective states, namely, Madhya Pradesh, Uttar Pradesh and Bihar. The Control Board will be in overall charge of the project including its technical and financial aspects. The actual work of construction will be carried out under the direction of the Control Board by the Chief Engineer concerned of the Madhya Pradesh Government.

NATIONAL WATER DEVELOPMENT AGENCY

National Water Development Agency (NWDA) was established in July, 1982 as a registered Society under the Societies Registration Act, 1860 under the Ministry of Water Resources to study the feasibility of the Peninsular Component of National Perspective Plan.

The agency functions with the following main objectives:

- (a) To carry out detailed surveys and investigations of possible reservoir sites and inter-connecting links in order to establish feasibility of the proposals of Peninsular Rivers Development and Himalayan Rivers Development Components forming part of the National Perspective for Water Resources Development prepared by the then Ministry of Irrigation (now Ministry of Water Resources) and Central Water Commission.

- (b) To carry out detailed surveys about the quantum of water in various Peninsular river systems and Himalayan river systems which can be transferred to other basins/States after meeting the reasonable needs of the basin/states in the foreseeable future.
- (c) To prepare feasibility report of the various components of the scheme relating to Peninsular rivers development and Himalayan rivers development.
- (d) To prepare detailed project report of river link proposals under National Perspective Plan for Water Resources Development after concurrence of the concerned states.
- (e) To prepare prefeasibility/feasibility/detailed project reports of the intrastate links as may be proposed by the states. The concurrence of the concerned co-basin states for such proposals may be obtained before taking up their Feasibility Reports (FRs) /DPRs.
- (f) To do all such other things the society may consider necessary, incidental supplementary or conducive to the attainment of above objectives.

NATIONAL INSTITUTE OF HYDROLOGY

The National Institute of Hydrology, a Government of India Society under the Ministry of Water Resources, established in December, 1978 at **Roorkee**, is conducting basic, applied and strategic research in the fields of hydrology and water resources development. The Institute is fully aided by the Ministry of Water Resources, Government of India.

Objective

- To undertake, aid, promote and coordinate systematic and scientific work on all aspects of hydrology;
- To cooperate and collaborate with other national and international organizations in the field of hydrology;
- To establish and maintain a research and reference library in pursuance of the objectives of the society and equip the same with books, reviews, magazines and other relevant publications; and
- To carry out activities that the Society may consider necessary, incidental or conducive to the attainment of the objectives for which the Institute has been established.

NARMADA CONTROL AUTHORITY

The Government of India framed the Narmada Water Scheme, which, *inter-alia*, constituted the Narmada Control Authority and Review Committee in 1980 for proper implementation of the decisions and directions of the Narmada Water Disputes Tribunal. The Narmada Control Authority (NCA) has been vested with powers for the implementation of the orders of the Tribunal with respect to the storage, apportionment, regulation and control of the Narmada water, sharing of power benefits from Sardar Sarovar Project (SSP), regulated release of water by Madhya Pradesh, acquisition of land likely to be submerged under the Sardar Sarovar Project by the concerned states, compensation, resettlement, rehabilitation of the oustees, and sharing of costs and implementation.

Water and Power Consultancy Services Limited (WAPCOS)

WAPCOS Limited is a 'MINI RATNA-1' Public Sector Enterprise under the aegis of the Union Ministry of Water Resources. Incorporated on June 26th, 1969 under the Companies Act, 1956, WAPCOS has been providing consultancy services in all facets of Water Resources, Power and Infrastructure Sectors in India and abroad. WAPCOS comply with the Quality Assurance requirements of ISO 9001:2008 for Consultancy Services in Water Resources, Power and Infrastructure Development Projects.

National Water Academy (NWA)

National Water Academy, Pune is a centre of excellence for imparting training on almost all facets of Water Resources Development and Management covering the areas of planning, design, evaluation, construction, operation and monitoring of water resources projects and also the application of high-end technology in water sector. In the beginning, it was set up to provide in-service training primarily to engineers and water professionals of various Central and State agencies. Subsequently, the programs at NWA were opened to all stakeholders of water sector including those from NGOs, media, private sector organisations, academic institutions, PSUs, individuals and foreign nationals. National Water Academy has also forayed into custom-designed programmes meeting specific requirement of client organizations, both at its campus and offcampus at the client locations.

CHAPTER TWENTY EIGHT | WELFARE

THE erstwhile Ministry of Welfare was formed in 1985 by transferring subjects relating to welfare of Scheduled Castes, Scheduled Tribes, Minorities and Other Backward Classes from the Ministry of Home Affairs and the welfare of the Disabled and programmes of Social Defence from the erstwhile Ministry of Social and Women's Welfare in 1986. The name of the Ministry of Welfare was changed to the Ministry of Social Justice & Empowerment in May, 1998. In October, 1999, the Tribal Development Division was moved out to form a separate Ministry of Tribal Affairs. In January, 2007, the Minorities Division along with Wakf Unit was moved out of the Ministry and formed as a separate Ministry of Minority Affairs, and the Child Development Division was merged with the Ministry of Women & Child Development.

WELFARE OF SCHEDULED CASTE

Statutory Framework

Relevant Constitutional Provisions: The Constitution contains several provisions in the nature of safeguards for the Scheduled Castes. The following two Acts specifically aim at curbing (i) untouchability and (ii) atrocities against SCs and STs, and are therefore very important for the Scheduled Castes:

- (i) The Protection of Civil Rights Act, 1955, and
- (ii) The Scheduled Castes and the Scheduled Tribes (Preventions of Atrocities) Act, 1989.

The Protection of Civil Rights Act, 1955

In pursuance of Article 17 of the Constitution of India, the Untouchability (Offences) Act, 1955 was enacted and notified in May, 1955. Subsequently, it was amended and renamed in the year 1976 as the 'Protection of Civil Rights Act, 1955'. Rules under this Act, viz., "The Protection of Civil Rights Rules, 1977" were notified in 1977. The Act extends to the whole of India and provides punishment for the practice of untouchability. It is implemented by the respective State Governments and Union Territory Administrations.

National Commission for Scheduled Castes

The National Commission for Scheduled Castes and Scheduled Tribes which was set up under Article 383 of the Constitution in 1990 was bifurcated into two Commissions namely, National Commission for Scheduled Castes and National Commission for Scheduled Tribes after the 89th Constitutional (Amendment) Act, 2003. The National Commission for Scheduled Castes is responsible for monitoring the safeguards provided for Scheduled Castes and also to review issues concerning their welfare.

EDUCATIONAL EMPOWERMENT

Post Matric Scholarship for Scheduled Caste Students (PMS-SC)

The Scheme is a centrally sponsored scheme and the single largest intervention by Government of India for educational empowerment of scheduled caste students. The Scheme is in operation since 1944. The objective of the Scheme is to provide financial assistance to scheduled caste students studying at post matriculation or post-secondary stage to enable them to complete their education. The financial assistance includes maintenance allowance, reimbursement of non-refundable compulsory fee charged by educational institutions, Book Bank facility and other allowances. The scholarships are available for studying in India only and are awarded by the Government of the States/Union Territories to which the applicant actually belongs.

Babu Jagjivan Ram Chhatrawas Yojana

The objective of the Scheme is to provide hostel facilities to SC Boys and Girls studying in middle schools, higher secondary schools, colleges and Universities. The state governments/union territory administrations and the Central and state universities/institutions are eligible for central assistance, both for fresh construction of hostel

buildings and for expansion of the existing hostel facilities while NGOs and deemed Universities in the private sector can avail the benefit only for expansion of their existing hostel facilities.

Rajiv Gandhi National Fellowship for SC Students

The scheme provides financial assistance to Scheduled Caste students for pursuing research studies leading to M. Phil, Ph.D. and equivalent research degree in universities, research institutions and scientific institutions. University Grants Commission (UGC) is the nodal agency for implementing the scheme. 2000 Research Fellowships Junior Research Fellowships (JRF) per year are awarded to Schedule Caste students.

National Overseas Scholarship for SC candidates

National Overseas Scholarship is meant to provide assistance to selected scheduled caste, denotified, nomadic, semi-nomadic tribes, landless agricultural labourers and traditional artisans students for pursuing higher studies of Master level courses and PhD programmes abroad in specified fields of study. The Scheme provides for fees charged by institutions as per actual, monthly maintenance allowance, passage visa fee and insurance premium etc. annual contingency allowance, incidental journey allowance. Only two children of the same parents/guardians are eligible to get benefit under the Scheme. The prospective awardees should not be more than 35 years of age.

National Scheduled Castes Finance and Development Corporation

The National Scheduled Castes Finance and Development Corporation (NSFDC) was set up in February, 1989 under Section 8 of the Companies Act, 2013 (formerly Section 25 of the Companies Act, 1956). The broad objective of NSFDC is to provide financial assistance in the form of concessional loans to Scheduled Castes families, and skill-cum-entrepreneurial training to the youth of the target group, living below Double the Poverty Line [presently Rs. 81,000/- per annum for rural area] and Rs. 1,03,000/- per annum for urban areas for their economic development.

Welfare of Persons with Disabilities

According to Census 2011, there are 2.68 crore Persons with Disabilities in India (who constitute 2.21 percent of the total population). Out of the total population of Persons with Disabilities, about 1.50 crore are male and 1.18 crore female. These include persons with visual, hearing, speech and locomotor disabilities, mental illness, mental retardation, multiple disabilities and other disabilities.

RELEVANT CONSTITUTIONAL PROVISIONS

The Constitution of India through its Preamble, inter-alia seeks to secure to all its citizens; justice, social, economic and political; liberty of thought, expressions belief, faith and worship; equality of status and of opportunity. Part-III of the Constitution provides for a set of six Fundamental Rights to all the citizens (and in a few cases to non citizens also). These include - Right to Equality; Right to Freedom; Right against Exploitation; Right to Freedom of Religion; Cultural and Educational Rights and Right to Constitutional Remedies. All these rights are also available to the Persons with Disabilities even though no specific mention of such persons appear in this Part of the Constitution.

The Directive Principles of State Policy have been incorporated in Part- IV of the Constitution. Even though non-justiciable these have been declared as fundamental in the governance of the country. These principles are intended to be the imperative basis of State policy. These are really in the nature of 'instructions issued to future legislatures and executives for their guidance. Article 41: Right to work, to education and to public assistance in certain cases, provides: 'The State shall, within the limits of its economic capacity and developments make effective provision for securing the right to work, to education and to public assistance in case of unemployment old age, sickness and disablement and in other cases of undeserved want. Besides, Eleventh Schedule to Article 243-G and Twelfth Schedule to Article 243-W, which pertain to the powers and responsibilities of the Panchayats and Municipalities respectively with respect to implementation of schemes for economic development and social

justice, include welfare and safeguarding the interests of Persons with Disabilities among other weaker sections of the society.

DEVELOPMENT OF SCHEDULED TRIBES

The Ministry of Tribal Affairs is the nodal Ministry for the overall policy, planning and coordination of programmes for the development of the Scheduled Tribes (STs). The programmes and schemes of the Ministry are intended to Support and supplement, through financial assistance, the efforts of other Central ministries, the state governments and voluntary organizations, and to fill critical gaps taking into account the needs of ST.

Scheduled Areas and Tribal Areas: Scheduled Tribes live in contiguous areas unlike other communities It is, therefore, much simpler to have an area- approach for development activities and also regulatory provisions to protect their interests.

In order to protect the interests of Scheduled Tribes with regard to land alienation and other social factors, provisions of Fifth Schedule' and "Sixth Schedule" have been enshrined in the Constitution.

The Fifth Schedule under Article 244 (1) of Constitution defines "*Scheduled Areas*" as such areas as the President may by Order declare to be Scheduled Areas after consultation with the Governor of the state.

The Sixth Schedule under Article 244 (2) of the Constitution relates to those areas in the states of Assam, Meghalaya, Tripura and Mizoram which are declared as "*Tribal Areas*" and provides for District Councils and/or Regional Councils for such Areas. These Councils have been conferred with wide ranging legislative, judicial and executive powers.

The Fifth Schedule Areas: The criteria for declaring any area as a "*Scheduled Area*" under the Fifth Schedule are: (a) Preponderance of tribal population, (b) Compactness and reasonable size of the area, (c) A viable administrative entity such as a district, block or taluk, and (d) Economic backwardness of the area as compared to neighbouring areas.

The specification of "*Scheduled Areas*" in relation to a State is done by a notified Order of the President, after consultation with the State Governments concerned. The same applies for altering, increasing, decreasing, incorporating new areas, or rescinding any orders relating to "*Scheduled Areas*".

The Sixth Schedule - Tribal Areas : The Sixth Schedule under Article 244 of the Constitution identifies Autonomous districts in the Tribal Areas in the states of Assam, Meghalaya, Tripura and Mizoram. It also makes provisions for recognition of Autonomous Regions within these Autonomous Districts. These have been specified in Parts I, II, II A & III of the table appended to paragraph 20 of the Sixth Schedule. In other words, areas where provisions of Sixth Schedule are applicable are known as Tribal Areas. The State-wise details of Tribal Areas are as under:

Part-I	Assam	1. The North Cachar Hills District
		2. The Karbi-Anglong District
		3. The Bodo Land territorial Area Districts
Part-II	Meghalaya	1. Khasi Hills District
		2. Jaintia Hills District
		3. The Garo Hills District

Part-IIA	Tripura	Tripura Tribal Areas District
Part-III	Mizoram	1. The Chakma District 2. The Mara District 3. The Lai District

PROCEDURE FOR DECLARATION AS ST

The term Scheduled Tribes is defined in the Constitution of India under Article 366(25) as such tribes or tribal communities or parts of groups within such tribes or tribal communities as are deemed under Article 342 to be Scheduled Tribes for the purposes of this Constitution. Article 342 prescribes the procedure to be followed in the matter of specification of Scheduled Tribes.

In terms of Article 342(1), the President may, with respect to any State or Union Territory, and where it is a State, after consultation with the Governor thereof, notify tribes or tribal communities or parts thereof as Scheduled Tribes. This confers on the tribe or part of it a constitutional status invoking the safeguards provided for in the Constitution, to these communities, in their respective States/UTs.

Thus, in terms of Article 342(1), only those communities who have been declared as such by the President through an initial public notification will be considered as Scheduled Tribes. Any further amendment in the list is to be done through an Act of Parliament (Article 342(2)). Parliament may, by law, include in or exclude from the list of Scheduled Tribes, any tribe or tribal community or parts thereof.

The list of Scheduled Tribes is State-specific. In other words, a community declared as Scheduled Tribe in one State need not be so in another State.

Scheduled Tribe claims through marriages

The guiding principle is that no person who is not a Scheduled Tribe by birth will be deemed to be a member of Scheduled Tribe merely because he or she has married a person belonging to a Scheduled Tribe. Similarly, a person who is a member of a Scheduled Tribe will continue to be a member of that Scheduled Tribe, even after his or her marriage with a person who does not belong to a Scheduled Tribe.

National Commission for Scheduled Tribes

In addition to the Office of the Commissioner for Scheduled Caste & Scheduled Tribes created in 1950 for effective implementation of various safeguards provided in the Constitution for the SCs & STs and various other protective legislations, a multi-member Commission for SCs and STs was set up in 1978.

In 1992 these two organizations were replaced by a statutory multi-member National Commission for Scheduled Castes and Scheduled Tribes. However, since the needs and problems of Scheduled Tribes and the solutions required were quite different from those of Scheduled Castes, a special approach for tribal development and independent machinery to safeguard the rights of Scheduled Tribes was considered necessary. Accordingly, a separate National Commission for Scheduled Tribes (NCST) was set up with effect from 19th February, 2004 by amending Article 338 and inserting a new Article 338A in the Constitution, through the Constitution (Eighty-ninth Amendment) Act, 2003.

NATIONAL SCHEDULED TRIBES FINANCE AND DEVELOPMENT CORPORATION

With a view to pay a focused attention and accelerate the pace of economic development of Scheduled Tribes, the erstwhile National Scheduled Castes and Scheduled Tribes Financial Development Corporation was bifurcated and National Scheduled Tribes Finance and Development Corporation (NSTFDC) was set up in April, 2001

under the Ministry of Tribal Affairs. The NSTFDC has been granted license under Section 25 of the Companies Act (A Company not for profit). The Authorized Share Capital of the NSTFDC is Rs. 500.00 crore and paid up capital is Rs. 230.50 crore as on date.

SPECIAL SCHEMES

- (a) **Adivasi Mahila Sashaktikaran Yojana (AMSY)** is an exclusive scheme for the economic development of ST women, at a highly concessional rate of interest. Under the scheme, NSTFDC provides Term Loan for scheme(s)/ project(s) costing upto 50,000/- per individual unit/profit centre. Financial assistance up to 99 per cent of the cost of the scheme(s) /project(s) is provided by the NSTFDC. The SCAs may charge a maximum interest @ 4 per cent per annum from the ultimate women beneficiaries.
- (b) **Micro-credit scheme-launch of a new scheme:** Micro Credit Scheme is meant to provide financial assistance for undertaking small self-employment ventures/activities by the eligible STs through existing profit making SHGs. SCAs shall provide eligible amount of subsidy or margin money as per their scheme(s) for the target group and remaining amount of subsidy or margin money as per their scheme(s) for the target group and remaining amount may be provided as term loan by NSTFDC. In case of no subsidy and or no share of SCAs/banks as SCAs, NSTFDC may provide 100 per cent of the funds required as term loan subject to maximum of 15,000/- per member.

WELFARE OF OTHER BACKWARD CLASSES

The Second Backward Classes Commission (commonly known as Mandal Commission), constituted under Article 340, submitted its Report in 1980. In the light of this report, the Government of India had provided 27 per cent reservation in Central Government posts for persons belonging to the Socially and Economically Backward Classes, [also referred to as "Other Backward Classes" or OBCs]. Several writ petitions were filed in the Supreme Court challenging this Order. These were disposed of by the Supreme Court in 1992, commonly known as the judgement in the Indra Sawhney case. In this judgement, the Court upheld 27 per cent reservation for OBCs in civil posts and services under the Union of India, subject to exclusion of the "Creamy Layer". The Government of India in 1993 reserved 27 per cent of vacancies in Civil Posts and Services under the Central Government, to be filled through direct recruitment in favour of the Other Backward Classes (OBCs).

With the amendment of Article 15 of the Constitution in January, 2006 and the enactment of the Central Educational Institutions (Reservation in Admissions) Act in January, 2007, listing of other backward classes has become relevant for admission in Central Educational Institutions also. Under this Act, OBC students are entitled to 27 per cent reservation in Central Educational Institutions in a phased manner, over a period of three years commencing from the academic session 2008-09. The National Commission for Backward Classes (NCBC) was set up in August, 1993 as per the provision of the National Commission for Backward Classes Act, 1993.

CHAPTER TWENTY NINE | YOUTH AFFAIRS AND SPORTS

YOUTH is on the threshold of a unique demographic divide with young persons. In India, the population below the age of 35 years is about 70 per cent of the total population. It is this population of young people, which constitutes for India, a potential demographic dividend, and/or a challenge of mega proportions if not properly addressed and harnessed. This “Youth and Bulge” in the light of its impact on work participation and dependency ratios has been called a window of opportunity in terms of growth and development of our country. This would require a variety of interventions and programmes aimed at addressing the youth in a multidimensional manner. The Ministry of Youth Affairs and Sports has been designated as the nodal Ministry for development and empowerment of youth and adolescents in the country.

YOUTH SERVICES

National Youth Policy, 2014

The National Youth Policy, 2014 (NYP-2014) seeks to define the Vision of the Government of India for the Youth of the Country and identify the key areas in which action is required, where not enough is being done, to enable youth development and to provide a framework for action for all stakeholders. It is intended to serve as a guiding document, and should be reviewed in 5 years, so the GoI (Government of India) may refocus its priorities for youth development, as may be necessary.

NYP-2014 provides a holistic Vision for the youth of India which is “to empower the youth of the country to achieve their full potential, and through them enable India to find its rightful place in the comity of nations”. In order to achieve this Vision, all stakeholders must work towards meeting the key objectives. This requires specific action in one or more of 11 priority areas, identified as important for youth development.

The Policy seeks to recommend specific future policy interventions required in each of the 11 priority areas.

Create a productive work force

1. Education 2. Entrepreneurship 3. Employment and Skill Development

Develop a strong and healthy generation

4. Health and Healthy Lifestyle 5. Sports

Instill social values and promote community service

6. Promotion of Social Values 7. Community Engagement

Facilitate participation and civic engagement

8. Participation in Politics and Governance 9. Youth Engagement

Support youth at risk and create equitable opportunity for all

10. Inclusion 11. Social Justice

NATIONAL PROGRAMME FOR YOUTH AND ADOLESCENT DEVELOPMENT (NPYAD): The scheme titled National Programme for Youth and Adolescent Development (NPYAD). Under the scheme of National Programme for Youth and Adolescent Development (NPYAD) financial assistance is given for youth activities under its five programme areas namely, Youth Leadership and Personality Development, Promotion of National Integration, Promotion of Adventure, Development and Empowerment of Adolescent and Technical and Resource Development. The objectives of this programme is to provide opportunity for holistic development of youth including adolescents for realization of their fullest potential, to develop leadership qualities and personality development and to engage and channelise their energy in a positive manner towards socio-economic development and growth of the nation. The beneficiaries of the scheme are youth & adolescents from all sectors irrespective of their caste & creeds, i.e. women, men SC/ST/OBC and physically challenged. However,

preference is given to the youth with special abilities and youth belonging to scheduled caste, scheduled tribes and other weaker sections.

IMPLEMENTATION OF THE SCHEME

- (i) The Youth Leadership and Personality Development Programme will be implemented through Nehru Yuva Kendra Sangathan (NYKS).
- (ii) The Technical and Resource Development Programme will be implemented through Rajiv Gandhi National Institute of Youth Development (RGNIYD).
- (iii) Penal action will be taken against organizations not fulfilling the requisite visions and shall be black-listed for any future grants from the Government.

NATIONAL SERVICE SCHEME (NSS): National Service Scheme (NSS) is a centrally sponsored scheme with the objective to develop character and personality of student youth in schools and colleges. The **objective of NSS is to arouse social conscience of the students, and to provide them an opportunity to work with the people in the villages and slum dwellers.** The NSS has two types of programmes, viz., **(a) Regular Activities and (b) Special Camping Programme.**

RAJIV GANDHI NATIONAL INSTITUTE OF YOUTH DEVELOPMENT (RGNIYD): Rajiv Gandhi National Institute of Youth Development (RGNIYD) was established at Sriperumbudur in Tamil Nadu in 1993. It was accorded the status of deemed University by the Ministry of HRD on 23rd October, 2008. This Institute has launched five post graduate programmes (M.A.) in Youth Empowerment, Career Counseling, Gender Studies, Local Governance and Life Education and M.A. Development Practice Programme

The Institute provides training in **(i) leadership and Personality Development, (ii) Enhancing Life Skills for Adolescents, (iii) Orientation Programme on Adolescent Reproductive and Sexual Health and HIV/ AIDS, (iv) Trainers Programmes on Youth in Social Harmony and National Unity, (v) Orientation Programmes for teacher Coordinators on Teen Clubs (vi) Pilot Testing of the Module on Career Counseling for Youth Functionaries, (vii) Pilot Testing of Training Manual, (viii) Youth for Gender equity (ix) Orientation Programme for Teens Club Office Bearers (x) Awareness Programme on Citizenship Rights for Women Prison Staff (xi) Orientation Program of National Adolescent Resource Team (NART) and many more areas.**

INTERNATIONAL COOPERATION COMMONWEALTH YOUTH PROGRAMMES & EXCHANGE OF YOUTH DELEGATIONS

- **Exchange of Delegations of Youth at International Level**
- **Tenzing Norgay National Adventure Award:** Tenzing Norgay National Adventure Award is the highest national recognition for outstanding achievements in the field of adventure on land, sea and air.
- **National Youth Festival:** Every year, the Ministry of Youth Affairs & Sports organizes the National Youth Festival during the birth anniversary of Swami Vivekananda, the great philosopher and thinker. The National Youth Festival is celebrated from 12th to 16th January. The idea behind a Youth Festival is to organize a gathering of youth and to take up one or all programmes mentioned above so that the concept of national integration, spirit of communal harmony, brotherhood, courage and adventure may be propagated.
- **National Youth Awards:** National Youth Awards are given away to young men and women and to a Voluntary Organisation in recognition of their outstanding work in the field of national development and social service. These awards are given every year during the National Youth Festival coinciding with the birth anniversary of Swami Vivekananda i.e. 12th January.

NEHRU YUVA KENDRA SANGATHAN (NYKS): The Nehru Yuva Kendras (NYKs) was established in 1972 to provide rural youth avenues to take part in the process of nation building and opportunities for the development of their personality and skills. The aim is to form village level voluntary action groups of youth at the grass root

level so that they come together with the concern for the poorest of the poor. The Government of India through its youth based flagship organisation Nehru Yuva Kendra Sangathan has initiated a Pilot project namely Youth Employability Skill (YES) Project to enhance the employability of youth.

YOUTH HOSTELS: Youth Hostels are built to promote youth travel, to enable the young people experience the rich cultural heritage of the country. The construction of the Youth Hostels is a joint venture of the Central and State Governments.

NATIONAL YOUTH CORPS (NYC): The Government launched a new Scheme "National Youth Corps" during the financial year 2010-11 to tap the potential of the youth and channeling their energy towards nation building. The Scheme, called "National Youth Corps" (NYC) was launched, amalgamating the two volunteer schemes namely National Service Volunteer (NSV) and Rashtriya Sadbhawana Yojana (RSY).

Commonwealth Youth Programmes (CYP): It came into being in 1974 to promote the development of youth in the Commonwealth Countries. This programme encourages and supports the youth in the process of national development and provides opportunities for increasing international understanding. There are three major strategic areas on which Commonwealth Youth Programme is concentrating: National Youth Policy; Human Resource Development, and Youth Empowerment.

DEPARTMENT OF SPORTS: The modern sports have become highly competitive. The use of modern equipments, infrastructure and advanced scientific support has changed the scenario of sports at international level. Keeping in line with the growing demands of advanced equipments, infrastructure and scientific support, Government of India has taken several initiatives:-

NATIONAL SPORTS POLICY 2001: National Sports Policy, 2001 envisages mainly broad basing and promotion of excellence in sports. The salient features of the National Sports Policy 2001 are as under: Broad-basing of Sports and achievement of excellence; Upgradation and development of infrastructure; Support to the National Sports Federations and other appropriate bodies; Strengthening of scientific and coaching support to sports;

Incentives to promote sports; Enhanced participation of women, Scheduled Tribes and rural youth; Involvement of the Corporate Sector in sports promotion; and Promote sports mindedness among the public at large.

PANCHAYAT YUVA KRIDA AUR KHEL ABHIYAN (PYKKA): Initiated to provide basic sports infrastructure at the panchayat level over a period of 10 years. Apart from contributing to public health, social inclusiveness, the promotion of indigenous games, and expansion of the talent pool through the identification and nurturing of rural sports talent, PYKKA is also expected to stimulate the economic activities within the sports sector, as it would lead to an exponential growth in the demand for sports instructors, coaches, sports equipment and consumables, sports events and related support services.

PROMOTION OF URBAN SPORTS INFRASTRUCTURE: The Government has introduced a new scheme titled 'Scheme of Assistance for the creation of Urban Sports Infrastructure' on pilot basis in 2010-11 for creating/upgrading sports facilities and for training coaches.

PROMOTION OF EXCELLENCE IN SPORTS THROUGH INSTITUTIONS: The Sports Authority of India (SAI) was established by the Government of India in year 1984 as a registered society. It is now the nodal agency in the country for broad basing sports and for training of sportspersons to achieve excellence in national and international sports. SAI operates various schemes at sub-junior, junior and senior level, namely, National Sports Talent Contest (NSTC), Army Boys Sports Company (ABSC), SAI Training Centres (STC) and Special Area

Games (SAG) to achieve excellence at national and international level. SAT has also set up Centres of Excellence (COE) for elite sportsperson at each of its Regional Centres and one at National Institute of Sports, Patiala.

LAKSHMIBAI NATIONAL INSTITUTE OF PHYSICAL EDUCATION (LNIPE), GWALIOR: The Institute offers the following full-time courses: (1) Bachelor of Physical Education (BPE) (4 years degree course) (2) Master of Physical Education (MPE) (2 years course) (3) M. Phil in Physical Education (1 year course) and (4) Ph.D in Physical Education. Apart from the above, following Certificate, Diploma and Post Graduate courses are also being conducted by the Institute : (a) Adventure Sports, (b) Special Sports, (c) Youth Affairs, (d) Information Technology; (e) Sports Coaching (f) Yoga and alternate therapies (g) Sports Management and (h) Sports Journalism.

PROMOTION OF EXCELLENCE IN SPORTS THROUGH ASSISTANCE

'Scheme Of Assistance To National Sports Federations: Under this scheme, the Government of India provides assistance to National Sports Federations (NSFs) for conducting National Championships and International Tournaments in India, participation in international tournaments abroad, organizing coaching camps, procuring sports equipment, engagement of foreign coaches and disbursement of salaries to the paid Joint/Assistant Secretaries.

Scheme Relating To Talent Search And Training: Under this Scheme, assistance is provided to promising sportspersons for training and training-cum-competitions in India and abroad, purchase of equipment and for scientific support. Support personnel such as coaches, sports scientists, doctors masseurs etc. are also assisted for undergoing specialized training.

National Sports Development Fund (NSDF): It was instituted by the Central Government with a view to mobilize resources from the Government as well as non-governmental sources, including the private/corporate sector and non-resident Indians, for promotion of sports and games in the country. The funds available under NSDF are used for promotion of sports in general and specific sport disciplines and individual sportspersons for achieving excellence at the national and international level in particular; imparting special training and coaching in relevant sport disciplines to sportspersons, coaches and sports specialists; to construct and maintain infrastructure as may be required for promotion of excellence in sports.

Rajiv Gandhi Khel Ratna Award : The scheme was launched in the year 1991-92 with the objective of honouring sportspersons to enhance their general status and to give them greater dignity and place of honour in society.

Arjuna Awards: The award was instituted in 1961 and it is given to a sportsperson who has performed consistently for the previous three years at the international level, with excellence for the year for which the Award is recommended.

Dhyan Chand Award For Lifetime Achievements In Sports And Games: The award was instituted in the year 2002. This award is given to honour those sportspersons who have contributed to sports by their performance and continue to contribute to promotion of sports even after their retirement from active sporting career.

Dronacharya Award : The award was instituted in 1985 to honour eminent Coaches who have successfully trained sportspersons or teams and enabled them to achieve outstanding results in international competitions.

Maulana Abul Kalam Azad (Maka) Trophy : It is a rolling trophy, instituted in 1956-57, which is given to the top overall performing university in the Inter-University Tournaments.

Rashtriya Khel Protsahan Puruskar : The Award has four categories, namely, community sports development, promotion of sports academies of excellence, support to elite sportspersons and employment to sportspersons.

Special Awards To Winners In International Sports Events And Their Coaches : This scheme was introduced in the year 1986 to encourage and motivate outstanding sportspersons for higher achievement and to attract the younger generation to take sports as a career.

Scheme Of Sports Fund For Pension To Meritorious Sports Persons : Those sportspersons, who are Indian citizens and have won gold, silver and bronze medals in Olympic Games, World Cup/World Championships, Asian Games, Commonwealth Games and Paralympic Games and have attained the age of 30 years and have retired from active sports career, are eligible for life pension under this Scheme.

National Welfare Fund For Sports Persons : The National Welfare Fund for sports persons was set up in March, 1982 with a view to assist outstanding sportspersons of yesteryears, who had won glory for the country in sports now living in indigent conditions.

OTHER INITIATIVES

SCHEME FOR PROMOTION OF SPORTS AMONG PERSONS WITH DISABILITIES: The Ministry formulated a scheme for promotion of sports and games among disabled in 2009. The objective of the Scheme is broad basing participative sports among the disabled. The Scheme of Sports and Games for the Disabled has the following components:-

- (i) Grant for Sports coaching and purchase of consumables & non-consumable sports equipment for Schools.
- (ii) Grant for Training of Coaches (iii) Grant for holding District, State and National level competitions for the disabled.

SCHEME OF ASSISTANCE FOR ANTI-DOPING ACTIVITIES: Doping is the deliberate or inadvertent use by sportspersons of a substance or method banned by Medical Commission of International Olympic Committee/World Anti Doping Agency (WADA). Recognizing the urgent need for embarking upon a concerted effort to check doping in collaboration with the global anti-doping community, the Government of India became one of the members of the Foundation Board of WADA, set up with the initiative of the International Olympic Committee.

NATIONAL ANTI DOPING AGENCY (NADA) is the national organization responsible for promoting, coordinating and monitoring the doping control programme in sports in the country. The Anti Doping rules of NADA are compliant with the Anti Doping Code of WADA.

NATIONAL DOPE TESTING LABORATORY (NDTL) is responsible for testing dope samples and conducting advance research on the subject by maintaining close association with the WADA and WADA accredited laboratories.

COME & PLAY SCHEME: For optimum utilization of its 5 stadia which were renovated at a substantial cost for Commonwealth Games 2010, Sports Authority of India (SAI) introduced 'Come and Play Scheme in May 2011. The designated areas in the SAT Stadia viz., Jawahar Lal Nehru Stadium, Dr. Karni Singh Shooting Ranges, Dr. SPM Swimming Pool Complex, Major Dhyan Chand Hockey Stadium and Indira Gandhi Indoor Stadium (Gymnastics, Wrestling and Cycling Velodrome) were thrown open in May 2011.