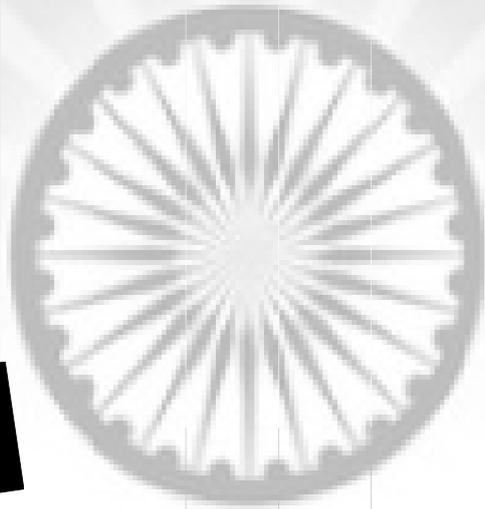


GS SCORE



Gist of

INDIA

Year Book

VOLUME - II

For Civil Services Examination

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1

HEALTH AND FAMILY WELFARE

The Union Ministry of Health and Family Welfare is instrumental and responsible for implementation of various programmes on the national scale in the areas of health and family welfare, prevention and control of major communicable diseases and promotion of traditional and indigenous systems of medicines. The Ministry also assists states in preventing and controlling the spread of seasonal and epidemics diseases.

In addition to the centrally sponsored family welfare programmes, the Ministry is implementing several World Bank assisted programmes for control of AIDS, malaria and tuberculosis in designated areas.

National Health Policy (2002)

The National Health Policy (NHP) of 2002 guides the strategy adopted by the Government for the health sector. The NHP 2002 evolved from the National Health Policy of 1983. Guidance was provided by the Bhore Committee Report (1946) for future health development of the country, included that 'No individual should fail to secure adequate medical care because of inability to pay for it'.

The framework of National Health Policy, 2002 envisages, accelerated achievement of public health goals in the backdrop of the socio-economic circumstances prevailing in the country.

Some of the salient aspects of the NHP 2002:

1. Making good the deficiencies in availability of health facilities,
2. Narrowing the gap between various states,
3. The gap across the rural-urban divide in attainment of health goals and
4. Reducing the uneven access to and benefits from the public health system between the better endowed and the more vulnerable sections of society.
5. Envisages setting up of an organized urban primary care structure, a network of decentralized health services and upgrading the physical infrastructure of mental health institutions.

National Health Mission

The Twelfth Five Year Plan for the health sector envisages transformation of the National Rural Health Mission into a National Health Mission covering both rural and urban areas. It envisages providing public sector primary care facilities in selected low income urban areas, expansion of teaching and training programmes for healthcare professionals, particularly in the public sector institutions, giving greater attention to public health, strengthening the drug and food regulatory mechanism and building an appropriate architecture for Universal Health Care.

The National Health Mission (NHM) has its two sub-missions,

1. National Rural Health Mission (NRHM) and
2. National urban Health Mission (NUHM).

The NHM envisages universal access to equitable, affordable & quality healthcare services that are accountable and responsive to people's needs. The main programmatic components includes:

- Health system strengthening in rural and urban areas,
- Reproductive-Maternal-New-born Child and Adolescent Health (RMNCH+A) and
- Control of Communicable and Non-Communicable Diseases.

Under NHM, substantial achievements have been made:

- The 7th Common Review Mission (CRM) under NHM was conducted from November 2013 in 14 states/UTs observed increased child survival, population stabilization and utilization of health services, though the progress across states was not analogous. The Infant Mortality Rate (IMR, the deaths of children before age 1 per 1000 live-births) has fallen steadily every year, with an all India average of 42.
- The Maternal Mortality Ratio (MMR), which measures the number of women of reproductive age (15 to 49) dying due to maternal causes per 100000 live-births, has come down to 178, though this is far short of the 12th Plan target of 100. Some states have registered significant reduction in MMR with Kerala at 66, Maharashtra at 87 and Tamil Nadu at 90.
- There has been a significant improvement in creation of new facilities and infrastructure, though adequate staffing of these facilities by qualified health personnel remains a problem.
- Availability of drugs has improved at all levels and the robust logistic arrangements for procurement and storage of these drugs are being put in place.
- An important achievement of NHM has been a considerable reduction in out of pocket expenses from 72% to 60%.

New initiatives have been launched under NHM:

- **Rashtriya Bal Swasthya Karyakram (RBSK):** To provide comprehensive healthcare and improve the quality of life of children through early detection of birth defects, diseases, deficiencies, and development delays including disability. Also provide child health screening and early interventions services by expanding the reach of mobile health teams at block level.
- **Rashtriya Kishore Swasthya Karyakram (RKSK):** To comprehensively address the health needs of the 253 million adolescents, who account for over 21 % of the country's population, by bringing in several new dimensions like mental health, nutrition, substance misuse, injuries and violence and non -communicable diseases.

This initiative was launched in January, 2014 to reach out to 253 million adolescents in the country in their own spaces and introduce peer-led interventions at the community level, supported by augmentation of facility based services. This initiative broadens the focus of the adolescent health programme beyond reproductive and sexual health and brings in focus on life skills, nutrition, injuries and violence (including gender based violence), non-communicable diseases, mental health and substance misuse.

- **Weekly Iron Folic Acid Supplementation Programme (WIFS):** To address adolescent anaemia where under supervised Iron-Folic Acid (IFA) tablets are given to adolescent population between 10-19 years of age in both rural and urban areas throughout the country.

National Urban Health Mission

National Urban Health Mission (NUHM) approved by the Union Cabinet in May 2013 as a sub-mission of NHM which seeks to improve the health status of the urban population particularly urban poor and

other vulnerable sections by facilitating their access to quality primary healthcare. NUHM would cover all state capitals, district headquarters and other cities/towns with a population of 50,000 and above (as per census 2011) in a phased manner. Cities and towns with population below 50,000 will continue to be covered under NRHM. The Centre-state funding pattern is 75:25 for all the states except north eastern states including Sikkim and other special category states of Jammu and Kashmir, Himachal Pradesh and Uttarakhand, for whom the Centre-state funding pattern is 90:10.

Major Initiatives under NRHM/NHM

ASHA (Accredited Social Health Activists):

Since 2013, more than 9.15 lakh ASHAs are in place across the country and serve as facilitators, mobilizers and providers of community level care. ASHA is the first port of call in the community especially for marginalized sections of the population, with a focus on women and children.

The Common Review Missions show that the ASHA has been a key figure in contributing to the positive outcomes of increases in institutional delivery, immunization, active role in disease control programmes (Malaria, Kala-azar and Lymphatic filariasis, in particular) and improved breastfeeding and nutrition practices.

Rogi Kalyan Samiti

This committee is a registered society whose members act as trustees to manage the affairs of the hospital and is responsible for upkeep of the facilities and ensure provision of better facilities to the patients in the hospital. Financial assistance is provided to these committees through untied fund to undertake activities for patient welfare.

Janani Suraksha Yojana (JSY)

It aims to reduce maternal mortality among pregnant women by encouraging them to deliver in government health facilities. Under the scheme, cash assistance is provided to eligible pregnant women for giving birth in a government health facility. Since the inception of NRHM, 8.55 crore women have benefited under this scheme.

Janani Shishu Suraksha Karyakram

It entitles all pregnant women delivering in public health institutions to absolutely free and no expense delivery, including caesarean section. The free entitlements include free drugs and consumables, free diagnostics, free diet during stay in the health institutions, free provision of blood, free transport from home to health institution, between health institutions in case of referrals and drop back home and exemption from all kinds of user charges.

As per the latest reports received from the states/UTs, 89% pregnant women availed free drugs, 82% free diagnostics, 75% free diet, 49% free home to facility transport and 56.03 % free drop back home. For sick infants, 73% sick infants availed free drugs, 40% free diagnostics, 10% sick infants free home to facility transport and 28% free drop back home.

National Ambulance Services

Dial 102 or 108 is predominantly an emergency response system, primarily designed to attend topatients of critical care, trauma and accident victims, etc. Dial 102 services essentially consist of basic patient transport aimed at the needs of pregnant women and children though other categories are also taking benefit and are not excluded.

Facility Based New born Care

It has been established with the launch of home based and facility based new born care components ensuring that every new born receives essential care right from the time of birth and first 48 hours at the health facility and then at home during the first 42 days of life.

National Commission on Population

In pursuance of the objectives of the National Population Policy (NPP), 2000, the National Commission on Population was constituted in May 2000 to review, monitor and give directions for the implementation of the NPP, to promote inter-sectorial coordination, involve the civil society in planning and implementation and to explore the possibilities of international cooperation in support of the goals set out in the National Population Policy. The National Commission on Population has since been reconstituted in April, 2005 with 40 members. The membership also includes the Chief Ministers of the states of Uttar Pradesh, Madhya Pradesh, Rajasthan, Bihar, Jharkhand, Kerala and Tamil Nadu.

Annual Health Survey

Immunization coverage in India has increased to 65.2 % as per Rapid Survey on Children (RSOC), 2013-14 from 35.5 % as per National Family Health Survey (NFHS), 92-93 in the last 21 years. There is a need for further improvement especially in DPT3 and OPV3 coverage and reducing the drop outs. The recent Annual Health Survey (AHS 2012-13) conducted in states documented improvement in immunization coverage.

Jansankhya Sthirata Kosh/National Population Stabilisation Fund

It is an autonomous body under the Ministry of Health and Family Welfare (MoHFW), constituted on the recommendations of the National Commission of Population. It was established in 2003 under the MoHFW and was reconstituted in 2005 with the addition of a General Body.

Its mandate is to promote and undertake schemes, programmes, projects and initiatives to meet the unmet need for contraception, and reproductive and child health. It is aimed at achieving population stabilisation at a level consistent with the needs of sustainable economic growth, social development and environment protection by 2045.

Child Health Programme

India is committed to reduce child deaths by two thirds between 1990 and 2015 as pledged in the Millennium Development Goals (MDG). This implies a reduction of Under Five Mortality Rate (U-5MR) from 125/1000 live births in 1990 to 42/1000 live births by 2015. This commitment is also reflected under the National Health Mission (NHM).

Situation of Child Mortality

At present, as per SRS 2013, an estimated 12.7 lakh under-5 child deaths annually. Four states together contribute to 58 per cent of all child deaths in the country, namely-Uttar Pradesh (3.5 lakhs), Bihar (1.5 lakhs), Madhya Pradesh (1.3 lakhs) and Rajasthan (1.0 lakh). About 45 per cent of under-five deaths take place within the first 7 days of birth, about 57 per cent of within first one month of birth and approximately 81 per cent within one year of the birth.

Causes of Child Mortality in India

The major causes of child mortality in India (as per WHO, 2012) are - neonatal causes (53%), pneumonia (15%), diarrhoeal diseases (12%), measles (3%) and others. Besides these, malnutrition is a contributory factor in 33 per cent child deaths.

Family Planning Programme

With its historic initiation in 1952, the family planning programme has undergone transformation in terms of policy and actual programme implementation. There has been a gradual shift from clinical approach to the reproductive child health approach and further the National Population Policy (NPP), 2000 brought a holistic and a target free approach which helped in reduction of fertility.

Indian Council of Medical Research:

The Indian Council of Medical Research (ICMR), New Delhi, set up in 1911, working under the Department of Health Research (DHR), Ministry of Health and Family Welfare, Government of India, is the apex body in the country for the formulation, coordination, promotion and conduct of biomedical research.

The ICMR discharges its primary function of promoting biomedical research through intramural as well as extramural research. Extramural research is promoted by the ICMR through:

- Setting up centres for Advanced Research in different research areas;
- Task force studies and national multi-centric collaborative projects and
- Open ended adhoc research projects generated spontaneously by active scientists in biomedical institutions/universities, nongovernmental organizations, etc., from different parts of the country.

ICMR has launched seven affordable technologies, which are:

- Vaccine for Japanese Encephalitis (JE);
- Test for molecular diagnosis of Thalassemia;
- Magnivisualizer for cervical cancer screening;
- Strips and detection system(s) for diabetes;
- Test for detection of pathogenic bacteria in food;
- Technologies for vitamin A and ferritin estimations; and
- Development of non-invasive diagnosis procedure for visceral Leishmaniasis from urine and sputum samples.

Other Research Activities

Anti-Microbial Resistance Surveillance Network, Indigenous TB Diagnostics, Revised National Tuberculosis Control Program (RNTCP), Leprosy, HIV/AIDS, Bio-safety, Poliomyelitis, Influenza, Crimean-Congo Hamorrhagic Fever, Social and Behavioural Research, etc.

Indian Systems of Medicine and Homoeopathy:

- Department of Indian Systems of Medicine and Homoeopathy (ISM&H) was created in March, 1995 and renamed as Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) in November, 2003. It was elevated to the status of Ministry of AYUSH with a view to providing focused attention to development of education and research in AYUSH systems.
- The Ministry continued to lay emphasis on up gradation of AYUSH educational standards, quality control and standardization of drugs, improving the availability of medicinal plant material, research and 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.
- Ayurveda, Siddha, Unani and Homoeopathy drugs are covered under the purview of Drugs and Cosmetics Act, 1940.
- The Ministry has set up a National Medicinal Plants Board to promote cultivation of medicinal plants and ensure sustained availability of quality raw material.
- A separate National Policy on Indian Systems of Medicine and Homoeopathy is in place since 2002.
- Pharmacopoeial Laboratory for Indian Medicine (PLIM) is a subordinate office of Ministry of AYUSH located at Ghaziabad. The laboratory was established in the year 1970 as a Pharmacopoeial standards setting-cum drugs testing laboratory at national level for Ayurvedic, Siddha and Unani (ASU) medicine.
- Homoeopathic Pharmacopoeial Laboratory, (HPL) Ghaziabad was set up as a national laboratory for the purpose of laying down standards and testing for identity, purity and quality of homoeopathic medicines. The laboratory also functions as Central Drug Laboratory for the testing of homoeopathic medicines under the Rule 3A, Section 6 of the Drugs and Cosmetics Act, 1947.
- The Pharmacopoeia Commission for Indian Medicine (PCIM) to cater to the needs of ASU Pharmacopoeia Committee and the Pharmacopoeial Laboratory for Indian Medicine (PLIM). It is a fully autonomous organization registered under Societies Registration Act, 1860. The main objective is to publish and revise the ASU&H Pharmacopoeias of India to ensure harmonization and development of the ASU&H Pharmacopoeial Standards and to make them acceptable internationally.

Public Sector Undertaking

Indian Medicines Pharmaceutical Corporation Limited:

Indian Medicines Pharmaceutical Corporation Limited (IMPCL), a Government of India enterprise, having 97.61% shares of Government of India and 2.39% shares of Uttarakhand government through Kumaon Mandal Vikas Nigam Ltd., was incorporated in 1978. IMPCL comes under the administrative control of the Ministry of AYUSH, New Delhi. IMPCL is Schedule D, 'Mini-Ratna' Category-II, GMP Certified & ISO 9001-2008 certificated Central Public Sector Undertaking.

Statutory Regulatory Councils

1. Central Council of Indian Medicine, 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 Govt. as required under Section 36 of the Indian Medicine Central Council Act, 1970 and after obtaining the comments of the State Govt. as required under Section 22 of the said Act has prescribed courses for Under-graduate and Postgraduate education in Ayurveda, Unani, Siddha and Sowa Rigpa through the Regulations.

2. Central Council of Homoeopathy (CCH), New Delhi

It is a statutory body constituted under the provisions of 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 the Homoeopathy Central Council Act, 1973 in 2002, and the amended Act had been enforced from 2003.

Research Councils

There are five apex research councils, namely,

1. Central Council for Research in Ayurvedic Sciences (CCRAS),
2. Central Council for Research in Siddha (CCRS),
3. Central Council for Research in Unani Medicine (CCRUM),
4. Central Council for Research in Homeopathy (CCRH) and
5. Central Council for Research in Yoga and Naturopathy (CCRYN).

Following reform measures/policy initiative were taken:

- Validation of classical Ayurvedic formulations, to establish clinical safety and efficacy have been undertaken (safety and efficacy).
- Collaborative clinical studies have been undertaken in collaboration with reputed medical institution/ universities.
- ISO-9001 certification has been obtained for CCRH, headquarters.

During 2015-16, the research councils have initiated various pilot projects in various states such as Swasthya Rakshan Programme: CCRAS, CCRUM and CCRH and Tribal Health Care Research Project. CCRH is also engaged in Homoeopathy for Health Child.

A scheme has been started by Central Council for Research in Yoga and Naturopathy (CCRYN) to conduct one month Yoga camp by administering Common Yoga Protocol in all districts of India to celebrate the International Day of Yoga through Government organizations/NGOs/Voluntary organizations.

National Institutes: To promote the Indian System of Medicine are:

- National Institute of Ayurveda, Jaipur;
- National Institute of Homoeopathy, Kolkata;
- National Institute of Unani Medicine, Bengaluru;
- National Institute of Siddha, Chennai;
- Morarji Desai National Institute of Yoga, New Delhi;
- Rashtriya Ayurveda Vidyapeeth, New Delhi;
- National Institute of Naturopathy, Pune.
- All India Institute of Ayurveda, New Delhi,
- North-Eastern Institute of Ayurveda and Homoeopathy, Shillong and
- North-Eastern Institute of Folk Medicine, Passighat, Arunachal Pradesh
- All India Institute of Unani Medicine is to be established at Ghaziabad, Uttar Pradesh.
- Institute for Post Graduate Teaching and Research in Ayurveda, Jamnagar (is financially assisted by the Ministry but it comes under the administrative control of Gujarat Ayurveda University Act.)

3. National Medicinal Plants Board (NMPB)

It is an apex national body which coordinates all matters relating to medicinal plants in the country. The Board which was established in November 2000, acts as advisory body to the concerned ministries, departments and agencies in strategic planning of medicinal plants.

The NMPB is presently implementing two schemes namely Central Sector Scheme for 'Conservation, Development and Sustainable Management of Medicinal Plants' and centrally sponsored scheme of National Mission on Medicinal Plants.

AYUSH Service under National AYUSH Mission

It providing cost effective AYUSH services, with a universal access is one of the strategies to improve quality and outreach of healthcare services in the country. Under the National Rural Health Mission (NRHM), a large number of AYUSH facilities have been provided with financial support from the Government of India. Centrally Sponsored Scheme for development of AYUSH hospitals and dispensaries of the Department of AYUSH, provides financial assistance to the State for the creation of such AYUSH facilities and for the supply of essential AYUSH medicines.

Drug Quality Control

The Drug Control Cell (DCC) in the Ministry of AYUSH deals with regulatory and quality control matters of AYUSH drugs including amendment in the regulations, introduction of new regulations and examination of other drugs related issues.

The DCC provides secretarial support to the two statutory bodies - Ayurveda, Siddha, Unani Drugs Technical Advisory Board (ASUDTAB) and Ayurveda, Siddha, Unani Drugs Consultative Committee (ASUDCC), which are set up under the provisions of Drugs and Cosmetics Act, 1940.

International Cooperation

World Health Organization (WHO) is one of the main UN agencies collaborating, in the Health Sector, with the Ministry of Health & Family Welfare, Government of India and providing technical support. Activities under WHO are funded through two sources:

1. The Country budget, which comes out of contributions made by member countries and
2. Extra Budgetary Resources which comes from-
 - a) Donations from various sources for general or specific aspects of health and
 - b) Funds routed through the WHO to countries by other member countries or institutes/agencies.

India is the largest beneficiary of the country budget within the South East Asia Region. The budget is operated on a biennium basis, calendar year-wise.

Urbanization is an important determinant of economic development. As per Census of India 2011, the number of towns is 7,935 comprising 4,041 Statutory Towns and 3,894 Census Towns. Also, proportion of population in urban areas has increased from 27.8% (2001) to 31.2% (2011) and slum population comprises 18% of urban population of 377 million.

The Technical Group on Urban Housing Shortage constituted for the Twelfth Five Year Plan estimated that in 2012, total housing shortage comprising obsolescence, congestion and shelter to house less households was 18.78 million, of which approximately 96% is accounted for by economically weaker section and lower income group categories.

Key issues and initiatives regarding urban housing and habitat including livelihood, with which Ministry of Housing and Urban Poverty Alleviation is concerned, are detailed here:

Pradhan Mantri Awas Yojana - Housing for All (Urban) Mission

- To facilitate housing for all by 2022.
- The Mission targets urban poor, living in slums and others.
- It envisages Government interventions for different segments of urban poor as follows:
 - a) Slum rehabilitation: Redevelopment of slums with participation of private developers using land as a resource – slum rehabilitation grant of 1 lakh per house on an average for all eligible slum dwellers in all such projects;
 - b) Promotion of affordable housing for weaker section through credit linked subsidy: The interest rate subvention at 6.5 % for both EWS/LIG categories so that interest payable at present is less than 4 %. If interest rate varies, even then interest subvention would remain at 6.5 % and interest payable after subvention would vary, the subsidy payout on NPV basis would be about 2.3 lakh per house for both EWS and LIG;
 - c) Affordable housing in partnership with public and private sectors: Central assistance at 1.5 lakh per EWS house in projects where 35% of the houses are mandatorily for EWS category; and
 - d) Subsidy for beneficiary-led individual house construction or enhancement: 1.5 lakh per house for EWS category in slums or otherwise if states/cities make a project. Houses of up to 30 sq.m. carpet area are to be provided with basic civic infrastructure i.e., water, sanitation, sewerage, road, power, telephone line, etc., and social infrastructure such as community centre, parks and playgrounds, livelihood centre, etc.
- Beneficiary criteria: A beneficiary family will comprise husband, wife, unmarried son and/ unmarried daughters. The beneficiary family should not own a 'pucca house' either in his/ her name of any member of his/ her family in any part of the country.
- Under the Mission, economically weaker sections are defined as urban poor with annual income of 3 lakh and low income group with annual income between 3-6 lakh. These limits can be revised by Ministry if required.

- All statutory towns as per census 2011 and towns notified subsequently would be eligible for coverage under the Mission. States/UTs will have flexibility to include the planning area as notified with respect to statutory towns and which surrounds the concerned municipal area.

Technology Sub-Mission

- To facilitate adoption of modern, innovative, green technologies and building material for faster and quality construction of houses.
- To facilitate preparation and adoption of layout designs and building plans suitable for various geo-climatic zones and
- To assist states/cities in deploying disaster resistant and environment friendly technologies.

Deendayal Antyodaya Yojana - National Urban Livelihoods Mission

- The National Urban Livelihoods Mission (NULM) and National Rural Livelihoods Mission (NRLM) have been converged and named as Deendayal Antyodaya Yojana (DAY). The scope of NULM has been enhanced to cover all statutory towns and it has been renamed as DAY-NULM.
- The primary target of DAY-NULM is urban poor, including urban homeless and particular emphasis is laid on mobilisation of vulnerable sections of urban population such as SCs, STs, minorities, female-headed households, persons with disabilities, destitute, migrant labourers, and especially vulnerable occupational groups such as street vendors, rag pickers, domestic workers, beggars, construction workers, etc.
- Activities under DAY-NULM are directed also at providing shelters equipped with essential services to urban homeless in a phased manner.
- Moreover, the Mission addresses livelihood concerns of urban street vendors by facilitating access to suitable spaces, institutional credit, social security and skills for accessing emerging market opportunities.

DAY-NULM has following components:

1. **Social Mobilization and Institution Development (SM&ID):** NULM envisages mobilisation of urban poor households into thrift and credit-based Self-Help Groups (SHGs) and their federations/collectives.
2. **Capacity Building and Training (CB&T):** A multipronged approach is planned under NULM for continuous capacity building of SHGs and their federations/collectives, government functionaries at Central, State and city/town levels, bankers, NGOs, CBOs and other stakeholders.
3. **Employment through Skills Training and Placement (EST&P):** NULM will focus on providing assistance for skill development/upgrading of the urban poor to enhance their capacity for self-employment or better salaried employment.
4. **Self-employment Programme (SEP):** This component will focus on financial assistance to individuals/groups of urban poor for setting up gainful self-employment ventures/micro-enterprises, suited to their skills, training, aptitude and local conditions.
5. **Support to Urban Street Vendors:** This component will cover development of vendors market, credit enablement of vendors, socio-economic survey of street vendors, skill development and micro enterprises development and convergence with social assistance under various schemes of the Government.

6. **Shelter for Urban Homeless (SUH):** Under this component, the construction of permanent shelters for the urban homeless equipped with essential services will be supported.
7. **Innovative & Special Projects (I&SP):** It will focus on the promotion of novel initiatives in the form of innovative projects. These initiatives may be in the nature of pioneering efforts, aimed at catalysing sustainable approaches to urban livelihoods through Public- Private-Community-Partnership (PPCP).

Under DAY-NULM, 6.24 lakh persons have been provided skill training; 1.98 lakh beneficiaries have been placed for wage/self-employment and assisted for setting up individual/group micro enterprises; more than 1 lakh Self Help Groups (SHGs) have been formed and disbursed loans under SHG Bank Linkage programme.

Acts Related to Housing Sector

Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014

To protect the rights of urban street vendors and to regulate street vending activities, Govt. of India has enacted the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014, provisions of which are aimed at creating a conducive atmosphere where street vendors are able to carry out their business in a fair and transparent manner, without fear of harassment and eviction.

Real Estate (Regulation and Development) Act, 2016

- The Act seeks to create a uniform regulatory mechanism across the country and enhance the growth of construction sector.
- It regulates transactions in real estate projects between the promoters and buyers.
- Establishes state level regulatory authorities called Real Estate Regulatory Authorities (RERAs) and tribunals called Real Estate Appellate Tribunals to settle disputes.
- Escrow Account: 70% of the amount collected from buyers for a project must be maintained in a separate bank (Escrow) account and must only be used for construction of that project. State government can alter this amount to less than 70%.
- Carpet Area: A carpet area has been clearly defined as the net usable floor area of an apartment, excluding the area covered by the external walls, areas under services shafts, exclusive balcony or verandah area and exclusive open terrace area, in order to eliminate any scope for wrongdoing.

Town Vending Committee (TVC) and Street Vendors Survey:

- The Town Vending Committee will conduct a survey of all existing street vendors, within the area under its jurisdiction headed by Municipal Commissioner or Chief Executive Officer.
- Every street vendor, identified under the survey will be issued a certificate of vending (license) by the Town Vending Committee. This certificate would allow the vendors to carry out their business activities legally.
- The Act provides for duty of the street vendors towards maintenance of cleanliness and public hygiene, maintenance of civic amenities in vending zones in good condition and payment of maintenance charges for the civic amenities and facilities provided in the vending zones.

Development Agenda and Sustainable Development Goals

The United Nations General Assembly (UNGA) in its 68th session adopted 17 goals and 169 targets for the proposed Development Agenda Post-2015 (Millennium Development Goals, MDGs) titled 'Sustainable

Development Goals, SDGs'. On Accordance with the proposed goals the Ministry of Housing and Urban Poverty Alleviation is participating in regard to the negotiations underway on the Proposal on the three goals viz.

1. End poverty in all its forms everywhere (Goal 1)
2. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (Goal 8) and
3. Make cities and human settlements inclusive, safe, resilient and sustainable (Goal 11).

Asia Pacific Ministerial Conference on Housing and Urban Development

- It was established in December, 2006, subsequent to the first Asia Pacific Ministers' Conference on Housing and Urban Development (AMCHUD), held at New Delhi under the aegis of Government of India, Ministry of Housing & Poverty Alleviation and the UN-HABITAT.
- The objectives of APMCHUD are enshrined in the 'Delhi Declaration' adopted unanimously by the countries participating in the conference from the Asia Pacific Region. India was the first Chair of the APMCHUD.
- The Asia Pacific Ministerial Conference on Housing and Urban Development (APMCHUD) envisages regional cooperation for promoting sustainable housing & urban development among Asia Pacific countries, in the context of the region facing similar problems and issues in these areas.
- The APMCHUD is third of such bodies created under the aegis of UN-Habitat after the Assembly of Ministers of Housing and Urban Development of Latin American Countries (MINURVI), in 1992 and African Ministerial Conference for Housing and Urban Development (AMCHUD) in 2005.
- The APMCHUD in 2008 had identified five focal areas for collaborative action are as follows:
 1. Urban and Rural Planning and Management (lead country Republic of India);
 2. Slum upgradation aspects (Lead country Islamic Republic of Iran);
 3. Basic services (to be jointly lead by Sri Lanka and Maldives);
 4. Financing aspects (lead country Republic of Korea); and
 5. Urban development with reference to natural disasters, etc. (lead country Republic of Indonesia).

Use of Space Technology

A. Space Technology Based Tools

For slum survey, Geographical Information System (GIS) mapping was being used as a decision support system in Rajiv Awas Yojana (RAY). After Survey the socio-economic data Management Information System (MIS) and GIS integrated MIS data is used for tenability analysis, prioritization of slums. Under the mission it is envisaged that progress of houses should be tracked through geo-tagged photographs so that each house can be monitored effectively.

Rajiv Awas Yojna has been replaced by "Housing For All (Urban)" mission.

B. Management Information System (MIS):

- Integrated Urban Poverty Management System: Portal captures each project right from appraisal, queries and compliances of those queries, approval status of these projects along with minutes of the Central Sanctioning and Monitoring Committee, etc.
- Management Information System (MIS) has been designed and developed for monitoring the progress of National Urban Livelihood Mission (NULM).
- The MIS would include details of beneficiaries, biometric attendance, training and placement details and certificates would be awarded to successful candidates online.
- To monitor online the progress of the city, Urban Local Bodies (ULBs) and states on a real-time basis.

Partners in progress:

- Housing and urban development corporation (HUDCO)
- Hindustan prefab Limited
- Building material and technology promotion council (BMTPC)
- National building organisation (NBO)
- Central government employees' welfare housing organisation (CGEWHO)
- National cooperative housing federation of India (NCHF)

3

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.
- This was followed by comprehensive enactment of Industries Development & Regulation Act, 1951
- This provides for the necessary framework for implementing the Industrial Policy and enables the Union Government to direct investment into desired channels of industrial activity *inter alia* through the mechanism of licensing keeping with national development objectives and goals.
- **The main objectives of the Industrial Policy are:**
 - To maintain a sustained growth in productivity,
 - To enhance gainful employment,
 - To achieve optimal utilisation of human resources,
 - To attain international competitiveness, and
 - 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 Government is continuously taking steps to boost the industrial production and growth. These *inter-alia*, include ‘**Startup India**’ initiative as well as ‘**Make in India**’ programme under which 25 thrust sectors have been identified to provide a major push to manufacturing in India.
- **The following steps have been taken to create ease of doing business:**
 - Setting up of an Investor Facilitation Cell.
 - Launch of e-biz Portal and
 - Liberalizing policy for industrial license for defence industries.
 - National Intellectual Property Rights (IPR) Policy has been approved on 12.5.2016 to stimulate, a dynamic vibrant and balanced IPR system.
 - The Foreign Direct Investment (FDI) policy and procedures have been simplified and liberalized progressively.

- To further supplement domestic capital, technology and skills, FDI has been further liberalized on 20.6.2016, for creation of state-of-art infrastructure,
- Government is implementing Delhi Mumbai Industrial Corridor (DMIC) project, with addition to four other industrial corridor projects have been conceptualized.

At present there are **only five industries related to security, strategic and environmental concerns, where an industrial license is currently required**: electronic aerospace and defence equipment of all types; industrial explosives including detonating fuses, safety fuses, gunpowder, nitrocellulose and matches; specified hazardous chemicals i.e.-

- Hydrocyanic acid and its derivatives;
- Phosgene and its derivatives; and
- Isocyanates and diisocyanates of hydrocarbon, not elsewhere specified (example Methyl Isocyanate);
- Cigars and cigarettes of tobacco and manufactured tobacco substitutes; and fermentation industry.

Policy for Micro, Small and Medium Enterprises Sector: Government has enacted the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 stepping up the investment limit in plant and machinery to 5 crore for small enterprises and 10 crore for medium enterprises, so as to reduce the regulatory interface with the majority of the industrial units.

Sectors reserved for the public sector: During 2014, private investment in Rail Infrastructure has been permitted. Consequently, at present only two industrial sectors are reserved for public sector:

- **Atomic energy**
- **Railway operations:** other than construction, operation and maintenance of the following:
 - Suburban corridor projects through PPP;
 - High speed train project;
 - Dedicated freight lines;
 - Rolling stock including train sets, and locomotives/ coaches manufacturing and maintenance facilities;
 - Railway electrification;
 - Signaling systems;
 - Freight terminals;
 - Passenger terminals;
 - Infrastructure in industrial park pertaining to railway line/sidings including electrified railway lines and connectivities to main railway line; and
 - Mass rapid transport systems.

Private investment (domestic as well as foreign) in construction, operation and maintenance of above had been allowed.

Growth in the production of eight core industries 2016-17 (in percentage);

- 1) Coal- (5.3)
- 2) Crude oil – (-2.9)
- 3) Natural gas- (-3.8)
- 4) Refinery products- (8.7)
- 5) Fertilizers- (8.6)
- 6) Steel- (2.8)
- 7) Cement- (4.6)
- 8) Electricity- (7.1)

National Manufacturing Policy (2011)

- Objective is to enhancing the share of manufacturing in GDP to 25 per cent and creating 100 million jobs by 2022.
- The policy is based on the principle of industrial growth in partnership with the states.
- The Central Government will create the enabling policy framework; provide incentives for infrastructure development on a PPP basis.
- The proposals in the policy are sector neutral, location neutral and technology neutral except incentivisation of green technology.
- While the NIMZs are an important instrumentality, the proposals contained in the Policy apply to manufacturing industry throughout the country including wherever industry is able to organize itself into clusters and adopt a model of self-regulation as enunciated therein.
- 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; and special focus sectors.

National Investment and Manufacturing Zones:

- 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 zones to function as a self-governing and autonomous body, it will be declared by the state government as an **Industrial Township** under Article 243 Q (1) (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.
- 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/ environmental protection.

Make in India -launched in 2014

- Ministries/departments concerned with 22 thrust sectors identified under 'Make in India', announced their Action Plans for implementation over one year and three years.
- This Department has launched an online '**Make in India Dashboard**' in April 2016, to enable ministries/departments to view and update the progress of their Action Plans on their own in a timely manner.
- This Dashboard is being monitored by this Department to evaluate the overall progress of the 'Make in India' related initiatives and address and resolve any issues.
- A '**Seven Year Strategy**' has been adopted which involves redefining the sectors covered by the new initiative, adding new sectors like medical devices while removing sectors that lose relevance in an evolving economy, to maximize job creation potential with evolution of the economy.
- It should also expand its reach to include service sectors, which have the greatest employment potential.
- Sectors such as tourism and hospitality are important for their job creation potential.
- With the objective to generate awareness about the investment opportunities and prospects of the country, to promote India as a preferred investment destination in the markets overseas and to increase Indian share of Global FDI, an interactive portal <http://www.makeinindia.com> has been created for dissemination of information and interaction with the investors.

Startup India

- The 'Startup India' initiative, aims at fostering entrepreneurship and promoting innovation by creating an ecosystem that is conducive to growth.
- An Action Plan of 19 action items spanning across areas such as simplification and handholding, funding support and incentives and industry-academia partnership and incubation were announced.
- It is established globally that Startups are driving the economic growth of nations, creating employment and fostering a culture of innovation.
- It is, therefore, incumbent on the Government to nurture emerging talent and entrepreneurship as part of the larger goal of nation building.
- Since the launch of the initiative, a number of forward looking strategic amendments to the existing policy ecology have been introduced, like:
 - a) **Startup Hub:** It has been set up to address queries of various startups and assists them through their life cycle. Additionally, a facility for interaction for entrepreneurs on Twitter known as '**Twitter Seva**' has also been launched.

- b) **Rolling-out of Mobile App and Portal:** The Startup India Portal and Mobile App have been made operational. The portal and app provide functionalities such as making application for obtaining real-time Startup recognition, verification of recognition certificate, information availability such as list of incubators, SEBI registered funds, notifications issued by various departments, etc.
- c) **Fast-tracking Patent Registration and Legal Support:** A scheme for Startups IPR Protection (SIPP) for facilitating fast track filing of patents, trademarks and designs by Startups has been introduced. The scheme thus provides for expedited examination of patents filed. This will reduce the time taken in getting patents. The fee for filing of patents has also been reduced up to 80 per cent.
- d) **Relaxed Norms in Public Procurement for Startups:** Provisions have been introduced in the procurement policy to relax norms pertaining to prior experience / turnover for micro and small enterprises.
- e) **Tax Incentives:** Tax incentives for Startup companies for a period of three years have been introduced in the Finance Act 2016.
- f) **Building Innovation Centres and Setting up of Seven Research Parks:** two Research Parks, 16 Technology Business Incubators (TBIs) and 10 Startup Centres have been approved and shall be made operational soon. 25-30 new Innovation Centres have been envisaged to be launched in the current financial year.
- g) **Promoting Startups in Biotechnology Sector:** Scheme guidelines have been drawn by Department of BioTechnology (DBT) to scale up existing 15 bio incubators.
- h) **Launching of Innovation Focused Programme:** Scheme guidelines for Innovation core and Ucchattar Avishkar Yojana (UAY) have been finalized by Ministry of Human Resource Development (MHRD). The guidelines for the National Initiative for Developing and Harnessing Innovations (NIDHI) has been formulated and notified.

Industrial/Economic Corridors

This is an important policy initiative of the Government for boosting industrial development income and employment. The status of development in this regard is as follows:

A. Delhi- Mumbai Industrial Corridor

- The DMIC project, 2011 is being developed on both sides of the Western Dedicated Freight Corridor as a global manufacturing and investment destination.
- DMIC industrial cities are being benchmarked against recently established industrial cities in other parts of the world.
- DMIC Project Implementation Trust Fund was set up as a Trust in September, 2012.
- The land for the new industrial cities will be the contribution of the state government.

The brief status of projects under implementation is as follows:

B. Ahmedabad- Dholera Special Investment Region

- Shareholder's Agreement and State Support Agreement have been executed between **Government of Gujarat** and DMIC Trust and Node/city level SPV in the name of "**Dholera Industrial City Development Ltd.**" has been incorporated.

C. Shendra-Bidkin Industrial Park

- Shareholders' Agreement and State Support Agreement have been executed between **Government of Maharashtra** and DMIC Trust and Node/ city level SPV in the name of "**Aurangabad Industrial Township Ltd.**"

D. Integrated Industrial Township, Vikram Udyogpuri

- SPV has been restructured under the name of "Vikram Udyogpuri Ltd." as a joint venture between DMIC Trust and MPTRIFAC and MPAKVN.
- EPC contractor has been appointed for construction of trunk infrastructure.

E. Integrated Industrial Township

- SPV has been incorporated with the name of "Integrated Industrial Township Greater Noida Limited" between DMIC Trust and Greater Noida Industrial Development Authority (GNIDA).

FDI in Relations with the Ease of Doing Business

Measures undertaken to simplify FDI policy and to provide ease of doing business in the country:

- (i) **Introduction of Composite Caps:** Government has introduced composite cap of foreign investment. Sectoral cap i.e., the maximum amount which can be invested by foreign investors in an entity, unless provided otherwise, is composite and includes all types of foreign investments, direct and indirect, regardless of whether the said investments have been made as:

Foreign Direct Investment, Foreign Institutional Investor, Foreign Portfolio Investor, Non Resident Indian, Foreign Venture Capital Investor, Limited Liability Partnership, Depository Receipt Investment Vehicle of FEMA. The measure provides full fungibility in different types of foreign investments.
- (ii) **Establishment of Branch, Liaison or Project Office:** For establishment of branch, liaison or project office or any other place of business in India if principal business of applicant is defence, telecom, private security or information and broadcasting, it has been provided that approval of Reserve Bank of India is not required in cases where FIPB approval or license/permission by the concerned Ministry/ Regulator has already been granted.
- (iii) **Guidelines for FDI on E-commerce Sector:** The Government has issued guidelines for FDI on e-commerce sector. 100 per cent FDI under automatic route is now permitted in marketplace model of e-commerce. Various terms like e-commerce, e-commerce entity, marketplace, and inventory based model have also been defined to bring clarity.
- (iv) **Investments by NRIs:** Investments by Non Resident Indians (NRIs) as an individual resident outside the country who is a citizen of India or is an Overseas Citizen of India cardholder extended to companies, trusts and partnerships owned by NRIs, Persons of Indian Origin (PIOs) and Overseas Citizens of India (OCIs) on non-repatriation basis is now deemed to be domestic investment at par with investment made by residents.
- (v) **Construction Development:** Major reforms have been undertaken in construction development sector. These are –
 - Removal of conditions of area restriction of floor area of 20,000 sq. mtrs in construction development projects and minimum capitalization of US \$ 5 million to be brought in within the period of six months of the commencement of business.

- Exit and repatriation of foreign investment is now permitted after a lock-in-period of three years. Transfer of stake from one non-resident to another non-resident, without repatriation of investment is also neither to be subjected to any lock-in period nor to any government approval.
 - Exit is permitted at any time if project or trunk infrastructure is completed before lock-in period.
 - Cent per cent FDI under automatic route is permitted in completed projects for operation and management of townships, malls/ shopping complexes and business centres.
- (vi) **Banking-Private Sector:** Government has introduced full fungibility of foreign investment in banking-private sector. Accordingly, FIIs/FPIs/QFIs, following due procedure, can now invest up to sectoral limit of 74 per cent, provided that there is no change of control and management of the investee company.
- (vii) **Manufacturing:** In order to provide boost to manufacturing sector and give impetus to 'Make in India' initiative, government has permitted a manufacturer to sell its product through wholesale and/or retail, including through e-commerce under automatic route. The term 'manufacturing' has also been defined.
- (viii) **Trading:** In order to encourage investment in the trading sector and provide simplification in the policy, some amendments have been brought in the FDI policy on the sector. Initiatives like Single Brand Retail Trading, Duty Free Shops, Wholesale cash and carry to name a few have been introduced to ease the system.
- (ix) **Limited Liability Partnerships (LLPs):** FDI policy has been amended to provide that investments in LLPs will not require government approval. Cent per cent FDI is now permitted under automatic route in LLPs operating in sectors/activities where 100 per cent FDI is allowed, through automatic route and there are no FDI-linked performance conditions.
- (x) **Mining:** In mining sector, a number of conditions which were not relevant have been removed.
- (xi) **Companies without operation:** Approval requirements in respect of companies without operation have also been relaxed. It has now been decided that for infusion of foreign investment into an Indian company which does not have any operations and also does not have any downstream investments, Government approval would not be required, for undertaking activities which are under automatic route and without FDI-linked performance conditions, regardless of the amount or extent of foreign investment.
- (xii) **Establishment and Ownership or control of the Indian Company:** As per earlier FDI policy establishment and ownership or control of Indian company in sectors/activities with caps required government approval. This provision has now been amended to provide that approval of the government will be required if the company concerned is operating in sectors/ activities which are under government approval route rather than capped sectors. Further no approval of the government is required for investment in automatic route sectors by way of swap of shares.
- (xiii) **Foreign Investment Promotion Board (FIPB):** As per earlier FDI policy Foreign Investment Promotion Board (FIPB) considered proposals having total foreign equity inflow up to 1,200 crore and proposals above 1,200 crore were placed for consideration of Cabinet Committee on Economic Affairs (CCEA). In order to achieve faster approvals of proposals, threshold limit for FIPB approval has been increased to 5,000 crore.

Simplifying the Business Environment

The DIPP in collaboration with the Industry Association CII is conducting state workshops with Industry and Industry Associations to make regulations conducive for business including establishment of online single-window, adoption of national and international best practices, simplification of tax-regime, etc.

A. e-Biz Mission Mode Project:

- The government has initiated the e-Biz Project, a Mission Mode Project under the National e-Governance Project, to provide online registration, filing payment services to investors and business houses.
- This project has been conceptualized by the DIPP.
- The project aims to create an ecosystem by making all business and investment related regulatory services across Central, state and local governments available on a single portal.
- The project has been designed on a PPP model.
- The e-Biz portal currently provides 20 Central government services pertaining to pre-registration, registration and filing services.
- In addition, 14 services of Andhra Pradesh, 14 services of Odisha and two services of NCT of Delhi have been launched.

B. Invest India:

- The Government of India has established “Invest India” as the **National Investment Promotion and Facilitation Agency**, as a joint venture between the DIPP, state governments and the Federation of Indian Chamber of Commerce and Industry (FICCI)
- A full-fledged “**Investment Facilitation Cell**” has been set-up in ‘Invest India’, which supports all investment queries apart from handholding and liaising with various agencies on behalf of potential investors.

Schemes Related textile Industry

A. India Handloom Brand:

Scheme is to promote handloom industry on a sustainable basis, to ensure the production of quality products with new designs for winning the trust and confidence of customers by giving particular attention to the defect free, hand woven, authentic niche products with zero defect and zero impact on environment.

B. Amended-Technology Upgradation Fund Scheme:

- A budget provision of 17,822 crore has been approved for seven years from 2015-22 to meet the committed liabilities of 12,671 crore and 5,151 crore for new cases under ATUFS.
- A resolution regarding introduction of Amended Technology Upgradation Fund Scheme (A-TUFS) in place of Revised Restructured Technology Upgradation Fund Scheme (FFTUFS) was put in place in 2016.

C. Protection of cotton farmers:

- For the cotton season 2015-16, the Cotton Corporation of India in association with the state governments has made elaborate arrangements for meeting the eventuality of minimum support price in all the cotton growing states.

- Special initiative has been taken for the cotton growing states to avoid distress sale by cotton farmers. Special initiative has been taken for the cotton season 2015-16 to enable online payment to farmers, provisions of bar coded cards for farmers in Telangana and conduct IEC activities to sensitise the farmers about moisture content and about avoiding contamination.

D. Infrastructure for Textile Industry:

24 new parks were sanctioned in 2014-15 and 2015-16. To promote industrialization in backward states, priority has been given to proposals from less industrialized textile states in the selection process.

E. Skilling in Textile Sector:

- To bridge the gap of the skilled workforce in sector the Ministry is implementing Integrated Skill Development Scheme (ISDS).
- Target is to provide 15 lakh additional skilled workers to the textile sector by 2017. The scheme has been revamped with major emphasis on employment.
- Minimum 70 per cent placement has been made mandatory under the scheme. During the last two years, about 2,60,000 persons have been provided employment in textile industry after training under the ISDS.
- Training programmes have been interfaced with an e-platform for ease of implementation and monitoring.

F. Integrated Processing Development Scheme:

- Textile processing cluster, dominated by SMEs, and job work units were facing closure under court/NGT order for environmental degradation issues.
- During the year 2015-16 five projects have been sanctioned to Rajasthan (3), Tamil Nadu (1) and Punjab (1).
- New initiatives launched in sericulture sector included promotion of imported substitutes by holding silk production, focus on quality silk worm seed production through development of improved breeds, promotion of best cocoon technology innovations and promotion of 'Vanya silk' as an eco-friendly organic silk to boost exports.

Intellectual Property Rights (IP)

- It administers by DIPP and reflects the idea that its subject matter is product of mind or intellect. These could be in the form of patents; trademarks; geographical indications; industrial designs; semiconductor integrated circuits layout-design; plant variety protection and copyright.
- IP, protected through law, like any other form of property, can be a matter of trade, i.e., it can be owned, bequeathed, sold or bought.
- Major features that distinguish it from other forms are their intangibility and non-exhaustion by consumption.
- IP is also foundation of knowledge-based economy. It pervades all sectors of economy and is increasingly becoming important for ensuring competitiveness of enterprises.

Intellectual Property Appellate Board:

- An IPAB has been set up at Chennai to hear appeals against the decisions of Registrar of Trademarks, Geographical Indications and the Controller of Patents.

Other IP Legislations:

- New varieties of plants are protected through the Protection of Plant Varieties and Farmers' Rights Act, 2001 - administered by the Department of Agriculture and Cooperation.
- The Patents Office is also bound to follow the scheme of the Patents Act, 1970 and the Patents Rules, 2003 as well as the provisions under the Biological Diversity Act, 2002.

Promotion of IPR Regime:

- DIPP has taken a multi-pronged strategy to develop an Intellectual Property regime in the country to promote creativity and to develop culture of respect for innovations and creativity.
- These are:
 - Meeting international obligations
 - Safeguarding national interests
 - Modernize administration; and
 - Creating awareness.

Patents (Amendment) Rules (2003):

- These Rules were subsequently amended in 2004, 2006, 2012 and 2014.
- A fresh amendment of the Rules was considered in 2015.

Trade Mark (Amendment) Act (2010):

- 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 Madrid Protocol provides opportunity to Indian companies to register their trade marks in member countries of the Protocol through filing a single application in one language and by paying a one-time fee in one currency.
- India has acceded to the Protocol in 2013.
- The Madrid Protocol came into force in India since 2013.

IPR Awareness Programmes:

- Educate stakeholders about benefits of registration of their rights as also educate general public, particularly business community, on perils of infringement of IPRs held by others/dealing in pirated and counterfeit products.
- These programmes are also expected to sensitize enforcement agencies such as state police forces, judiciary, etc.
- After adoption of National IPR Policy in 2016, the government, in association with various industry associations, has organized 19 awareness programmes on IPRs, including patents, across various states in 2016.

- IPO provided funds for 27 IP awareness programmes and participated in 7 IP related national conferences/exhibitions.
- IPO officials participated as Resource Persons in 48 IP awareness programmes/seminars at various places in the country.
- Besides, Rajiv Gandhi National Institute of Intellectual Property Management conducted 53 training and awareness programmes on IPRs during 2015-16.

National Design Policy (2007):

- This Policy envisages a key role for design in enhancing competitiveness of the industry.
- Focus is on spread of design education, branding of Indian designs and establishment of a Design Council.
- India Design Council (IDC), a society under the aegis of DIPP, was constituted on 2.3.2009, a mandate of the policy.
- The National Institute Design Act, 2014 has been notified in 2014 for declaration of NID, **Ahmedabad** as an Institution of National Importance.
- NID, Vijayawada was set up at its transit campus at Acharya Nagarjuna University
- NID, Kurukshetra was also set up in temporary accommodation in government polytechnic building for 2016-17.

National IPR Policy (2016):

- **This Policy lays down the following seven objectives:**
 - 1) **IPR Awareness:** outreach and promotion: to create public awareness about the economic, social and cultural benefits of IPRs among all sections of society;
 - 2) **Generation of IPRs:** to stimulate the generation of IPRs;
 - 3) **Legal and Legislative Framework:** to have strong and effective IPR laws, which balance the interests of rights owners with larger public interest;
 - 4) **Administration and Management:** to modernize and strengthen service-oriented IPR administration;
 - 5) **Commercialization of IPR:** get value for IPRs through commercialization;
 - 6) **Enforcement and Adjudication:** to strengthen enforcement and adjudicatory mechanisms for combating IPR infringements; and
 - 7) **Human Capital Development:** to strengthen and expand human resources, institutions and capacities for teaching, training, research and skill building in IPRs.

Cell for IPR Promotion and Management

- It has been constituted to facilitate promotion, creation and commercialization of IP assets.
- CIPAM shall be a professional body to cater to the need for promotion, creation and commercialization of IP assets in the country.
- CIPAM will consist of functional units, which will address the seven identified objectives of the IPR Policy.

IPR Initiatives in the International Fora:

- India has taken a lead role in the discussions in the United Nations specialized agency for intellectual property rights, namely, the **World Intellectual Property Organization**.
- It played a proactive role in building consensus for renewal of the mandate of the Inter-Governmental Committee (IGC) on Traditional Knowledge (TK), Genetic Resources (GR) and Traditional Cultural Expressions (TCEs) and was successful in getting the IGC to begin negotiations for an effective international legal instrument aimed at providing protection to TK, GR and TCEs.

Bilateral Negotiations and IPR:

- India is negotiating an IPR Chapter as part of the proposed India EU Bilateral Trade and Investment Agreement (BTIA), European Free Trade Association (EFTA) and Regional Comprehensive Economic Partnership (RCEP) Agreement keeping in view India's national legislations and also various multilateral agreements.

Modernization and Strengthening of Intellectual Property Offices

- During the 11th Five Year Plan, MSIP Offices was implemented.
- The Scheme aims at strengthening the capabilities of Intellectual Property Offices in the country and to develop a vibrant Intellectual Property Regime.
- It also aims to develop the modern infrastructure for the Indian Patent Offices to function as an International Search Authority and International Preliminary Examining Authority under the Patent Cooperation Treaty, for which, the WIPO had recognized Indian Patent Office in October, 2007 to join an exclusive group of 17 countries /organizations.

National Institute of Intellectual Property Management

- It was set up in 2012 at Nagpur as an institute of international importance which would provide training, education, research and function as a think tank on Intellectual Property Rights.

Geological Survey of India

- GSI, the premier earth science organization of the country, is the principal provider of basic earth science information to the government, industry and the geoscientific sector.
- Beginning in 1851 as a department engaged primarily in research for coal, GSI in its last 163 years of existence has expanded its activities manifold and has been involved either directly or indirectly in almost all areas of nation building.
- It has its headquarters at Kolkata.
- The Training Institute of GSI is located at Hyderabad.

Indian Bureau of Mines

- Established in 1948, is a multi-disciplinary scientific and technical organization under Ministry of Mines with statutory and developmental responsibilities for conservation and systematic exploitation of mineral resources other than coal, petroleum and natural gas, atomic minerals and minor minerals.
- IBM has its headquarters at Nagpur.

Public Sector Undertakings

A. National Aluminium Company Limited

- NALCO is a Navratna CPSE under Ministry of Steel and Mines.
- It was established in 1981 in the public sector, with its registered office at Bhubaneswar.
- The company is a group 'A' CPSE having integrated and diversified operations in mining, metal and power.
- The company has registered sales offices in Delhi, Kolkata, Mumbai, Chennai and Bengaluru.
- The company is one of the low cost producers of metallurgical grade alumina.

B. Hindustan Copper Limited

- HCL, a Mini Ratna Government of India enterprise under the administrative control of the Ministry of Mines, was incorporated in 1967 under the Companies Act, 1956.
- It has the distinction of being the nation's only vertically integrated copper producing company as it manufactures copper right from the stage of mining to beneficiation, smelting, refining and casting of refined copper metal into downstream saleable products.

C. Mineral Exploration Corporation Limited

- MECL is a premier mineral exploration public sector unit of the country with ISO 9001-2008 certification.
- Since its inception in 1972, it has completed over 1290 projects of detailed mineral exploration and mine development and has added 150110 million tonnes of mineral reserves to the national mineral inventory.

D. Fertilizer Corporation of India Limited

- Incorporated on January 1, 1961. FCI was re-organized along with National Fertilizers Corporation Ltd. (NFC) from 1978 into five companies namely, FCI, NFL, Hindustan Fertilizer Corporation Ltd. (HFC), Rashtriya Chemicals and Fertilizers Ltd. (RCF) and Projects and Development India Ltd. (PDIL).
- Following re-organisation, FCI comprised four units located at Sindri (Jharkhand), Gorakhpur (Uttar Pradesh), Ramagundam (Andhra Pradesh) and Talcher (Odisha), with a total annual capacity of 5.87 lakh MT of nitrogen besides and abandoned project at Korbe (Chhattisgarh).

E. Hindustan Fertilizer Corporation Limited

- HFCL was incorporated in 1978 as a result of the reorganization of the erstwhile Fertilizer Corporation of India Limited (FCIL), and NFL Group of Companies.
- The HFCL comprised Barauni Unit (Bihar), Durgapur Unit and Haldia Project (West Bengal) and Namrup Unit (Assam).
- The Namrup Unit was hived off from 2002 to form a separate entity with the name of **Brahmaputra Valley Fertilizer Corporation Ltd (BVFCL)**.

F. Indian Drugs and Pharmaceuticals Limited

- IDPL was incorporated in 1961 with the primary objective of creating self-sufficiency in essential life saving drugs and medicines.
- The company has presently three manufacturing plants, one each at Rishikesh (Uttarakhand), Hyderabad (Andhra Pradesh) and Gurgaon (Haryana).
- IDPL has two wholly owned subsidiaries, namely, IDPL Ltd., Chennai (Tamil Nadu) and Bihar Drugs and Organic Chemicals Ltd. At Muzaffarpur (Bihar).
- IDPL has two joint sector undertakings, promoted in collaboration with the respective state governments. These are Rajasthan Drugs and Pharmaceuticals Ltd. (RDPL), Jaipur, and Orissa Drugs and Chemicals Ltd. (ODCL), Bhubaneswar.
- However, the Government has decided to de-link RDPL from IDPL and the process of delinking is underway.

Autonomous Bodies

A. National Institute of Rock Mechanics

- The Institute is recognized as a Scientific and Industrial Research Organization (SIRO) and as a Certified Testing Centre for mining machineries and wire ropes by Directorate General of Mines Safety.
- The Institute carries out research projects funded by various Government ministries/departments, public sector and private organizations related to excavation in rock.
- NIRM is expanding its activities into newer areas, such as oil and gas, metro rails, major river-linking projects and other infrastructure projects.

B. National Institute of Miners' Health

- NIMH, Nagpur is an autonomous institute established under Ministry of Mines, with the objective of promotion of occupational health and prevention of occupational diseases among the persons employed in mining and mineral based industries.
- The institute is engaged in research and developmental activities relating to occupational health, work place monitoring, etc.

C. Jawaharlal Nehru Aluminium Research Development and Design Centre

- JNARDDC, Nagpur is a "Centre of Excellence" set up in 1989 as a joint venture of Ministry of Mines, and UNDP with a view to provide major R&D support system for the emerging modern aluminium industry in India.
- The Centre has been functional since 1996.
- The Centre is recognized as scientific and industrial research organization by the Department of Scientific and Industrial Research, Ministry of S&T.
- It is the only institute of its kind in India pursuing the cause of R&D from bauxite to finished product under one roof.

4

LAW AND JUSTICE

Law is a system of rules that are enforced through social institutions to govern behavior. Laws can be made by a collective legislature or by a single legislator, resulting in statutes, by the executive through decrees and regulations, or by judges through binding precedent, normally in common law jurisdictions.

Justice is the legal or philosophical theory by which fairness is administered in protecting the Right and punishing (reforming) the wrong.

Law making in India

1833-1920: Governor General in Council enacted laws for the country.

1920-1935: Indian legislature under Government of India Act 1919.

1935-1947: Indian legislature.

1947-1949: Dominion Legislature made laws under GOI Act 1935.

1950 onwards: January 26, 1950 the legislative power is vested in Parliament.

Administrative Setup

- Ministry of Law and Justice is the **oldest limb** of the Government of India dating back to 1833 when the **Charter Act, 1833** was enacted by the British Parliament.

Sources of Law

- The main sources of law in India are the **Constitution, statutes** (legislation), customary law and case law.
- Statutes are enacted by Parliament, State legislatures and Union Territory legislatures.
- **Subordinate legislation** in the form of rules, regulations as well as bye-laws made by central/state governments and local authorities.
- 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 sources of law
- **Local customs and conventions** which are not against statute, morality, etc., are also recognized and taken into account by courts while administering justice in certain spheres.

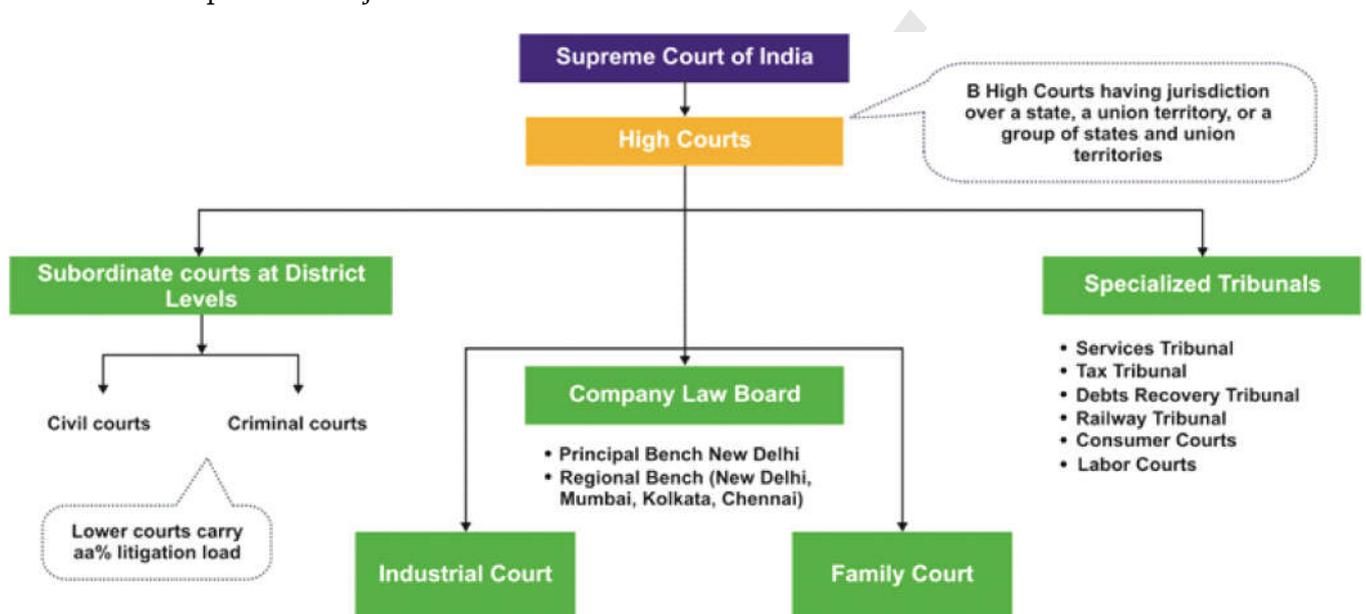
Enactment of Law

- **Schedule 7 of the Indian** constitution demarcates the areas of The **Parliament** and State legislature to enact laws.
- Parliament alone has power to make laws on matters not included in the State List or Concurrent List.

- On matters enumerated in the **Concurrent List**, laws can be made by both Parliament and the 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 and under the High Courts there is a hierarchy of subordinate courts. (**Integrated Judicial** system is a symbol of Unity and common law for all citizens).
- Panchayat Courts** also function in some states under various names like Nyaya Panchayat, Panchayat Adalat, Gram Katchehri, etc., to decide civil and criminal disputes of petty and local nature. Different state laws provide for jurisdiction of these courts.



SUPREME COURT

Evolution

- During British regime, the King in Council, or Privy Council as it was generally called, was the highest forum to entertain appeals from the judgments and orders passed by the courts in India.
- The Federal Court of India began functioning from October 1, 1937.
- On January 26, 1950 Federal Court gave way to the Supreme Court of India under the new Constitution.

Composition

- The Supreme Court of India comprises the Chief Justice and 30 other Judges appointed by the President of India. Supreme Court Judges retire upon attaining the age of 65 years.
- Eligibility
- A person must be a **citizen of India**.
- S/he must have been, for at least **five years**, a **Judge** of a High Court or of two or more such Courts in succession.

- S/he must be an **Advocate of a High Court** or of two or more such Courts in succession for at least 10 years.
- S/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 Supreme Court.

Provisions for Independence of Supreme Court Judges

- **Mode of Appointment:** Judges are appointed by the President in consultation with members of Judiciary itself (Curtails absolute discretion of the Executive).
- **Security of Tenure:** 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 **Special majority**, and presented to the President in the same Session for such removal. (Not at the pleasure of the President).

Jurisdiction & Power of Supreme Court

- **Original Jurisdiction:** Cases involving Centre-State, State-State
- **Writ Jurisdiction:** As guarantor and defender of Fundamental right.
- **Appellate Jurisdiction:** Constitutional matters, Civil, Criminal, and Special leave Petition.
- **Advisory Jurisdiction:** Art 143 authorizes President to seek opinion of SC.
- **A Court of Record:** Judgments and proceedings are recorded for perpetual memory and testimony.
- **Power of Judicial Review:** To examine the Constitutional validity of Legislative enactments and Executive Order.
- **Other Powers:** Disputes regarding election of president e.t.c

- **Fixed Service Condition:** Salaries, allowances and privileges of the Judges are determined from time to time by the Parliament.
- **Conduct of Judges** cannot be discussed in the Parliament or State Legislature.
- **Jurisdiction:** the Parliament is not authorized to curtail the jurisdiction and power of Supreme Court.
- Ground of Removal
- Proved misbehavior or incapacity.

Other features

- 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.

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 different state High Courts.

- 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.
- **Tenure:** They hold office up to **62 years** of age
- **Eligibility**
 - Citizen of India.
 - Should have held a judicial office in India for 10 years or must have practiced as an advocate of a High Court or two or more such courts in succession for a similar period.

Power

- Each High Court has power to issue 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**.

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.

SUBORDINATE COURTS

- These courts follow two important codes prescribing procedures, i.e., the **Code of Civil Procedure**, 1908 and the **Code of Criminal Procedure**, Cr. P.C., 1973 and further strengthened by state level amendments.

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

- Increasing access by reducing delays and arrears;
- Enhancing accountability through structural changes and by setting performance standards and capacities.

Five strategic initiatives:

- Outlining policy and legislative changes
- Reengineering of procedures and court processes
- Focusing on human resource development
- Leveraging information and communication technology and tools for better justice delivery
- Improving infrastructure

- 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 **computerization**, 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.

Reform Initiatives

- **Judicial Standards and Accountability Bill** is being considered by the Parliament.
- Constitution Amendment Bill for **rising the retirement age** of High Court Judges.
- Constitution of **All India Judicial Service (AIJS)**.
- All states have formulated their **litigation policies** with a view to reduce the governmental litigation.
- Amendments to the **Negotiable Instruments (NI) Act** along with other policy and administrative measures to check increasing litigation

Gram Nyayalaya/ Panchayat Courts/Nyaya Panchayat/ Panchayat Adalat/ Gram Kacheri

- A **Central Sector scheme** for providing financial assistance to the state governments / UT administrations for establishment and operationalization of Gram Nyayalayas .
- The **state governments and High Courts** should decide the question of establishment of Gram Nyayalayas wherever feasible, taking into account their local problems.

e-Courts Integrated Mission Mode Project Computerization

- The e-Courts Integrated Mission Mode Project is one of the **national e-Governance projects** being implemented in High Courts and District/ Subordinate Courts of the Country.
- The objective
- To provide designated services to litigants, lawyers and the judiciary by universal computerization of district and subordinate courts in the country.

Alternative Dispute Resolution:

What? ADR or “Alternative Dispute Resolution” is an attempt to devise machinery which should be capable of providing an alternative to the conventional methods of resolving disputes.

Constitutional Basis: Articles 14 and 21 which deal with Equality before Law and Right to life and personal liberty respectively. Equal justice and Free Legal Aid as laid down under Article 39-A.

Legislative Basis: Arbitration and Conciliation Act, 1996 and the Legal Services Authorities Act, 1987.

ADR Mechanism

- **Arbitration:** Arbitration is the process of hearing and determining of a dispute between parties by persons chosen or agreed to by them. The object of arbitration is to obtain the fair resolution of disputes by an impartial tribunal without unnecessary delay and expense.
- **Conciliation:** Conciliation is the process of facilitating an amicable settlement between the parties. Unlike the Arbitration there is no determination of a dispute. There need not be a prior agreement and it cannot be forced on a party not intending for conciliation.
- **Mediation:** Mediation aims to assist two (or more) disputants in reaching an agreement. The parties themselves determine the conditions of any settlements reached— rather than accepting something imposed by a third party.

Access to justice to Marginalised

- The project extends to the eight UNDAF states of Bihar, Chattisgarh, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh, Maharashtra and Odisha. This project focuses on strengthening access to justice for marginalised people by developing strategies that address barriers to accessing justice in legal, social and economic domains.
- The second phase of the project extends over five years from 2013 to 2017. In this phase, the project aims to build upon the achievements of previous phase and continues to work on creation of demand for justice and ensuring its supply. Under the project, a technical support team has also been placed with the Department of Justice with the specific purpose of supporting the National Mission for Justice Delivery and Legal Reforms.

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, or after any disaster.
- The centrally sponsored scheme envisages creation of new Civil Defence Training Institutes (CDTIs) in 10 states and renovation of Infrastructures of CDTIs in 17 states; in addition 100 multi-hazard districts have been selected for creation of civil defence infrastructure. A pilot project has also been launched in 40 selected towns to train and utilize Civil Defence volunteers in internal security tasks.
- Its volunteers are in various constructive and nation building activities - including providing assistance to the administration in undertaking social and welfare services and in the prevention, mitigation of natural, man-made disasters as well as in post-disaster response and relief operations and law and order situations.

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 citizens force was adopted by several States.
- Members of Home Guards in the organisation are trained to assist police in maintenance of law and order, prevention of crime, anti-dacoity measures, border patrolling, prohibition, flood relief, fire-fighting, election duties and social welfare activities.
- 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.
- The organisation is spread over in all the states and union territories except in Kerala. In seven border states, a total of eighteen (18) Border Wing Home Guards (BWHG) Battalions have also been raised viz., Punjab (6 Bns), Rajasthan (4 Bns), Gujarat (4 Bns) and one each of Bns for Assam, Meghalaya, Tripura and West Bengal to serve as an auxiliary to Border Security Force for preventing infiltration on the international border/ coastal areas, guarding of VVIPs and lines of communication in vulnerable areas at the time of external aggression.

Fire Services

Being included in the state subject, 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 Scheme attempts to fill the existing gaps in fire fighting and rescue capabilities through introduction of modern technology such as advanced fire tender, high pressure pump with mist technology, quick response team vehicle, combi tools for search and rescue and capacity building of various stakeholders.

Recommendations of the 13th Finance Commission:

- A portion of the grants provided to the urban local bodies should be spent on revamping of fire services within their respective jurisdiction.
- All municipal corporations with a population of more than 1 million (2001 census) must put in place a fire hazard response and mitigation plan for their respective areas.
- Government of India as a supplemental initiative is also implementing a centrally sponsored scheme at a cost of 200 crores for strengthening of Fire and Emergency Services in the country.

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.

- **The Special Marriage Act, 1954:** which provides 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.
- **Hindu Marriage Act, 1955:** This Act, 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.
- **The Indian Christian Marriage Act, 1872:** The husband can seek divorce on grounds of adultery on the part of his wife and the wife can seek divorce on the ground that the husband has become convert to another religion and has gone through marriage with another woman or has been guilty of:
 - (a) Incestuous adultery;
 - (b) Bigamy with adultery;

- (c) Marriage with another woman with adultery;
 - (d) Rape, sodomy or bestiality;
 - (e) Adultery coupled with such cruelty as without adultery would have entitled her to a divorce, a mensa etoro (a system of divorce created by the Roman Catholic Church equivalent to judicial separation on grounds of adultery, perverse practices, cruelty) and
 - (f) Adultery coupled with desertion .without reasonable excuse for two years or more.
- **Muslims marriage Act, 1939:** 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.
 - **The Parsi Marriage and Divorce Act, 1936:** Governs the matrimonial relations of Parsis, Every marriage as well as divorce under this Act is required to be registered in accordance with the procedure prescribed in the Act. The 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.
 - 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.
 - **The Anand Marriage (Amendment) Act, 2012:** A Sikh marriage performed according to the Sikh marriage ceremony called “Anand” or other customary ceremonies could be registered here under the provisions of Section 8 of the Hindu Marriage Act, 1955.

However, vide The Anand Marriage (Amendment) Act, 2012, The Anand Marriage Act, 1909 was amended to provide for registration of Anand marriages commonly known as Anand Karaj.

Adoption

- 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 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.
- The general law relating to guardians and wards is contained in the Guardians and Wards Act, 1890. It clearly lays down that father’s right is primary and no other person can be appointed unless the father is found unfit. This Act also provides that the court must take into consideration the welfare of the child while appointing a guardian under the Act.

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, 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.
- However, divorced wives who have received money payable under the customary personal law are not entitled to claim maintenance under the Code of Criminal Procedure.

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.

Security Forces

A. Indo-Tibetan Border Police

- The Indo-Tibetan Border Police (ITBP) was raised on October 24, 1962 in the wake of Chinese aggression for reorganizing the frontier intelligence and security setup along the Indo-Tibetan border covering 2115 kms from Karakoram pass to Lipulekh pass. **Border Security Force**

Functions & Tasks

1. Vigil on the northern borders, detection and prevention of border violations, and promotion of the sense of security among the local populace.
2. Check illegal immigration, trans-border smuggling and crimes.
3. Security to sensitive installations, banks and protected persons.
4. Restore and preserve order in any area in the event of disturbance.
5. Disaster management. Being the first responder for natural Disaster in Himalayas.
6. ITBP has also excelled in UN peace keeping exercise.
7. Security to Pilgrims in annual kailash Mansarovar Yatra.

B. BSF

- The Border Security Force (BSF) is a Border Guarding Force of India. Established on December 1, 1965. It is world's largest Border guarding force.
- It is a paramilitary force charged with:
 - Guarding India's land border during peace time and
 - Preventing transnational crime.

Tasks of the BSF:

- The tasks of the BSF are divided as follows:

Peace time:

- Promote a sense of security among the people living in the border areas.
- Prevent Trans border crimes, unauthorized entry into or exit from the territory of India.
- Prevent smuggling and any other illegal activity.
- In the last few years the BSF has, in addition to their duties, been deployed for counter insurgency and internal security duties.

War Time:

- Holding ground in less threatened sectors.
- Protection of vital installations.
- Assistance in control of refugees. Anti-infiltration duties in specified areas.

C. Central Reserve Police Force

- The Central Reserve Police Force (CRPF) was formed in July, 1939 .After independence it was renamed as the Central Reserve Police Force.
- The CRPF's primary role lies in assisting the State/Union Territories in police operations to maintain law and order and contain insurgency.
- Paramilitary law enforcement, counter insurgency, armed response to civil unrest, counter terrorism, special weapons operations.
- CRPF contingents are also being deployed in UN missions.

D. Central Industrial Security Force

- Raised in 1969, Central Industrial Security Force (CISF) is providing security cover to domestic and international airports and fire protection cover to industrial undertakings.
CISF is currently providing security cover to-
- Nuclear installations, space establishments, airports, seaports, power plants, sensitive Government buildings and ever heritage monuments.
- Among the important responsibilities recently entrusted to the CISF are the
 - Delhi Metro Rail Corporation, VIP Security, Disaster Management and establishment of a Formed Police Unit (FPU) of the UN at Haiti.
 - After the Mumbai terrorist attack on November 2008, the mandate of the force has been broadened to provide direct security cover to private sector also.

E. 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.
- The Assam Rifles' contribution towards assimilation of the people of the north-east into the national mainstream is truly monumental.
- 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.

F. National Security Guard

- The **National Security Guard (NSG)** is an Indian Special Forces unit under the Ministry of Home Affairs (MHA). It was raised in 1984, following Operation Blue Star for combating terrorist activities with a view to protect states against internal disturbances.

G. Sashastra Seema Bal

- The ‘Sashastra Seema Bal’ (SSB) is the newest border guarding force of Union of India entrusted with the guarding of Indo-Nepal and Indo-Bhutan borders.
- 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 between 1965-1991.

The 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; and
- (iii) Organizing and preparing border population to resist enemy.

5

LABOUR, SKILL DEVELOPMENT AND EMPLOYMENT

The Ministry of Labour and Employment is one of the important and oldest ministries of the Government of India. The main responsibilities entrusted to the Ministry:

- Protect and safeguard the interests of workers in general and the poor deprived and disadvantaged sections of the society, in particular.
- Create a healthy work environment for higher production and productivity.
- Develop and coordinate vocational skill training and employment services.
- Focus on promotion of welfare of labour and providing social security to the labour force both in organised and unorganised sectors.

Labour being the subject in the concurrent list under the Constitution of India the state governments are also empowered to enact legislations.

Initiatives**1. National Career Service Project**

- The Ministry is implementing the NCS Project as a mission mode project for transformation of the national employment service to provide a variety of employment related services like career counselling, vocational guidance, information on apprenticeship, internships etc.
- The NCS Portal (www.ncs.gov.in) has been made functional, dedicated to the nation in 2015.
- The NCSP is supported by a dedicated helpdesk (multilingual), available from Tuesday to Sunday (8.00 AM to 8.00 PM) on 18004251514 for assisting users.

2. Health Reforms Agenda of Employees' State Insurance Corporation (ESIC):

- Launched in 2015.
- Online availability of Electronic Health Record of ESI beneficiaries (Insured Persons and their family members).

3. Abhiyan Indradhanush:

Ensuring the change of bed sheet according to VIBGYOR pattern during the week i.e., bed sheet to be changed every day.

4. Shram Suvidha Portal

- Unified web portal, to bring transparency and accountability in enforcement of labour laws and ease complexity of compliance.
- It caters to four major organisations under the Ministry:
 - Office of Chief Labour Commissioner (Central).

- Directorate General of Mines Safety.
- Employees' Provident Fund Organisation.
- Employees' State Insurance Corporation.

5. Transparent Labour Inspection Scheme

- A computerised list of inspections is generated randomly based on risk based objective criteria.
- Serious matters are to be covered under the mandatory inspection list.
- Complaints based inspections are determined centrally after examination based on data and evidence.
- It is mandatory to upload inspection Reports within 72 hours.

Ministry of Labour and Employment has started Single Unified Annual Return for eight Labour Acts. This facilitates filling of simplified Single Online Return by the establishments instead of filing separate Returns, under these Acts.

6. Common Registration

- Facility for Common Registration under five Central Labour Acts has been developed on e-Biz portal of the Department of Industrial Policy & Promotion.

7. Labours Codes:

- For bringing transparency and accountability in enforcement of Labour Laws, with the objective of strengthening the safety, health, social security measures for every worker and bringing ease of compliance for running an establishment to catalyse creation of employment opportunities.
- These initiatives include governance reforms through use of technology and also legislative reforms by simplifying, rationalising and amalgamating the existing labour laws into four labour codes.

Social Security Initiatives

1. Draft Small Factory Bill

- Regulation of working and service conditions of workers in small manufacturing units employing less than 40 workers.
- Simplifies and rationalises the provisions of six Labour Laws at one place for these small factories.
- Ease the operation of small factories and thus catalyse the generation of employment ensuring, social security, safety and health of the workers.

2. Employees' State Insurance Corporation

- To provide medical care and cash benefits in case of sickness, maternity and employment injuries, the Employees' State Insurance Act was enacted in 1948.
- Employees' State Insurance Corporation (ESIC) is implementing the ESI Scheme introduced since 1952.
- ESI Corporation became the first organisation to integrate its service i.e., registration of employers through e-Biz portal. All PDB/DB payments are being made through ECS.
- Social security benefits of ESI Scheme have been extended to Mizoram and Port Blair.

- ESI Scheme is being implemented in industrial/commercial clusters within districts.
- Construction workers have been covered to avail benefits under the ESI Scheme from 2015.
- ESIC has launched independent Public Grievance Module 2.0 for lodging ESIC related Grievance online through its website 'www.esic.in'

3. Employees' Provident Fund Organisation

- The Employees' Provident Funds (EPF) and Miscellaneous Provisions Act, 1952 provides for Provident Fund, Pension Scheme and Insurance Fund in factories/establishments employing twenty or more employees in industries mentioned in Schedule-I to the Act.
- The following three schemes framed are: Employees' Provident funds Scheme, 1952; Employees' Pension Scheme, 1995 and Employees' Deposit-Linked Insurance Scheme, 1976.
- The rate of interest declared on the deposits of members to the EPF was 8.75 per cent (on monthly running balance) for 2014-15.

4. Implementation of Minimum Pension

- The Government notified in 2014:
 - Providing a minimum pension of 1000/- per month for member/widow(er)/disabled/nominee/dependent parent pensioners
 - 750/- per month for orphan pensioners and
 - 250/- per month for children pensioners.
- It was initially for the year 2014-15, which has been continued in perpetuity.
- The disbursement of pension is being carried out at present using the core banking system platform of the pension disbursement banks.
- Instructions were issued to the field offices to ensure that pension was credited to the pensioners' accounts on the first working day of the month.

5. Universal Account Number

- The facility of Universal Account Number (UAN) for EPF subscribers was formally launched in 2014.
- UAN provides automatic portability of Provident Fund account on change of employment if the employee has activated his UAN by seeding his Know Your Customer details (through the employer).

Industrial Relations

- Maintenance of harmonious industrial relations remains an avowed objective of Ministry of Labour & Employment.
- Twenty two Industrial tribunal-cum-Labour Courts have been set up under the provisions of the Industrial Disputes Act, 1947 for adjudication of industrial disputes in organisations for which the Central Government is the appropriate Government.
- Two Industrial Tribunals at Mumbai and Kolkata also function as National Tribunals.

- In order to reduce pendency of cases Lok Adalats are being organised by the CGIT-cum-Labour Courts as an alternate grievance redressal system. It provides a platform for settlement disputes through mutual consent and agreement between the litigant parties and depends on their willingness.

Vulnerable Sections

1. Child Labour

- Elimination of child labour is an area of great concern and Government of India is committed to address the issue.
- The objective is to create an environment where families are not compelled to send their children to work.

Policy on Child Labour

- The National Policy on Child Labour in a comprehensive, holistic and integrated manner. The Action Plan under this policy is multi-pronged and mainly consists of:
 - **Legislative Action Plan:** Under this, the Child Labour (Prohibition and Regulation) Act was enacted in 1986. The Act prohibits employment of children below the age of 14 years in 18 occupations and 65 processes and regulates the conditions of employment of children in all occupations and processes not prohibited under the Act.
 - **Project Based Action Plan:** The National Child Labour Project (NCLP) Scheme was started in 1988 to rehabilitate children rescued from child labour.
 - a. Under this Central Scheme, working children are identified through child labour survey, withdrawn from work and put into the special training centres so as to provide them with an environment to subsequently join mainstream education system.
 - b. In these special training centres, besides formal education, the children are provided stipend, supplementary nutrition, vocational training and regular health check-ups.
 - c. Target the families of these children so as to cover them under various developmental and income/employment generating programmes of the Government to raise the economic standard of the family.
 - d. Ministry funds awareness generation campaigns against the evils of child labour and enforcement of child labour laws through electronic and print media.

Re-alignment of NCLP Scheme

- With the enactment of Right to Education (RTE) Act, 2009, there was a need for realignment of the NCLP Scheme with the provisions of RTE Act, 2009.
- Ministry of Human Resource Development allowed the NCLP Schools to serve as special training centre for un-enrolled and out of school children in accordance with the provisions of Section 4 of the RTE Act and Rule 5 of the Right of Children for Free and Compulsory Education (RTE) Rules, 2010.
- A complaint committee, on sexual harassment at workplace to deal with the complaints of sexual harassment of women employees of Ministry of Labour & Employment and its attached offices, has been reconstituted.

2. Bonded Labour

Rehabilitation of Bonded Labour

- Centrally Sponsored Plan Scheme for rehabilitation of bonded labour was launched by in May, 1978.
- Under the Scheme, state governments are provided Central assistance on matching grants (50:50) basis for the rehabilitation of bonded labour.
- The Scheme has been drastically modified in May 2000 to provide for 100 per cent assistance for conducting district wise surveys for identification of bonded labour, awareness generation activities, and evaluatory studies.
- The Rehabilitation grant has also been raised from 10,000/- per identified bonded labour, to 20,000/- per identified bonded labour.
- In the case of North-Eastern states, Cent per cent rehabilitation grant is provided in case they fail to provide their matching contribution.

Wages and Bonus

1. The Minimum Wages Act, 1948

- The Minimum Wages Act, 1948 was enacted to safeguard the interests of the workers mostly in the unorganised sector.
- Both the Central and state governments are the appropriate governments to fix, revise, review and enforce the payment of minimum wages to workers in respect of scheduled employments under their respective jurisdictions.
- The enforcement of the Minimum Wages Act, 1948 is ensured at two levels
 - Central sphere- The enforcement is done through the inspecting officers of the Chief Labour Commissioner (Central) commonly designated a Central Industrial Relations Machinery (CIRM).
 - The compliance in the state is ensured through the State Enforcement Machinery.
- To protect the minimum wages against inflation, the Central Government has introduced **Variable Dearness Allowance (VDA)** linked to Consumer Price Index.
- 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 on the basis of the recommendations of the **National Commission on Rural Labour (NCRL)** in 1991, it is a non-statutory measure.

2. Payment of Wages

- The Payment of Wages Act, 1936 ensures timely payment of wages and that no unauthorised deductions are made from the wages of the workers.
- The Central Government, on the basis of figures of the Consumer Expenditure Survey published by **National Sample Survey Office**, has enhanced the wage ceiling from 10,000/- to 18,000/- per month from 2012.

3. Payment of Bonus

- The Payment of Bonus Act, 1965 has been amended to revise the statutory eligibility limit under Section 2 (13) from 10,000/- to 21,000/- per month and the calculation ceiling under Section 12

from 3,500/- to 7,000/- or the minimum wage for the scheduled employment, as fixed by the appropriate Government, whichever is higher.

- The changes in the Payment of Bonus Act, 1965 are effective retrospectively from 2014.

4. Occupational Safety and Health

- The provisions on OSH of workers as provided for in the Constitution of India are being implemented through the offices of **Directorate General of Mines Safety (DGMS)** and the Directorate General of Factory Advice Service and Labour Institutes (DGFASLI).
- The DGMS enforces the safety and health provisions for the workers in the mining industry through its Inspectors appointed under the Mines Act, 1952.
- The DGFASLI, through its Inspectorate of Dock Safety enforces safety provisions in the docks and also acts as the coordinating agency at the national level for the Inspectorate of Factories functioning under different state governments.
- Some of the important events/initiatives in OSH are:-
 - Every year, Ministry of Labour and Employment distributes awards viz.
 - a. The **Prime Minister's Shram Awards** are given to the workers employed in Department/ Public Sector Undertakings of the Central and state governments and the manufacturing units employing 500 or more workers in the private sector in recognition of their performance, devotion to duty etc.
 - b. The **Vishwakarma Rashtriya Puraskars (VRP)** are given to individual workers or group of workers for their outstanding suggestions leading to improvement in productivity, safety and health as well as the import substitution resulting in the savings of foreign currency.
 - c. The **National Safety Awards (NSA)** are given in recognition of good safety performance on the part of the industrial establishments covered under the factories Act, 1948, the employers covered under the Dock Workers (Safety, Health and Welfare) Act, 1986 and Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.

Research and Training

(a) Central Board for Workers' and Education

- Established in 1958, is a tripartite society which implement the Workers Education Programmes at national, regional and unit/village level.
- The Board undertakes training programmes, which cover workers from organised, unorganised, rural and informal sectors.
- The main objective is to create awareness among all sections of the working population.
- Supervisory and managerial cadres are also covered through joint education programmes.
- With headquarters at Nagpur, the Board has a network of 50 regional and nine sub regional directorates spread throughout the country.
- The Board has an apex level training institute - Indian Institute of Workers Education, Mumbai established in 1970 to conduct national level training programmes for the activists of Central Trade

Union Organisations/ Federations, Voluntary Organizations besides training programmes for Board's Officials.

- The Board has been generating awareness among the informal sector workers about various welfare schemes through its Labour Welfare and Development Programmes.
- The special programmes for the beneficiaries of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) are being introduced by CBWE from 2012.

(b) V.V. Giri National Labour Institute

- VVGNI, an autonomous body of the Ministry of Labour and Employment, Government of India, set up in July 1974.
- Since its inception, the institute has endeavoured through its research, training, education and publications to reach out to diverse groups concerned with various aspects of labour in the organised and unorganised sectors.
- The focus of such endeavours is the concern to transfer academic insights and understanding for application to policy formulation and action, so as to ensure a just place for labour in an egalitarian and democratic society.

International Cooperation

105th Session of International Labour Conference of ILO:

- India is the founder member of ILO and has been contributing to evaluation of global policy on labour welfare.
- The 105th Session of the international Labour Conference (ILC) of ILO and 326th Session of Governing Body was held during 2016 in Geneva.

G-20 labour and Employment Ministries Meeting:

- An Indian delegation attended G-20 Labour and Employment Ministers' meeting in Beijing, China on 12-13 July 2016.
- Objectives: Developing a policy environment that supports innovation and inclusive growth, and take actions to advance decent work, enhance employability, and generate adequate job opportunities.

Directorate General of Employment

- The Directorate General of Employment and Training (DGET) was transferred to the new Ministry of Skill Development and Entrepreneurship to focus all training and skilling activities under the new Ministry.
- The Ministry is implementing the Nation Career Service (NCS) Project.
- Employment being concurrent subject, both Central and state governments share the responsibility.
- Laying down of policies, procedures, standards, norms, guidelines, are the responsibility of the Central Government whereas the administration of Employment exchanges rests with the respective state governments union territories.
- Most of the states have Directorates of Employment located in the state capitals.
- Twenty four Coaching-cum-Guidance Centres (CGCs) for SC/STs have been set up in 24 states.

Vocational guidance and training in confidence-building is provided to SC/ST job seekers through these centres.

- These centres have also been arranging pre-recruitment training programmes for SC/ST candidates to improve their employability through competitive examinations conducted by Staff Selection Commission and other Recruitment Boards for Group 'C' and equivalent posts. For Central labour Acts please log on to www.labour.gov.in

Skill Development

Skill India

- Skill India is an initiative of the Government of India which has been launched to empower the youth of the country with skill sets which make them more employable and more productive in their work environment.
- India is a country today with 65 per cent of its youth in the working age group.
- Skill India offers courses across 40 sectors in the country which are aligned to the standards recognised by both, the industry and the Government under the National Skill Qualification Framework.
- The courses help a person focus on practical delivery of work and help him enhance his technical expertise so that he is ready on day one of his job and companies do not have to invest in training him for his job profile.
- The target to train more than a crore fresh entrants into the Indian workforce has been substantially achieved for the first time.
- 1.04 Crore Indian were trained through Central Government Programmes and NSDC associated training partners in the private sector.
- The flagship scheme, **Pradhan Mantri Kaushal Vikas Yojana** (PMKVY) alone has seen close to 20 lakh people getting skilled and prepared for a new successful future.

National Skill Development Mission

- This Mission has been developed to create convergence across sectors and States in terms of skill training activities.
- To achieve the vision of 'Skilled India', the NSDM would not only consolidate and coordinate skilling efforts, but also expedite decision making across sectors to achieve skilling at scale with speed and standards.
- It will be implemented through a streamlined institutional mechanism driven by Ministry of Skill Development and Entrepreneurship.
- Key institutional mechanisms for achieving the objectives of the Mission have been divided into three tiers:
 - Governing Council for policy guidance at apex level.
 - A Steering Committee.
 - A Mission Directorate (along with an Executive Committee) as the executive arm of the Mission.

- Mission Directorate will be supported by three other institutions:
 - National Skill Development Agency (NSDA).
 - National Skill Development Corporation (NSDC).
 - Directorate General of Training (DGT).
- Seven submissions have been proposed initially to act as building blocks for achieving overall objectives of the Mission. They are:
 1. Institutional training.
 2. Infrastructure.
 3. Convergence.
 4. Trainers.
 5. Overseas employment.
 6. Sustainable livelihoods.
 7. Leveraging public infrastructure.

National Policy on Skill Development and Entrepreneurship

- The objective will be to meet the challenge of skilling at scale with speed and standard (quality).
- It will aim to provide an umbrella framework to all skilling activities being carried out within the country, to align them to common standards and link the skilling with demand centres.
- The effort will also be to identify the various institutional frameworks which can act as the vehicle to reach the expected outcomes.
- It will also provide clarity and coherence on how skill development efforts across the country can be aligned within the existing institutional arrangements.
- This policy will link skill development to improved employability and productivity.

6

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. Individual efforts and private initiatives are considered necessary and desirable in the national endeavour for development with optimum voluntary cooperation. The respective bodies for planning in India are discussed below:

NITI Aayog

- The National Institution for Transforming India (NITI Aayog) came into existence by a government resolution dated January 1, 2015 replacing the existing Planning Commission which was established by a resolution dated March 15, 1950.
- The new institution is envisaged to be a catalyst to the developmental process; nurturing an overall enabling environment, through a holistic approach to development going beyond the limited sphere of the Public Sector and Government of India.
- This will be built on the foundation of:
 - An empowered role of States as equal partners in national development; operationalizing the principle of Cooperative Federalism.
 - A knowledge hub of internal as well as external resources; serving as repository of good governance best practices, and a think Tank offering domain knowledge as well as strategic expertise to all levels of government.
 - A collaborative platform facilitating implementation; by monitoring progress, plugging gaps and bringing together the various Ministries at the Centre and in states, in the joint pursuit of developmental goals.

Objectives

- The Resolution setting up the NITI Aayog outlines following objectives:
 - To evolve a shared vision of national development priorities, sectors and strategies with the active involvement of States in the light of national objectives.
 - The vision of the NITI Aayog will then provide a framework '**national agenda**' for the Prime Minister and the Chief Ministers to provide impetus to.
 - To foster cooperative federalism through structured support initiatives and mechanisms with the states on a continuous basis, recognizing that strong states make a strong nation.
 - To develop mechanisms to formulate credible plans at the village level and aggregate these progressively at higher levels of government.
 - To ensure, on areas that are specially referred to it, that the interests of national security are incorporated in economic strategy and policy.

- To pay special attention to the sections of our society that may be at risk of not benefitting adequately from economic progress.
- To design strategic and long term policy and programme frameworks and initiatives, and monitor their progress and their efficacy. The lessons learnt through monitoring and feedback will be used for making innovative improvements, including necessary mid course corrections.
- To provide advice and encourage partnerships between key stakeholders and national and international likeminded Think Tanks, as well as educational and policy research institutions.
- To create a knowledge, innovation and entrepreneurial support system through a collaborative community of national and international experts, practitioners and other partners.
- To offer a platform for resolution of inter-sectoral and inter-departmental issues in order to accelerate that implementation of the development agenda.
- To maintain a State-of-the-art Resource Centre, be a repository of research on good governance and best practices in suitable and equitable development as well as help their dissemination to stake-holders.
- To actively monitor and evaluate the implementation of programmes and initiatives, including the identification of the needed resources so as to strengthen the probability of success and scope of delivery.
- To focus on technology upgradation and capacity building for implementation of programmes and initiatives.
- To undertake other activities as may be necessary in order to further the execution of the national development agenda, and the objectives mentioned above.

Composition:

- The composition of the NITI Aayog is as follows:
 - Prime Minister of India as the Chairperson.
 - The Governing Council comprising the Chief Ministers of all the States, Chief Ministers of Union Territories with Legislatures, viz., Delhi and Puducherry and Lt. Governors of other Union Territories.
 - Regional Council will be formed to address specific issues and contingencies impacting more than one state or a region. These will be formed for a specified tenure. The Regional Councils will be convened by the Prime Minister and will comprise of the Chief Minister of States and Lt. Governors of Union Territories in the region. These will be chaired by the Chairperson of the NITI Aayog or his nominee.
 - Experts, specialists and practitioners with relevant domain knowledge as special invitees nominated by the Prime Minister.
- The full time organisational framework will consist of, in addition to the Prime Minister as Chairperson
 - **Vice-Chairperson:** To be appointed by the Prime Minister.
 - **Members:** Full Time.
 - **Part-time Members:** Maximum of 2, from leading universities, research organisations and other relevant institutions in an ex-officio capacity. Part time members will be on a rotational basis.

- **Ex-officio Members:** Maximum of 4 Members of the Union Council of Ministers to be nominated by the Prime Minister.
- **Chief Executive Officer:** To be appointed by the Prime Minister for a fixed tenure, in the rank of Secretary to the Government of India, Secretariat as deemed necessary.

At present the approved constitution of the NITI Aayog is as under:

- **Chairperson:** Shri Narendra Modi, Prime Minister.
- **Vice Chairpersons:** Dr. Arvind Panagariya, in the rank of Cabinet Minister.
- **Full Time Members:**
 - (a) Dr. Bibek Debroy, in the rank of Minister of State.
 - (b) Dr. V.K. Saraswat, former Secretary; Defence R & D, in the rank of Minister of State.
 - (c) Prof. Ramesh Chand, Former Professor & Head, Institute of Economic Growth, Delhi University; and Professor at Punjab Agricultural University, Ludhiana.
- **Ex-Office Members:**
 - (a) Shri Raj Nath Singh, Minister of Home Affairs.
 - (b) Shri Arun Jaitley, Minister of Finance; Minister of Corporate Affairs.
 - (c) Shri Suresh Prabhu, Minister of Railways.
 - (d) Shri Radha Mohan Singh, Minister of Agriculture.
- **Special Invitees:**
 - (a) Shri Nitin Jairam Gadkari, Minister of Road Transport and Highways, and Minister of Shipping.
 - (b) Shri Thaawar Chand Gehlot, Minister of Social Justice and Empowerment.
 - (c) Smt. Smriti Zubin Irani, Minister of Textiles.

Major Activities

NITI Aayog as a “Think Tank” of the Government has been instrumental in providing a directional and policy dynamics for taking steps in liaison with states while fostering the spirit of cooperative federation.

Fourteenth Finance Commission

- Appointed every five years the Finance Commission is a **constitutional body** with the broad mandate to define centre state federal relations.
- Its most important task is to recommend division of states’ revenues collected by the Centre of the ‘**divisibility pool**’ between the Centre and the states and the share to be allocated to each state.
- The Fourteenth Finance Commission (FCC) submitted its recommendations to the Government in December, 2014.
- Some of its important recommendations include:
 - The devolution of a significantly higher share of 42 per cent of the divisible pool to states compared with the 32 per cent share recommended by the 13th Finance Commission.

- This was in response to the demand by the states for increased flow of untied fiscal resources in place of tied resources that come with Centrally Sponsored Schemes.
- Other recommendations by FCC concern GST, fiscal consolidation, road map and pricing of public utilities, public expenditure management.

Twelfth Five Year Plan

- The broad vision and aspirations which the Twelfth Plan seeks to fulfil 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. However, rapid growth of GDP is an essential requirement for achieving this objective.
- The Approach Paper to the Twelfth Plan, had set a target of 9 per cent average growth of GDP over the Plan period (2012 to 2017). That was before the Euro-zone crisis in that year triggered a sharp downturn in global economic prospects, and also before the extent of the slowdown in the domestic economy was known.
- 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. However, while our full growth potential remains around 9 per cent, acceleration to this level can only occur in a phased manner, especially since the global economy is expected to remain weak for the first half of the plan period.

Major Initiatives

1. Atal Innovation Mission

- The Government has set up Atal Innovation Mission (AIM) in NITI Aayog with a view to promote a culture of innovation and entrepreneurship in the country.
- The key initiatives identified under the Mission include:
 - I. Setting up of **Atal Tinkering Laboratories (ATLs)** in schools for fostering curiosity, creativity and imaginations in young minds, and inculcate skills such as design mindset, computational thinking, adaptive learning, physical computing etc.
 - II. Setting up **Atal Incubation Centres (AICs)** for creating high class incubation facilities across India with suitable physical infrastructure in terms of capital equipment and operating facilities, coupled with the availability of sectoral experts for mentoring the start-ups.
 - III. Providing scale up support to **Established Incubation Centres (EICs)** in different parts of the country for upgrading their capacity.
 - IV. The Mission will also launch **Atal Grand Challenge (AGC)** awards for developing novel disruptive technologies/ solutions for stubborn socio-economic problems of the country that are ultra-low cost, low maintenance, durable and customised to the local conditions of the country.

2. Pradhan Mantri Krishi Sinchai Yojana

- PMKSY conceived in 2015 is an umbrella scheme for coverage of more and more area under assured irrigation as early as possible.
- Its major components are:

- I. Accelerated Irrigation Benefits Programme (AIBP) for major and medium irrigation including National; projects.
- II. Har Khet Ko Pani which includes command area development and water management (CAD&WM) works., surface minor irrigation, irrigation through groundwater and repair, renovation and restoration (RRR) of water bodies.
- III. Per drop more crop for promotion of micro irrigation and
- IV. Watershed development for rain water harvesting, effective management of the run-off water, prevention of soil erosion, regeneration of natural vegetation and recharging of the ground water table.

3. Soil Health Card

- An outlay of 568.54 crore to assess the soil fertility status in respect of 1,400 lakh land holdings at 2 year interval was initiated.
- The states will be provided funds for strengthening of the soil testing labs, analysis of soil samples and distribution of the Soil Health Card.
- This would be continuous and dynamic exercise to be carried out periodically.

4. Agri-Tech Infrastructure Fund

- Promotion of National Agricultural Market through Agri-Tech Infrastructure Fund (ATIF) with an outlay of 200 crore for 2015-16 to 2017-18 was formulated.
- ATIF is aimed at implementation of agricultural marketing reforms by initiating appropriate e-market platforms in states with a view to move towards a national market.
- It would also increase the farmers' access to markets through warehouse based sales and thus obviate the need to transport the produce to the mandi.

5. Public Financial Management System

- PFMS, earlier known as Central Plan Schemes Monitoring System (CPSMS), is a Central Sector Scheme of NITI Aayog started in April, 2008.
- It aims at establishing a suitable online Management Information System (MIS) and Decision Support System (DSS) for fund management of the Schemes of the Government of India.
- The system is envisaged to track the fund disbursement from Government of India under Schemes and ultimately report utilization under these Schemes at different levels of implementation in States/UTs on a real time basis.
- PFMS through its interface with banking networks, facilitates end-to-end beneficiary management and electronic payment system to the bank accounts/Aadhaar linked bank accounts of the beneficiaries and provides an online-real time MIS to various stakeholders.
- For monitoring the funds devolved to Consolidated Fund of states (and UTs with legislature) and obtaining real time expenditure information for schemes for which funds are transferred from the Central ministries, an interface for sharing data with state treasuries and state AGs has also been developed in PFMS. Since 2015, it was transferred to Department of Expenditure.

6. Housing for All

- Housing for All has been proclaimed as a priority by the Government of India.
- Housing for All has two components:
 - (a) Housing for All (Rural) known as Pradhan Mantri Awas Yojana (Gramin) implemented by Ministry of Rural Development and
 - (b) Housing for All (Urban) known as Pradhan Mantri Awas Yojana (Urban) implemented by Ministry of Housing and Poverty Alleviation.
- To achieve the goal of Housing for All 2022, nearly 3 crore houses are to be built in rural areas and about 2 crore houses in the urban areas in the next 7 years.

7. Swachh Bharat Mission

- The Swachh Bharat Mission (SBM) a joint mission of the Ministry of Urban Development and the Ministry of Drinking Water and Sanitation, emanates from the vision of the Government.
- Swachh Bharat Mission (SBM) was launched on October 2, 2014, with a target to make the country clean by October 2, 2019.

8. Smart Cities Mission

- Smart Cities Mission (CSM), a **Centrally Sponsored Scheme** was launched in June 2015 as part of Urban Rejuvenation Mission for the development of 100 smart cities.
- The objective of the Mission is to promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions.
- The core infrastructure elements in a Smart City include:
 - I. adequate water supply,
 - II. assured electricity supply
 - III. sanitation, including solid waste management
 - IV. efficient urban mobility and public transport
 - V. affordable housing, especially for the poor
 - VI. robust IT connectivity and digitalization
 - VII. good governance, especially e-Governance and citizen participation
 - VIII. sustainable environment
 - IX. safety and security of citizens, particularly women, children and the elderly, and
 - X. health and education.

9. Additional Central Assistance for Left Wing Extremism Affected Districts

- The Government initiated the scheme Integrated Action Plan (IAP) for selected tribal backward districts in 2010 in 60 districts which was subsequently extended to 82 districts of nine states namely, Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Uttar Pradesh and West Bengal.

- This scheme was in operation upto March, 2013.
- In 2013-14, it was decided to continue the financial assistance to 88 districts including 82 districts covered under IAP through the scheme “**Additional Central Assistance (ACA)** for Left Wing Extremism (LWE) Affected Districts” for the remaining years of the Twelfth Plan. Under the scheme, each district has been allocated 30 crore per year for 2013-14 and 2014-15.

10. Backward Regions Grant Fund

- The State Component of Backward Regions Grant Fund (BRGF) comprising the Special Plan for KBK districts of Odisha, special Plan for Bihar and West Bengal was being implemented by the erstwhile Planning Commission to address the issues of regional imbalances in development processes.
- During 2015-16, 132.07 crore under Special Plan for KBK districts of Odisha, 1,887.53 crore under Special Plan for Bihar and 836.77 crore for West Bengal was released as One Time Assistance.

11. Rural Development

- Nearly 70 per cent of India’s population is rural, 25 per cent of which lives in poverty. NITI Aayog oversees the Government’s mega schemes which seek to ensure that benefits of growth reach rural India, and empower its inhabitants to rise above the poverty line.
- The schemes – the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), the Indira Awaas Yojana (IAY) now renamed as Pradhan Mantri Awas Yojana (PMAY-G), the National Rural Livelihoods Mission (NRLM) now renamed as Deendayal Antyodaya Yojana (DAY) and the National Social Assistance Programme (NSAP) - are implemented by the Ministry of Rural Development (MoRD). The Aayog also monitors the progress of rural drinking water and sanitation schemes of the Ministry of Drinking Water and Sanitation (MDWS).

12. Saansad Adarsh Gram Yojana

- Saansad Adarsh Gram Yojana (SAGY), a new initiative in rural development, was launched in 2014 with the objective that these Adarsh Grams (Model Villages) serve as the “nucleus of health, cleanliness, greenery and cordiality” within the village community.
- The scheme’s Guidelines call upon Members of Parliament (MPs) to make one village of their choice in their constituency a Model Village by 2016, and another two villages by 2019.
- Taking development to the doorstep of villages, the scheme aims to empower the villagers to make choices and provide them with opportunities to exercise these choices.
- The Adarsh Gram will have a population of three to five thousand in plain areas and 1,000 to 3,000 in hilly, tribal and difficult areas.
- The Member of Parliament would be free to identify any village for the scheme, other than his own or that of his/her spouse.
- The scheme would utilize in a convergent manner resources available from existing schemes like IAY, PMGSY, MGNREGS, RKVY, NRLM, National Health Mission (NHM), Sarva Shiksha Abhiyan (SSA), Backward Regions Grant Fund (BRGF), Member of Parliament Local Area Development Scheme (MPLADS), schemes of MLAs and CSR funds, and no additional funding will be required.
- There will be evaluation mid-term and post project by competent independent agencies.

13. RURBAN Mission

- The Government launched the Dr. Shayma Prasad Mukherji RURBAN Mission in 2014 to deliver integrated project based infrastructure in the rural areas.
- The RURBAN Mission aims at providing basic amenities in rural areas and check migration from there to cities.
- The scheme envisages development of economic activities and skill development and helping rural areas get efficient civic infrastructure and associate services.
- The preferred mode of delivery would be through PPPs, while using various scheme funds.
- The Mission will be linked with e-governance and achieve targets in a time bound manner.
- Best practices of cooperatives, NGOs and other sectors can also be dovetailed into the scheme.

GS SCORE

7

RURAL AND URBAN DEVELOPMENT

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 grassroots level.

Major Programmes for Rural Development

The following major programmes are being operated by the Ministry of Rural Development:

1. Mahatma Gandhi National Rural Employment Guarantee Act

- 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 up to one hundred days of guaranteed wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work.
- Objectives of the Scheme are:
 - Providing up to 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;
 - Pro-actively ensuring social inclusion;
 - Strengthening Panchayati Raj Institutions.

2. National Rural Livelihoods Mission

- The government launched National Rural Livelihoods Mission (NRLM), subsequently renamed as 'Aajeevika' in 2011.
- It aims at mobilizing all rural poor household into Self Help Groups (SHGs) in a phased manner and also aims at supporting all women SHGs of the poor, including those promoted by other state agencies and Non-Governmental Organizations (NGOs).
- The Mission provides them long term support to attain appreciable increase in incomes over a period of time to improve their quality of life and come out of abject poverty.
- Key features of the NRLM:
 - Mobilization of at least one woman member from each rural poor household in the country into SHG network in a phased manner.

- Special focus on the mobilization of women from the Scheduled Castes (SCs) and the Scheduled Tribes (STs), the Particularly Vulnerable Tribal Groups (PVTGs), the disabled and other vulnerable and marginalized household.
- Promotion of SHG federations at village and cluster levels—Village Level Self Help Group Federations (VLF) at village level and Cluster Federation (CF) at cluster (groups of villages) level.
- Provision of Revolving Fund (RF) support at the rate of 10,000-15,000 per eligible SHG to supplement own funds.
- Provision of Vulnerability Reduction Fund (VRF) as per norms to eligible VLF to meet community level food security, health and nutrition security and such other priority needs of the poor households.
- Intensive support to link each SHG to bank credit such that each SHG member would be able to leverage a cumulative bank credit of 1.00 lakh over a period of 5 to 8 years.
- All women SHGs in selected 150 districts, which include all IAP districts, will be eligible to avail credit at 7 per cent interest upto the maximum credit outstanding of 3 lakh. Women SHGs who will repay in time will get an additional subvention of 3 per cent reducing the effective rate of interest to 4 per cent. It is proposed to extend this facility to additional 100 districts.
- 25 per cent of NRLM allocation is earmarked for skill development and placement support component which seeks to build the skills of the rural youth and place them in relatively high wage employment sectors of the economy; and
- So far 29 states (all states except Goa) union territory (Puducherry) have transited to NRLM. The implementation has started in 460 districts, 3,186 blocks of the country and so far 27,63,188 Self Help Groups have been promoted.

3. Rural Self Employment Training Institute

- The government has decided to set up one Rural Self Employment Training Institute (RSETI) in each district of the country.
- RSETIs are bank lead initiative with the active support of state government.
- The Government of India provides one time infrastructure support of rupees one crore besides reimbursing the cost of training rural poor candidates, the state government provides land free of cost or at nominal charges and the banks are responsible for day to day functioning of the RSETI.
- The core strength of the RSETI lies in its short term training and long term hand-holding to the rural entrepreneurs for setting up micro enterprises. Currently, 583 RSETIs are functioning in the country.

4. Mahila Kisan Sashaktikaran Pariyojana

- Mahila Kisan Sashaktikaran Pariyojana (MKSP) is a subcomponent of NRLM to meet the specific needs of women farmers and achieve their socio-economic and technical empowerment predominantly small and marginal.
- Under the programme, 34 lakh mahila kisans are being provided support in 16 states at a total outlay of 110 crore.

- During 2015-16, a new scheme named Start-up Village Entrepreneurship Programme (SVEP) was included in NRLM.
- The SVEP is to provide the supported enterprises with business skills, exposure, loan for starting and business support during the first critical six months of the enterprises by using the NRLM SHGs and their federations.

5. Pradhan Mantri Gram Sadak Yojana:

- To give better rural connectivity launched the Pradhan Mantri Gram Sadak Yojana (PMGSY) in December, 2000 as a centrally sponsored scheme to in crore) assist the states, though rural roads are in the state list as per the Constitution.
- Objective of the scheme:
 - To connect eligible unconnected habitations as per core-network with a population of 250 persons and above.
 - The programme envisages single all weather connectivity.
 - To ensure full farm-to-market connectivity, the programme also provides for the upgradation of the existing “Through Routes” and major rural links to prescribed standards, though it is not central to the programme.
 - Under PMGSY-II, the projects for upgradation of 11,234 km. roads have been sanctioned against total target of 50,000 km. of such roads.

6. Pradhan Mantri Awaas Yojana

- In the context of Government's priority for “Housing for All” by 2022, the rural housing scheme IAY has been restructured to Pradhan Mantri Awaas Yojana-Gramin (PMAY-G), which came into effect from 2016-17.
- The main features of the scheme of PMAY-G include:
 - Providing assistance for construction of 1.00 crore houses in rural areas over the period of 3 years from 2016-17 to 2018-19.
 - Enhancement of unit assistance from 70,000 to 1.20 lakh in plain and from 75,000 to 1.30 lakh in hilly states, difficult areas and IAP districts.
 - Identification of beneficiaries based on the **Socio-Economic and Caste Census (SECC 2011)** data covering households that are houseless or living in houses with kutchha walls and kutchha roof with two rooms or less after excluding households falling under the automatic exclusion category; and
 - The beneficiary will get 12,000/- as assistance for construction of toilet under Swachh Bharat Mission or any other dedicated source of funding including Swachh Bharat Kosh and Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and support of 90 person days in plain areas and 95 person days in hilly states, difficult areas and IAP districts under MGNREGS through convergence.

7. National Social Assistance Programme

- NSAP is a social assistance programme for poor BPL households for the aged, widows, disable and also include provision for one time assistance in the case of death of the primary bread winner in a BPL family.

- Allocation of funds for implementation of the scheme of NSAP was under the budget heads of Ministry of Finance and Ministry of Home Affairs till 2013-14.
- Funds were released in a combined manner for all the schemes under NSAP to the states and UTs by Ministry of Finance and Ministry of Home Affairs respectively from their budget heads.
- There is no provision of a state share.
- This is done to ensure that all the beneficiaries are provided with a uniform minimum assistance.
- States may contribute from their own resources to enhance the assistance.
- At present, NSAP comprises:
 - National Old Age Pension Scheme,
 - National Widow Pension Scheme,
 - National Disability Pension Scheme,
 - National Family Benefit Scheme (NFBS) and Annapurna.

8. Deen Dayal Upadhyaya -Grameen Kaushalya Yojana:

- DDU-GKY is a critical component of the National Skill Development Policy, and has an ambitious agenda, to benchmark wage placement-linked skill programmes to global standards and requirements.
- Aim:
 - To convert India's demographic surplus into a demographic dividend by developing rural India into a globally preferred source of skilled labour.
 - As a result, the scheme will also benefit more than 55 million poor rural youth who are ready-to-be-skilled, by providing sustainable employment.
 - In this way, the scheme is expected to play a crucial role in generational poverty alleviation.
- DDU-GKY is a pioneer in standards-led delivery of skilling in India, the first to notify standard operating procedures for training, and the first to introduce IT solutions for skilling, including mandatory tablets for trainees, Aadhar-linked biometric information on attendance, and geo-tagged time-stamped record of training centres and classes.

Aajeevika Skills was announced as DDU-GKY with a focus on providing opportunities through skilling for rural poor youth in domestic and global jobs.

- To ensure rural poor youth are skilled in market relevant trades and job-relevant competencies;
- To ensure regular and sustainable employment to its beneficiaries, and consistent career progression through upskilling; and
- To ensure independent assessment and globally acceptable certification of its beneficiaries.
- Key feature of the scheme:
 - DDU-GKY follows a 3 tier implementation architecture in **PPP mode**, with the national unit responsible for policy, central investments and technical support, SRLMs/State Skills Missions are responsible for state investments, implementation and monitoring controls, and Project Implementing Agencies (PIAs), both public and private training partners with a legacy in skill training, responsible for mobilization, training and placements.

- The focus of this programmes is on the rural youth from poor families, in the age group of 15 to 35 years, **belonging to:**
 - a) MGNREGA worker household in which household members have together completed 15 days of work;
 - b) RSBY household;
 - c) Antyodaya Anna Yojana card household;
 - d) BPL PDS card households;
 - e) NRLM-SHG household; and
 - f) Household covered under auto inclusion parameters of SECC 2011.
- Full social inclusion of candidates is ensured by the mandatory coverage of socially disadvantaged groups-50 per cent allocation to SC/ST groups, 15 per cent to minorities and 33 per cent for women and 3 per cent for persons with disabilities.
- Regional inclusion of candidates is enabled through, a special sub-scheme for the youth of Jammu & Kashmir, called Himayat; a special initiative for the rural youth of poor families in 27 most-affected Left-Wing Extremist (LWE) districts across nine states, called Roshni and 10 per cent of DDU-GKY's capital investment is reserved for projects from North-East region.
- Focus on quality is done through its framework of guidelines and Standard Operating Procedures (SOPs), curricula from NCVT or QP-NOS developed by SSCs of NSDC, rating/grading systems for projects and states implementing the projects.
- Placement in wage employment is mandated for a minimum of 70 per cent of all successful candidates, with a minimum salary of 6,000 per month or the minimum wages, whichever is higher.
- Post-placement support is given to candidates to enable assimilation into workforce and society.
- Support for job retention, career progression and foreign placements are also given to PIAs.
- In allocation of skills projects, primacy is given to training partners who can train and support overseas placement and captive placements.
- The programme promotes Make in India, through pro-active partnership with industry through multi-pronged engagement - champion employer policy, captive employer policy and industrial internship policy.
- Transparency and Accountability through:
 - Geo-tagged time stamped biometric attendance based on unique ID for trainers and trainees;
 - Online check of inventory available for training in every training centre;
 - CCTV and audio recording of all classroom and lab sessions;
 - Mapping of project implementing agencies on the public financial management system for tracking payments; e. reporting of performance on real time basis;
 - Concurrent monitoring process for reliability and validity of the monitoring process;

- Independent mechanism for project appraisal and project monitoring apart from state level monitoring through designated technical support agencies i.e., the National Institute of Rural Development and the NABCONS.

9. Saansad Adarsh Gram Yojana:

- The goal of Saansad Adarsh Gram Yojana (SAGY) is to translate this comprehensive and organic vision of Mahatma Gandhi into reality, keeping in view the present context.
- Far beyond mere infrastructure development, SAGY aims at instilling certain values in the villages and their people so that they get transformed into models for other.
- These values include: adopting people's participating as an end in itself - ensuring the involvement of all sections of society in all aspects related to the life of village, especially in decision-making related to governance.

Salient Features of the Scheme:

- Aims to develop three Adarsh Grams chosen by MPs, by March 2019, of which one would be achieved by 2016. Thereafter, five such **Adarsh Grams (one per year)** will be selected and developed by 2024;
- Focus on '**Jan Bhagidar**' (community participation);
- Members of parliament will guide and lead the initiative;
- Not an infrastructure centered scheme; and
- Holistic development of the village. The programme is primarily about unleashing people's power, converging and implementing existing government schemes/programmes and adopting bottom-up approach in planning and execution. While the Members of Parliament will guide and lead the initiative leverage the leadership, capacity, commitment energy of the individual MPs develop model Gram Panchayats.
 - Under the Yojana, a Village Development Plan would be prepared for every identified Gram Panchayat with special focus on enabling every poor household to come out of poverty, and villages which have achieved success as model villages, would be understood.
 - Every state/UT has created a **State Team of Trainers (STOT)**, who shall in-turn assist in the orientation of the MPs and the collectors of their states; 29 states/UTs have conducted the state orientation programme for Members of Parliament and district collectors; 10,000 copies of guidelines were printed and distributed.
 - The SAGY guidelines were translated into seven regional languages (Gujarati, Kannada, Marathi, Punjabi, Tamil, Telugu and Urdu) and made available online.

10. Watershed Programme

- The Integrated Watershed Management Programme (IWMP) was one of the flagship programmes.
- The **Natural Land Reforms Modernization Programme:**
 - The Scheme of National Land Reforms Modernization Programme (NLRMP) has been renamed as Digital India Land Records Modernization Programme (DILRMP).
 - Under DILRMP, 27 states/UTs have computerized the registration of Records (RoR) of land in their respective areas, 19 states/UTs have stopped manual issue of RoRs and 22 states/UTs have uploaded in their websites.

Ministry of Panchayati Raj

- It has the primary objective to ensure the compliance of the provisions of Part IX of the Constitution, provisions regarding the district Planning Committees as per Article 243 ZD and PESA.

Schemes under the Ministry of Panchayati Raj:

1. Panchayat Sashaktikaran Abhiyan:

- To improve the functioning of PRIs the MoPR has been implementing the Panchayat Sashaktikaran Abhiyaan to addresses the major constraints of inadequate devolution of powers, lack of manpower, inadequate infrastructure and limited capacity in the effective functioning of Panchayats by providing manpower, infrastructure, training and promotion of devolution of power to Panchayats and put in place structures of accountability.
- Funds to the tune of 191.00 crore were provided for RGPSA in 2015-16 for Central activities.
- These funds received under the Central Component were primarily meant for supporting states to meet their capacity building obligations under Fourteenth Finance Commission (FFC) Award particularly training support for Gram Panchayat Development Plan (GPDP).
- Support is provided for capacity building requirement for GPDP, training infrastructure and human resources (HR), HR for PESA and e-governance, and for programme management costs.

2. Rashtriya Gram Swaraj Abhiyan:

- The Constitutionally mandated Panchayati Raj system is in place across the country and there are nearly 2.55 lakh elected Panchayats and 30 lakh Elected Representatives (ERs).
- A new restructured scheme, namely, Rashtriya Gram Swaraj Abhiyan (RGSA) to help Panchayati Raj Institutions to develop governance capabilities to deliver on the Sustainable Development Goals (SDGs) was announced in 2016.
- **RGSA will have the following sub-schemes:-**
 - Capacity building;
 - Mission mode project on e-panchayat;
 - ATM services in panchayat bhawans; and
 - Incentivization of panchayats.
- The FFC award has created an opportunity for convergent plans at the local level and leadership by Panchayats in providing basic amenities and services to the people.
- The thrust of the new scheme will be on the lines of the **Gramoday se Bharat Uday programme** which focus on social empowerment, economic empowerment and enabled Gram Sabhas through convergence of resources at the Panchayat level.
- MoPR has supported states to develop state specific guidelines for **Gram Panchayat Development Plans (GPDP)** which converge all the resources over which the Panchayats have command including FFC funds, MGNREGS funds, Swachh Bharat funds, etc. Awareness building for Gram Panchayat Development Plans through a participatory process has resulted in 1.45 lakh Gram Panchayats preparing for this scheme.
- Under RGSA comprehensive efforts will be made to support and enhance the capacity building and training facilities for all stakeholders with particular thrust on the aspects of GPDP.

Initiatives undertaken by the Ministry for capacity building include:

- Support for training of all stakeholders of local governance;
- Support for building training capability - infrastructure and human resources for training;
- Support for providing computers and e-governance tools for information capture and governance;
- Support for strengthening governance in PESA villages;
- Supporting material and guidelines have been prepared and disseminated to the states and training institutions:
 - Toolkit on GPDP, advisory on environment generation, central guidelines on GPDP,
 - Manual for grassroots planning, advisory on SHG - GP convergence, framework for participatory planning for GPDP,
 - Collaboration with National Institute of Rural Development & Panchayati Raj (NIRD&PR) as mentor institution for capacity building, reading materials for Gram Panchayats developed under “**Strengthening Capacities of Panchayati Raj Institutions**” (SCPRI) project supported by United Nations Development Programme.

3. e-Panchayat Initiatives:

- E-Panchayat is one of the Mission Mode Projects (MMPs) under the Digital India programme of Govt. of India.
- The project seeks to completely transform the functioning of Panchayati Raj Institutions, making them more transparent, accountable and effective as organs of decentralized self-governing institutions.
- This will make democracy truly decentralized. The states are also being provided financial support for manpower, computers and capacity building for the implementation of e-Panchayat through the Ministry’s **umbrella RGPSA scheme (Under restructuring to Rashtriya Gram Swaraj Abhiyan (RGSA))**.
- Under e-Panchayat MMP, a suite of Core Common Applications has been developed to address various aspects of Panchayats’ functioning including planning, budgeting, implementation, accounting, monitoring, social audit and delivery of citizen services like issue of certificates, licenses, etc.

Recommendations of Fourteenth Finance Commission

- Under the Fourteenth Finance Commission (FFC) award for the period 2015-20 grants to the tune of 2,00,292.20 crore are being devolved to Gram Panchayats in the country constituted under Part IX of the Constitution.
- The FFC has not recommended grants to Non-Part IX areas under Schedule VI in Meghalaya, Mizoram, Tripura and Assam, the areas in the hill districts of Manipur, rural areas of Nagaland and Mizoram.
- The grants are allocated and released to various states by **Ministry of Finance (Department of Expenditure)** in accordance with the guidelines issued by that Ministry.
- The states are to distribute the grants to Gram Panchayats as per the approved formula recommended in the latest **State Finance Commission (SFC)** report.

- To facilitate better monitoring of the release and utilization of grants including FFC grants an online system (MIS) has been developed.
- PRIASoft (web based Panchayat accounting software) and Plan Plus (web based participatory planning software) are the two important Applications under e-Panchayat Mission Mode Project (MMP) that foster transparency and accountability in Panchayati Raj Institutions (PRIs) have been developed by the Ministry for adoption by the states.

Ministry of Drinking Water and Sanitation

- The Ministry of Drinking Water and Sanitation is the nodal Ministry for the overall policy, planning, funding and coordination of the flagship programmes of the Government of India viz., the National Rural Drinking Water Programme (NRDWP) for rural drinking water supply and the Swachh Bharat Mission (Gramin) [SBM(G)] for sanitation in the country.

1. National Rural Drinking Water Programme:

- Programme The National Rural Drinking Water Programme (NRDWP) is a Centrally sponsored scheme aimed at providing adequate and safe drinking water to the rural population of the country.
- The NRDWP is a component of **Bharat Nirman** which focuses on the creation of the infrastructure.
- This has resulted in the provision of significant additional resources to the sector and for creating an environment for the development of infrastructure and capacities for the successful operation of drinking water supply schemes in rural areas.

2. Swachh Bharat Abhiyan:

- An Action Plan has been drawn up for a Swachh Bharat to become a reality by 2019, the 150th birth anniversary of Mahatma Gandhi.
- The concept of Swachh Bharat Abhiyan is to pave access for every person to sanitation facilities including toilets, solid and liquid waste disposal systems, village cleanliness and safe and adequate drinking water supply. The programme is implemented by the Ministry of Drinking Water and Sanitation.
- The Abhiyan aims to **'triple the growth percentage of toilets from present 3 per cent to 10 per cent by 2019'**.
- From the present level of construction of 14,000 toilets per day this Action Plan proposes to increase the construction to 48,000 toilets daily. The Action Plan calls for an Open Defecation Free (ODF) India in five years.
- As part of **Swachh Bharat**, priority is being given to build toilets for boys and girls in all schools of the country.
- To strengthen delivery mechanism in sanitation in rural areas some of the important measures have been proposed:
 - Signing MoU with states, on water and sanitation for implementation of both water and sanitation, with interchangeability of funds between water and sanitation so that idle funds do not lie in states and targets are not starved of funds in either of the two sectors;

- Release to states with ‘**Just in Time**’ concept, to be adopted by Centre to avoid extra cost of funds to Government of India;
- Enable a system of small loans through agencies like **NABARD, SIDBI** (or banks through priority sector lending without collateral) to those households for the construction of toilets which are eligible for incentives or need funds to construct better toilets maybe with bathing space;
- Developing a **Block Level cadre** of sanitation coordinators who shall be the main support to Gram Panchayats (GP) in disseminating information and strengthening capacity in sanitation activities;
- Identifying a **Swachhata Doot** (messenger) for each GP in the country, equipping him with skills on sanitation and giving him performance linked incentives; and
- Intensive monitoring at the household level shall be taken up through the MIS of the Ministry, as already name of each household has been collected by Ministry of Drinking Water Supply through baseline data recently. Besides senior officers of Centre and state should **directly talk to the Sarpanches** on telephone to get feedback.

Swachh Bharat Mission (Gramin):

- The focus of the new strategy is to move towards a Swachh Bharat by providing flexibility to state governments (sanitation being a state subject), to decide on their implementation policy and mechanisms, taking into account state specific requirements.
- Rural drinking water supply is a state subject and is also included in the Eleventh Schedule of the Constitution amongst the subjects that may be entrusted to Panchayats by the states.
- Thus, the participation of the Panchayati Raj Institutions in the rural drinking water supply sector is an important area of focus.

Urban Development

- The Ministry of Urban Development has the responsibility of broad policy formulation and monitoring of programmes in the area of urban development.
- Urban Development is a state subject but the Government of India plays a coordinating and monitoring role and also supports urban development through centrally sponsored schemes.
- The Ministry addresses various issues of urban sector through policy guidelines, legislative guidance and sectoral programmes.
- Urbanization in India has become an important and irreversible process, and an important determinant of national economic growth and poverty reduction.
- The process of urbanization is characterized by a dramatic increase in the number of large cities, although India may be said to be in the midst of transition from a predominantly rural to a quasi urban society.
- At current rate of growth, urban population in India will reach a staggering total of 575 million by 2030 A.D. According to Census 2011, as many as 52 cities in India had population of a million plus.

a) National Heritage City Development and Augmentation Yojana:

- The National Heritage City Development and Augmentation Yojana (HRIDAY) was launched in 2015 with an initial coverage of 12 cities.
- The scheme is aimed at **preserving and revitalizing the soul and unique character** of the heritage cities in the country.
- The Mission is being operated as a Central Sector Scheme and is initially being implemented in 12 identified cities namely, **Ajmer, Amaravati, Amritsar, Badami, Dwarka, Gaya, Kanchipuram, Mathura, Puri, Varanasi, Velankanni and Warangal.**

b) Atal Mission for Rejuvenation and Urban Transformation (AMRUT):

- **The Objective of the Mission:**
 - To improve basic urban infrastructure in 500 cities/ towns which would be known as Mission cities/ towns. The Mission is being operated as a Centrally Sponsored Scheme (CSS).
 - It aims to cover all cities and towns with a population of over one lakh with notified Municipalities, including Cantonment Boards (Civilian areas) and certain other cities like capital towns, some cities on stem of main rivers and tourist and hill destinations.
- **The Purpose of AMRUT:**
 - Ensure that every household has access to a tap with assured supply of water and a sewerage connection;
 - Increase the amenity value of cities by developing greenery and well maintained open spaces (e.g. parks); and
 - Reduce pollution by switching to public transport or constructing facilities for non-motorized transport (e.g., walking and cycling).
 - AMRUT makes states equal partners in planning and implementation of projects, thus actualizing the spirit of cooperative federalism. As of now, 497 cities/ towns have been selected under this Mission.
- An advance of 25.00 lakh per city or as per eligibility wherever it comes below 25.00 lakh, has been released to states/UTs for preparation of Service Level Improvement Plans (SLIP) by ULBs.
- On the basis of SLIP, states will prepare the State Annual Action Plan (SAAP). As an advance of 123.38 crore has been released to states/UTs for preparation of SLIP under A&OE of this Mission.

c) Scheme for Urban Infrastructure Development in Satellite Towns around Seven Mega Cities:

- Ministry of Urban Development is implementing a pilot scheme for urban infrastructure development in satellite towns around seven mega cities.
- The Objectives of this Scheme are:
 - To develop urban infrastructure facilities such as drinking water, sewerage and solid waste management, etc. at satellite towns around the seven megacities and to channelize their future growth so as to reduce pressure on the mega cities;

- To implement reforms such as e-Governance, property tax, double entry accounting, creation of barrier free environment, structural safety norms in compliance with the national building code, water and energy audit of water and waste water utilities and implementation of service level benchmarks;
- Strengthening implementation of reforms such as levy of reasonable user charges, earmarking of budgets for basic services and at least 10-15 per cent of housing sites for the urban poor, formulation of bye-laws to incorporate provisions for disaster management, water harvesting and reuse and recycle of waste water and implementation of Public Private Partnership (PPP) projects.

d) Smart Cities Mission

- Smart Cities Mission is based on the idea of developing the entire urban ecosystem on the principles of complete and integrated planning.
- The focus is on sustainable and inclusive development and the idea is to look at compact areas, create a replicable model which will act like a light house to other aspiring cities.
- The Smart Cities Mission is meant to set examples that can be replicated both within and outside the Smart City, catalysing the creation of similar cities in various regions and parts of the country. The Mission is operated as a Centrally Sponsored Scheme (CSS).
- Subsequent to finalization of names of 98 potential Smart Cities and evaluation of their smart city proposals by a panel of national and international experts the government has announced the list of first 20 urban areas that will be developed as smart cities.
- The Objective:
 - To promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions.
 - The focus is on sustainable and inclusive development and the idea is to look at compact areas, create a replicable model which will act like a lighthouse to other aspiring cities.

The core infrastructure elements in a smart city would include:

- Adequate water supply;
- Assured electricity supply;
- Sanitation, including solid waste management;
- Efficient urban mobility and public transport;
- Affordable housing, especially for the poor;
- Robust IT connectivity and digitalization;
- Good governance, especially e-Governance and citizen participation;
- Sustainable environment;
- Safety and security of citizens, particularly women, children and the elderly; and
- Health and education.

e) Urban Transport:

- Increasing urban population coupled with increased city size has led to a rapid growth in the urban travel demand.
- Rapid growth in the use of personal motor vehicle along with neglect of public transport, pedestrianisation and non-motorized modes has resulted in increased congestion, air pollution, higher incidence of accidents as well as an increasing consumption of petroleum products.
- Significant improvement in public transport, pedestrianisation and non-motorized modes are a critical requirement for improving mobility in urban areas and hereby facilitating economic growth. Such improved mobility would also have a beneficial impact on the urban poor by improving their access to employment, education and health care.
- For urban planning it is necessary to give attention to an appropriate policy for integration of transportation and traffic plans with land use plans for every urban agglomeration.

A National Urban Transport Policy:

- The focus of the policy is to “**Move People Not Vehicles**”. This policy envisages integrated land use and transport planning, significant improvements in public transport, encouragement of non-motorised modes of travel, provision of adequate parking spaces as also a comprehensive set of measures for capacity building in urban transport planning.

Delhi Metro:

- Delhi Metro Phase-3 and extensions covers a length of 135.003 km at a cost of 41,078.79 crore. Extension of 4.373 km from Jahangirpuri to Samaypur Badli was operationalized and 13.875 km from Badarpur to YMCA Chowk, Faridabad was operationalized in 2015.

Bengaluru Metro:

- Rail Project Bengaluru Metro Rail Corporation Ltd. (BMRCL) is a 50:50 joint venture company set up under Section 617 of the Companies Act, 1956 with equity participation of Central and Karnataka government in equal proportion.
- The 3.5 km stretch (Reach 3-B) between Peenya Industry and Nagasandra has become operational in 2015. Reach-2 from Magadi Road to Mysore Road, measuring 7 km has become operational later.
- Total 27 km of Phase-1 is operational as on date. Centre approved the Bengaluru Metro Rail Project Phase-2 in 2014 consisting of 61 stations and 72.095 km route length at a total cost of 26,405 crore.

Mumbai Metro:

- Government of India has approved the Mumbai Metro Project in three corridors which are as under:
 - I. Mumbai Metro Rail Line-1 (Versova-Andheri-Ghatkopar) covering a length of 11.40 km at a cost of 2,356 crore,
 - II. Mumbai Metro Rail Line-2 (Charkop-Bandra-Mankhurd) covering a length of 31.871 km at a cost of 7,660 crore, and
 - III. Mumbai Metro Rail Line-3 (Colaba-Bandra-SEEPZ) covering length of 32.5 km at a cost of 23,136 crore.
- Apart from the above mentioned metro projects, 33 more cities are projected to cover with the metro rail transportation facility.

8

SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENTS**Department of Science & Technology**

Department of Science and Technology, in its endeavor to strengthen national science and technology capacity and capability, kept its pace to implement several planned initiatives to enable Indian S&T community to increase scientific and technological outputs.

Some of the important domains in which the Department devotes its attention 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;
- 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 policy formulation for S&T sector.

Science, Technology and Innovation Policy

- The new Science, Technology and Innovation (STI) Policy unveiled in 2013 includes a thrust for innovations in science and technology sector.
- STI policy reveals an aspiration to gain global competitiveness and link science sector to the developmental agenda of the country.
- Science, Research and Innovation System for High Technology led path for India (**SRISHTI**) is the main policy goal.
- Emergence of India as one of the top five of six knowledge powers in science are expressed aspirations of the new STI policy.
- To translate this vision into action, the Department has already established a dedicated Policy Research Cell.

Science & Engineering Research

- The research and development in frontier areas of science and engineering has received an overwhelming support with the establishment of the Science and Engineering Research Board (**SERB**).
- Several new initiatives have been launched by the Board recently to reverse the brain drain at different stages of scientific careers such as **Early Career Research Awards** (ECRA) for young faculty for setting up laboratory facilities for quick launching of research by new faculty.

- A National Post-doctoral Fellowship (N-PDF) scheme will allow the best of our 3000 scientists to stay in India to serve and strengthen our R&D institutions, industry and universities.

Schemes for Human Resource Development

1. Attracting Young Talent to Science

- Innovation in Science Pursuit for Inspired Research (**INSPIRE**) is an ongoing initiative for attraction of talent for science and research.
- More than 13 lakh students in the age group of 10-15 have been provided INSPIRE awards.
- Science camps of five days duration are organised to provide opportunity to class XI students pursuing science to interact with the science icons from India and abroad including Nobel Laureates to experience the joy of innovations.

2. Opportunities for Women Scientists

- Department has launched several initiatives for women in science under its flagship scheme namely KIRAN (Knowledge Involvement in Research Advancement through Nurturing).
- DST provides opportunity to women scientists who had break in their career, primarily due to family reasons, to pursue research in Physical & Mathematical Sciences, Chemical Sciences, Life Sciences, Earth & Atmospheric Sciences and Engineering Technology.

New Initiatives Aligned with the National Agenda

1. 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 –
 - I. Basic research promotion,
 - II. Research infrastructure development,
 - III. Nano application and technology development,
 - IV. Human resource development,
 - V. International collaboration and orchestrating national dialogues.
- India has secured third position amongst nations of the world in terms of scientific publications in this emerging area.

2. Climate Change

- National Mission for Sustaining the Himalayan Ecosystem (NMSHE) and National Mission for Strategic Knowledge on Climate Change (NMSKCC) launched under National Action Plan for Climate Change (NAPCC) are under implementation by the Department.
- Himalayas Climate Change Portal has been launched to make the knowledge on Himalayas readily available for the end users and community.

3. Other initiatives

- National Supercomputing Mission was approved in March 2015. This is a visionary programme to enable India to leapfrog to the league of world class computing power nations. The Mission is under implementation jointly by the Department of Science and Technology (DST) and Department of Electronics and Information Technology (DeitY) at an estimated cost of 4,500 crore over a period of seven years
- DST has launched a new programme viz. Science and Technology of Yoga and Meditation (**SATYAM**) in 2015-16 to rejuvenate research in yoga and meditation.
- National Initiative for Developing and Harnessing Innovations (**NIDHI**) has been evolved as an umbrella scheme for a seamless innovation ecosystem booster.

The specific components of NIDHI are:

- I. Promotion and Acceleration of Young and Aspiring innovators & Startups (**PRAYAS**) - Support from Idea to Prototype;
 - II. Entrepreneur in Residence (**EIR**) - Support system to reduce risk;
 - III. Startup-NIDHI through Innovation and Entrepreneurship Development Centres (IEDCs) in academic institutions for encouraging students to promote start-ups;
 - IV. Start-up Centre in collaboration with MHRD— inculcating a spirit of entrepreneurship in National Institutions of Higher Learning.
- **MANAK** (Million Minds Augmenting National Aspirations and Knowledge): To widen the base of the innovation pyramid by cultural intervention, ideas relevant to the national needs are to be invited from 10 lakh school students in any language.
 - With the objective to contribute towards **Swachh Bharat**, a new programme viz. **Technology Development for Waste Management** has been initiated to come up with technological solutions for the problems faced by the country in waste management.

Organizations

1. Survey of India

- Survey of India (SOI), the national survey and mapping organisation under the Ministry of Science and Technology, was set up in 1767.
- 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.
- The primary responsibility of SOI is to maintain topographical map coverage on 1:250K, 1:50K and 1:25K scales.
- Survey Training Institute, Hyderabad established under UNDP assistance is a premier institution for training in various disciplines of surveying and mapping to the trainees sponsored by the Department, other state/central government organisations and neighbouring countries.
- National Atlas and Thematic Mapping Organisation (**NATMO**) operating under the Department concentrate 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 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.

2. Council of Scientific & Industrial Research (CSIR)

- The Council of Scientific & Industrial Research, constituted in 1942 is an autonomous body which is known for its cutting edge R&D knowledge base in diverse S&T areas.

CSIR functions:

- Promotion, guidance and co-ordination of scientific and industrial research.
- Collection and dissemination of information on research and industry.
- Founding of laboratories to carry forward scientific and industrial research.
- Utilization of the new knowledge for development of industry .
- Rendering assistance to other institutions conducting research, awarding of fellowships and publishing of scientific journals.

CSIR achievements:

- The induction of precocious flowering in plantlets of bamboo raised in tissue culture;
- Discovery of one of the smallest protein molecules, seminal plasmin;
- The first combined genetic and physical map of the whole *V. cholerae* genome;
- The elucidation of the mechanisms for delaying the formation of cataract in the human eye;
- To introduce buffalo milk for baby food (brand name 'Amul');
- It launched the wholly indigenous tractor *Swaraj*;
- Developed a cost-effective process for drugs for mass use;
- It was the first to extract polymetallic nodules from the Indian ocean bed, based on which India became the first country in the world to be granted 'pioneer status', under the UN treaty on the Laws of Seas;
- Development of Aerospace materials such as high-density carbon-carbon composites, Nalar—a Kevlar equivalent high strength fibre, aluminium-lithium alloys, high purity aluminium;
- Development of Industrial materials for special performance such as silicon carbide, silicon nitride bonded silicon carbide, silicon carbide whiskers, aluminium metal matrix and aluminium-graphite composites, special glasses for optical fibres, infrared range finders, laser glasses, radiation shielding glasses and sol-gel techniques for glass coatings etc.

Atomic Energy

The Department of Atomic Energy (DAE), established in 1954 is engaged in the development of nuclear power technology, applications of radiation technologies in the fields of agriculture, medicine, industry, and basic research.

- Some of these are :
 - (i) Increasing the share of nuclear power through deployment of indigenous and other proven technologies.
 - (ii) Developing fast breeder reactors and thorium reactors with associated fuel cycle facilities;
 - (iii) Building and operation of research reactors for production of radioisotopes and carrying out radiation technology applications in the field of medicine, agriculture and industry;
 - (iv) Developing advanced technologies such as accelerators, lasers and encourage transfer of technology to industry;
 - (v) Support to basic research in nuclear energy and related frontier areas of science, interaction with universities and academic institutions, support to R&D projects having a bearing on DAE's programmes and international cooperation in related areas of research; and contribution to national security.

Nuclear Power Programme

1. Pressurised Heavy Water Reactors & Light Water Reactors

The Nuclear Power Corporation of India Ltd. (NPCIL) is a dividend paying company with AAA credit rating by Crisil and CARE and is responsible for sitting, design, construction, commissioning and operation of nuclear power reactors.

Project Under construction

1. Kakrapar Atomic Power Project (KAPP) Unit-3&4 (2x700 MWe)
2. Rajasthan Atomic Power Project (RAPP) Unit 7&8 (2x700 MWe)

Sanctioned Projects

1. Kudankulam Nuclear Power Project (KKNPP) Unit-3&4 (2x1000 MWe LWRs)
2. Gorakhpur Anu Vidyut Pariyojana Harayana (GHAVP) Units-1&2 (2x700 MWe PHWRs).

2. Front End Fuel Cycle

Front End Fuel Cycle comprises operations such as mining, milling and processing of ore, and fabrication of fuel. In addition, production of heavy water, used as moderator and coolant in pressurized heavy water reactors, also constitutes a major programme segment of the Nuclear Power

Programme. DAE has wide ranging capabilities in uranium mining and mineral processing, and is self-sufficient in the production of heavy water, zirconium alloy components and other materials and supplies, for pressurised heavy water reactor. The Nuclear Fuel Complex at Hyderabad manufactures fuel assemblies for pressurised heavy water reactors, boiling water reactors and fast breeder reactor.

3. Heavy Water Board

The Heavy Water Board has contributed successfully to the first stage of Nuclear Power Programme by producing heavy water for all Pressurised Heavy Water Reactors in a cost effective manner enabling the department to provide nuclear power at an affordable cost to common man. Presently, Heavy Water Board is not only self-sufficient in meeting the domestic demand of heavy water, but is also geared up to supply heavy water for the future PHWRs and AHWRs as per the envisioned nuclear power programme of DAE.

4. Boron Enrichment

In consonance with the material input required for second stage of NPP based on FBRs, HWB, with its decades of experience of handling isotope separation process, took up development, demonstration and deployment of indigenous technologies for production of enriched Boron. HWB has now acquired comprehensive capability in this area achieving enrichment levels beyond 95 per cent in multiple chemical forms.

Mineral Exploration and Mining

Atomic Minerals Directorate for Exploration and Research (AMD) continued the accelerated pace of exploration activities during the year by integrated, multi-disciplinary methodology and judicious utilisation of manpower with a focussed approach on augmentation of uranium, thorium and rare metals.

Geochemical surveys (4,040 sq km) have been carried out in different parts of the country for delineating the target for detailed investigations. Ground geophysical surveys (about 560 sq km) have delineated conducting zones in Haryana and high chargeability zones in Karnataka and Jharkhand. Airborne survey and remote sensing survey has also been carried out over 42,559 line km in parts of Rajasthan and Karnataka. Rare Metal and Rare Earth (RMRE) investigations resulted in location of significant concentrations of RMRE alongwith Chhattisgarh, Tamil Nadu and Karnataka. Beach Sand and Offshore Investigations (BSOI) resulted in establishing potential heavy mineral zones mainly along the east coast.

Mining and processing of uranium ore in India is done by the Uranium Corporation of India Ltd. (UCIL). The Corporation operates in Jharkhand state with seven mines at Jaduguda, Bhatin, Narwapahar, Turamdih, Bagjata, Banduhurang, Mohuldih and two processing plants at Jaduguda and Turamdih. A new mine and a processing plant are also under construction at Tummalapalle, Andhra Pradesh. The Indian Rare Earths Limited (IREL) is a Mini Ratna (Category-1) company and it is engaged in mining and production of beach sand minerals and rare earth compounds.

Fuel reprocessing and fuel management

Incineration of combustible wastes can be applied to both radioactive and other wastes. In the case of radioactive waste, it has been used for the treatment of low-level waste from nuclear power plants, fuel production facilities, research centres (such as biomedical research), medical sector and waste treatment facilities.

The Joule Melter Technology is essentially a single step process, where immobilisation of HLW in a borosilicate glass matrix is achieved in a refractory-lined melter.

The immobilisation of high-level waste (HLW) requires the formation of an insoluble, solid waste form that will remain stable for many thousands of years. In general borosilicate glass has been chosen as the medium for dealing with HLW. The stability of ancient glass for thousands of years highlights the suitability of borosilicate glass as a matrix material. This type of process, referred to as vitrification.

Fast Breeder Reactors

For the second stage of the Nuclear Power Generation Programme, the Indira Gandhi Centre for Atomic Research (IGCAR) is pursuing development of sodium cooled fast breeder reactors and associated fuel cycle technologies.

Breeder reactors produce more fuel than they consume. The Fast Reactor Programme of IGCAR is supported by its research and development endeavour in a range of disciplines such as reactor engineering, metallurgy, materials science, instrumentation, safety, etc. The Fast Breeder Test Reactor (FBTR), operating at Kalpakkam for over 25 years, also caters to technology development related to fast reactors.

Based on the fast breeder reactor technology developed by IGCAR, a 500 MWe Prototype Fast Breeder Reactor (PFBR) is coming up at Kalpakkam. The project is being executed by the Bharatiya Nabhikiya Vidyut Nigam Limited (BHAVINI), a public sector undertaking of DAE. BARC contributes to the research & development and manufacture of fuels for fast reactors, technology for reprocessing of fuels, waste management and health and safety of the work force.

Prototype Fast Breeder Reactor

PFBR is a pool type reactor using mixed oxide of uranium and plutonium as fuel. The coolant used is liquid sodium.

The project is located 500 m south of the existing Madras Atomic Power Station.

FBR Fuels

The U-Pu mixed carbide fuel pins for FBTR at Kalpakkam and fuel pins for the full core of PFBR were supplied by BARC. Electro refining of U-Pu-Zr alloy in molten LiKCIPuCl₃ electrolyte was demonstrated at IGCAR.

Thorium Based Reactors

Nuclear power employing closed fuel cycle is the only sustainable option for meeting a major part of the world energy demand. World resources of thorium are larger than those of uranium. Thorium, therefore is, widely viewed as the 'fuel of the future'. The Indian Nuclear Power Programme Stage-3 aims at using thorium as fuel for power generation on a commercial scale. In the thorium fuel cycle, thorium 232 is transmuted into the fissile isotope uranium 233 which is a nuclear fuel. As a part of this programme,

BARC has been developing a 300 MWe Advanced Heavy Water Reactor (AHWR). Fuelled by thorium and using light water as coolant and heavy water as moderator, this reactor will have several advanced passive safety features.

Applications of nuclear technology

1. Electronics & Instrumentation

- The Electronics Corporation of India Limited (ECIL) continued to remain engaged in the design, development, manufacture, supply, and installation and commissioning of electronic equipment for the Atomic Energy, Defence, Aerospace, Security, Information Technology and e-Governance sectors.

2. Robotics

- A robot based frameless stereotactic system is developed at BARC for performing neurosurgery which has accuracy and patient comfort level comparable to frame based system.
- It automates the frameless stereotaxy using a high precision robot (Parallel Mechanism based Robot).

3. Cryogenics

- A cryogenic system consisting of cryogen distribution lines for liquid helium and liquid nitrogen, sub-atmospheric vacuum jacketed lines for helium, warm helium lines between the helium buffer tanks and compressors, and a 500 watt helium liquefier is being set-up for the superconducting electron and heavy-ion linacs at VECC. The design of the cryogenic system has been finalized.

4. Radioisotopes & Radiation Technology and their Applications

- India is one of the leading countries in the isotope technology today as a result of the consistent efforts of DAE.
- Radioisotopes are produced in the Dhruva research reactor at Trombay, accelerator at Kolkata and the various nuclear power plants of NPCIL during the report period, a wide variety of radioisotopes for medical, industrial and research applications were produced and supplied by BARC.

5. 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.
- These technologies are benefiting Indian farmers and traders.

6. 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, has been produced here.
- This miniature source was tried for the first time for treatment of eye cancer at Sankara Netralaya, Chennai. Another salient development here is the digital medical imaging system based on a Charge Coupled Device (CCD).
- 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 internationalised radiotherapy.
- Tuberculosis is a major health problem in India. For detection of the disease, 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 is involved in research and development in nuclear medicine and allied products.
- The centre 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).
- **Radioimmunoassays (RIA)** and related procedures are used for the measurements of hormones, enzymes, certain serum proteins, and others. RMC is a major provider of RIA services in the country to thyroid patients.

7. Laser Systems and Applications

- BARC and RRCAT developed a variety of lasers that include gas lasers, solid state lasers and semiconductor lasers which find wide applications.

- The laser based devices that have been developed include a projectile speed-measuring instrument commissioned at the Defence Metallurgical Research Laboratory, Hyderabad, and Surface Profilometer for measuring roughness.
- For measurement of the equation-of-state-of-materials, various shock diagnostic systems are being set up at Trombay.

8. Plasma Devices and Systems

- BARC has developed a large number of atmospheric plasma torches and processing systems.
- The high power plasma torches (40 – 300 kW) operating in transferred and non-transferred arc mode have been used 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.
- On surface engineering, plasma spray systems have been extensively used to develop special purpose thermal barrier, chemical barrier and bioceramic coatings that have drastically improved system performance.

Organizations related to Atomic Energy

Homi Bhabha National Institute

- The Homi Bhabha National Institute (HBNI) accredited as a deemed university by Ministry of Human Resource and Development (MHRD) completed ten years of its existence.
- HBNI continued its academic programmes by offering various courses with its eight Boards of Studies namely as Chemical Sciences, Engineering Sciences, Health Sciences, Life Sciences, Mathematical Sciences, Physical Sciences, Strategic Studies and Undergraduate Studies.
- Degrees and diplomas including Ph.D were awarded to students.
- HBNI continued to strengthen its linkages with premier research and academic institutes in the country and abroad.

Public Sector Undertakings

- DAE's public sector undertakings namely:
 - a) Nuclear Power Corporation of India Ltd.,
 - b) Uranium Corporation of India Ltd.,
 - c) Indian Rare Earth Ltd. and Electronics Corporation of India Ltd.,
 - d) (BHAVINI is yet to commence commercial operations).

Indian Space Programme

- Space activities in the country were initiated with the setting up of Indian National Committee for Space Research (**INCOSPAR**) in 1962.
- In the same year, work on Thumba Equatorial Rocket Launching Station (**TERLS**) near Thiruvananthapuram was also started.

- Indian Space Research Organisation (**ISRO**) was established in August, 1969.
- The Space Commission was constituted and established the Department of Space (DOS) in June, 1972 and brought ISRO under DOS in 1972.
- Space Commission formulates the policies and oversees the implementation of the Indian space programme to promote the development and application of space science and technology for the socio-economic benefit of the country.
- The year 2015 witnessed many significant achievements of the Indian Space programme:
 - With the successful completion of the intended six month period by **Mars Orbiter Spacecraft** in its orbit around Planet Mars, India became the first country to achieve total success in its maiden attempt to explore Mars.
 - The second consecutively successful launch of **GSLV-MkII** carrying the indigenous Cryogenic Upper Stage (CUS) underscored ISRO's capability in cryogenic rocket propulsion.
 - Launch of India's multi wavelength Space Observatory **ASTROSAT** and its successful operationalisation.
 - Launch of **IRNSS-1D and IRNSS-1E** - the fourth and fifth satellites of the Indian Regional Navigation Satellite System (IRNSS) —by PSLV-C27 and PSLV-C31 respectively into the required sub-Geosynchronous Transfer Orbits (sub-GTO), also occurred during the year 2015-16.
 - Launch of India's latest communication satellite GSAT-15 carrying communication transponders and **GAGAN** payload.

Space Science Programme

1. Mars Orbiter Mission

- Mars Orbiter Mission is India's first interplanetary spacecraft mission as well as the first Indian spacecraft mission to planet Mars.
- With a lift-off mass of 1340 kg, the Mars Orbiter Spacecraft carries five payloads –
 - Mars Colour Camera,
 - Thermal infrared Imaging Spectrometer,
 - Methane Sensor for Mars,
 - Lyman Alpha Photometer and
 - Mars Exospheric Neutral Composition Analyser.
- MOM primarily envisaged to demonstrate the technologies for building, launching and navigating an unmanned spacecraft to Mars as well as to explore the planet by placing it in an orbit around that planet.
- The spacecraft, which was launched by PSLV-C25 on November 05, 2013 from SDSC, Sriharikota into an elliptical earth parking orbit, was successfully placed in orbit around Mars on September 24, 2014.
- MOM is primarily a technological mission, which enabled ISRO to achieve critical mission operations with enhanced autonomy functions and stringent capabilities of propulsion and other spacecraft systems.

2. Space science mission - ASTROSAT

- It was successfully launched on September 28, 2015 by India's workhorse launch vehicle PSLV.
- ASTROSAT is India's first multi wavelength observatory capable of simultaneously viewing the universe in the visible, ultra violet and X-ray regions of the electromagnetic spectrum.
- After its launch into the planned orbit, ASTROSAT became operational following extensive in orbit test of its five payloads.

Space Applications and Disaster Management

- Remote Sensing applications projects at national, state and local levels are being carried out through well-established multi-pronged implementation architecture of National Natural Resources Management System (NNRMS) in the country.
- Indian Remote Sensing Satellite constellation helped in agricultural crops inventory, agricultural drought, forest fire, landslides, earthquakes monitoring, groundwater prospects mapping, inventory; monitoring of glacial lakes/water bodies, sericulture development and satellite aided search and rescue.
- **ISRO Telemedicine network** facilities cover 389 hospitals connecting 301 rural hospitals and 17 mobile vans to 66 super speciality hospitals for providing health care to citizens, especially in rural areas.
- **The Disaster Management Support (DMS) Programme** of ISRO continues to provide space based information and services to the state and central Government Departments to strengthen the disaster management activities.
- In 2014, flood monitoring was carried out for floods in 8 states and 112 flood maps were disseminated to the concerned State and Central officers in addition to making available to users on the web through Bhuvan, DSC and NDEM web portals.
- In the case of unprecedented floods that devastated Jammu and Kashmir in September, 2014, ISRO quickly established DMS satellite communication VSAT nodes with voice and data capabilities in Srinagar.
- Besides cumulative flood inundation maps and their progression as well as recession maps were prepared for Srinagar valley and the information was disseminated on daily basis during September 8 – 21, 2014.
- **A Flood Early Warning System (FLEWS)** is operational in Assam State by North Eastern Space Applications Centre (NE-SAC).
- **A Flood Hazard Atlas for Odisha** based on past flood incidents was prepared and handed over to the state government for ground validations.
- All the depressions and cyclones that originated in the Indian ocean region including Cyclone .Hudhud which made a landfall at Visakhapatnam and Cyclone Nilofar which threatened Gujarat region during October, 2014 were monitored and their track, intensity and landfall were predicted.
- During 2014, NRSC has provided IRS satellites' data for disasters occurred across the globe through International Charter "Space and Major Disasters", "Sentinel Asia framework" and also through UNOOSA /UNESCAP. A total of 92 datasets for 26 events were provided during the year.

Earth Sciences

Earth system science comprises the understanding of complex interactions among various components of the Earth, viz. **atmosphere, oceans, cryosphere, geosphere and biosphere**. The knowledge about the earth system helps to improve prediction of climate, weather and natural hazards. The exploration of polar regions and seabed for discovery of new resources or phenomena has been undertaken.

- The national agenda includes promotion of discovery to provide new perspective on earth systems, better understanding of earth processes and apply this knowledge for sustainability of the Earth and develop services for the societal benefits.
- An **Earth System Science Organization (ESSO)** was established with the objective to provide the nation with the best possible services for monsoons, weather, climate, oceans and natural hazards.
- The policies and programmes of the ESSO are largely being pursued through mission mode projects through its centres, viz. India Meteorological Department (IMD), National Centre for Medium Range Weather Forecasting (NCMRWF), Indian Institute of Tropical Meteorology (IITM), National Centre for Antarctica and Ocean Research (NCAOR), National Institute of Ocean Technology (NIOT), Indian National Centre for Ocean Information Services (INCOIS), National Centre for Earth Science Studies (NCESS), Centre for Marine Living Resources and Ecology (CMLRE) and Integrated Coastal and Marine Area Management (ICMAM).
- The important achievements include:
 - (i) International Indian Ocean Expedition (IIOE);
 - (ii) International Ocean Drilling Programme;
 - (iii) Strengthening of the Polar Observations;
 - (iv) Ocean Mixing Monsoon Experiments;
 - (v) Improved Weather Forecasts and the Seasonal Monsoon Forecast for the year 2015;

Atmospheric Science and Services

Some of the salient accomplishments in the atmospheric sector during the year include,

- extending five days tourist forecast for 109 destinations and public weather forecast for 318 cities and nowcast for 130 cities with SMS alerts;
- accurate prediction of Hudhud, Nilofer and other cyclonic storms; establishment of 'SMS based Cyclone Alert/Warning System';
- establishment of 'RAPID' (Real-time Analysis of Products and Information Dissemination: A web based system for INSAT Data Products);
- establishment of 'CRIS' (Customized Rainfall Information System: A GIS based system for processing Real-time rainfall data to generate rainfall products);
- SMS based Fog Dissemination Service to Airlines; Dissemination of Agromet advisories to 70.6 lakh farmers through SMS;
- Environmental Impact Assessment of 1771 Development Projects; and augmentation of Doppler Weather Radars (1 installed, 6 under process).

Ocean Science and Services

- The Indian Tsunami Early Warning Centre (**ITEWC**) kept the watch of all tsunamigenic earthquakes in and around the Indian Ocean and issued appropriate messages in the event of any threats from potential tsunamis.
- The early warnings by the Ministry on the wind-waves and storm surges during the occurrence of cyclone 'Ashoba' (during 8-10 June, 2015) helped the authorities to reduce the damages to the property and loss of life.

GS SCORE

9

TRANSPORT

A Well-Knit and coordinated system of transport plays an important role in the sustained economic growth of country. The present transport system of the country comprises several modes 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 163 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 kms, Indian Railways have grown into a vast network of 7,137 stations spread over a route length of 66,030 km with a fleet of 10,773 locomotives, 51,798 passenger service vehicles, 7,000 other coaching vehicles and 2,54,006 wagons.
- The growth of Indian Railways in the 163 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 multi-gauge operations extending over 66,030 route kilometres.
- About 36.66 per cent of the route kilometre and 45.19 per cent of running track kilometre and 46.84 per cent of total track kilometre is electrified. The network is divided into 17 Zones. Divisions are the basic operating units.
- The 17 zones and their respective headquarters are given below:

| Zonal Railways | Headquarters |
|----------------|--------------|
| Central | Mumbai |
| Eastern | Kolkata |
| East Coast | Bhubaneswar |
| 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 |
| Metro Railway | Kolkata |

- The rolling stock fleet of Indian Railways in services in 2015 comprised 43 steam, 5,714 diesel and 5,016 electric locomotives. Currently, the Railways are in process of inducting new designs of fuel-efficient locomotives of higher horse power, high-speed coaches and modern bogies for freight traffic.
- Modern signalling like panel interlocking, route relay inter-locking, centralized traffic control, automatic signalling and multi-aspect colour light signalling, are being progressively introduced.
- Railways have made impressive progress regarding indigenous production of rolling stock and variety of other equipment over the years and are now self-sufficient in most of the items.
- The main objectives of railways have been to develop the transport infrastructure to carry the projected quantum of traffic and meet the developmental needs of the economy.

Public Undertakings

- There are fourteen undertakings under the administrative control of the Ministry of Railways, viz.
 - I. Rail India Technical & 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. Mumbai Railway Vikas Corporation Limited (MRVC).
 - VII. Indian Railway Catering & Tourism Corporation Ltd. (IRCTC).
 - VIII. Railtel Corporation of India Ltd. (Rail Tel).
 - IX. Rail Vikas Nigam Ltd. (RVNL).
 - X. Mumbai Rail Vikas Nigam Ltd. (MRVNL).
 - XI. Dedicated Freight Corridor Corporation of India Limited (DFCCIL).
 - XII. Bharat Wagon and Engineering Co. Ltd. (BWEL).

XIII. Burn Standard Company Limited (BSCL).

XIV. Braithwaite and Company Limited (BCL).

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.

Railway Finance

- Since 1924-25, railway finances remained separated from general revenues. They have their own funds and accounts and the Railway Budget is presented separately to Parliament. However, the Railways contribute to the general revenue a dividend on the capital invested. Quantum of contribution is reviewed periodically by a Parliamentary Convention Committee.

Achievements

I. Passenger Amenities

- Railways launched three social media platforms on Facebook, Twitter and You Tube with the handle @railminindia. It employed first of its kind, a real time 24x7 public grievance system through Twitter and provided medical, security and other emergency assistance to travelling passengers.
- All India Security Helpline 182 was set up to report any untoward incident and seek emergency help during travel.
- The All India Passenger Helpline '138' provided for all other query/complaints during travel.
- E-catering facility launched at 100 stations. 408 railway stations are designated for it.
- E-ticketing facility launched for disabled persons and for accredited journalist on concession pass.
- Rationalization of Computerized Passenger Reservation System (PRS) done to enable passengers to buy tickets even after the preparation of reservation charts.
- Currency coin-cum-card operated automatic ticket vending machines installed at select stations.
- Launched one of the largest free public wifi systems in the world. 26 stations with a plan to extend it to 100 stations.
- Cancellation of confirmed, RAC and Waitlisted PRS counter tickets made easy using IRCTC website or phone No. 139.
- Provision made for acceptance of international debit and credit cards for payment of e-ticket through IRCTC website.
- Yatri Ticket/Sewa Kendra (YTSK) Scheme launched to allow private agents to operate ticketing terminals for selling reserved as well as unreserved tickets.
- 'Vikalp', Alternative Train Accommodation System (ATAS) launched with a view to provide confirmed accommodation to waitlisted passengers and also to ensure optimal utilization of available accommodation.

II. Infrastructure Creation

- MoU between India and Japan signed for Mumbai-Ahmedabad High Speed Rail Project using Shinkansen Technology covering a total of 508 kms.
- Railways launched Gatimaan Express, country's first semi high speed train with a maximum speed of 160 kmph between Delhi and Agra heralding a new era of high speed rail travel in the country.
- Railways commissioned 2828 km of Broad Gauge lines, highest ever in 2015-16 against an average of 1528 km from 2009-14.
- One of the most challenging railway projects, conversion of 1500 V DC to 25000 V AC traction system has been successfully completed over the entire Mumbai division of Central Railway.

III. Reforms

- Powers delegated and decentralized for improving efficiency and transparency. Measures for e-tendering, e-auctioning, e-ticketing, e-governance, e-freight demand, e-catering, e-wheelchair, e-concierge, etc., taken for efficiency and transparency.
- Four centres of railways research set up in premier educational institutions. Development of an online system initiated for grievance redressal of both serving as well as retired railwaymen.

IV. Green Initiatives

- Commissioned 26 MW wind mill power plant at Jaisalmer. Railways provided 27,000 bio-toilets in trains in the last two years.
- First 'Green' DEMU train introduced on Northern Railway to run between Rewari-Rohtak sections.
- A hybrid toilet system, combining best features of a vacuum toilet system and indigenous bio-toilet system was installed for trial in a First Class air conditioned coach of Dibrugarh Rajdhani which is running well since September 2015.
- The system does not require any waste handling facilities for evacuation and processing of waste. This system uses significantly less quantity of water for flushing.
- A new separate **Environment Management Directorate** formed to address all environment related issues in a focused and integrated manner.
- Indian Railways has started a massive exercise of planting trees alongside Railway Track with the signing agreement with Haryana and Punjab Government in the first phase.

Cleanliness

- Railways joined the Swachh Bharat Abhiyan in a big way. It formulated an integrated policy on cleanliness. 27 Charitable Institutions/Social Organizations invited to take part in '**Swachh Rail, Swachh Bharat Abhiyan**' through Shramdaan campaign "Clean My Coach" service launched for any cleaning requirement in the coach.
- A passenger can send an SMS on a mobile number 58888 or book through app and his request is attended to.
- Cleanliness audit through third party started for railway stations institutionalised.

Connectivity in North East and J&K

- Railways completed Udhampur-Katra Broad gauge line in Jammu and Kashmir bringing Katra on broad gauge railway map.
- Fast passenger carrying train namely Banihal-Baramulla Fast Passenger (DEMU) and Budgam-Baramulla DEMU was started in Jammu and Kashmir.
- Lumding-Silchar Broad gauge section inaugurated giving seamless BG connectivity to Barak Valley of Assam.
- Meghalaya came on the rail map with the flagging off the first ever train from Guwahati to Medipathar in Meghalaya.
- The Prime Minister laid the foundation for a new line to take rail connectivity to Mizoram's capital Aizwal. Tripura's capital Agartala came on the broad gauge rail map. Meter gauge is to be fully eliminated in North-East in near future.

Freight

- Merry- Go-Round system introduced to capture short lead traffic near steel plants and thermal power house.
- **Roll on – Roll off scheme** launched on Digha Rail Bridge over Ganges near Patna. Under this scheme loaded trucks would be moved on the flat wagons to avoid congested roads across Ganges.
- Automatic freight rebate scheme for traffic loaded in traditional empty flow direction introduced.

Safety in Rail Operations

- Working towards 'Zero Accident' Mission. TPWS (Train Protection and Warning System) is a safety Automatic Train Protection (ATP) system conforming to European Train Control System (ETCS) Level-1.
- TPWS trials at 160 Km/h were successfully conducted.

Miscellaneous

- Railways made successful arrangements to transport drinking water to drought-affected areas of Latur district in Maharashtra. Railways lent helping hand during the Nepal earthquake by providing 'Rail Neer' bottles and by transporting Nepali evacuees. Railways also helped during the J&K floods.
- Railways were in the forefront in extending help to the Indian nationals returning from Yemen. Railway weightlifters (5 women and 1 Men) represented India in the Commonwealth Youth; junior and senior weightlifting championship held at Pune where railway players won medals.

Roads

- Road as a mode of transport is a critical infrastructure for economic development of a country. It influences the pace, structure and pattern of development.
- The Ministry of Road Transport and Highways was formed in 2009 by bifurcating the erstwhile Ministry of Shipping, Road Transport and Highways into two independent ministries.
- The Ministry of Road Transport and Highways encompasses construction and maintenance of National Highways (NHs), administration of Motor Vehicles Act, 1988 and Central Motor Vehicles Rules

1989, formulation of broad policies relating to road transport, environmental issues, automotive norms, fixation of user fee rate for use of National Highways etc. besides making arrangements for cross-border movement of vehicular traffic with neighbouring countries.

- The capacity of national highways in term of handling traffic (passenger and goods) needs to keep pace with industrial growth. India has one of the largest road networks of over 52.32 lakh km. It comprises national highways, expressways, state highways, major district roads, other district roads and village roads with following length distribution:
 - National Highways / Expressway - 1,00,475 km
 - State Highways 1,48,256 km
 - Other Roads 49,83,579 km

Road Transport benefits

- Road transport is considered to be one of the most cost effective and preferred modes of transport, both for freight and passengers, keeping in view its level of penetration in populated areas. Thus, it is vital to the economic development and social integration of the country.
- Road transport has emerged as the dominant segment in India's transportation sector with a share of 4.8% in India's Gross Domestic Product (GDP) in 2011-12.
- Although national highways constituted 1.58% of the total road network in 2012, they carried 40% of the total road traffic. Easy availability, adaptability to individual needs and cost savings are some of the factors which go in favour of road transport.
- Road transport also acts as a feeder service to railway, shipping and air traffic. The total number of registered motor vehicles has been growing at 10.5% per annum during the period 2002 to 2012.
- The share of road traffic in total traffic movement by roads and railways has grown from 13.8 % of freight traffic and 15.4% of passenger traffic in 1950-51 to an estimated 64.5% of freight and 85.9% of passenger traffic respectively in 2011-12.

National Highways Authority of India

- National Highways Authority of India (NHAI) was constituted to develop, maintain and manage the national highways vested or entrusted to it by the Central Government.
- It became operational in 1995 with the appointment of the first Chairman. Presently, NHAI is headed by a Chairman with six full time members and four part time (ex-officio) members.
- The Authority has its field offices in the form of zonal offices, regional offices, project implementation units (PIUs) and corridor management units (CMU) spread all over the country.

Border Road Development Board

- It was set up in 1960 to co-ordinate the development of road communication in the border areas of the country, as inadequate communication facilities were seriously hampering defence preparedness and economic development of these areas.
- The Board has financial and other powers of a Department of Government and functions under over all control of Chairman. All sanctions of the Board are processed by the secretariat of the Board. MoRT&H provides fund to BRDB.

- Border Road Organisation (BRO) is the executive arm of the Secretariat, BRDB. An amount of 4207.56 crore was allocated during current year 2015-16, for the NH entrusted to state PWDs and nil amount for NHs entrusted to BRO.
- In addition to 4207.56 crore an amount of 50.00 crore from permanent bridge fee fund (PBFF) has been allocated for NHs entrusted to state PWD.

International Border Highways

- Connects Indian borders with neighboring countries
- Responsibility lies with Border road organization (BRO)
- Financed by World Bank

| | |
|-------|--|
| NH1 | Indo – Pak border (Delhi, Haryana, Punjab) |
| NH22 | Indo – China border (Haryana, Punjab, Himachal Pradesh) |
| NH35 | Indo – Bangladesh border (West Bengal) |
| NH39 | Indo – Bhutan border (Assam, Nagaland, Manipur) |
| NH28A | Indo – Nepal border (Bihar) |

Road Safety

- The National Road Safety Policy places emphasis on awareness regarding road safety issues, establishment of road safety information database, strengthening of driving licence system and training, better enforcement of road safety laws, etc.
- The important schemes on road safety operated by the Ministry include publicity measures and awareness campaign on road safety, scheme for setting up institutes for driving training, refresher training of drivers in unorganized sector and human resource development, national highways accident relief service scheme (NHARSS), setting up of inspection and certification centres and road safety and pollution testing equipment and so on.

National Highway Accident Relief Service Scheme

- This scheme entails providing cranes and ambulances to states/ UTs/NGOs for relief and rescue measures in the aftermath of accidents by way of evacuating road accident victims to the nearest medical aid centre and for clearing the accident site.
- So far, 347 ten tonnes cranes and 106 small/medium size cranes have been provided under the scheme. 509 ambulances have been provided to states/UTs/NGOs under the scheme.
- Further, the Ministry has also provided 140 advanced life support ambulances to 140 identified hospitals upgraded under the Ministry of Health and Family Welfare's Scheme 'establishment of an integrated network of Trauma Centres' along the golden quadrilateral, north-south and east-west corridors of the National highways by upgrading the trauma care facilities in 140 identified state government hospitals.

Recent projects

1. Bharatmala Project

- The Ministry has taken up detailed review of national highways network with a view to improving road connectivity to coastal/border areas, backward areas, religious places, tourist places,

construction/ rehabilitation/widening of about 1,500 major bridges and 200 railway over bridges (ROBs)/railway under bridges (RUBs) on NHs, improvement of newly declared NHs providing connectivity to district head quarters, connectivity improvement programme for Char-Dham (Kedarnath, Badrinath, Yamunotri and Gangotri in Uttarakhand) under proposed Bharatmala Pariyojana.

2. Setu Bharatam Programme

- The Setu Bharatam programme for building bridges for safe and seamless travel on national highways was launched in 2016.
- The Setu Bharatam programme is to make all national highways free of railway level crossings by 2019. This is being done to prevent the frequent accidents and loss of lives at level crossings.
- The Minister informed that 208 railway over bridges (ROB) railway under bridges (RUB) are to be built at the level crossings at a cost 20,800 crore as part of the programme.
- The aim is to carry out conditions survey and inventorization of all bridges on national highways by using mobile inspection units. 11 consultancy firms have been appointed for this purpose. Inventorization of 50,000 bridges had already been done.

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 ship building 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.
- **Major Ports are:** Kolkata Port, Paradip Port, New Mangalore Port, Cochin Port, Jawaharlal Nehru Port and Mumbai port.

Shipping Sector significance

- Shipping plays an important role in the economic development of the country, especially in India's international trade. The shipping industry also plays an important role in the energy security of the country, as energy resources, such as coal, crude oil and natural gas are mainly transported by ships.
- Further, during crisis situation, Indian shipping contributes to the uninterrupted supply of essentials and can serve as second line of defence.
- Approximately, 95 per cent of the country's trade by volume and 68 per cent in terms of value is being transported by sea.
- Shipping is an important indicator of both commodity and services trade of any country.

Coastal Shipping

- The share of coastal shipping in domestic cargo movement is around 7 per cent including just 0.5 per cent through inland waterways.

- The contiguous coastline of India covers 5400 kms and 2100 kms of shores on more than 1190 islands. Therefore, there is huge potential for coastal shipping in the country. Coastal shipping is best suited for bulk cargo.
- This transportation at present is regulated through a policy on cabotage enshrined in the Merchant Shipping Act, 1958. As an intermediate measure, a scheme of green channel clearance of coastal cargo and priority berthing for coastal vessels has been operationalized.
- Coastal vessels are exempted from lighthouses dues. 40 per cent rebates on coastal related charges are provided to all coastal vessels at major ports.

Maritime Development

- The maritime sector in India comprises ports, shipping, ship building and ship repair and inland water transport systems.
- India has 12 major ports and about 200 non major ports.
- Approximately 95 per cent of the country's trade by volume and 68 per cent by value is moved through maritime transport.
- 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.

Maritime Agenda

- In the Maritime Agenda 2010-20, a target of 3,130 MT port capacity has been set for the year 2020.
- More than 50 % of this capacity is to be created in the non-major ports as the traffic handling by these ports is expected to increase to 1,280 MT.
- The objective of the Maritime Agenda is not only creating more capacity but augmenting port performance.
- The proposed investment in major and non-major ports by 2020 is expected to be around 2,77,380 crore.
- Most of this investment has to come from the private sector including foreign direct investment (FDI). FDI up to 100 % under the automatic route is permitted for construction and maintenance of ports.
- Private-sector participation will not only increase investment in the ports infrastructure, but also efficiencies in ports through induction of latest technology and better management practices. Public funds will be mainly deployed for common use infrastructure facilities like deepening of port channels, rail and road connectivity, etc.

Port Sector

- During 2015, major and non-major ports in the country handled a total cargo of around 786 million tonnes (MT). The traffic grew by 1.4 % over the corresponding period of previous year.
- The 12 major ports handled a traffic of 447.05 MT during April - December 2015, representing an increase of about 3.18 % over the corresponding period of previous year.
- During 2015-16 upto December 2015, 12 major ports handled 447.05 MT of traffic as against 433.27 MT over the corresponding period of previous year.

Organisations

1. Shipping Corporation of India

- The Shipping Corporation of India Ltd. (SCI) was formed in 1961.
- Presently, the authorised capital of the company is 450.00 crore and the paid up capital is 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 % of the share capital and the balance is held by financial institutions, public and others (NRIs, corporate bodies etc.)

2. Cochin Shipyard

- Situated in the south western coast of India in Kochi, Kerala, Cochin Shipyard is the largest shipyard in the country.
- Incorporated in 1972, Cochin Shipyard can build ships up to 1,10,000 DWT and repair up to 1,25,000 DWT.
- The yard is also a leading ship-repairer of the country and has repaired more than 1,200 ships of all types.
- Considering its achievement, the Government granted it Miniratna status in 2008.

3. 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.

Inland Water Transport

- Various projects for development and maintenance of national waterways 1, 2, 3, 4 & 5 were implemented by Inland Waterways Authority of India (IWAI) for providing / maintaining Inland Water Transport (IWT) infrastructure as per requirement. Implementation of Jal Marg Vikas Project for capacity augmentation on NW-1 from Haldia to Allahabad (1620 km) has commenced with estimated cost of 4200 crore.

| Major Inland Waterways by Inland waterways authority of India (IWAI) | |
|--|--|
| Inland Waterway 1 | Allahabad-Haldia stretch of Ganga-Bhagirathi-Hooghly river system |
| Inland Waterway 2 | Sadiya-Dhubri stretch of the Brahmaputra River (Assam) |
| Inland Waterway 3 | Kottapuram-Kollam stretch of the West Coast Canal, Champakara Canal and Udyogmandal Canal (Kerala) |

| | |
|--------------------------|--|
| Inland Waterway 4 | Kakinada-Pondicherry along Godavari and Krishna River system |
| Inland Waterway 5 | Talcher – Paradip (Odisha) |
| Inland Waterway 6 | Lakhipur to Bhanga on the River Barak (Assam – Proposed) |

Sagarmala Project

- The National Perspective Plan for the Sagarmala programme was put in place in 2016. In all, 173 projects will be completed by 2019-20.
- The implementation of the projects identified under the National Perspective Plan, at an estimated investment of 41 crore, will be taken up starting FY 16-17 by the relevant ports, state governments/ maritime boards, central ministries, mainly through private or PPP mode.
- Sagarmala Development Company (SDC) is to be set up by the Ministry of Shipping to provide support to the project SPVs and funding support for the residual projects under Sagarmala.
- The Sagarmala Consultants have projected that the identified industrial cluster projects will enable creation of approximately 1 crore new jobs, including 40 lakh direct jobs in the next 10 years.

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.
- The Ministry also administratively controls the institution of Commission of Railway Safety, which is responsible for the safety in rail travel and operations in terms of the provisions of the Railways Act.
- 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.
- 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 and 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. Apart from Air India, Indian Airlines, Alliance Air and Air India Charters Ltd.,
- There are at present six private scheduled operators, viz., Jet Airways (India) Ltd., Jetlite Airlines, Go Airlines (India) Pvt. Ltd., Spicejet Ltd., Paramount Airways Pvt. Ltd., and Inter Globe Aviation Ltd. (IndiGO) operating on the domestic sector providing a wide choice of flights and connectivity to various parts of India.

Organisations

1. Bureau of Civil Aviation

- The Bureau of Civil Aviation Security (BCAS) was set up in January, 1978. 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 preembarkation security and anti-sabotage measures in respect of civil flights and ensuring their compliance through regular inspections and security audits.
- The BCAS has its headquarters in New Delhi and at present has four regional offices located in Delhi, Mumbai, Kolkata and Chennai airport.
- BCAS is headed by Commissioner of Security (Civil Aviation) who is the appropriate authority to ensure development, maintenance, updating and implementation of National Civil Aviation Security programme for India and fulfill all international obligations in this context.

2. Indira Gandhi Rashtriya Uran Akademi

- It is an Autonomous Body under the control of the Ministry.
- 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 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 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.

3. 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.
- About 2.8 million nautical square mile area of the national airspace covering the Bay of Bengal and the Arabian Sea has been assigned to AAI for provision of Air Traffic Services.

4. National Flying Training Institute

- Airport Authority of India (AAI) in collaboration with CAE, Canada has set up a Joint Venture Company in the name of National Flying Training Institute Private Limited (NFTIPL).
- This Institute is located at Gondia in Maharashtra. AAI holds 49% equity share capital while CAE holds 51 per cent share capital in this joint venture company.

5. Rajiv Gandhi National Flying Training Institute

- Rajiv Gandhi National Flying Training Institute (RGNFTI) became operational in September, 2008.
- The objective of setting up this Institute is to provide qualified and well trained pilots.

6. 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'.
- The Hotel Corporation of India Limited (HCI) is a public limited company wholly owned by Air India Limited and was incorporated in 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.

7. Pawan Hans Helicopters

- Pawan Hans Helicopters Limited (PHHL) was incorporated in 1985 and commenced its operations within one year, 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 Government of India holds 78.5% shares and the balance is held by ONGC. PHHL provides helicopter support services to several state governments namely, Arunachal Pradesh, Punjab, Meghalaya, Tripura, Sikkim, Jharkhand, Lakshadweep and Andaman and Nicobar Islands.

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.
- 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.
- AAI is undertaking upgradation and modernization of 35 non-metro airports in the country in a time bound manner as per government's decision.

Greenfield Airports

- 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 (PPP) at a revised cost of 2,068 crore.
- Government of Karnataka and AAI together hold 26 per cent equity and the strategic joint venture partners hold the balance 74 per cent. AAI's investment in the equity is capped at 50 crore.
- A consortium led by Siemens, Germany with Unique Zurich, Switzerland and Larsen and Toubro, India Limited, as other members has been chosen as the strategic Joint Venture Partners.
- The airport was commissioned in 2008. Rajiv Gandhi International Airport, 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.

Greenfield Policy for 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.

GS SCORE

10

WATER RESOURCES

The Ministry of Water Resources, River Development and Ganga Rejuvenation lays down policies and programmes for development and regulation of the water resources of the country. It covers sectoral planning, coordination, policy guidelines, technical examination and techno-economic appraisal of projects, providing central assistance to specific projects, facilitation of external assistance and assistance in the resolution of interstate water disputes.

National Water Mission

- With a view to address Climate Change and the related issues, the National Action Plan on Climate Change (NAPCC) has been prepared by the Government of India, which laid down the principles and has identified the approach to be adopted to meet the challenges of impact of climate change through eight National Missions.
- National Water Mission is one of the missions under NAPCC.
- The main objective of the National Water Mission is “conservation of water, minimizing wastage and ensuring its more equitable distribution both across and within States through integrated water resources development and management”.
- The five identified goals of the Mission are:
 1. Comprehensive water data base in public domain and assessment of impact of climate change on water resource.
 2. Promotion of citizen and state action for water conservation, augmentation and preservation.
 3. Focused attention to vulnerable areas including over-exploited areas.
 4. Increasing water use efficiency by 20 %.
 5. Promotion of basin level integrated water resources management. Various strategies for achieving the goals have been identified which lead to integrated planning for sustainable development and efficient management with active participation of the stakeholders.

Main Activities undertaken by the National Water Mission

- **Comprehensive water data base in public domain:** India-WRIS (Water Resource Information System), a portal for providing information on water resources has been developed by Central Water Commission. All the data pertaining to surface water and ground water are made available at India-WRIS.
- **NWM web portal:** An independent Web Portal of NWM has been launched. The portal aims at providing all the information relating to water resources, organisations and their activities on different aspects of water resources at one point.
- **Assessment of Impact of Climate Change on water resources:** NWM has identified eight river basins for study of impact of climate change in association with research institutes like IITs, NITs, IISc and NIH under the R and D scheme of the Ministry.

- **Convention on Participatory Irrigation Management (PIM):** The National Convention of Water Users Associations (WUA) was held at CSMRS, New Delhi in 2014. The main objective of PIM regional conventions was to promote equitable distribution of water, creating awareness about conservation of water, minimizing wastage, depletion of ground water table and adopting onfarm water efficient techniques etc. in the command areas.

National Water Policy, 2012

- It was adopted by the National Water Resources Council in 2012 has made several recommendations for conservation, development and improved management of water resources in the country.
- Recommendations:
 - Emphasis on the need for a National Water Framework Law.
 - Comprehensive legislation for optimum development of inter-state rivers and river valleys.
 - Evolving a system of benchmarks for water uses for different purposes to ensure efficient use of water.
 - Setting up of Water Regulatory Authority by each state.
 - Incentivizing recycle and reuse of water are some of the important recommendations in the Policy.
 - Emphasis on community participation in management of water resources projects and services.
 - Incentivizing water saving in irrigation through methods like aligning cropping pattern with natural resource endowments, micro irrigation, automated irrigation operation, evaporation-transpiration reduction etc.
 - Undertaking conservation of rivers, river corridors, water bodies and infrastructure in a scientifically planned manner through community participation.
 - Arresting declining ground water levels in over-exploited areas.

National Water Resources Council

- It was set up by the Government of India in March, 1983.
- **Chairman** - The Prime Minister.
- **Members** - Union Minister of Water Resources, River Development and Ganga Rejuvenation is the Vice-Chairman of the Council. The Union Minister of State for Water Resources, concerned Union Ministers/Ministers of State, and Chief Ministers of all States & Lieutenant Governors/Administrators of the Union Territories are the Members.
- **Secretary of the Council** - Secretary, Ministry of Water Resources, River Development & Ganga Rejuvenation.

National Water Board

- The Government of India constituted it in September, 1990 to review the progress achieved in implementation of the National Water Policy and to report the progress to the National Water Resources Council from time to time.
- The Secretaries of the concerned Union Ministries, Chairman, Central Water Commission, Chief Secretaries of all states/union territories are its Members and Member (Water Planning & Projects), Central Water Commission is the Member Secretary of the Board.

- A National Forum of Water Resources and Irrigation Ministers of states was constituted by the Ministry with the following terms of reference:
 1. To deliberate on various reforms needed in the water resources sector from time to time and attempt towards evolving consensus at the national level; and
 2. To provide appropriate platform for sharing of ideas and facilitating support to new and innovative ideas and initiatives for better water governance proposed by the Central and/or state governments.
- It is a permanent forum of twelve Members with the provision that half of its Members would retire after every two years and would be replaced by the Ministers from states / union territories from similar regions in the country.
- Thus, a member shall have a tenure of four years except for six members from the initial constitution who would have a tenure of only two years.

National Mission for Clean Ganga

- “Namami Gange” Programme integrates the efforts to clean and protect the river Ganga in a comprehensive manner with a budget outlay of 20,000 crores for next 5 years.
- To speed up progress, the Centre has decided to take over 100 per cent funding of various activities/ projects and plans to provide for operation and maintenance of the assets for a minimum 10 year period.
- The primary focus of the programme is on pollution abatement and by 2020; the gap in treatment capacity for 118 priority towns located along Ganga will be addressed.
- Accordingly an integrated Ganga Conservation Mission called “Namami Gange” has been proposed with a sum of Rs. 2,037 crores. In addition a sum of Rs. 100 crores has been set aside for development of Ghats and beautification of river fronts at various places.
- Identified grossly polluting Industries have been directed to move towards implementing zero liquid discharge and installing real time effluent monitoring stations.
- Intensive afforestation drive has also been initiated along the banks of the river with focus on regeneration of native/medicinal species and providing comprehensive intervention that leads to the overall objective of cleaning river Ganga by reducing sediment load, recharging ground water and reducing non-point source pollution.

Jal Kranti Abhiyan

- The Ministry celebrated Jal Kranti Abhiyan during the year 2015-16 to consolidate water conservation and management in the country through a holistic approach involving all stakeholders, making it a mass movement.
- The objectives of Jal Kranti Abhiyan are as follows:
 1. Strengthening grass root involvement of all stakeholders including Panchayati Raj Institutions and local bodies in the water security and development schemes.
 2. Encouraging the adoption/utilization of traditional knowledge in water resources conservation and its management.
 3. Utilizing sector level expertise from different levels in government, NGO's, citizens etc.
 4. Enhancing livelihood security through water security in rural areas.

- The activities under Jal Kranti Abhiyan are as:
 - Jal Gram Yojana.
 - Development of model command area.
 - Pollution abatement.
 - Mass awareness programme and other activities.

Pradhan Mantri Krishi Sinchayee Yojana

- It was aimed to enhance physical access of water on farm and expand cultivable area under assured irrigation, improve on farm water use efficiency, introduce sustainable water conservation practices etc.
- The main objective of the scheme are as:
 - (a) Achieve convergence of investments in irrigation at the field level.
 - (b) Enhance the physical access of water on the farm and expand cultivable area under assured irrigation (Har Khet Ko Pani).
 - (c) Enhance the adoption of precision-irrigation and other water saving technologies (more crops per drop).
 - (d) Enhance recharge of aquifers and introduce sustainable water conservation practices.
 - (e) Ensure the integrated development of rainfed areas using the watershed approach towards soil and water conservation regeneration of ground water, arresting runoff, providing livelihood options and other NRM activities.
 - (f) Promote extension activities relating to water harvesting, water management and crop alignment for farmers and grass root level field functionaries.
 - (g) Explore the feasibility of reusing treated municipal water for peri-urban agriculture.
 - (h) Attract greater private investments in precision irrigation. Ministry of WR, RD & GR has been entrusted with two main components of PMKSY e.g. AIBP and PMKSY-HKKP.

Command Area Development and Water Management

- **Objective:** - To enhance water use efficiency and production and productivity of crops per unit of land and water for improving socio- economic condition 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.
- **Coverage:-** Initially, 60 major and medium irrigation projects were taken up under the CAD Programme, covering a culturable Command Area (CCA) of about 15 million hectare.
- The Programme was restructured and renamed as Command Area Development and Water Management (CAD&WM) Programme from 2004.
- The Programme is being implemented under Pradhan Mantri Krishi Sinchai Yojana (PMKSY) - **Har Khet Ko Pani** - from 2015-16.
- **Programme Components:** -

- survey, planning and designing of on-farm developments (OFD) works
- on farm development (OFD) works comprising construction of field channels, land levelling and micro-irrigation
- construction of field, intermediate and link drains for letting out surplus water
- correction of system deficiencies above the outlet up to distributaries of 4.25 cumec (150 cusec) capacity
- reclamation of waterlogged area including use of location specific biodrainage techniques to supplement conventional techniques for reclamation of waterlogged area
- one time functional and infrastructure grants to Water Users' Associations;
- **The following broad provisions have been made in the Programme during XII Five Year Plan:**
 - (i) To promote water use efficiency in irrigation, financial assistance is provided to the states for development of infrastructure for micro-irrigation to facilitate use of sprinkler/drip irrigation as an alternative to construction of field channels.
 - (ii) Inclusion of any new project/command is to be governed as per the approved District Irrigation Plan (DIP)/State Irrigation Plan (SIP), except for the year 2015-16.
- Ongoing CAD&WM projects should also be part of DIP/SIP. Under the Programme, there is a thrust on Participatory Irrigation Management (PIM) and, therefore, following features have been made mandatory for its implementation:
 - I. Central assistance to states has been linked to enactment of PIM legislation. Till this is done, alternative arrangements have to be in place for formation and empowerment of Water Users' Associations (WUAs);
 - II. WUAs have to be in position before Project Components are taken up so that beneficiaries are involved in the implementation of Programme activities since inception;
 - III. Central assistance for correction of system deficiencies up to distributaries of 4.25 cumec (150 cusec) capacity has been linked to formation of Distributaries Committees and handing over of the distributaries to such Committees for maintenance in future.
- **Programme Implementation:** The Command Area Development and water management wing of the Ministry of Water Resources coordinate and monitor the implementation of the Command Area Development Programme at the national level.
- **Financing Pattern:** The funding pattern for all the programme components is on 50:50 sharing basis between the Centre and the state

Reclamation of Water Logged Areas

- Ministry of Water Resources introduced a component of Reclamation of Water Logged Areas under the Centrally Sponsored Command Area Development Programme from 1996.
- Under PMKSY (Har Khet Ko Pani), convergence is also to be explored in case of earth works. So far 823 schemes of 9 states, namely, Bihar, Gujarat, Madhya Pradesh, Jammu & Kashmir, Karnataka, Kerala, Maharashtra, Odisha and Uttar Pradesh have been approved for reclamation of 122.53 thousand hectare (th. ha) water logged area.

Participatory Irrigation Management

- National Water Policy stresses participatory approach in water resources management. It has been recognized that participation of beneficiaries will help greatly in the optimal upkeep of irrigation system and effective utilization of irrigation water.
- The participation of farmers in the management of irrigation would include transfer responsibility for operation and maintenance and also collection of water charges to the Water Users' Association in their respective jurisdiction from 2008-09.
- One time functional grant @ 1200/-per hectare to be shared by the Centre, state and farmers in the ratio of 45:45:10 respectively is being paid to outlet level Water Users Associations' as incentive, the interest from which is to be used for maintenance.

Flood Management

- Rashtriya Barh Ayog (RBA) had estimated in 1980, total flood-prone area in the country as 40 million hectare (mha) which was revised further to 45.64 mha by the Working Group on Flood Management set up by the Planning Commission for the 11th Five-Year Plan, based upon the information furnished by the state governments.
- Government of India has also been assisting the flood prone states in flood management and anti-erosion works for critical reaches, by providing financial assistance to the state governments through a number of centrally sponsored schemes.

Ganga Flood Control Commission

- GFCC, a subordinate office of MoWR, RD & GR with its headquarter at Patna, was created in 1972 to deal with floods and its management in Ganga Basin states as secretariat and executive wing of Ganga Flood Control Board.
- Headed by Union Minister of Water Resources, chief ministers of basin states or their representatives and members, Planning Commission, Chairman, GFCC acts as the Member-Secretary of the Board.
- Ganga Flood Control Commission (GFCC) carries out several activities as outlined here:
 - Preparation and updating of comprehensive plan of flood management.
 - Technoeconomic appraisal of flood management schemes.
 - Assessment of adequacy of waterways under road and rail bridges.
 - Framing of guidelines for quality control and maintenance
 - Monitoring of all flood management schemes funded by Central Govt. and important flood management schemes funded by state governments.
 - Documentation and Dissemination of recommendations of special studies.
 - Performance evaluation of completed Flood Management Schemes.

Central Ground Water Board

- A Multidisciplinary scientific organization with a mandate to: "develop and disseminate technologies, monitor and implement national policies for the scientific and sustainable development and management of India's ground water resources including their exploration, assessment, conservation, augmentation, protection from pollution and distribution based on principles of economic and ecological efficiency and equity".

- Major activities of the Board include:
 - Management of ground water, exploratory drilling, monitoring of ground water levels and water quality through a network of ground water observation wells.
 - Implementation of demonstrative schemes for artificial recharge and rainwater harvesting for recharge augmentation.
 - Periodic assessment of ground water resources of the country etc.
- The Board also takes up special studies on various aspects of ground water such as ground water depletion, sea water ingress, ground water contamination, conjunctive use of surface & ground water, water balance etc.
- CGWB also organizes various campaigns and training programmes with an objective to create awareness regarding water conservation, rainwater harvesting, artificial recharge, etc.

Brief details of the major activities are as follows:

1. Aquifer Mapping and Formulation of Aquifer Management Plan:

- Aquifers are natural rock formations which can store and economically yield water. In XII Plan CGWB has taken up the National Project on Aquifer Management (NAQUIM) to facilitate identification, delineation, characterization and effective management of aquifers to ensure sustainability of ground water resources.
- Major objectives of the project are:
 - i) Delineation of aquifers in 3D on 1:50,000 scale in priority areas (Over- Exploited, Critical and Semi critical categories of assessment units as well as water quality and other problem/ vulnerable areas).
 - ii) Detailed characterization of aquifers including quality of ground water.
 - iii) Formulation of aquifer management plans. The project also envisages a participatory approach involving stakeholders at grassroots level for ground water management at local levels. The preparation of Aquifer Map and Aquifer management has been plan completed for an area 2.28 lakh.sq.km till March2016.

2. Water Supply Investigations:

- The Board carries out short-term water supply investigations for Government Agencies to help them in augmenting their water supply.
- Normally minimum financial implications are charged from all other departments except Defense. The Board has carried out 221 investigations up to March, 2016.

3. Demonstrative Projects on Artificial Recharge to Groundwater and Rainwater Harvesting:

- CGWB has implemented demonstrative projects on artificial recharge to groundwater and rain water harvesting in Andhra Pradesh, Arunachal Pradesh, Bihar, Chhattisgarh, Delhi, Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, West Bengal and Chandigarh, during XI Plan.

4. Central Ground Water Authority:

- Central Ground Water Board was constituted as Central Ground Water Authority (CGWA) under sub-Section (3) of Section 3 of the Environment (Protection) Act, 1986 for the purpose of regulation and control of ground water management and development in the country.
- As part of streamlining the regulatory function of Central Ground Water Authority (CGWA), district magistrates/deputy commissioners of revenue districts have been appointed as authorized officers for grant of permission for extraction of ground water for drinking/domestic uses in notified areas.

5. Ground Water Development:

- CGWB carries out periodic assessment of ground water resources jointly with the state ground water departments.

6. Rajiv Gandhi National Ground Water Training and Research Institute:

- The Rajiv Gandhi National Ground Water Training and Research Institute (RGNGWTRI) located at Raipur, Chhattisgarh caters to the training requirements of Central Ground Water Board and other Central and state organizations, academic institutes, NGOs, etc.

7. Hydrology Project-II:

- Under the World Bank funded Hydrology Project-II, pilot projects on aquifer mapping were taken up in six different Hydrogeological terrains in the country covering parts of Bihar, Rajasthan, Maharashtra, Karnataka and Tamil Nadu.
- CSIR-National Geophysical Research Institute, Hyderabad was engaged as a consultant for aquifer characterization using advanced geophysical techniques and to establish the efficacy of various geophysical techniques for different Hydrogeological terrains.

Central Water Commission

- Central Water Commission is headed by a Chairman, with the status of an Ex-Officio Secretary to the Government of India.
- The work of the Commission is divided among 3 wings namely,
 - I. Designs and Research Wing (D&R).
 - II. Water Planning and Projects Wing (WP&P).
 - III. River Management Wing (RM).
- Allied functions are grouped under respective wings and each wing is placed under the charge of a full-time Member with the status of an ex- Officio Additional Secretary to the Government of India.
- There is a separate human resources management Unit headed by a Chief Engineer, to deal with human resources management and development, financial management, training and administrative matters of the Central Water Commission.
- National Water Academy, the training institute of CWC, is located at Pune for training of Central and state in-service engineers, NGO's etc and functions directly under the guidance of the Chairman.

Functions:

- CWC is charged with the general responsibility of initiating, coordinating and furthering in consultation with the State Governments concerned, schemes for the control, conservation and utilization of water resources in the respective state for the purpose of flood management, irrigation, drinking water supply and water power generation.
- The Commission, if so required, can undertake the construction and execution of any such scheme.
- In exercise of these responsibilities the functions of CWC include:
 - To carry out techno-economic appraisal of irrigation, flood control and multi-purpose projects proposed by the state governments;
 - To collect, compile, publish and analyse the hydrological and hydro meteorological data relating to major rivers in the country, consisting of rainfall, run-off and temperature, etc;
 - To collect, maintain and publish statistical data relating to water resources and its utilization including quality of water throughout the country;
 - To provide flood forecasting services to all major flood prone inter-state river basins of the country;
 - Monitoring of selected major and medium irrigation projects, to ensure the achievement of physical and financial targets. Monitoring of projects under Accelerated Irrigation Benefit Program (AIBP), and Command Area Development(CAD) programme, RRR and FMP has also been included in its field of activities;
 - To undertake construction work of any river valley development scheme on behalf of the Government of India or state government concerned;
 - To conduct and coordinate research on the various aspects of river valley development schemes such as flood management, irrigation, navigation, water power development, etc., and the connected structural and design features;
 - To conduct studies on dam safety aspects for the existing dams and standardize related instrumentation for dam safety measures;
 - To carry out morphological studies to assess river behaviour, bank erosion/coastal erosion problems and advise the Central and state governments on all such matters.

Major Activities**a) Hydrological Observations**

- Central Water Commission is operating a network of 954 hydro-meteorological observation stations throughout the country on all major river basins to observe (i) water level (gauge), (ii) discharge, (iii) water quality, (iv) silt besides (v) selected meteorological parameters including snow observations at key stations.
- The data so collected is utilized for planning and development of water resources projects, climate change studies, water availability studies, flood / inflow forecasting, examination of international and inter-state issues, river morphological studies, inland waterway development, reservoir siltation studies and research related activities, etc.

b) Water Quality Monitoring

- Central Water Commission is monitoring water quality at 396 key locations covering all the major river basins of India.
- CWC is maintaining a three tier laboratory system for analysis of the physico-chemical parameters of the water.
- The level- I laboratories are located at 370 field water quality monitoring stations on major rivers of India where physical parameters such as temperature, colour, odour specific conductivity, electrical conductivity, total dissolved solids, pH and dissolved oxygen of river water are observed.
- There are 18 level-II laboratories located at selected division offices throughout India to analyze 25 physico-chemical characteristics and bacteriological parameters of water.
- 5 level-III / II+ laboratories are functioning at Varanasi, Delhi, Hyderabad, Coimbatore and Guwahati where 41 parameters including heavy metals / toxic parameters and pesticides are analyzed.

c) Flood Forecasting

- There are 187 flood forecasting stations, of which 150 are level forecasting and 37 are inflow forecasting stations on major dams/barrages.
- On an average, about 6000 forecasts are being issued during flood season every year by the Central Water Commission.
- Normally, these forecasts are issued 12 to 48 hours in advance, depending upon the river terrain, the locations of the flood forecasting sites and base stations.

d) Survey and Investigation

- CWC is carrying out surveys and investigations for preparation of detailed project reports (DPRs) in the NE region, Sikkim, Uttarakhand, Bihar and J&K on the request of the respective states for development of water resources potential for irrigation, hydropower and other uses.
- The projects which are presently under investigation are KalezKhola HE Project (Sikkim), Rukni and Sonai Irrigation Project (Assam), Kali Khola HE Project (Sikkim), Tarum Chu HE Project(Sikkim), Twalang HE Project(Mizoram).

e) Project Appraisal

- One of the important activities assigned to Central Water Commission is techno-economic appraisal of irrigation, flood control and multi-purpose projects proposed by state governments. This task is performed and coordinated by Project Appraisal Organisation (PAO).

f) Project Monitoring

- A three tier system of monitoring at Centre, state and project level was introduced in 1975.
- At the Central level, this work was entrusted to CWC. The main objective of monitoring is to ensure the achievement of physical and financial targets and achieve the targets of creation of irrigation potential.

g) Monitoring of Glacial Lakes

- CWC is monitoring glacial lakes/water bodies in the Himalayan Region of Indian river basins on monthly basis during monsoon season from 2011 onwards.

h) Hydrological Studies

- Hydrological studies form the backbone of a water resources project. The success of a project is largely governed by the hydrological inputs.
- The inputs at Detailed Project Report (DPR) or Pre-Feasibility (PFR) stage are made available in the form of: (i) water availability/yield studies; (ii) design flood estimation; (iii) sedimentation studies; and (iv) diversion flood studies.
- In addition to above, special studies in respect of review of flood hydrology for existing projects as per dam safety guidelines is also carried out.

i) Design Consultancy

- Central water Commission is actively associated with design of majority of the mega water resources projects in India and neighbouring countries viz. Nepal, Bhutan, Afghanistan, Myanmar, Sri Lanka and African countries by way of design consultancy or in the technical appraisal of the projects.

j) Dam Rehabilitation & Improvement Project

- DRIP is the World Bank assisted project with the provision of rehabilitation of about 225 large dams in the seven participating states (namely Jharkhand, Karnataka, Kerala, Madhya Pradesh, Odisha, Tamil Nadu and Uttarakhand) along with institutional strengthening component for participating states and Central Water Commission.
- It had become effective from 2012 for implementation over a period of six-years.
- The Dam Safety Organisation, CWC has received ISO 9001: 2008 certification for its quality management systems from the Bureau of Indian Standards during the year 2015.
- Central Water Commission also received “**CBIP Award 2016**” for promoting health and safety of large dams under DRIP.

k) National Register of Large Dams

- Maintained by CWC, there are 5174 large dams in the country. Out of this, 4861 large dams have been completed and 313 large dams are under construction.

l) Water Resource Information System

- CWC and ISRO have jointly developed India-WRIS in 2010. Subsequently, four versions of the website of India-WRIS have been launched.
- The information system contains several GIS layers on water resources projects, thematic layers like major water bodies, land use/land cover, wastelands, land degradation etc., environmental layers as well as infrastructure and other administrative layers.

m) Training and Capacity Building

- Central Water Commission offers training to water sector professionals every year. These training are organised at National Water Academy (NWA), CWC Headquarter and field offices of CWC.
- The National Water Academy, CWC is a centre of excellence for imparting training on all facets of Water Resources Development and Management covering the different areas of planning, design, evaluation, construction, operation and monitoring of water resources projects, and also the application of high-end technology in water sector.

- The programs at NWA are open to all stakeholders of water sector including those from NGOs, media, private sector organisations, academic institutions, PSUs, individuals and foreign nationals also.

National Water Academy

- NWA is an institute established by the Ministry under Central Water Commission at Khadakwasla, Pune.
- The objective of NWA is to function as 'Centre of Excellence' in training and capacity building for all stakeholders on various aspects of water resources planning, development and management and to develop institutional capability at the national level for imparting training in new emerging technologies in water resources sector on continued basis.

Central Soil and Materials Research Station

- Central Soil and Materials Research Station (CSMRS), New Delhi, is a premier organization in the country that deals with the field explorations, laboratory investigations, and research in the field of geotechnical engineering and civil engineering materials, particularly for construction of river valley projects, and safety evaluation of existing dams.

National Water Development Agency

- The NWDA was established in July, 1982 by the Government of India as a registered Society under the Societies Registration Act, 1860 under the MoWR, RD & GR to study the feasibility of the links under peninsular component of National Perspective Plan.
- The NWDA is fully funded by the Government of India through grant-in-aid. Subsequently in 1990-91, NWDA Society resolved to take up the studies of the Himalayan Component also.
- The Agency functions with the following main objectives:
 - To carry out detailed surveys and investigations of possible reservoir sites and interconnecting links.
 - 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;
 - To prepare pre-feasibility / feasibility / detailed project reports of the intra-State links as may be proposed by the states.
 - 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

- Established in 1978 as an autonomous organization under MoWR, RD & GR is a premier R&D institute in the country to undertake, promote and coordinate basic, applied and strategic research on all aspects of hydrology and water resources development.
- The Institute has its headquarters at Roorkee (Uttarakhand).
- To carry out field related research covering different regions of the country, the Institute has four regional centres located at Belgaum, Jammu, Kakinada and Bhopal, and two centres for flood management studies at Guwahati and Patna.

- The objectives of the Institute include:
 - To undertake, aid, promote and coordinate systematic and scientific work on all aspects of hydrology;
 - To cooperate and collaborate with other national foreign 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 do all other such things as the Society may consider necessary, incidental or conducive to the attainment of the objectives for which the Institute has been established.
- To fulfil these objectives, the Institute has established state-of-art laboratory facilities in the area of nuclear applications in hydrology, water quality, soil water, remote sensing and GIS applications, snow and glacier, numerical groundwater modelling and hydrological instrumentation.

National Projects Construction Corporation Limited (NPCC)

- It was established in 1957 as a premier construction company to create necessary infrastructure for economic development of the country.
- NPCC Ltd comply with Quality management requirements of ISO 9001-2008 for execution of civil works for thermal & hydro-electric projects', river valley projects, industrial structures, project management consultancy services for buildings, housings, roads, bridges and infrastructure projects.
- NPCC Ltd. has been conferred with “**Udyog Ratan Award 2015**” to CMD and “**Excellence Award 2015**” by Institute of Economic Studies. It has also been assigned a credit rating of A+ by ICRA.
- NPCC is gearing up to achieve greater heights for “Mini Ratna” status.

WAPCOS (Water and Power Consultancy Services) Limited

- WAPCOS Limited is a “MINI RATNA-I” Public Sector Enterprise under the aegis of this Ministry.
- Incorporated in 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 complies with the Quality Assurance requirements of ISO 9001:2008 for Consultancy Services in Water Resources, Power and Infrastructure Development Projects.

Policies and interventions within this sector aim to achieve human development while infusing sustainability to the development process as a whole. It takes the notion of development to the level of providing spiritual and cultural fulfillment to the people.

It is driven by the objective of providing choice to the individuals ranging across various realms. Investing in social sector can create enabling freedom for individual and social groups.

Welfare of Scheduled Castes

Statutory Framework

The Constitution contains several provisions in the nature of safeguards for the Scheduled Castes:

The following two Acts specifically aim at curbing (1) untouchability and (2) 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.

Protection of Civil Rights:

In pursuance of Article 17 of the Constitution of India, 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.

Scheduled Castes and the Scheduled Tribes (Preventions of Atrocities) Act, 1989:

- This legislation aims at preventing commission of offences by persons other than Scheduled Castes and Scheduled Tribes against Scheduled Castes and Scheduled Tribes.
- Comprehensive Rules under this Act, titled "Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Rules, 1995 were notified in the year 1995, which, inter-alia, provide norms for relief and rehabilitation. These Rules had not been amended thereafter.

Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Amendment Act, 2015

- High incidence of occurrences of offences against members of SCs and STs also indicated that the deterrent effect of the PoA Act was not adequately felt by the accused.
- It was, therefore, considered appropriate to strengthen the Act and make the relevant provisions of the Act more effective. Based on the consultation process with all the stakeholders, amendments in the PoA Act were proposed to broadly cover five areas.

National Commission for Schedule Caste:

Set up under Article 383 of the constitution, which is responsible for monitoring the safeguards provided for Scheduled Castes and also to review issues concerning their welfare.

Functions of the NCSC as enumerated in the Article 338(5) of the Constitution are:-

- To investigate and monitor all matters relating to the safeguards provided for the Scheduled Castes under the Constitution or under any other law for the time being in force or under any order of the Government and to evaluate the working of such safeguards;
- To inquire into specific complaints with respect to the deprivation of rights and safeguards of the scheduled castes;
- To participate and advise on the planning process of socio-economic development of the Scheduled Castes and to evaluate the progress of their development under the Union and any State;
- To present to the President, annually and at such other times as the Commission may deem fit, reports upon the working of those safeguards;
- To make in such reports, recommendations as to the measures that should be taken by the Union or any State for the effective implementation of those safeguards and other measures for the protection, welfare and socio-economic development of the scheduled castes; and
- To discharge such other functions in relation to the protection, welfare and development and advancement of the scheduled castes as the President may, subject to the provisions of any law made by Parliament, by rule specify.

Educational Development Schemes:

- a) **Pre-Matric Scholarships for Children of those engaged in Unclean Occupation:** Under the Scheme, the Children of families engaged in unclean occupations such as scavenging, flaying and tanning are assisted to pursue education up to matriculation level. The scholarship is provided through State Governments and Union Territory Administrations.
- b) **Pre-Matric Scholarship Scheme for SC students:** The Scheme of Pre-Matric Scholarship Scheme for SC students has been introduced in 2012 with an objective of the scheme to support parents of SC children for education of their wards studying in classes IX and X so that the incidence of drop-out, especially in the transition from the elementary to the secondary stage is minimized. For being eligible under this Scheme, the student should belong to Scheduled Caste and her/ his Parent/ Guardian's income should not exceed Rs. 2 lakh per annum.
- c) **Post-Metric Scholarships for SC Students:** The scheme provides financial assistance to Scheduled Caste students for pursuing studies beyond matriculation in recognized institutions. The assistance includes maintenance allowance for various categories of courses, reimbursement of compulsory non-refundable fee charged by the institutions and other allowance such as study tour charges, thesis typing/ printing charges and book grant.
- d) **National Overseas Scholarship and Passage Grants for Higher Education for SCs:** Under this scheme assistance is provided to meritorious students for pursuing higher studies of Masters level courses, Ph. D and Post Doctoral research Programmes abroad in specified fields like Engineering, Technology and Science only.
- e) **Upgradation of Merit for SC Students:** The main objective of the scheme is to upgrade the merit of Scheduled Caste students by providing them with facilities for all-round development through education in residential schools.
- f) **Coaching and Allied Scheme for Weaker Sections including SCs, OBCs and Minorities:** The scheme aimed to equip aspiring students for preparing them for various competitive exams. Aspiring students take their guidance and coaching from the centers run by State Governments/UTs, Universities and NGOs.

- g) **Central Sector Scholarship Scheme of Top Class Education for Scheduled Caste Students:** Under the Scheme, SC students who secure the admission in the notified institutions are provided full financial support to meet the requirements of Tuition fees, living expenses, books and computer.

Economic Development Schemes:

- a) **Special Central Assistance:** Scheme has started in 1980, under which 100 per cent grant is given to the states/UTs, as an additive to their Scheduled Castes Sub Plan (SCSP). The main objective is to give a thrust to family oriented schemes of economic development of SCs below the poverty line.
- b) **National Scheduled Castes Finance and Development Corporation:** The National Scheduled Castes Finance and Development Corporation (NSFDC) provides concessional finance for employment generation to the persons belonging to the Scheduled Castes living below double the poverty line (i.e. Rs. 40,000 p.a. in rural areas and Rs. 55,000 p.a. in urban areas), skill development through training, entrepreneurial development and innovative projects. The Corporation is also implementing 'Mahila Samridhi Yojana'.
- c) **National Safai Karamcharis Finance and Development Corporation:**
- National Safai Karamcharis Finance and Development Corporation was established in 1997 to provide financial support to the safai karamcharis (scavengers) to take up various income-generating activities.
 - The National Commission for Safai Karmacharis, a statutory body has, inter-alia, been empowered to investigate into specific grievances as well as matters relating to implementation of programmes and schemes for welfare of Safai Karmacharis.
 - The authorized share capital of NSKFDC has been enhanced from Rs.300.00 crore to Rs. 600.00 crore by the Government in January, 2012. These would enable the Corporation to cover additional number of Safai Karamcharis under its Schemes for enabling them to undertake income generating activities etc.

THE PROHIBITION OF EMPLOYMENT AS MANUAL SCAVENGERS AND THEIR REHABILITATION ACT, 2013:

- Manual scavenging refers to the removal of human waste/excreta using brooms, tin plates and baskets from dry latrine and carrying it to disposal grounds some distance away. The toilets often use a container that needs to be emptied daily. Manual scavenging still survives in parts of India without proper sewage systems.
- Manual scavenging is a caste-based and hereditary occupation for Schedule caste (Untouchables) that is predominantly linked with forced labour or slavery. It is estimated that around 1.3 million Schedule Caste in India, mostly women, make their living through manual scavenging, which involves removing human excrement from dry toilets and sewers. Manual scavenging is done with basic tools like thin boards and either buckets or baskets lined with sacking and carried on the head.
- The Act prohibits employing a person as a manual scavenger and provides for the rehabilitation of people currently engaged in the profession.

Development of Scheduled Tribes /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 the "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 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.

Tribal Sub Plan for States:

The TSP strategy, with some modifications, continues till this day and the salient features with respect to TSP for States, are given below:

- i) The funds provided under the Tribal Sub Plan of the State have to be at least equal in proportion to the ST population of each State or UT;
- ii) Tribal's and tribal areas of a State or UNION TERRITORIES are given benefits under the TSP, in addition to what percolates from the overall Plan of a State/UT;
- iii) The Sub-Plan should; a) Identify the problems and need of tribal people and critical gaps in their development b) Identify all available resources for TSP c) Prepare a broad policy framework for development, e) Define a suitable administrative strategy for its implementation. f) Specify the mechanism for monitoring and evaluation.

Special schemes for STS

- (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:** 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 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.
- (c) **Vanbandhu Kalyan Yojana:** Major activities approved under Vanbandhu Kalyan Yojana (VKY) Scheme during 2015-16 are: education/infrastructure/toilets in hostel and schools; health/sports/safe drinking water; self employment/skill development/fruit farming/livelihood/dairy/fishery; irrigation; culture/tourism; monitoring cell/institution; and connectivity/market/electricity/solar energy.

(d) Umbrella Scheme for Education of ST Children: Objective of providing adequate educational infrastructure for STs and incentive for education for ST children through scholarships. In the proposed Umbrella Scheme, the following schemes have been merged:

- Establishing and strengthening of Ashram Schools;
- Establishing and strengthening of Hostels;
- Vocational training in tribal areas;
- Post-Matric Scholarship; and
- Pre-Matric Scholarship.

(e) Overseas Scholarships (NOS) for ST students: The Ministry of Tribal Affairs has approved the revised Scheme of National Overseas Scholarships (NOS) for ST students. The scheme is providing scholarship to students selected for pursuing higher studies abroad for Post-Graduation, Ph. D and Post-Doctoral research programmes.

Tribal Cooperative Marketing Development Federation of India Ltd. (TRIFED):

- The Tribal Cooperative Marketing Development Federation of India Limited (TRIFED), was set up in 1987 as a national level apex body under the Multi State Cooperative Societies Act, 1984 (MSCS Act, 1984) after the enactment of the Multi-State Cooperative Societies Act, 2002 (MSCS Act, 2002).
- TRIFED is deemed to be registered under the latter Act and is also listed in the Second Schedule to the Act as a National Cooperative Society.
- The Bye-laws of TRIFED were revised in April, 2003 in tune with the new Multi State Cooperative Societies Act, 2002 read with the Multi State Cooperative Societies Rules, 2002.
- Under its revised mandate TRIFED has stopped bulk procurement in Minor Forest Produce (MFP) and surplus Agricultural Produce (SAP) from Tribals. (This procurement is now done by the State level Tribal Cooperatives Societies/Federations).
- TRIFED now functions as a 'market developer' for tribal products and as 'service provider' to its member federations.
- TRIFED is now engaged in the marketing development of tribal products (natural and organic products, handicrafts, ratification etc.) through its own shops (TRIBES India) and shops selling its products on consignment basis.

Recognition of Forest Rights of ST's:

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 seeks to recognize and vest the forest rights and occupation in forest land in forest dwelling Scheduled Tribes and other traditional forest dwellers who have been residing in such forests for generations but whose rights on ancestral lands and their habitat were not adequately recognized in the consolidation of State forests during the colonial period as well as in independent India resulting in historical injustice to them. The Act has been notified for operation with effect from December 31, 2007.

Rules, for implementing the provisions of the Act, were notified in January, 2008 and they envisage the constitution of various Committees under the Act, viz, the Sub Divisional Level Committee, District Level Committee and the State Level Monitoring Committee, by the State Governments; All the States have been requested to nominate the nodal officer for implementing the provisions of the Act.

Persons with Disability

Section 2 (t) of The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, defines "*Person with Disability*" as a person suffering from not less than 40 per cent of any disability as certified by a medical authority.

The Mental Health Act, 1987:

- Mental illness has been recognized as one of the disabilities under The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995.
- The treatment and care of the mentally ill persons are governed by The Mental Health Act, 1987.
- The Act is administered by the Ministry of Health and Family Welfare.

Persons with Disabilities Act, 1995:

- A comprehensive law, namely, The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 was enacted and enforced in February, 1996.
- The law deals with both prevention and promotion aspects of the rehabilitation such as education, employment and vocational training, creation of barrier-free environment, provision of rehabilitation services for persons with disabilities, institutional services and supportive social security measures like unemployment allowance and grievance redressal machinery both at the Central and State Level.
- National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities: The National Trust is a statutory body under "The National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999".
- The main objectives of the Trust are to enable and empower persons with these disabilities to live independently as fully as possible, to extend support to registered organisations providing need-based services and to evolve procedure for appointment of legal guardians for persons with disabilities requiring such protection.

Office of the Chief Commissioner for Persons with Disabilities:

- The Chief Commissioner is an important statutory functionary, appointed under Section 57 of The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995.
- The functions and duties of the Chief Commissioner include coordinating the work of State Commissioners for persons with disabilities, monitoring of utilisation of funds disbursed by the Central Government, taking steps to safeguard rights and facilities made available to persons with disabilities and also to look into complaints with respect to deprivation of rights of persons with disabilities.
- The Chief Commissioner can also take suo-moto notice of non implementation of any rule, law, etc. meant for persons with disabilities and is vested with the powers of a civil court relating to summoning of witness, discovery, requisitioning and production of any document, etc.

Rehabilitation Council of India:

The Rehabilitation Council of India is a statutory body set up under the Rehabilitation Council of India Act, 1992.

The Council is responsible for regulating the training policies and programmes for various categories of professionals in the area of rehabilitation and special education. Its functions include:

- Standardization and regulation of training courses at different levels in all the training courses in the area of rehabilitation of the disabled within and outside the country on a reciprocal basis,
- Promotion of research in rehabilitation and special education.
- Maintenance of a Central Rehabilitation Register for professionals possessing the recognised rehabilitation qualifications in the area of rehabilitation and
- Encouragement of Continuing Rehabilitation Education Programmes in collaboration with organisations working in the area of disability.

Economic Development:

- The National Handicapped Finance and Development Corporation (NHFDC) is an apex-level financial institution for extending credit facilities to persons with disabilities for their economic development. Funds assistance is disbursed through the channelising agencies authorized by the State Governments/ UT Administrations and Non-Governmental Organisations.
- It also extends loans for pursuing education at graduate and higher levels. Besides, it assists in the upgradation of technical and entrepreneurial skills to enable beneficiaries to manage their production units efficiently.
- Under the scheme for Assistance to Disabled Persons for Purchase/Fitting of AIDs and Appliances assistance is given for procuring durable, sophisticated and scientifically manufactured, standard aids and appliances that can promote their physical, social and psychological rehabilitation by reducing the impact of disability and enhance their economic potential.
- The scheme is implemented through agencies like voluntary organisations, National Institutes under the Ministry, ALIMCO, Zilla Panchayats, DRDAs, etc.
- The implementing agencies are provided grant in- aid for purchase, fabrication and distribution of aids and appliances. The scheme also includes under its ambit medical/surgical correction and intervention that may be essential prior to fitment of aids and appliances.

Prevention and Rehabilitation of Drug Addicts/Alcoholics

- Under the Scheme, grant-in-aid to the extent of 90 per cent (95 per cent in North East States, J & K and Sikkim) of the expenditure is provided to voluntary organisations for rehabilitation of drug addicts and alcoholics.
- Assistance to Voluntary Organisation for Social Defence Services provides for undertaking programmes for the rehabilitation of various social segments at risk, not currently covered under the existing schemes of the Ministry.
- In particular, the scheme provides for Pilot Projects in unchartered areas in which the Ministry may like to formulate independent programmes in due course.

A number of programmes are being supported for rehabilitation of children of sex workers. Initiatives have also been taken to support projects for rehabilitation of widows and for providing counselling and support to traumatised children and women particularly those who have been victims of physical violence and sexual abuse.

Welfare Measures for the Minorities

- Five religious communities viz. Muslims, Christians, Sikhs, Buddhists and Zoroastrians (Parsis) have been notified as minorities as per provisions under the National Commission for Minorities (NCM) Act, 1992. These five communities constitute about 18.47 per cent of the country's population.

- The Government has taken the following measures for the welfare of Minorities: The Ministry of Minority Affairs was created in January 2006 to ensure a focused approach to the issues relating to the minorities and to play a pivotal role in the overall policy planning, coordination, evaluation and review of the regulatory and development programme for the benefit of the minority communities.
- The Ministry is also responsible for the administration and implementation of the:
 - (i) National Commission for Minorities Act, 1992;
 - (ii) Wakf Act, 1995 and
 - (iii) Durgah Khwaja Saheb Act, 1955.

In a short period of time, not only the Ministry has been made fully functional but concerted efforts have been made to streamline the ongoing programmes/schemes and to launch innovative and effective schemes/programmes for the welfare of minority communities.

Welfare measures for Women and Children

Ministry of Women and Child Development has the main responsibility to advance the rights and concerns of women and children and to promote their survival, protection, development and participation in a holistic manner.

The Ministry has a vision of empowered women living with dignity and contributing as equal partners in development in an environment free from violence and discrimination and well nurtured children with full opportunities for growth and development in a safe and protective environment.

Its mission for children is to ensure development, care and protection through cross-cutting policies and programmes, spread awareness about their rights, facilitate access to learning, nutrition, institutional and legislative support for enabling them to grow and develop to their full potential.

Statutory and Autonomous Organisations National Commission for Women:

The National Commission for Women (NCW) was constituted in January, 1991 as a statutory body at the national level in pursuance of The National Commission for Women Act, 1990 to safeguard the interests of women.

- It has a wide mandate covering almost all aspects of women's development, viz., to investigate and examine the legal safeguards provided for women under the Constitution and other laws and recommend to Government measures for their effective implementation; review the existing provisions of the Constitution and other laws affecting women and recommended amendments to meet any lacunae, inadequacies or shortcomings in such laws; look into complaints and take suo motu notice of matters relating to deprivation of women's rights etc., and take up the issues with appropriate authorities; take up studies/research on issues of relevance to women, participate and advise in the planning process for socio-economic development of women, evaluate the progress made thereof, inspect jails, remand homes etc where women are kept under custody and seek remedial action wherever necessary.
- National Commission for women had taken up the review of the MTP Act, 1971 and Immoral trafficking (Prevention) Act, 1956 with a view to examine whether the existing provisions of the Act require any amendments.
- NRI Cell of NCW deals with complaints received from deserted women in India and abroad due to cross country marriages wherein there is any deprivation of women's rights or any issue involving grave injustice to women.

- The objective of the project is to train and sensitize police personnel in dealing with the cases of atrocities against women and provide counsellors for effecting reconciliation in cases of marital dispute.

National Commission for Protection of Child Rights:

The National Commission for Protection of Child Rights Act (NCPCR), 2005 was notified in January, 2006. A National Commission for Protection of Child Rights was set up in March, 2007 in accordance with the provisions of the Act for proper enforcement of children's rights and effective implementation of laws and programmes relating to children.

- Its mission is to protect, promote and defend child rights in India. Its mandate is to ensure that all laws, policies, programmes, practices and administrative structure in the country are in consonance with the child rights perspective as enshrined in the Constitution of India and also the UN Convention on the Rights of the Child (CRC).
- This comprehensive piece of legislation provides protection to all children under the age of 18 years from offences of sexual assault, sexual harassment and pornography and overcomes the lacunae in the different sections of the IPC and more important, does not distinguish between adult and child victims.
- The SCPCRs have also been entrusted with the task of monitoring the implementation of the Protection of Children from Sexual offences (POCSO) Rules, 2012.

Schemes for Women

Sabla:

- Sabla was introduced in the year 2010-11 and is operational in 205 selected districts on a pilot basis. It aims at all-round development of adolescent girls (AGs) of 11-18 years (with a focus on all out-of-school AGs).
- Sabla is being implemented through the state governments/UTs with 100 per cent financial assistance from the Central Government for all inputs other than nutrition provision for which 50 per cent Central assistance to states is provided.
- Anganwadi Centre (AWC) is the focal point for the delivery of the services. The scheme has two major components Nutrition and Non-Nutrition Component.
- Nutrition is being given in the form of Take Home Ration or Hot Cooked Meal for 11- 14 years out of school girls and 14-18 years all AGs (out of school and in school girls). The nutrition provided is as per the norms for Pregnant & Lactating (P&L) mothers.
- While the nutrition component aims at improving the health and nutrition status of the adolescent girls, the non-nutrition component addresses the developmental needs.
- In the Non-Nutrition Component, out of school adolescent girls of 11-18 years are being provided IFA supplementation, health check-up and referral services, nutrition and health education, Adolescent Reproductive Sexual Health (ARSH) counselling/guidance on family welfare, life skill education, guidance on accessing public services and vocational training (only 16-18 year old adolescent girls).

Swadhar:

For providing holistic and integrated services to women in difficult circumstances and without any family, social and economic support, such as destitute widows deserted by their families in religious places like

Vrindaban and Kashi, women prisoners released from jails; women survivors of natural disasters who have been rendered homeless, trafficked women/girls rescued or runaway from brothels, women victims of terrorist violence without any means for survival, mentally challenged women and women with HIV/AIDS deserted by their family, etc.

Short Stay Homes:

- It provides temporary accommodation, maintenance and rehabilitative services through voluntary organizations to homeless women and girls.
- Under the scheme, temporary shelter to the needy women and girls is provided for 6 months to 3 years.
- Children accompanying the mother or born in the home are permitted to stay in the home upto age of 7 years, after which they may be referred to children's institutes.
- Rehabilitation of residents is provided with vocational training and skill development to make them economically independent and self-reliant.
- **Working Women's' Hostel:** In order to promote greater mobility of women in the employment market and to provide suitable, safe and inexpensive accommodation to women residing away from their hometowns to be able to work, working women's hostels exist.

Ujjawala:

For Prevention of trafficking, with five specific components;

- (i) Prevention, which includes formation of community vigilance groups / adolescents groups, awareness and sensitization of important functionaries like policy, community leaders and preparation of awareness generation materials, holding workshops, etc.;
- (ii) Rescue, for safe withdrawal of the victim from the place of exploitation.;
- (iii) Rehabilitation, which includes providing safe shelter for victims with basic amenities such as food, clothing, counseling, medical care, legal aid, vocational training and income generation activities, etc.;
- (iv) Reintegration, for restoring the victim into the family/community (if she so desires) and the accompanying costs;
- (v) Repatriation, to provide support to cross - border victims for their safe repatriation to their country of origin.

'Janani Suraksha Yojna' - A Conditional Maternity Benefit Scheme:

A Conditional Cash Transfer Scheme for pregnant and lactating women was introduced in October, 2010 to contribute to better enabling environment by providing cash incentives for improved health and nutrition to pregnant and nursing mothers.

- The scheme attempts to partly compensate for wage loss to Pregnant & Lactating women both prior to and after delivery of the child.
- The beneficiaries are paid 4,000/- in three installments per P & L woman between the second trimester and till the child attains the age of 6 months on fulfilling specific conditions related to maternal and child health. Being implemented on pilot basis in 53 selected districts using the platform of ICDS, 12.5 lakh P & L women are expected to be covered every year under IGMSY.

- Pregnant women of 19 years of age and above for first two live births are eligible under the scheme.
- All organized sector employees are excluded from the Scheme as they are entitled for paid maternity leave. Under IGMSY scheme, transfer of amount to the beneficiary is done through bank/post office only.
- The modalities of cash transfer are decided by the state governments/ union territories.
- The modes of cash transfer include - nationalized bank, post office, cooperative bank, business correspondent model of bank, etc. IGMSY is a Centrally Sponsored Scheme under which amount is given as grant-in-aid to state governments/union territories.
- The scheme is now covered under Direct Benefit Transfer (DBT) programme.

Women Empowerment and Livelihood Programme in Mid-Gangetic Plains - "Priyadarshini":

The Ministry is administering a pilot project titled Women's Empowerment and Livelihood Programme in the Mid Gangetic Plains "Priyadarshini" in 13 blocks spread over five districts in Uttar Pradesh and two districts in Bihar.

- The project is assisted by IFAD. It aims at holistic empowerment (economic and social) of vulnerable groups of women and adolescent girls in the project area through formation of women's Self Help Groups (SHGs) and promotion of improved livelihood opportunities.
- Over 1,00,000 households are to be covered under the project and 7200 SHGs will be formed during the project period ending 2016-17.
- Though the focus of the project is on livelihood enhancement, the beneficiaries will be empowered to address their political, legal and health problems through rigorous capacity building.
- National Bank for Agriculture and Rural Development (NABARD) is the lead programme agency for the implementation.
- Field Non-Governmental Organisations (NGOs) will carry out all field level activities, whereas Resource NGO has been involved to undertake activities on specialized capacity building and provide other technical support to the field level project functionaries.
- The Programme involves giving training to SHG members on topics such as income generation and allied activities, marketing of products and social issues etc.

Gender Budgeting Initiatives:

Gender Budgeting is a powerful tool for achieving gender mainstreaming so as to ensure that benefits of development reach women as much as men.

- It is not an accounting exercise but an ongoing process of keeping a gender perspective in policy/ programme formulation, its implementation and review.
- To institutionalize gender budgeting in the country, the setting up of Gender Budgeting Cells (GBCs) in all Ministries/Departments was mandated by the Ministry of Finance in 2005.
- The Ministry of Women and Child Development (MWCD) as the nodal agency for gender budgeting has been undertaking several initiatives for taking it forward at the national and state levels.
- One of the key areas has been advocating for setting up of GBCs in all Ministries/ Departments, strengthening internal and external capacities and building expertise of GBCs to undertake gender mainstreaming of policies/ schemes/ programmes.

National Mission for Empowerment of Women (NMEW):

NMEW, a Centrally Sponsored Scheme (CSS), was launched by the government on March 8, 2010 with a view to empower women holistically.

- The Mission aims to achieve empowerment of women by securing inter sectoral convergence of schemes/programmes of different Ministries / Departments of Government of India as well as state governments.
- It has the mandate to strengthen and facilitate the process of coordinating all the women's welfare and socio-economic development programmes.
- The Mission has an Executive Director and experts in the fields of poverty alleviation, social empowerment, health and nutrition, gender budgeting, gender rights & law enforcement, empowerment of vulnerable and marginalized women, media, awareness generation, advocacy & mass communication and information technology services.
- The convergence model is aimed at convergent implementation of programmes intended for welfare and development of women.
- The model would include introduction of convergence cum facilitation centres at the district (few urban agglomerations), tehsil/ward and village/area levels.
- The women centre at the village level, the first point of contact for women will be known as the Poorna Shakti Kendras (PSK), an unique model of 'convergence centres' for women, dedicated to helping women access the benefits made available to them through various government programmes.
- The Poorna Shakti Kendra (PSK) is the focal point for action on ground through which the services to grassroots women would be facilitated.
- Village coordinators at the Kendras would reach out to the women with the motto "Hum Sunenge Naari ki Baat". Poorna Shakti Kendras (PSK) also offers the information on all the government schemes/services/programmes for women.

Welfare of Children**Beti Bachao- Beti Padhao:**

In the backdrop of a trend of declining sex ratio in the age group upto five years, the Government has introduced a new scheme called Beti Bachao, Beti Padhao with the twin aim of not only improving the adverse sex ratio but also to ensure that girls are educated.

- With an initial corpus of ₹ 100 crore, it will help in generating awareness and improve the efficiency of delivery of welfare services meant for women.
- With the government's emphasis on gender mainstreaming, the school curriculum will have a separate chapter on gender mainstreaming.
- This will sensitize students, teachers and the community at large to be more sensitive to the needs of a girl child and women and will promote growth of a more harmonious society.
- The important activities that would be undertaken under the Beti Padhao Abhiyan are as under: Activate SMCs to ensure universal enrolment of girls. 'Balika Manch' in schools.
- Construction of girl's toilets. Make dysfunctional toilets functional.

- Completion of 'Kasturba Gandhi Bal Vidyalayas'. Sustained campaign to re-enroll drop-out girls in secondary schools.

Policies and Schemes National Policy for Children (NPC), 2013:

The Government adopted a new National Policy for Children in April, 2013. The new Policy reaffirms the Government's commitment to the realization of the rights of all children in the country.

- It recognizes every person below the age of eighteen years as a child.
- The Policy recognizes childhood as an integral part of life with a value of its own, and a long term, sustainable, multi-sectoral, integrated and inclusive approach is necessary for the harmonious development and protection of children.
- The Policy lays down the guiding principles that must be respected by the national, state and local government in their actions and initiatives affecting children.
- As children's needs are multisectoral, interconnected and require collective action, the Policy aims at purposeful convergence and strong coordination across different sectors and levels of governance; active engagement and partnerships with all stakeholders; setting up of a comprehensive and reliable knowledge base, provision of adequate resources; and sensitization and capacity development of all those who work for and with children.

The Protection of Children from Sexual Offences Act, 2012:

- To deal with child abuse cases, the Government has brought in a special law "The Protection of Children from Sexual Offences Act, 2012".
- The Act has come into force with effect from November 14, 2012 along with the rules framed there under.
- The Act defines a 'child' as any person below eighteen years of age. Being gender neutral, this definition provides equal protection to both the male and the female child.
- The Act provides for stringent punishments, which have been graded as per the gravity of the offence. The punishments range from simple to rigorous imprisonment of varying periods.
- There is also a provision for fine, which is to be decided by the Court. An offence is treated as 'aggravated' when committed by a person in a position of trust or authority of child such as a member of security forces, police officer, public servant, etc.
- The Act provides for the establishment of special courts for trial of offences under the Act, keeping the best interest of the child as of paramount importance at every stage of the judicial process.
- The National Commission for the Protection of Child Rights (NCPCR) and State Commissions for the Protection of Child Rights (SCPCRs) have been made the designated authority to monitor the implementation of the Act.

Sukanya Samridhi Account:

- Account has the potential to have a phenomenal impact on the lives and self esteem of young girls in the country. The scheme aims to ensure a bright future for the girl children by facilitating their education and marriage expenses.
- Under the scheme, a parent or legal guardian can open an account in the name of the girl child until she attains the age of ten years. As per the government notification on the Scheme, the account can be opened in any post office branch and designated public sector banks. The rate of interest for the scheme is an attractive 9.2 per cent (varies as per the every year budget) which will be compounded annually.

- The account will be valid for 21 years from the date of opening, after which it will mature and the money will be paid to the girl child in whose name the account had been opened. If the account is not closed after maturity, the balance amount will continue to earn interest as specified for the scheme from time to time. The account will also automatically close if the girl child gets married before the completion of the tenure of 21 years. Deposits can be made up to 14 years from the date of opening of the account. After this period the account will only earn interest as per applicable rates.
- A parent or guardian can open only one account per girl child, and a maximum of two such bank accounts in the name of two girl children. In case of twin girls as second birth, or if the first birth itself results in the birth of three girl children, three bank accounts can be opened in the name of three girl children.

Food and Nutrition Board (FNB):

Food and Nutrition Board in the Ministry of Women and Child Development is involved in policy making, strategy development as well as identifying innovative measures for the improvement of the nutritional status of the people of our country.

- It also focuses on improving the dietary habits of the people through nutrition education and extension; promotion of low cost, locally available foods; conservation of fruits and vegetables through home-scale processing; and training of health functionaries in nutrition.
- Programmes are undertaken to train master trainers such as medical officers/nursing officers, child development project officers/supervisors., principals of schools implementing mid-day meal scheme as well as the field level functionaries.
- Nutrition awareness programmes for the community, home-scale preservation of fruits and vegetables which also promotes skill development in the adolescent girls and women are organized
- Linkages with ICDS for better quality of supplementary nutrition, health and nutrition education are maintained. For promotion of infant and young child feeding practices, focus on appropriate feeding and implementation of IMS Act are undertaken.

Integrated Child Protection Scheme (ICPS):

Ministry of Women and Child Development is implementing this comprehensive Centrally sponsored scheme since 2009-10 through the state government/UT administrations on a predefined cost sharing financial pattern.

- The objectives of the Scheme are to contribute to the improvement in the well being of children in difficult circumstances, as well as reduction of vulnerabilities to situation and actions that lead to abuse, neglect, exploitation, abandonment and separation of children from parents.
- ICPS provides preventive, statutory care and rehabilitation services to children who are in need of care and protection and children in conflict with law as defined under The Juvenile Justice (Care and Protection of Children) Act, 2000 and its Amendment Act, 2006 and any other vulnerable child.
- **These services include:**
 - (a) Homes of various types for children
 - (b) Emergency outreach service through childline;
 - (c) Open shelters for children in need of care and protection in urban and semi urban areas;
 - (d) Family based non institutional care through sponsorship.
 - (e) Foster care and adoptions.

Rashtriya Mahila Kosh:

Rashtriya Mahila Kosh (RMK) extends micro-finance to the needy and poor women in the informal sector through a client-friendly, without collateral and in a hassle-free manner for livelihood activities, housing, micro-enterprises, etc., for their socio-economic upliftment.

- RMK has pioneered an alternate credit delivery mechanism in the country by advancing micro-credit to the Self-Help Groups (SHGs) of poor women through a diverse range of intermediary organizations working at the grass-root level such as NGOs, women federations, co-operatives, urban women cooperative banks.
- Government autonomous bodies, not-for-profit Section 25 Companies registered under the Companies Act, etc. RMK took a number of promotional measures to popularize the concept of micro financing, thrift and credit, formation and stabilization of SHGs and also enterprise development for poor women through these intermediaries.

Integrated Child Development Services (ICDS):

This is one of the flagship programmes of the Government and represents one of the world's largest and unique programmes for early childhood development.

- The programme aims at addressing health, nutrition and the development needs of young children, pregnant and nursing mothers. NIPCCD has been functioning as an apex institution for training of the ICDS functionaries since 1975.
- The Institute had finalized syllabi for functionaries under ICPS in collaboration with UNICEF and training manuals have been prepared for various stakeholders for effective child protection, as envisaged under the legal framework.
- The current thrusts areas of the Institute relate to child development are maternal and child health and nutrition, early childhood care and education, childhood disability, positive mental health in children and child care support service.
- It is currently focusing on gender planning and mainstreaming, gender budgeting, economic and political empowerment of women, prevention of sexual harassment at work place, prevention of gender related violence such as female foeticide, female infanticide, trafficking of women and children, child marriage, etc.
- The major initiatives during 2013-14 include Capacity Building Programmes on Protection of Children from Sexual Offences (POCSO) Act & Rules, 2012 for stakeholders; consultation with stakeholders on experiences in service delivery under IGMSY in the implementing districts, workshop on strengthening and restructuring of ICDS programme under 12th Five Year Plan, cross learning workshop on innovation and potential best practices in ICDS; sensitization of ICDS functionaries on management of severe acute malnourished (SAM) children and their follow-up; and prevention of malnutrition on women & children.
- The Institute provides technical advice and consultancy to government and Voluntary Agencies in promoting and implementing policies and programmes for women and child development and voluntary action.

Scheme for Welfare of Working Children in Need of Care and Protection:

- The objective of providing non-formal education, vocational training, etc., to working children to facilitate their entry/re-entry into mainstream education in cases where they have either not attended, any learning system or where, for some reason, their education has been discontinued, with a view to prevent their future exploitation.

- The Scheme is being implemented in 11 blocks across seven states of Andhra Pradesh, Chhattisgarh, Odisha, Jharkhand, Bihar, Uttar Pradesh and Punjab.

Child Awards:

To give recognition to children with exceptional abilities who have achieved outstanding status in various fields including academics, arts, culture and sports etc. Children between the age of 4 -15 years who have shown an exceptional achievement in any field are eligible for this award.

GS SCORE

The Ministry of Youth Affairs and Sports functions under the overall guidance of the Minister of State (Independent Charge) for Youth Affairs and Sports. In April, 2008, two separate Departments, namely, Department of Youth Affairs and Department of Sports, were created under the Ministry, each Department under the charge of a Secretary to the Government of India.

YOUTH AFFAIRS

- The Youth represent the most dynamic and vibrant segment of the population.
- India is one of the youngest nations in the World, with about 65 per cent of the population being under 35 years of age. The youth in the age group of 15-29 years comprise 27.5 per cent of the population.
- India is expected to become the 4th largest economy by 2025, only after the United States, China and Japan, contributing about 5.5 per cent-6 per cent to the world GDP. While most of these developed countries face the risk of an ageing workforce, India is expected to have a very favourable demographic profile.
- It is estimated that by the year 2020, the population of India would have a median age of 28 years only as against 38 years for United States, 42 years for China and 48 years for Japan.
- This 'demographic dividend' offers a great opportunity. However, in order to capture this demographic dividend, it is essential that the economy has the ability to support the increase in the labour force and the youth have the appropriate education, skills, health awareness and other enablers to productively contribute to the economy. To achieve this number of initiatives have been taken by all stakeholders.

National Youth Policy, 2014

- The National Youth Policy, 2014 (NYP-2014) which replaced the erstwhile National Youth Policy, 2003 reiterates the commitment of the entire nation to all round development of the youth of India, so that they can realise their full potential and contribute productively to the nation-building process.
 - The Policy defines 'youth' as persons in the age group of 15-29 years.
 - The NYP-2014 proposes a holistic 'vision' for the youth of India, which is "to empower youth of the country to achieve their full potential, and through them enable India to find its rightful place in the community of nations".
 - In order to realise this Vision, the NYP-2014 identifies five clearly defined 'Objectives' which need to be pursued and the 'Priority Areas' under each of the Objectives. The objectives and priority areas identified under the NYP-2014 have been given in Table below.

| Objectives | Priority Areas |
|---|--|
| 1. Create a productive workforce that can make a sustainable contribution to India's economic development | 1. Education 2. Employment and skill development 3. Entrepreneurship |
| 2. Develop a strong and healthy generation equipped to take on future challenges | 4. Health and healthy lifestyle 5. Sports |
| 3. Instill social values and promote community service to build national ownership | 6. Promotion of social values 7. Community engagement |
| 4. Facilitate participation and civic engagement at levels of governance | 8. Participation in politics and governance 9. Youth engagement |
| 5. Support youth at risk and create equitable opportunity for all dis-advantaged and marginalised youth | 10. Inclusion 11. Social justice |

National Young Leaders Programme

- National Young Leaders Programme (NYLP) is a Central Sector Scheme and was introduced in December, 2014.
 - National Young Leaders Programme (NYLP) aims at developing leadership qualities among the youth to enable them to realise their full potential and in the process, to contribute to the nation building process.
 - The Programme aims at motivating the youth to strive for excellence in their respective fields and to bring them to the forefront of the development process. It seeks to harness the immense youth energy for nation building.
 - The Programme beneficiaries shall be the youth in the age-group of 15-29 years, in line with the definition of 'youth' in the National Youth Policy, 2014.
 - The National Young Leaders Programme is proposed as a Central Sector Scheme.
 - The Programme shall have the following components:
 - Neighbourhood Youth Parliament (NYP);
 - Youth for Development Programme (YFDP);
 - National Young Leaders Awards (NYLA);
 - National Youth Advisory Council (NYAC); and
 - National Youth Development Fund (NYDF)

Nehru Yuva Kendra Sangathan

- Nehru Yuva Kendra Sangathan (NYKS), **launched in 1972**, is one of the largest youth organisations in the world.
- NYKS has presence in 623 districts through Nehru Yuva Kendras (NYKs).
- The objective of the Programme is to develop the personality and leadership qualities of the youth and to engage them in nation-building activities.

- The areas of focus of the NYKS activities include literacy and education, health and family welfare, sanitation and cleanliness, environment conservation, awareness on social issues, women empowerment, rural development, skill development and self-employment, entrepreneurship development, civic education, disaster relief and rehabilitation, etc.
- The youth associated with Nehru Yuva Kendras are not only socially aware and motivated but are also inclined towards social development work through voluntary efforts.
- All the programmes of NYKS are implemented in close coordination with/ active involvement of state governments, elected local bodies and various development departments/ agencies.

National Youth Corps

- The Scheme of National Youth Corps (NYC) was launched in the country during **2010-11**.
- The earlier schemes, namely, National Service Volunteer Scheme (NSVS) and Rashtriya Sadbhavana Yojana (RSY) were subsumed in the National Youth Corps (NYC) Scheme.
- The NYC Scheme is being implemented through NYKS.
- Under the Scheme, youth in the **age-group of 18-25 years** are engaged as volunteers to serve up to maximum two years in nation-building activities. The minimum qualification for NYC volunteers is Class-X passed.
- NYKS provides them skill development training so that they can get some employment after their term with NYKS ends.
- Normally, two NYC volunteers are deployed in every block. They act as an extended arm of NYKS in the block and play an active role in implementation of various programmes and initiatives of NYKS.

National Service Scheme

- National Service Scheme (NSS) was introduced in **1969** with the primary objective of developing the personality and character of the student youth through voluntary community service. An NSS volunteer places the 'community' before 'self'.
- The ideological orientation of the NSS is inspired by the ideals of Mahatma Gandhi and the motto of NSS is "*Not Me, But You*".
- 'Education through Service' is the purpose of the NSS.

Objectives of NSS

NSS aims at developing the following qualities/ competencies among the volunteers:

- I. To understand the community in which the NSS volunteers work and to understand themselves in relation to their community;
- II. To identify the needs and problems of the community and involve themselves in problem-solving exercise;
- III. To develop among themselves a sense of social and civic responsibility;
- IV. To utilize their knowledge in finding practical solutions to individual and community problems;
- V. To gain skills in mobilizing community participation;

- VI. To acquire leadership qualities and democratic values;
- VII. To develop capacity to meet emergencies and natural disasters; and
- VIII. To practice national integration and social harmony. NSS attempts to establish meaningful linkages between 'Campus and Community', 'College and Village' and 'Knowledge and Action'.

Punarjagaran (Rejuvenation) Programme

- The year-long Punarjagaran programme and Yatra which was started from 2014 on the birth anniversary of Mahatma Gandhi, from four corners of the country viz., Leh (J&K), Kanyakumari (Tamil Nadu), Roing (Arunachal Pradesh) and Okha (Gujarat), culminated at Deen Dayal Upadhyay Dham, Nagla Chandrabhan, Mathura marking the birth centenary of Pandit Deen Dayal Upadhyay, the proponent of integral humanism.

National Programme for Youth and Adolescent Development

- National Programme for Youth and Adolescent Development (NPYAD) is an "Umbrella Scheme" of the Ministry under which financial assistance is provided to Government/ non-Government organisations for taking up activities for youth and adolescent development.
- The Scheme is operational since April 1, 2008.
- The assistance under NPYAD is provided under five major components are:
 - I. Youth leadership and personality development training;
 - II. Promotion of national integration (National Integration Camps, Inter State youth exchange programmes, youth festivals, multi-cultural activities, etc.,;
 - III. Promotion of adventure; Tenzing Norgay National Adventure Awards;
 - IV. Development and empowerment of adolescents (life skills education, counseling, career guidance, etc.,; and
 - V. Technical and resource development (research and studies on youth issues, documentation, seminars/ workshops.

National Youth Awards

National Youth Awards are conferred every year on young individuals and NGOs for excellent work done for nation-building/ community service.

Youth Hostels

- Youth Hostels are built to promote youth travel and to enable the young people to experience the rich cultural heritage of the country.
- Youth hostels are located in areas of historical and cultural value, in educational centres, in tourist destinations, etc. Youth hostels provide good accommodation for the youth at reasonable rates.
- The construction of the youth hostels is a joint venture of the central and state governments.

Scouting and Guiding

- The Department provides financial assistance to the Scouting and Guiding Organisations, with a view to promoting the Scouts and Guides movement in the country.

- Scouts and Guides movement is an international movement aimed at building character, confidence, idealism and spirit of patriotism and service among young boys and girls.
- Scouting and Guiding also seeks to promote balanced physical and mental development among the boys and girls.
- The activities, inter alia, include programmes related to adult literacy, environment conservation, community service, health awareness and promotion of hygiene and sanitation.

SPORTS

Rio Olympics

- India's star P. V. Sindhu won silver in the women's singles event Badminton category in the Rio Olympics.
- Sakshi Malik won the bronze in the 58 kg category, becoming the first Indian women wrestler to win a medal at the Olympics and the fourth female Olympic medalist from the country.

Governments initiatives in the field of Sports are:

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:
 - I. Broad basing of sports and achievement of excellence;
 - II. Up-gradation and development of infrastructure;
 - III. Support to National Sports Federations and other appropriate bodies;
 - IV. Strengthening of scientific and coaching support to sports;
 - V. Incentives to promote sports;
 - VI. Enhanced participation of women, scheduled tribes and rural youth;
 - VII. Involvement of corporate sector in sports promotion; and
 - VIII. Promotion of sports mindedness among the public at large.

Khelo India

- It has been formed after merger of Rajiv Gandhi Khel Abhiyan (RGKA), Urban Sports Infrastructure Scheme (USIS) and National Sports Talent Search Scheme (NSTSS).

Objective of Scheme:

- (a) Mass participation of youth in annual sports competitions through a structured competition.
- (b) Identification of talent.
- (c) Guidance and nurturing of the talent through existing sports academies and new set up either by the central Government or State Government or in PPP mode.
- (d) Creation of Sports Infrastructure at mofussil, Tehsil, District, State levels, etc.

Promotion of urban sports

- The Government introduced a 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 of coaches.
 - Further, financial assistance is provided under the scheme to the state governments and the National Playing Field Association for protection and preservation of playing spaces across the country.
 - Under the Scheme, state governments, local civic bodies, schools, colleges, universities and sports control boards are eligible for assistance.

Promotion of Excellence in Sports through Institutions

A. Sports Authority of India (SAI)

- The Sports Authority of India (SAI) was established by the Government of India in year 1984 as a registered society primarily to ensure effective maintenance and optimum utilization of the sports infrastructure that was built in Delhi during ASIAD, 1982.
- 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 levels, 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.
- SAI has also set up Centres of Excellence (COE) for elite sportspersons at each of its Regional Centers and one at the National Institute of Sports, Patiala.

B. Lakshmibai National Institute of Physical Education (LNIPE), Gwalior

- The Institute was established initially as a College (upgraded to a "Deemed University" in 1995) in Gwalior on August 17, 1957, the centenary year of the first war of India's Independence.

Initiatives for Promotion of excellence in sports

- 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 of the paid Joint/Assistant Secretaries through the scheme of assistance to national sports federations and other schemes.
- The Ministry of Youth Affairs and Sports has revised the existing 'Scheme relating to Talent Search and Training' in 2014 and renamed it as '**Scheme of Human Resources Development in Sports**'.
- Under the revised Scheme, the Government intends to focus on developing human resources in sports sciences and sports medicine, sports coaching/umpires for the overall development of sports and games in the country.
- This will help the country be self reliant in these fields over a period of time in general and meet the requirements of the proposed National Institute of Sports Sciences and Medicine in particular.

National Sports Development Fund

- The National Sports Development Fund (NSDF) was instituted by the Central Government with a view to **mobilizing 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.
- To make contributions to the fund attractive, 100 per cent exemption from income tax is available on all contributions.
- Further, Government contribution is on matching basis to the contributions received from other sources.

Incentive Schemes for Sportspersons

- The Ministry of Youth Affairs and Sports also implements various schemes to give incentives to sportspersons to take up sports as given below.

A. 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.
- Under this scheme, an amount of Rs. 7.5 lakh is given as award for the **most spectacular and outstanding performance** by a sportsperson over a **period of four years immediately preceding the year** in which award is to be given.

B. Arjuna Award

- The award was instituted **in 1961**. To be eligible for the Award, a sportsperson should have not only **good performance consistently** for the **previous four years at the international level** with excellence for the year for which Award is recommended, but **should have also shown qualities of leadership, sportsmanship and a sense of discipline**.
- The awardee is given a statuette, a certificate, ceremonial dress and a cash award of Rs. five lakh.
- Not more than 15 awards are given every year.

C. Dhyan Chand Award for Life Time Achievements in Sports and Games

- This award was instituted **in 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.
- The awardee is given a statuette, a certificate, ceremonial dress and a cash award of Rs. five lakh.
- Not more than three awards are given every year.

D. Dronacharaya Award

- This 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.
- The awardee is given a statuette of Guru Dronacharaya, a certificate, ceremonial dress and a cash prize of Rs. five lakh.
- Not more than five awards are given every year.

E. Maulana Abul Kalam Azad Trophy

- This trophy was instituted in 1956-57.
- The **top overall performing university** in the **Inter-University Tournaments** is given the **Maulana Abul Kalam Azad (MAKA) Trophy**, which is a rolling trophy. A small replica of the MAKA Trophy is also awarded for retention by the University. In addition, top three universities get cash awards.

F. Rashtriya Khel Protsahan Puruskar

- With a view to recognizing the **contribution made to sports development** by entities **other than sportspersons and coaches**, Government has instituted a new award titled **Rashtriya Khel Protsahan Puruskar from the year 2009**.
- It has four categories, namely,
 - ‘Identification and nurturing of budding/young talent’,
 - ‘Encouragement to sports through Corporate Social Responsibility’,
 - ‘Employment of sports persons and sports welfare measures’ and
 - ‘Sports for Development’.
- The award consists of a citation and a trophy in each of the above mentioned categories. **There is no cash award.**

G. Special Awards to Winners in International Sports Events and their Coaches

- This scheme was introduced in **1986** to encourage and motivate outstanding sportspersons for higher achievements and to attract the younger generation to take up sports as a career.
- Under the scheme, **special awards** are given to **sportspersons and their coaches** for **winning medals in recognized international sports events held in a year**.
- Cash award is also given to coaches who have trained the medal winners for at least 180 days immediately preceding the tournament. Award money to a coach is 50 per cent of the award money given to the sportsperson coached. In case, there is more than one coach, the award money is distributed among them equally.

H. Scheme of Sports Fund for Pension to Meritorious Sportspersons

- This scheme was launched in **1994**.
- 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 Paralympics Games, **have attained the age of 30 years** and have **retired** from active sports career are eligible for life pension under this Scheme.

I. National Welfare Fund for Sportspersons

- The National Welfare Fund for sports persons was set up in March, **1982** with a view to **assisting outstanding sportspersons of yesteryears, living in indigent circumstances** who had won glory for the country in sports.

- Assistance from the Fund is given in the form of **lump sum financial assistance, ex-gratia** to sportspersons or their families in case of sustaining a fatal injury during training for, or participation in, an international competition; sportsperson sustaining injury other than a fatal injury, families of sportspersons living in indigent circumstances, for medical treatment of sportspersons, and for sports promoters (referees, coaches and umpires) living in indigent circumstances.
- Assistance is provided to those whose monthly income from all sources is less than ₹ 2, 00,000/- per annum. The fund is managed and operated by a Committee with the Minister for Youth Affairs and Sports as the Chairperson.

Other Initiatives

A. Scheme for Promotion of Sports among Persons with Disabilities

- The Ministry formulated a scheme for promotion of sports and games among disabled during 2009.
- The Scheme of Sports and Games for the Disabled has the following components:-
 - I. Grant for sports coaching and purchase of consumables and non-consumable sports equipment for Schools;
 - II. Grant for Training of Coaches; and
 - III. Grant for holding District, State and National level competitions for the disabled.
- The successful implementation of the Scheme will go a long way in integration of the disabled in the mainstream of the society.

B. 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) in pursuit of gold and glory.
- The Government of India became one of the members of the Foundation Board of WADA constituted for ensuring concerted effort to check doping.

At national level the following institutions works in the area of anti-doping:

1. National Anti Doping Agency

- This agency 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.

2. National Dope Testing Laboratory

- This is responsible for testing dope samples and conducting advance research on the subject by maintaining close association with the WADA and WADA accredited laboratories.
- NDTL achieved WADA accreditation in September 2008.

C. Come and Play Scheme

- Sports Authority of India (SAI) introduced 'Come and Play Scheme' in 2011, first in Delhi (for optimum utilization of its five stadia which were renovated at substantial cost for Commonwealth

Games, 2010) and later all over India for both imparting professional training to established sportspersons, the local youth and also to beginners with the objective of encouraging participation in sports.

- 'Come and Play' Scheme would also lead to talent scouting. Meritorious talent emerging from this Scheme will also form a pool and entry link for induction into regular residential sports promotional schemes of STC and SAG.

D. National Sports Talent Search Scheme (NSTSS)

- National Sports Talent Search Scheme (NSTSS) has been formulated by the **Ministry of Youth Affairs and Sports**.
- The objectives of the scheme are:
 - I. Identification of sporting talent among students in the age group of 8-12 years (for admission in Class IV to Class VI) who possess inborn qualities.
 - II. Nurturing of the Sporting Potential / talent in District level Sports schools / Central Sports Schools / National Sports Academies etc., to make them excel at the National and international sports competitions.