CH-8 REVIEW OF ECONOMIC DEVELOPMENTS

I. Introduction

- As per the first Advance Estimates (AE) released by the CSO, the Indian economy is estimated to register a GDP growth rate of 7.1 per cent in 2016-17 which largely mirror the economic situation during the first seven to eight months of the financial year.
- At the sectoral level,
    - growth of agriculture & allied sectors improved significantly in 2016-17,
    - The growth in industrial sector, comprising mining & quarrying, manufacturing, electricity, gas & water supply, and construction sectors moderated in 2016-17.
    - The service sector continued to be the dominant contributor to the overall growth of the economy, led by a significant pick-up in public administration, defence & other services, that were boosted by the payouts of the Seventh Pay Commission
- Fixed investment rate has been declining since 2011-12 .
- Being aware of the need to boost investment and growth, Government, in coordination with the Reserve Bank of India and other stakeholders, has taken a number of steps to improve the ease of doing business and to improve the balance sheet positions of banks and firms.
- It is the 23.8 per cent growth in government final consumption expenditure that is the major driver of GDP growth in the current year from the demand side.
- Private consumption is also projected to grow at a reasonable pace during the year. With plummeting imports of gold, silver and other bullion, acquisition of valuables by households is expected to contract in the current year.
- Steeper contraction in imports, compared to exports, during the first half of 2016-17 led to a sharp decline in trade deficit.
- Despite slowing services exports, the decline in merchandise trade deficit helped improve the position of net exports of goods and non-factor services in the national accounts.

II. Fiscal developments

- Budget 2016-17 reaffirmed Government's commitment to continue with fiscal consolidation and projected fiscal deficit at 3.5 per cent of GDP for the year, down from 3.9 per cent in 2015-16.
- Consolidation was achieved through a 11.9 per cent increase in the gross tax revenue and significant strides in non-tax revenue and non-debt capital receipts, despite higher pay-outs on account of the implementation of the recommendations of the Seventh Pay Commission.
- Tax collections, especially union excise duties and service tax, have been buoyant in the current year till November 2016. The tax measures on additional resource mobilization have primarily helped this buoyancy thus far.
- The achievement of the budget estimates of tax collections in the current year will depend significantly on the dynamics of economic activity and tax collections during the last quarter.
- In the last quater of the current year, the pace of economic activity can be affected by the demonetisation of the high domination currency and the response to the gradual re-monetization.
- Devolution to States and Union Territories during April-November 2016 also kept pace with

and Central assistance during April-November 2016 was 58 per cent of the budget estimates for the full year and a notch below the corresponding accomplishments in the previous year.

- The growth in revenue expenditure during April-November 2016, which prima facie seems very high (Table 4), may be viewed against the background of a few developments.
    - Firstly, the salary component of the revenue expenditure increased by 23.2 per cent, in meeting the commitments under the Seventh Pay Commission.
    - Secondly, in contrast to 5.9 per cent decline in major subsidies budgeted for the current year, it increased by 5.0 per cent during April-November 2016, despite a decline in fertilizer and petroleum subsidy bills. This was because of a 21.6 per cent surge in food subsidy, largely because it is front-loaded this year and is likely to taper off, to a great extent, as the year progresses.
    - The third reason for is an increase in the grants for creation of capital assets (GCCA) during April-November 2016. All grants given to the State Governments and Union Territories are treated as revenue expenditure, but a part of these grants are used for creation of capital assets.
    - The investment push that the Central Government expenditure provides to the economy can be approximated by subtracting these grants from revenue expenditure and adding it to the capital expenditure. This adjustment reduces the gap between the growth in capital and revenue expenditures
- The total outstanding liabilities of the Central Government are composed of internal debt, other internal liabilities like provident funds, small savings, etc. and external debt. The growth in the **total outstanding liabilities** of the Union Government remained closely similar during 2014-15 and 2015-16, at 10.1 per cent and 10.4 per cent respectively.
- Yet, there was an increase in the ratio of internal debt of the Central Government to GDP in 2015-16. This was not due to any adverse change in the trajectory of debt addition, but to the nominal GDP growth declining in the year—despite an acceleration of the real GDP growth—on account of a sharp decline in inflation.

III. Prices

- The headline inflation as measured by the Consumer Price Index (CPI) declined to 4.9 per cent in 2015-16 from 5.9 per cent in 2014-15. It was 4.8 per cent during April-December 2016. Inflation hardened during the first few months of 2016-17, mainly due to upward pressure on the prices of pulses and vegetables.
- The average inflation based on the wholesale price index (WPI) declined to (-) 2.5 per cent in 2015-16 from 2.0 per cent in 2014-15. The downward trend, however reversed during the current financial year partly due to impact of rise in global commodity prices and partly owing to adverse base effect.

Food inflation

- Pulses continued to be the major contributor of food inflation.
- Since July 2016, pulses prices except gram dal prices have been declining owing to near normal monsoon, increase in the Rabi pulses sowing and buffer build up by the Government.
- Sugar prices also firmed up on account of lower production and hardening of price in the international market. V
- Vegetable prices, which flared during the lean summer season, have also declined sharply as supply picked up during the post monsoon and winter season.

Core inflation remains sticky

- CPI based refined core inflation (exclusive of food & fuel group, petrol & diesel) has been averaging around 5 per cent in the current fiscal year.
- Inflation for Pan, tobacco & intoxicants, Clothing & footwear, Housing and Education groups continued to be above 5 per cent and the major contributors of the core inflation.
- Inflation for the 'Transport & communication' group has been rising in recent months partly reflecting rise in global crude oil prices and its pass-through to domestic petrol and diesel prices.
- Price of crude oil (Indian basket) has increased from $39.9 in April 2016 to $52.7 in December 2016.
- Likewise, comparatively higher gold price in the international market this financial year has contributed towards **sticky core inflation**.

Inflation outlook

- In view of the deceleration in the wholesale and retail prices of key food items during the second half of the current financial year so far, the average inflation based on CPI is projected to remain below 5 per cent.
- For the next financial year, the recent uptick in global commodity prices, in particular crude oil prices, **pose an upside risk**.
- The food inflation is likely to remain subdued in the light of higher Rabi sowing acreage, projected increase in the production of pulses and key agri-products globally and astute food management and price monitoring by the Government.

IV. Monetary Management and Financial intermediation

- The Government amended the Reserve Bank of India Act, 1934 during the current financial year. The amended Act provides for inflation target to be set by the Government, in consultation with the Reserve Bank, once in every five years and further provides for a statutory basis for the constitution of an empowered **Monetary Policy Committee (MPC**).
- As per the **revised monetary policy framework**, the Government has fixed the inflation target of 4 per cent with tolerance level of +/- 2 per cent for the period beginning from 5th August, 2016 to March 31, 2021.
- The Government has also notified the constitution of the MPC on 29th September 2016. So far the MPC has already held two meetings.
- The Reserve Bank of India (RBI) also refined its monetary policy framework in April 2016, with the objective of meeting short-term liquidity needs through regular facilities; frictional and seasonal mismatches through fine-tuning operations and more durable liquidity by modulating net foreign assets and net domestic assets in its balance sheet.

Liquidity situation

- The RBI has been managing liquidity following its liquidity management framework. In order to bring ex ante liquidity conditions close to neutrality it has pumped durable liquidity through open market operations (OMOs).
- Post the withdrawal of specified bank notes (SBNs), RBI has conducted exceptional operations to mop the large surplus liquidity through **variable reverse repo rate**. To complement the RBI's efforts, the Government also increased the limit on securities under **market stabilisation scheme** from Rs. 30,000 crore to Rs. 6 lakh crore. Liquidity conditions were generally tight during Q1 of 2016-17.

Credit growth

- Non- food credit (NFC) outstanding grew at sub 10 per cent for all the months except for September 2016.
- Credit growth to industrial sector remained persistently below 1 per cent during the current fiscal, with contraction in August, October and November.
- However, **bank credit lending to agriculture and allied activities (A&A)** and personal loans (PL) segments continue to be the major contributor to overall NFC growth.

Measures to strengthen corporate bond market

- The RBI took a number of measures to strengthen the corporate bond market in India. It accepted many of the recommendations of the **Khan Committee** to boost investor participation and market liquidity in the corporate bond market.
- The new measures as announced by the RBI include:
    - Commercial banks are permitted to issue rupee-denominated bonds overseas (masala bonds) for their capital requirements and for financing infrastructure and affordable housing;
    - Brokers registered with the Securities and Exchange Board of India (SEBI) and authorized as market makers in corporate bond market permitted to undertake repo /reverse repo contracts in corporate debt securities. This move will make corporate bonds fungible and thus boost turnover in the secondary market;
    - Banks allowed to increase the partial credit enhancement they provide for corporate bonds to 50 per cent from 20 per cent. This move will help lower-rated corporate to access the bond market;
    - Permitting primary dealers to act as market makers for government bonds, to give further boost to government securities by making them more accessible to retail investors; and
    - To ease access to the foreign exchange market for hedging in over the counter (OTC) and exchange-traded currency derivatives, the RBI has allowed entities exposed to exchange rate risk to undertake hedge transactions with simplified procedures, up to a limit of US$30 million at any given time.

Foreign Portfolio Investments

- For the first time since the meltdown of 2008, **Net Foreign Portfolio Investments (FPI)** have turned negative (implying that there was an outflow from the Indian markets to the tune of Rs. 23079 crore).
- The FPI outflow was not a phenomenon associated with Indian markets alone as FPIs pulled out of most EMEs in a big way due to higher returns in advanced economies.

V. India's Merchandise Trade Exports

- In line with subdued global growth and trade, India's exports declined by 1.3 per cent and 15.5 per cent in 2014-15 and 2015-16 respectively.
- The trend of negative growth was reversed somewhat during 2016-17 (April-December), with exports registering a growth of 0.7 per cent
- Region-wise, India's exports to Europe, Africa, America, Asia and CIS and Baltics declined in 2015-16. However, India's exports to Europe, America and Asia increased by 2.6 per cent, 2.4 per cent and 1.1 per cent respectively in 2016-17 (April-November),
- While exports to Africa declined by 13.5 per cent. USA followed by UAE and Hong Kong were

Imports

- Value of imports declined from US$ 448 billion in 2014-15 to US$ 381 billion in 2015-16, mainly on account of decline in crude oil prices resulting in lower levels of POL imports.

Trade deficit

- In 2015-16, India's trade deficit declined by 13.8 per cent (vis-à-vis 2014-15) to US$ 118.7 billion. Furthermore, it declined by 23.5 per cent to US$ 76.5 billion in 2016-17 (April-December) as compared to US$ 100.1 billion in the corresponding period of previous year.

VI. Balance of Payments Current account

- Despite moderation in India's exports, India's external sector position has been comfortable, with the current account deficit (CAD) progressively to 1.1 per cent of GDP in 2015-16.
- The CAD further narrowed in 2016-17 (H1) to 0.3 per cent of GDP. In 2016-17 (H1), sharp contraction in trade deficit outweighed the decline in net invisible earnings.
- The downward spiral in international crude oil prices resulted in a decline in oil import bill by around 18 per cent which together with a sharp decline in gold imports led to a reduction in India's overall imports (on BoP basis).
- Net services receipts declined by 10 per cent in H1 of 2016-17 despite increase in services receipts (4.0 per cent) as growth in services payments was higher (16 per cent). However, growth of receipts of software was marginal and financial services receipts declined.
- Subdued income conditions in source countries, particularly in the gulf region due to downward spiral in oil prices continued to weigh down on remittances by Indians employed overseas as private transfers moderated to US$ 28.2 billion in H1 of 2016-17 from US$ 32.7 billion in H1 of 2015-16.

Capital/finance account

- Despite higher net repayments on overseas borrowings and fall in banking capital (net) with building up of foreign currency assets by banks & decline in NRI deposits (net), robust inflow of foreign direct investment (FDI) and net positive inflow of foreign portfolio investment (FPI) were sufficient to finance CAD leading to an accretion in foreign exchange reserves in H1 of 2016-17.

Foreign exchange reserves

- In H1 of 2016-17, India's foreign exchange reserves increased by US$ 15.5 billion on BoP basis (*i.e.*, excluding valuation effects), while in nominal terms (*i.e.*, including valuation effect) the increase was to the tune of US$ 11.8 billion. The loss due to valuation changes of US$ 3.7 billion mainly reflects the appreciation of the US dollar against major currencies.

Exchange rate

- The subsequent depreciation of the rupee could be attributed largely to the strengthening of the US dollar globally following the US presidential election results and tightening of monetary policy by the Federal Reserve.
- The rupee depreciated in terms of nominal effective exchange rate (NEER) against a basket of 6 and 36 currencies during April-December 2016.

VII. External debt

- The shares of Government (Sovereign) and non-Government debt in the total external debt were 20.1 per cent and 79.9 per cent respectively, at end-September 2016.
- US dollar denominated debt accounted for 55.6 per cent of India's total external debt at end-September 2016, followed by Indian rupee (30.1 per cent), SDR (5.8 per cent), Japanese Yen (4.8 per cent) Pound Sterling (0.7 per cent), Euro (2.4 per cent) and others (0.6 per cent).
- The maturity pattern of India's external debt indicates dominance of longterm borrowings.
- At end-September 2016, long-term external debt accounted for 83.2 per cent of India's total external debt.

IX. Agriculture and Food Management

- As per the first advance estimates of the CSO, growth rate for the agriculture and allied sectors is estimated to be 4.1 per cent for 2016-17

Production

- As per the First Advance Estimates (AE) released by Ministry of Agriculture and Farmers Welfare on 22nd September 2016, production of Kharif food-grains during 2016-17 is estimated at 135.0 million tonnes compared to 124.1 million tonnes in 2015-16.

Monsoon rainfall and its distribution

- During the South West Monsoon Season (June-September) of 2016 the country as a whole received rainfall which was 97 per cent of its long period average (LPA).

Price policy of agricultural produce

- The price policy of Government for major agricultural commodities seeks to ensure remunerative prices to the farmers to encourage higher investment and production, and to safeguard the interest of consumers by making available supplies at reasonable prices.
- On account of the volatility of prices of pulses, a Committee on **'Incentivising Pulses Production Through Minimum Support Price (MSP) and Related Policies'** was set up under the Chairmanship of Dr. Arvind Subramanian
- To increase productivity of pulses, a new extra early maturing, high yielding variety of Arhar (Pusa Arhar-16) has been developed to be made available for farmers in the next Kharif season.
- During 2016-17, MSPs were raised substantially mainly for pulses to incentivize farmers to cultivate pulses.

Food-grain stocks and procurement in central pool

- The food-grain management involves **procurement of rice and wheat** and following the **norms for buffer stocks.** The stocks of food-grains (Rice and Wheat) was 43.5 million tonnes as on 1st December, 2016 compared to 50.5 million tonnes as on 1st December, 2015 vis-à-vis the buffer stock norm of 30.77 million tonnes as on 1st October 2015.
- Procurement of rice as on 6th January 2017 was 23.2 million tonnes during Kharif Marketing Season 2016-17 whereas procurement of wheat was 22.9 million tonnes during Rabi Marketing Season 2016-17.
- As part of the price policy to protect consumers, the **Central Issue Prices** of rice and wheat have remained unchanged since 1st July 2002.

Agriculture credit

- Credit is an important input to improve agricultural output and productivity. To improve agricultural credit flow, the credit target for 2016-17 has been fixed at Rs. 9 lakh crore against Rs. 8.5 lakh crore for 2015- 16

X. Industrial, Corporate and Infrastructure Sectors

- Growth rate of the industrial sector comprising mining & quarrying, manufacturing, electricity and construction is projected to decline from 7.4 per cent in 2015-16 to 5.2 per cent in 2016-17
- In terms of use-based classification, basic goods, intermediate goods and consumer durable goods attained moderate growth. Conversely, the production of capital goods declined steeply and consumer nondurable goods sectors suffered a modest contraction during April-November 2016-17.
- The eight core infrastructure supportive industries, viz. coal, crude oil, natural gas, refinery products, fertilizers, steel, cement and electricity that have a total weight of nearly 38 per cent in the IIP registered a cumulative growth of 4.9 per cent during April-November, 2016-17
- The production of refinery products, fertilizers, steel, electricity and cement increased substantially, while the production of crude oil and natural gas fell during April-November, 2016-17. Coal production also attained lower growth
- The performance of corporate sector (Reserve Bank of India, January 2017) highlighted that the growth in sales was 1.9 per cent in Q2 of 2016-17 as compared to near stagnant growth of 0.1 per cent in Q1 of 2016-17.
- The Government has liberalized and simplified the foreign direct investment (FDI) policy in sectors like defence, railway infrastructure, construction and pharmaceuticals, etc.
- Sectors like services sector, construction development, computer software & hardware and telecommunications have attracted highest FDI equity inflows.
- Some initiatives to improve ease of doing business such as **Make-in-India, Invest India, Start Up India and e-biz Mission Mode Project under the National e-Governance Plan**.
- Measures to facilitate ease of doing business include online application for Industrial License and Industrial Entrepreneur Memorandum through the eBiz website 24x7 for entrepreneurs; simplification of application forms for Industrial Licence and Industrial Entrepreneur Memorandum; limiting documents required for export and import to three by Directorate General of Foreign Trade; and setting up of **Investor Facilitation Cell under Invest India** to guide, assist and handhold investors during the entire life-cycle of the business.

XI. Services Sector

- Growth rate of the services sector is projected to grow at 8.8 per cent in 2016-17, almost the same as in 2015-16.
- As per WTO data, India's commercial services exports increased from US$ 51.9 billion in 2005 to US$ 155.3 billion in 2015.
- As per RBI's BoP data, India's services exports declined by 2.4 per cent in 2015-16 as a result of slowdown in global output and trade.
- Growth of net services, which has been a major source of financing India's trade deficit in recent years, was (-) 9.0 per cent in 2015-16 and (-) 10.0 per cent in H1 of 2016-17 due to relatively higher growth in imports of services.
- Growth of software exports which accounted for 48.1 per cent share in services exports was 1.4 per cent in 2015-16 and 0.1 per cent in H1 of 2016-17

- India's tourism sector witnessed a growth of 4.5 per cent in terms of foreign tourist arrivals (FTAs)
- The Baltic dry index (BDI) an indicator of both merchandise trade and shipping services, which showed some improvement up to 18 November 2016 declined somewhat to 910 on 13 January 2017

XII. Social Infrastructure, Employment and Human Development Trends in social sector expenditure

- As per Reserve Bank of India data, expenditure on social services by Centre and States, as a proportion of GDP was 7.0 per cent during 2016-17 (BE), with education and health sectors accounting for 2.9 per cent and 1.4 per cent respectively

Employment scenario

- For the period December, 2015 over December, 2014 the overall employment increased by 135 thousand. The sectors that contributed to this increase include: IT/BPOs sector, textiles including apparels and metals.
- Employment, however, declined in gems & jewellery sector, handloom/powerloom sector, leather, automobiles sectors and transport sector during the same period.
- The Labour Force Participation Rate (LFPR) at the all India level based on usual principal status approach was estimated at 50.3 per cent.
- The All India LFPR of females is much lower than that for males. There are wide interstate variations in the female LFPR as well.
- The North Eastern and Southern States, in general, display high female LFPR as compared to low levels in Northern States.
- The unemployment rate for females was higher than that of males across rural and urban areas
- States that show low unemployment rates also generally rank high in the share of manufacturing.
- While States compete to seek investment offering incentives, linking incentives to the number of jobs created, sustained efforts need to be considered as a tool to increase employment.
- There is a clear shift in employment to secondary and tertiary sectors from the primary sector. The growth in employment by category reflects increase in both casual labour and contract workers.
- This has adverse implications on the level of wages, stability of employment, social security of employees owing to the 'temporary' nature of employment.
- It also indicates preference by employers away from regular/formal employment to circumvent labour laws.
- The multiplicity of labour laws and the difficulty in their compliance have been an impediment to the industrial development and employment generation.
- At present, there are 39 Central labour laws which have been broadly proposed to be grouped into four or five Labour Codes on functional basis with the enactment of special laws for small manufacturing units.
- In a major initiative for bringing compliance in the system, catalysing the need of job creation and to ensure ease of doing business while ensuring safety, health and social security of every worker, the Government has put forth a set of labour reform measures.

Education sector

- An important concern that is often raised in the context of school education is low learning outcomes. This has been pointed out in several studies including ASER, 2014.
- While there have been improvements in access and retention, the learning outcomes for a majority of children is still a cause of serious concern.
- Some of the underlying causes contributing to low quality of education in the primary sector are teacher absenteeism and the shortage of professionally qualified teachers.
- Teacher absenteeism and the shortage of professionally qualified teachers remain an issue to be addressed.
- An option to address teacher absenteeism that can be explored is biometric attendance of all teachers in primary schools for each scheduled class/lecture/session/distinct from the present system, where it is morning and evening to ostensibly record arrival and departures with little control on the activities during the working hours.
- Apart from the biometric attendance being regularly monitored by local communities and parents, it should also be put in public domain.
- This should be backed by adequate teaching aids, recorded lectures, etc. to fill in for absentee teachers.
- The scope of implementation should leave room for flexibility at the local level so the same do not end up as top driven 'Model Schools'. The pilot of biometric attendance of teachers should be accompanied with an evaluation of learning outcomes.

Health for all

- India's health policy aims at an integrated approach which will provide accessible, affordable and equitable quality health care to the marginalized and vulnerable sections.
- Life expectancy has doubled and infant mortality and crude death rates have reduced sharply.
    - India's total fertility rate (TFR) has been steadily declining and was 2.3 (rural 2.5 & urban 1.8) during 2014.
    - Infant Mortality Rate (IMR) has declined to 37 per 1000 live births in 2015 from 44 in 2011.
    - The challenge lies in addressing the huge gap between IMR in rural (41 per 1000 live births) and urban (25 per 1000 live births) areas.
- The Maternal Mortality Ratio (MMR) declined from 301 maternal deaths per 100,000 live births during 2001-03 to 167 maternal deaths per 100,000 live births during 2011-13.
- The high levels of anaemia prevalent among women in the age group 15-49 have a direct correlation with high levels of MMR. In Haryana and West Bengal more than 60 per cent of women suffer from anaemia.
- Under the National Health Mission, Government of India has programmes to address the issue of anaemia through **health and nutrition education to promote dietary diversification**, inclusion of **iron foliate rich food** as well as food items that promote iron absorption.

Inclusive Policies of the Government

- It is the vision of the Government to have an inclusive society in which equal opportunities are provided for the growth and development of all sections of the population including the marginalised, vulnerable and weaker sections to lead productive, safe and dignified lives.
- Accordingly, programmes have been initiated by the government towards attaining the objective of inclusive society like the *Accessible India Campaign*

- The government has various schemes meant for the economic and social empowerment of people belonging to the minority communities.
- The 'Nai roshni' scheme for leadership development of minority women, 'Padho Pardesh', a scheme of interest subsidy on educational loans for overseas studies for the students belonging to the minority communities, etc. are being implemented.
- For skill development and economic empowerment of minorities, schemes like 'Seekho Aur Kamao' (Learn & Earn)
- Upgrading Skill and Training in Traditional Arts/Crafts for Development (USTTAD) and 'Nai Manzil'- a scheme to provide education and skill training to the youth from minority communities are in operation.

XIII. Climate Change Developments in international climate change negotiations:

- On 12th December, 2015, 196 Parties to the United Nations Framework Convention on Climate Change (UNFCCC) adopted the historic Paris Agreement, which brings all nations into a common cause to undertake ambitious efforts to combat climate change and unleash actions and investment towards a low carbon, resilient and sustainable future.
- The Paris Agreement sets the path for the post-2020 actions based on the Nationally Determined Contributions (NDCs) of the Parties. The Paris Agreement entered into force on 4th November 2016.
- The 22nd Session of the Conference of Parties (COP 22) to UNFCCC was held from 7-19 November 2016 in Marrakech, Morocco. The main thrust of COP 22 was on developing rules and action framework for operationalizing the Paris Agreement and advance work on pre-2020 Actions.
- At COP 22, Parties agreed to a deadline of 2018 for the rule book. Detailing exercise will include accounting of the NDCs, adaptation communication, building a transparency framework, global stock take every five years, etc.
- The key decision adopted at COP 22 was "Marrakech Action Proclamation for our Climate and Sustainable Development" which captured the sense of urgency to take action on climate change.
- The Marrakech Action Proclamation also emphasized the need to strengthen and support efforts to eradicate poverty, ensure food security and enhance resilience of agriculture.
- The pre 2020 action including mobilization of USD 100 billion per year was a key element of the Proclamation.

India's green actions

- India's comprehensive NDC target is to
    - lower the emissions intensity of GDP by 33 to 35 per cent by 2030 from 2005 levels,
    - increase the share of non-fossil fuels based power generation capacity to 40 per cent of installed electric power capacity by 2030, and
    - create an additional (cumulative) carbon sink of 2.5–3 GtCO2e through additional forest and tree cover by 2030.
- Currently, India's renewable energy sector is undergoing transformation with a target of 175 GW of renewable energy capacity to be reached by 2022. In order to achieve the target, the major programmes/schemes on implementation of **Solar Park**, **Solar Defence Scheme**, Solar scheme for Central Public Sector Undertakings, **Solar photovoltaic (SPV) power plants** on **Canal Bank and Canal Tops, Solar Pump, Solar Rooftop,** etc. have been launched in recent years.
- A capacity addition of 14.30 GW of renewable energy has been reported during the last two

Power, 7.04 GW from Wind Power, 0.53 GW from Small Hydro Power and 0.93 GW from Bio-power.

- As a result of various actions in the right direction, India attained 4th position in global wind power installed capacity after China, USA and Germany.
- In January 2016, Government has amended the **National Tariff Policy** for electricity. The Tariff Policy amendment has a focus on the environmental aspect with provisions such as
    - Renewable Purchase Obligation in which 8 per cent of electricity consumption excluding hydro power shall come from solar energy by March 2022;
    - Renewable Generation Obligation in which new coal/lignite based thermal plants after specified date to also establish/procure/purchase renewable capacity;
    - bundling of renewable power with power from plants whose Power Purchase Agreements have expired or completed their useful life;
    - no inter-state transmission charges for solar and wind power;
    - procurement of 100 per cent power produced from waste-to energy plants;
    - Ancillary services to support grid operation for expansion of renewable energy, etc.
- With India's initiative, **International Solar Alliance (ISA)** was launched, which is envisaged as a coalition of solar resource-rich countries to address their special energy needs and will provide a platform to collaborate on addressing the identified gaps through a common, agreed approach.
- 24 countries have signed the **Framework Agreement of ISA** after it was opened for signature on November 15, 2016. ISA is expected to become inter-governmental treaty-based organization that will be registered under Article 102 of the UN charter after 15 countries ratify the Agreement. With legal framework in place, ISA will be a major international body headquartered in India.
- Centre has established the ***National Adaptation Fund for Climate Change*** to assist States and Union Territories to undertake projects and actions for adaptation to climate change. Rs. 182.3 crore has been released for 18 projects for sectors including agriculture and animal husbandry, water resources, coastal areas, biodiversity and ecosystem services.
- India is also one of the few countries in the world to impose a tax on coal. This coal cess which has been renamed as **"Clean Environment Cess"** in the Union Budget 2016-17 funds the National Clean Environment Fund (NCEF).
- The **Clean Environment Cess** has been doubled in the 2016-17 budget from Rs. 200 per tonne to Rs. 400 per tonne.
- The proceeds of the NCEF are being used to finance projects under **Green Energy Corridor** for boosting up the transmission sector, Namami Gange, Green India Mission, Jawaharlal Nehru National Solar Mission, installation of SPV lights and small capacity lights, installation of SPV water pumping systems, SPV Power Plants and Grid Connected Rooftop SPV Power Plants.