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GROUP I MAINS - ECONOMY -1

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INDIAN ECONOMY

Economics has become a very sought after subject in the field of Social Science. The knowledge of Economics is very important in pursuing various activities in everyday life such as production, consumption and investment. In Consumption, every individual wants to utilize his/her income in the best possible manner so as to get maximum satisfaction from the goods and services purchased. Similarly, as producer, the individual/firm/industry uses the resources to minimize cost and get maximum output/profit. At the economy level, everybody wants that there should be economic growth and development through higher income and employment. Study of economics is very useful to achieve these goals.

Every economy in the world has its own characteristics or features by which it is known or identified. Economies are compared with each other on the basis of these features. India as a distinct nation came into existence on 15th August 1947, called the independence day of India which marked the end of British rule over India. After that, Independent India has completed 72 years of self rule on 15th August 2018. This period is long enough to evaluate the position and performance of the country to enable comparison with other countries in the world as well as evaluate its own progress over the years

ECONOMIC HISTORY OF INDIA

The colonial rule in India brought a significant change in the taxation and agricultural policies. This led to commercialization of agriculture with a focus on trade. It had many adverse effects on Indian economy, such as decreased production of food crops, mass impoverishment and destitution of farmers and many famines. Thus, Indian economic policy after independence was influenced by the colonial experience. Independent India's domestic policy tended towards protectionism, concentrating on import substitution industrialization, economic interventionism, a large public sector, business regulation and central planning.

At the dawn of independence, India was an extremely poor nation with an overwhelmingly illiterate population that was mostly employed in the agriculture sector. The leaders of the independence movement had to think about how to develop the nation so as to satisfy the aspirations of the newly freed people. They collectively decided to follow the state planning method of development under a mixed economy model as they considered it the most appropriate method to bring about rapid development. The first Indian Prime Minister Jawaharlal Nehru had been deeply impressed with the developments in the Soviet Union, and as such decided to adopt their five-year plans approach in India

India initiated the principles of free market in 1991. This move was aimed at enabling the country to survive in internationally competitive market and attract foreign investment. Today, the economy of India is the tenth largest in the world by nominal GDP and the fourth largest by purchasing power parity (PPP). Our country is the second largest economy in the world, in terms of both population and arable land. It has 16 per cent of the world's population and 12 per cent of the world's arable land. According to the World Bank, the per capita GDP in India in 2016 was US$ 1,709.39.

Indian economy has managed to sustain high GDP growth despite financial crises it faced on regular intervals. The economic reforms which kicked off in 1991 led it to emerge as the third largest economy in Asia after China and Japan. It has now emerged as a major exporter of software services and software workers. As a result service sector now contributes immensely to India's GDP. However, more than half of the population is dependent on agriculture for its livelihood.

Some of key reforms it initiated include increasingly liberal foreign investment and exchange regimes, industrial decontrol, reductions in tariffs and trade barriers, opening and modernization of the financial sector, significant adjustments in government monetary and fiscal policies and more safeguards for intellectual property rights.

Post-liberalization and economic reform and since 1997, Indian economy has recorded an average growth rate of more than 7 per cent in the decade, reducing poverty by about 10 percentage points. India achieved GDP growth of 9.6 per cent, 9.0 per cent and 6.6 per cent in 2006, 2007 and 2008 respectively, significantly expanding manufactures through late 2008. Even in the wake of the financial crisis and resulting global economic slowdown, the country's foreign portfolio and direct investment inflows have significantly increased in recent years. However, there are factors which are restricting India's economy. Inadequate infrastructure, a cumbersome bureaucracy, corruption, labour market rigidities, regulatory control, high fiscal deficits, etc. are some of the stumbling blocks impeding the potential growth of economy

Despite big stride on account of economic reforms and the resultant benefits, Indian economy still suffers from some features of under-developed and developing economies. Dependence on agriculture, low per capita income, high population, unemployment, under-utilization of resources, use of poor technology, unequal distribution of wealth, etc. are some of hindrances it needs to address to transform into a developed economy.

NATURE AND SCOPE OF INDIAN ECONOMY

India has got along with the global financial crisis in a remarkable manner. Regardless of the recession in 2008-2009, the government is expecting the annual Gross Domestic Product (GDP) growth to return to approximately 9 per cent. The total population of the country stands at more than 1.1 billion, which is further growing at 1.55 per cent a year. With total GDP in 2008 of approximately $1.21 trillion ($1,210 billion), India occupies a position as the world's twelfth largest economy— and the third largest in Asia following Japan and China. Services, industry and agriculture account for 54 per cent, 29 per cent, and 18 per cent of GDP, respectively. India is making the most of its large numbers of qualified people who are skilled in the English language in order to become a major exporter of software services and software workers. However, more than half of the population is dependent on agriculture for its livelihood. Approximately 700 million Indians live on $2 per day or less, while a large and growing middle class comprising more than 50 million Indians are dependent on disposable income ranging from 2,00,000 to 1,000,000 per year ($4,166–$20,833) for their livelihood. However, it is estimated that the middle class will grow ten-fold by 2025.

Key Reforms and Sustained GDP Growth

Even though in a slow and halting manner, India continues to move ahead with market-oriented economic reforms that started in 1991.

Some of the reforms are:

- Increasingly liberal foreign investment and exchange regimes • Industrial decontrol
- Reductions in tariffs and other trade barriers
- Opening and modernization of the financial sector
- Significant adjustments in government monetary and fiscal policies
- More safeguards for intellectual property rights

Since 1997, the country's economy has recorded an average growth rate of more than 7 per cent in the decade, reducing poverty by about 10 percentage points. India achieved GDP growth of 9.6 per cent, 9.0 per cent and 6.6 per cent in 2006, 2007 and 2008 respectively, significantly expanding manufactures through late 2008. Initially, growth for the fiscal year ending 31 March 2009 was expected to be between 8.5 and 9.0 per cent. However, several economists had revised it to 7.0 per cent or less because of the financial crisis and resulting global economic slowdown. Foreign portfolio and direct investment inflows have significantly increased in recent years,

Factors Restricting Economic Growth

- Inadequate infrastructure
- A cumbersome bureaucracy
- Corruption
- Labour market rigidities
- Regulatory and foreign investment controls
- The 'reservation' of key products for small-scale industries
- High fiscal deficits

INDIA - AN UNDEVELOPED ECONOMY

Low per capita income:

One of the most important characteristic features of an under-developed economy is low per capita income. As opposed to the advanced countries, India's per capita income stands at a very low level. For example, the per capita income of India was 460 dollar in 2000, whereas the per capita income of the USA in the same year was eightythree times than India. Currently, there is a gradual increase in this trend of difference of per capita income between under-developed and advanced countries. In India, not only the per capita income is low, but the income is also distributed unequally, which creates a wide gap between the rich and the poor. Due to this unequal distribution of income and wealth, the problem of poverty in the country is increasingly becoming more critical and acute, and is strongly acting as a hurdle in the process of economic growth.

Heavy population pressure:

Population explosion is another massive hurdle to the economic growth of India. This is clearly seen from the total population of India, which was 102.67 crore in 2001 census. After China, India occupies the second position as the most populated country in the world. As in 2011, India has a total population of around 121 crore. All the under-developed countries are characterized by high birth rate, which stimulates the growth of population. The fast rate of population growth further propels a higher rate of economic growth in order to maintain the same standard of living. However, the failure to maintain the standard of living makes the under-developed countries poorer, thereby affecting the economic growth.

Pre-dominance of agriculture:

Occupational distribution of population in India evidently shows the backwardness of the economy. One of the basic features of an under-developed economy is the major contribution of the agriculture in the national income and the involvement of a very high proportion of working population in agriculture.

Unemployment:

Another significant feature of the under-developed economy of India is unemployment and under-employment. In underdeveloped countries, it is not possible to provide productive employment to the entire population. Due to lack of job opportunities in the market, talented people are forced to take up agriculture as their occupation. This leads to the deficiency of capital formation.

Low rate of capital formation:

The rate of capital formation is also low in an under-developed economy like India. Capital formation mainly depends on the ability and willingness of the people to save. Since the per capita income is low and there is unequal distribution of income and wealth, the ability of the people to save is very low in under developed countries. Therefore, this results in very low capital formation

Poor technology:

Technology plays a vital role in the growth of the economy of a nation. However, Indian economy greatly suffers from technological backwardness. In India, the techniques applied in agricultural industries and other economic fields are primitive in nature.

Backward institutional and social framework:

The social and institutional framework in India is highly under-developed, which significantly affects the economy of under-developed countries like India. This acts as a strong obstacle to any change in the form of production. Moreover, religious institutions, such as caste system and joint family universal marriage, greatly affect the economic life of the people.

Under-utilization of resources:

India, being a poor and an underdeveloped country, is not able to effectively utilize its resources. This makes the people remain economically backwards for the lack of utilization of resources of the country.

Price instability:

Price instability is also significantly responsible for an under-developed economy like India. In almost all the under-developed countries like India, there is continuous price instability. Shortage of essential commodities and gap between consumption and productions increase the price steadily. The rising trend of price further acts as a deterrent for maintaining the standard of living of the common people

INDIA - A DEVELOPING ECONOMY

If we go through the above facts, we may rush to the conclusion that Indian economy is an underdeveloped economy. But that is not completely true. Indian economy has over the decades shown marked improvements. It is in fact moving fast on the path of development.

- Rise in National income
- Rise in Per Capita Income
- Significant changes in occupational distribution of population. By occupational structure of acountry we mean the distribution of work force in different occupations of the country. All occupations are broadly divided into three groups
- Important changes in sectoral distribution of GDP
- Growing capital base of the economy
- Improvements in social overhead capital
- Development in the banking and financial sector

INDIA - A MIXED ECONOMY

Private ownership of means of production Agriculture and most of the industrial and services sectors are in the private hands

- Important role of market mechanism - Market forces of demand and supply have free role in determining prices in various markets. Government regulations and control over period of time have reduced a lot.

- Growth of monopoly houses - Over a period of time, many big business houses have come into being and have been growing such as Tatas, Birlas, Reliance, Infosys etc.

- Presence of a large public sector along with free enterprise - After Independence, the government recognised the need to provide infrastructure for the growth of the private sector. Also, it could not hand over strategic sectors like arms and ammunition, atomic energy, air transport etc. to the private sector. So public sector was developed on a large scale.

- Economic planning as a means of realizing overall national economic goals - Economic planning has been an integrated part of the Indian Economy. The Planning Commission lays down overall targets for the economy as a whole, for public sector and even for the sectors which are in the private hands like agriculture. The government tries to achieve the laid down targets by providing incentives to these sectors. Thus, here planning is only indicative in nature and not compulsive

INTRODUCTION TO NATIONAL INCOME

Economic growth usually refers to quantitative rise in National Income and Per Capita Income of an economy during a period of time. To understand economic growth in India, first we examine the National Income trends and then look into the trends of Per Capita Income in India during the last sixty years. India was an underdeveloped economy when it achieved independence in 1947. Even though India has started the process of economic development under the Five Year Plans, it continued to face many problems. The major issues, which India has to deal with in the 21st century, are poverty, population growth, food security, unemployment, illiteracy, lack of health facilities environmental degradation and other issues related to agriculture, industry and so on.

NATIONAL INCOME

National income is the money value of all the final goods and services produced by a country during a period of one year. National income consists of a collection of different types of goods and services of different types.

Since these goods are measured in different physical units it is not possible to add them together. Thus we cannot state national income is so many millions of metres of cloth, so many million litres of milk, etc.

Therefore, there is no way except to reduce them to a common measure. This common measure is money. The value of all goods and services produced is measured in money. For example, if the value of a metre of cloth is Rs. 20 and the total cloth produced is 100 metres, then the money value of cloth is Rs. 2000. In this way we can find out the value of other goods and services and the total value of all the goods and services produced during one year. This gives us a single measure of the final goods and services produced by the country in that year which is nothing but the value of national income or national product

BASIC CONCEPTS IN NATIONAL INCOME AND OUTPUT

Gross Domestic Product (GDP)

Gross domestic product is the money value of all final goods and services produced in the domestic territory of a country during an accounting year. The concept of domestic territory has a special meaning in national income accounting.

Gross National Product (GNP)

It has already been seen that whatever is produced within the domestic territory of a country in a year is its gross domestic product. It, however, includes, the contribution made by non-resident producers by way of wages, rent, interest and profits.

The non-residents work in the domestic territory of some other country and earn factor incomes. For example, Indian residents go abroad to work. Indian banks are functioning abroad. Indians own property in foreign countries. The income of all these people is the factor income earned from abroad. In other words, it is factor income earned from abroad by the residents of India by rendering factor services abroad. Similarly, factor services are rendered by non- residents within the domestic territory of India. Net factor income from abroad is the difference between the income received from abroad for rendering factor services and the income paid for the factor services rendered by non-residents in the domestic territory of a country. It’s the income received by only Indian Citizen

Net Domestic Product:

While calculating GDP no provision is made for depreciation allowance (also called capital consumption allowance). In such a situation gross domestic product will not reveal complete flow of goods and services through various sectors.

It is a matter of common knowledge that capital goods like machines, equipment, tools, buildings, tractors etc., get depreciated during the process of production. After some time these capital goods need replacement. A part of capital is therefore, set aside in the form of depreciation allowance. When depreciation allowance is subtracted from gross domestic product we get net domestic product.

NDP = GDP – depreciation

Net National Product (NNP) :

It can be derived by subtracting depreciation allowance from GNP. It can also be found out by adding the net factor income from abroad to the net domestic product. If the net factor income from abroad is positive i.e., the inflow of factor income from abroad is more than the outflow, NNP will be more than NDP; conversely, if net factor income from abroad is negative, NNP will be less than NDP and it would be equal to NDP in case the net factor income from abroad is zero. Symbolically, NNP = NDP + NFIA

Per-Capita Income:

The percapita income is arrived by dividing the national income by population. Percapita income is measured either at constant price

Methods of Calculation of National Income

There are three different methods of calculating national income. They are

Product or Output Method

Production Method

The production method gives us national income or national product based on the final value of the produce and the origin of the produce in terms of the industry.

All producing units are classified sector wise.

- Primary sector is divided into agriculture, fisheries, animal husbandry.
- Secondary sector consists of manufacturing.
- Tertiary sector is divided into trade, transport, communication, banking, insurance etc.

Income Method

Different factors of production are paid for their productive services rendered to an organization. The various incomes that includes in these methods are wages, income of self-employed, interest, profit, dividend, rents, and surplus of public sector and net flow of income from abroad.

Expenditure Method

The various sectors – the household sector, the government sector, the business sector, either spend their income on consumer goods and services or they save a part of their income. These can be categorized as private consumption expenditure, private investment, public consumption, public investment etc.

Problems in Calculation of National Income

- Presence of a large non-monetized sector
- Lack of appropriate and reliable data
- Problem of double counting
- Problem of transfer payments
- Difficulties in classification of working population
- Unreported illegal income

The National Income Unit of the Central Statistical Organisation (CSO) estimates a major part of the national incomes by the product method, e.g., in sectors like agriculture, animal husbandry, forestry, fishing, mining and factory establishments. And the "income method" is used in the estimation of national income in the case of other sectors.

Introduction of GVA at basic prices in India

In India, GDP is estimated by Central Statistical Office (CSO). Under the Fiscal Responsibility and Budget Management Act 2003 and Rules thereunder, Ministry of Finance uses the GDP numbers (at current prices) to peg the fiscal targets. For this purpose, Ministry of Finance makes their own projections about GDP for the coming two years while specifying future fiscal targets.

In the revision of National Accounts statistics done by Central Statistical Organization (CSO) in January 2015, it was decided that sector-wise wise estimates of Gross Value Added (GVA) will now be given at *basic prices* instead of *factor cost*. In simple terms, for any commodity the basic price is the amount receivable by the producer from the purchaser for a unit of a product minus any *tax on the product* plus any *subsidy on the product*. However, GVA at basic prices will include production taxes and exclude production subsidies available on the commodity. On the other hand, GVA at factor cost includes no taxes and excludes no subsidies and GDP at market prices include both production and product taxes and excludes both production and product subsidies.

CHANGES IN THE SECTORAL COMPOSITION OF NATIONAL INCOME

The different sectors have been grouped under three heads, namely, Agriculture and allied activities, Industry and services. The share of GDP originating from agriculture and allied activities has steadily declined, while that originating from industry and services sectors has increased. These changes show that Indian economy has transformed from the production structure of a backward economy to that of developing economy

Changes in the Sectorial Composition:

Decreasing Share of Agriculture and Allied Activities:

Agriculture has been a way of life and continuous to be the single most important livelihood of the masses Agriculture and allied activities include agriculture, forestry and fishing, mining and quarrying. The share of agriculture and allied activities has declined from about 56 % in 1950-51 to 33.3 % in 1990-91 and further to about 17% in 2010-11. The gap between the growth of agriculture and non-agriculture sector started to widen since 1996- 97 because of acceleration in the growth of industry and service sectors. The continuous fall in the share of agriculture and allied activities in the GDP is partly due to the high growth in other sectors in the economy and partly to the low growth in this sector especially agriculture. During the Ninth and Tenth Five Year Plans agricultural sectoral growth rate was 2.44% and2.3% respectively compared to 4.72% during the 8 th Plan. During the Eleventh Plan agricultural growth is estimated at 3.28 % against the target of 4%. Low investment, imbalance in fertilizer use, low seeds replacement rate, a distorted incentive system, low post harvest value addition and erratic rainfall continued to affect the performance of agricultural sector.

Rising Share of Industry:

The share of industry comprising manufacturing, construction, electricity, gas and water supply has steadily increased from 14.4 percent of GDP in 1950-51 to 24 percent in 1990-1991 and further to 25.6 % in 2010-11 (see Table 1.7). Industrial sector is comprised of manufacturing, construction, electricity, gas and water supply. The near stability of the share of industry in GDP indicates that the potential of this sector has not yet been fully exploited. The manufacturing is the most dominant sector within industry. The share of manufacturing in GDP remained in the range of 14-16 % during the post-reform period between1991-92 and 2011-12. The industrial sector is open to international trade environment and rapid technological change. Thus, this sector is required to be innovative and competitive.

Increasing Share of Services:

The services sector comprises of three components, i.e., (i) Trade, hotels, transport and communication; (ii) Financing insurance, real estate and business services; and (iii) Public administration, defense and other services. The share of services increased steadily from 29-.5 percent of GDP in 1950-51 to 42.6 percent in 1990-91 and further to about 57.6 percent in 2010-11. Services sector has acted as the important engine of overall growth of Indian economy for more than a decade. The Indian economy has successfully navigated the difficult years of the recent global economic crisis because of the vitality of this sector in the domestic economy.

CAPITAL FORMATION

Capital formation refers to the increase in the stock of real capital in an economy during an accounting period. In other words, it is the creation of things that help us produce more. We commonly used the term in the study of macroeconomics. We 'form' capital when we use our savings for investment purposes – often investment in production. In other words, the formation of capital occurs when we invest in making things

It should, however, be very clearly understood that capital formation does not mean increase in money capital, but it actually refers to increase in physical capital, i.e., machinery, factories, transport equipment, bridges, power projects, dams, irrigation systems, etc. To sum up, capital formation implies the creation of real assets.

Capital formation consists of both tangible goods like plants, tools and machinery and intangible goods like high standards of education, health, scientific progress and research.

Human and Physical Capital formation

Physical capital refers to the assets which themselves have been manufactured and are used for production of other goods and services. In a broader term, physical capital refers to all non-human assets created by humans and used in the production and manufacturing process. Examples of physical capital include machinery and equipment used directly in the production process. Buildings are also classified as physical capital, as long as they are used in business operations. Manufacturing plants that contain all production equipment and facilities, warehouses that contain finished or work in progress products, and even buildings used for administration, accounting, sales, etc. are also referred to as physical capital. Vehicles are also considered physical capital, whether they are used for internal purposes, or are used to transport goods to their final retail destination; as long as the vehicle is used in business operations it becomes physical capital.

Human capital

Human capital refers to the skills, training, experience, education, knowledge, know-how, and competencies contributed by humans to a business. In other words, human capital can be referred to as the value that is added onto a company by an employee, which can be measured by the employee's skills and competencies. Human capital is an important factor of production, and employing individuals with the right education, experience, skills and training can improve efficiency, productivity, and profitability. Companies can invest in their human capital by offering training and education facilities to its workers. Training and developing employees can help them develop a broader set of skills and abilities and reduce cost of hiring additional employees with necessary skills. One thing that must be kept in mind is that humans are not equal to one another and that human capital can be developed in many ways to obtain the highest economic value to the firm.

There are two aspects of capital formation viz. Gross Capital Formation (GCF) and Net Capital Formation (NCF).

Gross Capital Formation: It means gross investment. It includes both replacement investment and net investment.

Net Capital Formation: It means increase in net investment only. Net investment is estimated by deducting depreciation from gross investment.

Sources & key Aspect of Capital Formation

Gross Capital Formation Steadily Improved: Gross capital formation in the 1950s was as low as 7.8% of GDP. This improved in the following decades with the Five-Year Plans constantly focusing on improving physical stock.

Measures of Capital Formation: Gross capital formation, gross fixed capital formation and gross domestic capital formation are few other definitions to study capital formation. In India, the Central Statistical Organisation provides data on capital formation by institutions and sectors.

Savings: Savings provide necessary means for investment in the economy. Savings rate has improved post-liberalisation to 36% of GDP, which points to rise in economic activity and national income in India. The country currently is among the high-saving economies of the world. However, India's saving rate is still far lower compared with China's, which is around 50% of GDP.

Contribution To Gross Capital Formation: Currently, private sector leads in investments in the economy at 37% of total investments. Public investments are around 26% and household investments account for 32%. Public share in investments has fallen over time, which indicates the government's inability to stimulate investments in the country. The way forward is to boost investments through private-public partnerships that can help India solve its infrastructure problems.

Private Investments: With liberalisation of the economy and a favourable business environment, private sector now leads in investments in the economy. Private investments are largely funded by household savings. Over the years, private savings have also improved, which have further aided private sector capital formation. The private sector, being the biggest contributor to gross capital formation, now has a crucial role to play in leading India's economic growth

Public Investments: Public investments have declined as government lacks enough resources to boost investment in a big way. Also, the government's propensity for dissavings, because of poor expenditure management, has left it with fewer resources to fund investments in the country. As government lacks enough muscle to raise investments further, the private sector and foreign fund inflows have become critical for increasing investment levels in the country.

Household Investments: Household investments account for 32% of total investments. Household includes individuals, non-corporate business bodies, private and charitable institutions such as educational and religious organisations. Therefore, investments by these bodies in terms of physical capacity creations such as on land, buildings, factories, etc, are termed as household capital formation. Household investments are funded by rising household savings. Household savings accounts for nearly 70% of total savings and are the chief source of investments for both private and public investments.

NEP (New Economic Policy)

When India gained its independence, India's leaders decided that the nation needed to follow a state led model of development. In this regard, many restrictions were put on private industry. These restrictions reached such an extent in the 1970s that industrialists started referring to the state led model of development as License Raj. The state-led model of development was more or less continued till 1991 when India decided to reform its economy by opening it up to the private sector and outside competition. This decision was taken in light of the balance of payment crisis that India was facing in 1991. As you have read in the previous unit, during the balance of payment crisis, the current account deficit had widened to such a degree that India was in jeopardy of defaulting on its loan. The crisis resulted in India mortgaging its gold reserves for a loan from the IMF. The loan came with certain conditions, known as 'structural adjustment policies' which India had to comply with to fulfil the conditions of the loan. Thus, the process of economic reform began. Since 1991, we have moved away from a state led model of development to the LPG (Liberalisation, Privatisation, Globalisation) model of development.

Rational Behind Economic Reform

At the time of Independence in 1947, India was a typically backward economy. Owing to poor technological and scientific capabilities, industrialization was limited and lop-sided. Agricultural sector exhibited features of feudal and semi-feudal institutions, resulting into low productivity. Means of transport and communications were underdeveloped. Educational and health facilities were grossly inadequate and social security measures were virtually non-existent. In brief, the country suffered from the twin problems of rampant poverty and widespread unemployment, both resulting in low standard of living.

In 1991, India met with an economic crisis relating to its external debt — the government was not able to make repayments on its borrowings from abroad; foreign exchange reserves, which we generally maintain to import petrol and other important items, dropped to levels that were not sufficient for even a fortnight. The crisis was further compounded by rising prices of essential goods. All these led the government to introduce a new set of policy measures which changed the direction of our developmental strategies. In this chapter, we will look at the background of the crisis, measures that the government has adopted and their impact on various sectors of the economy.

India approached the International Bank for Reconstruction and Development (IBRD), popularly known as World Bank and the International Monetary Fund (IMF) and received $7 billion as loan to manage the crisis. For availing the loan, these international agencies expected India to liberalise and open up the economy by removing restrictions on the private sector, reduce the role of the government in many areas and remove trade restrictions between India and other countries.

India agreed to the conditionalities of World Bank and IMF and announced the New Economic Policy (NEP). The NEP consisted of wide ranging economic reforms. The thrust of the policies was towards creating a more competitive environment in the economy and removing the barriers to entry and growth of firms.

This set of policies can broadly be classified into two groups: the stabilisation measures and the structural reform measures. Stabilisation measures are shortterm measures, intended to correct some of the weaknesses that have developed in the balance of payments and to bring inflation under control. In simple words, this means that there was a need to maintain sufficient foreign exchange reserves and keep the rising prices under control. On the other hand, structural reform policiesare long-term measures, aimed at improving the efficiency of the economy and increasing its international competitiveness by removing the rigidities in various segments of the Indian economy

APPRAISAL OF ECONOMIC REFORMS

Economic reforms in India were started by late Prime Minister Rajiv Gandhi. He said, "The public sector has entered into too many areas where it should not be. We shall open the economy to the private sector in several areas hitherto restricted to it." Consequently, a number of measures were taken to remove control and open areas to private sector players. However, Rajiv Gandhi did not take a very strong and categorical position on the issue of Privatisation\and Globalisation, though some Liberalisation of the economy did take place. It was when Mr. Narasimha Rao took over as Prime Minister in 1991 that a new industrial policy was announced, which marked a sharp departure from the earlier industrial policy of 1956. There were three aims of the new economic policy—Liberalisation, Globalisation and Privatisation.

Aims of Liberalisation, Globalisation and Privatisation

Liberalisation, Globalisation and Privatisation are all means to achieve certain ends of the society just as nationalization and regulatory frameworks were intended to achieve certain goals

(a) To achieve a high rate of growth of national and per capita income.
(b) To achieve full employment.
(c) To achieve self-reliance.
(d) To reduce inequality of income and wealth.
(e) To reduce the number of people living below the poverty line.

(f) To develop a pattern of society based on equality and absence of exploitation.

Liberalisation

The main aim of Liberalisation was to dismantle the excessive regulatory framework which acted as a shackle on freedom of enterprise. Over the years, the country had developed a system of licence-permit-control raj. The aim of the new economic policy was to save the entrepreneur the unnecessary harassment of seeking permission from the bureaucracy to start an undertaking.

Similarly, the big business houses were unable to start new enterprises because the MRTP Act had prescribed a ceiling on the asset ownership to the extent of `100 crore. In case a business house had assets more than `100 crore, its application was rejected. It was believed that on account of the rise in prices this limit had become outdated and needed reviewing. The second objection by the private sector lobby was that it prevented big business houses from investing in heavy industry and infrastructure, which required lump sum investment. The NDA in its election manifesto had suggested that the asset limit of MRTP companies should be raised to `1000 crore. The government thought it wise to abolish the limit altogether so that big businesses could establish big projects in the core sectors—heavy industry, petrochemicals, electronics, etc. The Government was of the view that in the context of Liberalisation, the MRTP limit had become irrelevant and needed to be scrapped. The major purpose of Liberalisation was to free the large private corporate sector from bureaucratic controls. It therefore, started dismantling the regime of industrial licensing and control. In pursuance of this policy, the industrial policy of 1991 abolished industrial licensing for all projects except for a small set of 18 industries

Privatisation

Privatisation is the process of involving the private sector in the ownership or operation of a state-owned or public sector undertaking.

(i) Ownership measures,
(ii) Organizational measures and
(iii) Operational measures

Ownership Measures:

The degree of Privatisation is judged by the extent of ownership transferred from the public enterprise to the private sector. Ownership may be transferred to an individual, co-operative or corporate sector. This can have three forms:

(i) Total denationalisation implies 100 per cent transfer of ownership of a public enterprise to the private sector.
(ii) Joint venture implies partial transfer of a public enterprise to the private sector. It may have several variants—25 per cent transfer to private sector in a joint venture implies that majority ownership and control remains with the public sector. Fifty one per cent transfer of ownership to the private sector shifts the balance in favour of the private sector, though the public sector retains a substantial stake in the undertaking. seventy-four per cent transfer of ownership to the private sector implies a dominant share being transferred. In such a situation, the private sector is in a better position to change the character of the enterprise
(iii) Liquidation implies sale of assets to a person who may use them for the same purpose or for some other purpose. This depends solely on the preference of the buyer
(iv) Workers' Cooperative is a special form of denationalisation. In this form, ownership of the enterprise is transferred to workers who may form a co-operative to run the enterprise. In such a situation, appropriate provision of bank loans is made to enable workers to buy the share of the enterprise. The burden of running the enterprise rests on the workers in a workers' cooperation. The workers become entitled to ownership dividends besides getting wages for their services.

Organisational Measures:

(i) A holding company structure may be designed in which the government limits its control to top-level major decisions and leaves a sufficient degree of autonomy for the operating companies in their day-to-day operations. A big company like the Steel Authority of India may acquire a holding company status, thereby transferring a number of functions to its smaller units. In this way, a decentralized pattern of management emerges
(ii) Leasing: In this arrangement, the government agrees to transfer the use of assets of a public enterprise to a private bidder for a specified period, say

five years. While entering into a lease, the bidder is required to give an assurance of the quantum of profits that would be made available to the state. This is a kind of tenure ownership. The government reserves the right to review the lease to the same person or to grant the lease to another bidder, depending upon the circumstances of the case

(iii) Restructuring: It is of two types—Financial Restructuring and Basic Restructuring.

- Financial Restructuring implies the writing-off of accumulated losses and rationalisation of capital composition in respect of debt– equity ratio. The main purpose of this restructuring is to improve the financial health of the enterprise.
- Basic Restructuring is said to occur when the public enterprise decides to shed some of its activities to be taken up by ancillaries or small-scale units

Operational Measures

The efficiency of public sector enterprises depends upon the organisational structure. Unless this structure grants a sufficient degree of autonomy to the operators of the enterprise or develops a system of incentives, it cannot raise its efficiency and productivity. These measures include

(a) Grant of autonomy to public enterprises in decision-making
(b) Provision of incentives for workers and executives consistent with increase in efficiency and productivity
(c) Freedom to acquire certain inputs from the markets with a view to reducing costs
(d) Development of proper criteria for investment planning
(e) Permission to public enterprises to raise resources from the capital market to execute plans of diversification. The basic purpose of operational measures is to infuse the spirit of private enterprise in public enterprises so that government control is effectively reduced and private initiative is promoted

Review of Economic Reforms:

There is general agreement among all political parties that reforms are a historical necessity and it is not possible to reverse the reform process. Even the Left parties, after the collapse of the former Soviet Union, have accepted the view that some reforms in the form of Liberalisation, Privatisation and Globalisation will have to be undertaken. However, recent events like the global financial crisis have once again started the debate in India on whether to continue the process of economic reforms. While there can be no doubt that the reforms process has helped to accelerate growth, the benefits of growth have not percolated to the poor and weaker sections of the society. In fact, income inequality has risen sharply in the last 20 years. India may be now home to around 50 U.S. dollar billionaires, but at the same time, around 800 million people live on two dollars a day. Considering the size of India's population, such large-scale income disparity is untenable and can only result in instability in the country. Moreover, the recent unearthing of corporate scams running into multiple lakh crores has put serious question marks on India's growth story. Questions are now being raised whether India is following a path of 'crony capitalism'.

Higher growth rate achieved:

Since the reform process was initiated the growth rate of the economy has started picking up. The growth rate of GDP slumped to 0.9 per cent in 1991–92, but picked up thereafter. The average growth rate of over 6 per cent during the five years (1992–93 to 1996–97) is an achievement of the reform process. This would result in an average 4 per cent growth rate of per capita GDP.

Control of Inflation:

During 1993–94 and 1994–95, the wholesale price index rose by 10.8 per cent and 10.4 per cent respectively. Thereafter, due to strong measures taken during 1995–96, the rate of inflation slowed down to 5 per cent. The impact of inflation on the common man is measured by the consumer price index. The consumer price index has shown an average rise of over 10 per cent during 1991–1997. This implies the failure of the reform process to control inflation despite the achievement of high growth rate

Reform of the Public Sector:

The major aim of economic reforms is to improve the public sector so that the rate of return improves. To remedy the situation, it was necessary that overstaffing of the public sector undertakings be reduced. The government has already taken steps in this direction by its voluntary retirement scheme. It set up the National

Renewal Fund to provide compensation for voluntary retirement and also arranged for retraining and redeployment of workers. As a result of the VRS, the employee strength of PSUs has been reduced by 8 per cent.

Another step taken by the government was disinvestment in PSUs. The government has been offering equity of 31 selected public sector enterprises, varying from 5 per cent to 20 per cent to Mutual Funds and Financial Institutions. This is only a token Privatisation and the government was able to raise `9793 crore during the four-year period (1991–92 to 1994–95).

Critics describe disinvestment as deficit Privatisation because the proceeds of disinvestment are being used to reduce the budget deficit. The Common Minimum Programme of the NDF Government stipulated that the proceeds of disinvestment would be used in two vital areas—health and education. On the whole, the reforms of PSUs have not gathered as much momentum as expected. Disinvestment has been piecemeal and the funds so raised are being used to reduce budget deficits rather than strengthen the PSUs. In addition, labour problems, political and bureaucratic interference have not been effectively used. Since it is not possible to privatise a large component of the public sector, it would be advisable to reform it

Large dose of Foreign Capital to help Indian Economy:

The reforms process, especially its emphasis on Globalisation, was intended to accelerate the growth process by attracting a larger dose of foreign capital. However, the efforts of the state met with only partial success. The data reveal that during 1991–92 to 1995– 96, total investment flows of the order of `1,174 billion were made, out of which portfolio investment was of the order of `8.05 billion and direct foreign investment accounted for barely $ 3.69 billion. Critics point out that mainly 39 per cent of foreign investment is in the non-priority sector. The entry of multinationals in consumer goods only displaces Indian labour and capital employed in the production of these commodities.

Reform Process and the Foreign Trade Scenario:

The reform process has led to growth of exports but simultaneously, it has also led to a larger growth of imports. As a result, the trade gap has not been reduced.

NITI Aayog

Government of India has replaced the old planning commission started in 1950 with a new institution called NITI Aayog on 1 January 2015. It works under the chairmanship of Prime Minister. NITI Aayog (National Institution for Transforming India) will seek to provide a critical directional and strategic input into the development process. It focuses on co-operative federalism.

What's new with NITI Aayog

- NITI Aayog = more a "think tank" than a finance distributing agency.
- NITI Aayog will provide Governments at the central and state levels with relevant strategic and technical advice across the spectrum of key elements of the policy.
- With NITI Aayog, there will be multi-directional flow of policy (from Center to States, from States to Center, between ministries etc.)
- Better inter-ministry coordination.
- The NITI Aayog will develop mechanisms to formulate credible plans to the village level and aggregate these progressively at higher levels of government.
- The NITI Aayog will create a knowledge, innovation and entrepreneurial support system through a collaborative community of national and international experts.
- NITI Aaayog is based on the 7 pillars of effective governance – (1) Pro-People (2) Pro-Activity (3) Participation (4) Empowering (5) Inclusion of all (6) Equality (7) Transparency.
- In NITI Aayog, the state governments has an equal role in nation's development process and NITI Aayog promises the principle of co-operative federalism.
- It's a platform for monitoring and implementation of all government policies by bringing together various ministries at the center and state level.
- Priorities include upliftment of the poor, marginalized and downtrodden.,
- Empower vulnerable and marginalized sections, redressing identity-based inequalities of all kinds – gender, region, religion, caste or class.

Objectives

- An administration paradigm in which the Government is an "enabler" rather than a "provider of first and last resort."
- Progress from "food security" to focus on a mix of agricultural production, as well as actual returns that farmers get from their produce.
- Ensure that India is an active player in the debates and deliberations on the global commons.
- Ensure that the economically vibrant middle-class remains engaged, and its potential is fully realized.
- Leverage India's pool of entrepreneurial, scientific and intellectual human capital.
- Incorporate the significant geo-economic and geo-political strength of the Non-Resident Indian Community.
- Use urbanization as an opportunity to create a wholesome and secure habitat through the use of modern technology.
- Use technology to reduce opacity and potential for misadventures in governance

Structure and Composition of NITI Aayog

NITI Aayog	**Planning Commission**
It serves as an advisory Think Tank.	It served as extra-constitutional body.
It draws membership from a wider expertise.	It had limited expertise.
It serves in spirit of Cooperative	States participated as spectators in annual

Federalism as states are equal partners.	plan meetings.
Secretaries to be known as CEO appointed by Prime- Minister.	Secretaries were appointed through usual process.
It focuses upon 'Bottom-Up' approach of Planning.	It followed a 'Top-Down' approach.
It does not possess mandate to impose policies.	Imposed policies on states and tied allocation of funds with projects it approved.
It does not have powers to allocate funds, which are vested in Finance Minister.	It had powers to allocate funds to ministries and state government

National Development Council

The National Development Council or the Rashtriya Vikas Parishad was set up on 6th August 1952 to strengthen and mobilise the effort and resources of the nation in support of the plan, to promote common economic policy in all vital spheres, and to ensure the balanced and rapid development of all parts of the country.

The Council which was re-constituted on October 7, 1967 is the highest decision making authority in the country in the area of development matters.

It is a constitutional body with representation from both the Centre and States.

The Council is headed by the Prime Minister and all Union Cabinet Ministers, State Chief Ministers, representatives of Union Territories; Members of Planning Commission are its members. The Secretary/ Member-Secretary of Planning Commission functions as the Secretary of the Council and all administrative assistance is rendered by Planning Commission.

Objectives

The purpose of NDC is to secure the active participation and cooperation of the people, improving the efficiency of the administrative services, ensuring the development of the less advanced regions and sections of the community and, build up resources for national development. It was envisaged that the NDC would advise and make recommendations to the Central and state governments.

It has been functioning since its inception as a high power consultative body wherein the frame of the Five-Year Plans and the policies, that have to be adopted for tiding over the urgent problems of economy have been discussed and solutions arrived at. Thus, in addition to the plan, the council has concerned itself with problems like food, creation of the State Trading Corporation and land reforms.

The council is to act as a kind of bridge between the Union government, the Planning Commission and the state governments. It helps in the coordination not only of policies and programmes but also other matters of national importance. It provides a useful forum for full and free exchange of views and served as an effective device for sharing of responsibility between states and the Union government.

Functions of the NDC

1. Assessment of resources required for implementing the plan and to suggest ways and means for raising them
2. Review of the working of the plan from time to time and to recommend such measures as are necessary for achieving the aims and targets.
3. Prescription of guidelines for the formulation of the national plan.
4. Consideration of the national plan as formulated by the Planning Commission.
5. Consideration of important questions of social and economic policy affecting development.

PLANNING IN INDIA

A planned economy is an economic system in which the economy is directed by the state. It is an economic system in which the central government controls industry by making major decisions regarding the production and distribution of goods and services. The two major types of planning are central or centralized planning and indicative planning. After the end of the British Raj, Independent India decided to follow a centralized planning approach to its development. In this regard the Planning Commission was set up.

India's first Prime Minister, Jawaharlal Nehru set up the Planning Commission with a Government of India resolution in March 1950. The Planning Commission was set up in pursuance of the declared objectives of the government, which was to promote a swift rise in the standard of living of the people by the efficient utilization of the resources of the country, increasing production and offering opportunities to all for employment in the service of the community. Nehru was the first chairman of the Planning Commission, a post that has been held by all subsequent prime ministers. The charge of the Planning Commission was to assess all the resources of the country, increasing deficient resources, formulating plans for the most effective and balanced utilization of resources and determining priorities

The 'Nehru-Mahalanobis' model was formulated by Prof. P. C. Mahalanobis under the guidance of Nehru. The 'Nehru-Mahalanobis Model' became the basis of the second five-year plan and continued to be guiding principle of all subsequent plans with small alterations until 1977 when the Janata Party came into power and conceived of the Gandhian model. The emphasis of the model was on the rapid development of heavy industry with the objective of creating an indigenous industrial base so as to make India even more self-reliant into heavy industries and-goods sector. The justification of the heavy industries strategies was stated in the framework of the second five-year plan because "in long run, the rate of industrialization and the growth of the national economy would depend upon the increasing production of coal, electricity, iron and steel, heavy machinery, heavy chemicals and heavy industries generally – which would increase the capacity for capital formation. One important aim is to make India independent as quickly as possible of foreign imports of producer goods so that the accumulation of capital would not be hampered by difficulties in securing supplies of essential producer goods from other countries. The heavy industry must, therefore, be expanded with all possible speed." The Nehru–Mahalanobis Model's justifications for greater emphasis on heavy industry were given as follows:

(a) The British colonial government intentionally denied the development of heavy industry in India and kept the country, primarily an agrarian economy, as an appendage of the British colonial system.

(b) The Indian industrial structure was mainly dependent on the consumer goods industries. Therefore, it was necessary to broaden this base by developing heavy industries and infrastructure. The argument was made that a diversified industrial structure could absorb a huge population of labour and raise labour productivity. Such a situation would reduce the nation's dependence on agriculture as a provider of employment.

(c) Since the productivity of labour was higher in manufacturing than in agriculture, a push towards industrialisation promised to bring about a swift increase in national and per capita income

(d) The rapid development of the industrial sector was not only critical for the development of agriculture, but also for the growth of all other sectors of the Indian economy.

Although there was no denying the fact that foreign aid assisted in the development of capital goods and the infrastructure sector, the 'Nehru-Mahalanobis Model' stressed that the major burden of development would have to be borne by domestic savings. Since foreign aid would largely come in the form of loans, the model emphasised the growth of exports so as to pay for the bulk of imports by the increase in exports. The model was also conscious of the fact that enormous investments in heavy industry, although very important, would not increase employment significantly, since such investments were capital-intensive. Therefore, in order to generate employment and support the production of consumer goods, investment had to be made in small scale industries. The emphasis of enormous investment in heavy industry did not mean that the model did not give due importance to the role of agriculture for developing the Indian economy. Nehru recognised how critical agriculture was to the Indian economy stating, "We shall find that this industrial progress cannot be achieved without agricultural advances and progress... Everyone knows that unless we are self-sufficient in agriculture we cannot have the wherewithal to advance in industries. If we have to import food, then we are doomed so far as progress is concerned. We cannot import both food and machinery."

Indian Planning Since Independence

Plan	Aspects
First Plan (1951–56)	• Based on the Harrod-Domar Model • Community Development Program launched in 1952 • Focus on agriculture, price stability, power and transport • Plan successful primarily because of good harvests in the final two years of the plan
Second Plan (1956–61)	• Also called the Nehru-Mahalanobis Plan • Focus on rapid industrialization • Advocated huge imports through foreign loans • Shifted the emphasis from agriculture to industry • Target Growth: 4.5 per cent • Actual Growth: 4.27 per cent • During this plan, prices increased by 30 per cent, against a decline of 13 per cent during the first plan
Third Plan (1961–66)	• At the inception of the third plan, it was felt that the Indian economy had entered a take-off stage. Therefore, the aim of the plan was to make India a 'self-reliant' and 'self-generating' economy • Based on the experience of first two plans, agriculture was given top priority to support the exports and industry • Target Growth: 5.6 per cent • Actual Growth: 2.84 per cent • The plan failed completely in reaching targets due to the Chinese aggression of 1962, the India-Pakistan War if 1965 and a severe drought in 1965–66
Annual Plans (1966–69)	• The prevailing crisis in agriculture and a serious food shortage necessitated the emphasis on agriculture during the Annual Plans • During these plans a completely new agricultural strategy was implemented. It involved the wide-spread distribution of high-yielding varieties of seeds, extensive use of fertilizers, exploitation of irrigation

	potential and soil conservation During the Annual Plans, the economy absorbed the shocks that were generated during the third plan The annual plans paved the path for the planned growth ahead
Fourth Plan (1969–74)	• The main emphasis of the plan was on growth rate of agriculture to enable other sectors to move forward • Target Growth: 5.7 per cent • Actual Growth: 3.30 per cent • The first two years of the plan saw record production. The last three years did not measure up due to poor monsoons • The influx of Bangladeshi refugees before and after the 1971 Indo-Pak war was an important issue
Fifth Plan (1974–79)	• D.D. Dhar prepared and launched the fifth five year plan • The two main objectives of the plan was 'Garibi Hatao' (removal of poverty) and the 'attainment of self reliance' • The promotion of a high rate of growth, better distribution of income and significant growth in the domestic rate of savings were seen as key instruments of the plan • The fifth plan was abruptly terminated in 1978 instead of 1979 after the Janata Party came to power at the centre • Target Growth: 4.4 per cent • Actual Growth: 3.8 per cent
Rolling Plan (1978–80)	There were two sixth five-year plans. The Janata party government put forward a plan for 1978–1983. However, the government lasted for only two years. The Congress returned to power in 1980 and launched a different plan
Sixth Plan (1980–85)	• The Congress government's sixth five-year-plan focused on increasing national income, modernising technology, ensuring the continuous decrease in poverty and

	unemployment, population control through family planning, etc • Target Growth: 5.2 per cent • Actual Growth: 5.66 per cent
Seventh Plan (1985–90)	• The focus of the seventh plan was the rapid growth in foodgrains production, increased employment opportunities and productivity within the framework of the basic tenants of planning • The plan was very successful with the economy recording 6 per cent growth rate against the targeted 5 per cent • Target Growth: 5.0 per cent • Actual Growth: 6.01 per cent
Eighth Plan (1992–97)	• The eighth plan was postponed by two years because of political uncertainty at the Centre • The Balance of Payment crisis and inflation during 1990–91 were the key issues during the launch of the plan • The plan undertook drastic 'structural adjustment policies' enforced by the World Bank to combat the bad economic situation and to undertake an annual average growth of 5.6 per cent • Some of the main economic outcomes during the eighth plan period were rapid economic growth, high growth of the agriculture and allied sector the manufacturing sector, the growth in exports and imports, improvements in trade and the current account deficit
Ninth Plan (1997–2002)	• The ninth five year plan was developed in the context of four important dimensions. The dimensions were quality of life, generation of productive employment, regional balance and selfreliance • Target Growth: 6.5 per cent • Actual Growth: 5.35 per cent
Tenth Plan (2002–2007)	• The objective of the tenth five year plan was to achieve 8 per cent GDP growth rate, reduce poverty by five percentage points by 2007, provide universal primary

	healthcare by 2007, and to provide sustained drinking water to all villages by 2012. • The plan also aimed at providing high quality gainful employment to the labour force over the plan period and aimed at increasing literacy rate to 72 per cent within the plan period and to 80 per cent by 2012 • Target growth:8.1 per cent • Growth achieved:7.7 per cent
Eleventh Plan (2007–2012)	• Accelerate GDP growth from 8% to 10 per cent, increase agricultural GDP growth rate to 4 per cent per year, create 70 million new work opportunities and reduce educated unemployment to below 5 per cent • Raise real wage rate of unskilled workers by 20 per cent • Reduce dropout rates of children from elementary school from 52.2 per cent in 2003–04 to 20 per cent by 2011–12 and increase literacy rate for persons of age 7 years or above to 85 per cent • Lower gender gap in literacy to 10 percentage point and increase the percentage of each cohort going to higher education from the present 10 per cent to 15 per cent • Reduce infant mortality rate to 28 and maternal mortality ratio to 1 per 1000 live births • Reduce Total Fertility Rate to 2.1 • Attain WHO standards of air quality in all major cities by 2011– 12 • Provide clean drinking water for all by 2009 • Increase forest and tree cover by 5 percentage points • Reduce malnutrition among children between 0–3 years to half its present level and reduce anaemia among women and girls by 50 per cent • Raise the sex ratio for age group 0–6 to 935 by 2011–12 and to 950 by 2016–17 • Ensure that at least 33 per cent of the direct and indirect beneficiaries of all government schemes are women and

	girl children • Ensure all-weather road connection to all habitation with population 1000 and above (500 in hilly and tribal areas) by 2009, and ensure coverage of all significant habitation by 2015 • Treat all urban waste water by 2011–12 to clean river waters • Connect every village by telephone by November 2007 and provide broadband connectivity to all villages by 2012 • Increase energy efficiency by 20 percentage points by 2016–17

At the core of NITI Aayog's creation are two hubs – Team India Hub and the Knowledge and Innovation Hub. The Team India Hub leads the engagement of states with the Central government, while the Knowledge and Innovation Hub builds NITI's think-tank capabilities. These hubs reflect the two key tasks of the Aayog.

Instead of the Five Year Plans, NITI Aayog has been tasked with preparing the following documents:

(i) A vision document keeping in view the social goals set and/or proposed for a period of 15years;

(ii) A 7-year strategy document spanning 2017-18 to 2023-24 to convert the longer-term vision into implementable policy and action as a part of a 'National Development Agenda';

(iii) A 3-year Action document for 2017-18 to 2019-20 aligned to the predictability of financial resources during the 14th Finance Commission Award period. This is also to help translate into actions the goals of the government to be achieved by 2019.

AGRICULTURE AND DEVELOPMENT

Though the economic contribution of agriculture to national income and GDP is steadily declining since Independence, it still plays a significant role in the overall socio-economic fabric of India. Agriculture is aptly described as the backbone of Indian economy because this sector still constitutes large share of country's national income though the share has declined substantially from early 1950s. Recent census data indicates that agriculture workers (cultivators and agricultural labourers) account for almost 60 percent of workforce of India. Also growth of other sectors and overall economy depends on the performance of agriculture to a considerable extent. It has also played important role as foreign exchange earner. Country's agricultural performance has a multiplier effect on the Indian economy.

Thanks to the Green Revolution and various measures, India has made a lot of progress in agriculture since Independence in terms of growth in output, yields and area under many crops. Today, India is the largest producer of milk, fruits, cashew nuts, coconuts and tea in the world; it is the second largest producer of wheat, vegetables, sugar and fish and the third largest producer of tobacco and rice.

Because of low productivity and production in agriculture sector, India had an acute food shortage at the initial stage of Independence. The situation has drastically changed after introduction of the Green Revolution. The stated goal was to increase production of food grains through increasing per hectare yield of food grain crops by adaptation of new technology. As expected, this has brought fruitful results in agriculture sector. The introduction of high-yielding variety (HYV) or hybrid seeds along with pesticides, fertilizers and other inputs to farmers led to improvement in per hectare yield of wheat, rice. India has now achieved considerable growth in per hectare yield of cotton, oilseeds, fruits and milk.

Both the central and state governments launched various policy initiatives like Land Reforms and other institutional mechanism to boost the sector but the sector needs a holistic approach as it still employs a large number of people. A series of essential steps are required to raise agricultural productivity.

Role of Agriculture in India

Providing employment:

Agriculture provides employment to a large number of people in India. At the time of Independence around 72 per cent of the population was engaged in agriculture and allied activities. As economy developed, its other sectors (industry and services) also developed and the percentage of people working in agriculture sector came down to around 52 per cent in 2008-09. It must however, be noted that in absolute terms there has been a big increase in the number of people engaged in agricultural activities. Besides, a large number of people earn their living by working in occupations dependent on agriculture like storage, procuring, trade and transport, marketing and export of agricultural products.

Share in national income:

Agriculture contributes a large share in the country's gross domestic product. Its share in total GDP in 1950-51 was around 55 per cent which has come down to 17 per cent in 2008-09. This reduced share indicates that the economy and its non-agricultural sectors are growing, nevertheless share of 17 per cent is an indicator of the fact that India is still predominantly an agricultural economy.

Supporting industries:

Agriculture has a big role in the development of industries specially the agro-based industries such as textiles, sugar, tea, paper. There are several other industries like handloom, weaving and other cottage industries which also depend upon inputs from agriculture. The prosperity of these agro-based industries is directly dependent upon the availability of inputs from the agricultural sector. The prosperity of industries depends on agricultural prosperity from another angle also. The demand for industrial products depends upon the income of the farmers which in turn depends upon agricultural production

Shares in foreign trade:

The country's foreign trade especially in the export of traditional commodities like jute, tea, tobacco and coffee depends a great deal on the supplies of the agricultural sector. In case of crop failures the country becomes a net importer of food grains. Therefore, the balance of trade in the country is affected a great deal by the performance of this sector

Supplier of food and fodder:

Agriculture meets almost the entire food-needs of the people. In India, people spend a very large proportion of their incomes on food and food products. Thus, the cost of living of people also gets affected by agricultural prosperity. If food is costly; the cost of living of the people also gets affected to a great deal. Agriculture also provides fodder to sustain livestock comprising of cattle, buffaloes, sheep and poultry etc. Their number runs in crores. These provide employment and income to many people in the rural and hilly areas.

Savings of capital:

Agriculture has low capital output ratio; in other words it requires lesser capital per unit of output produced compared with the industries. A capital poor economy like India can make efforts to develop this sector which along with increase in production could increase employment opportunity in the rural areas and could help in solving problems of urban congestion and pollution in the cities.

Solving problems of urban congestion and brain drain:

Migration from rural areas to urban areas and metropolitan cities has created a dual problem: on the one hand, it has deprived rural areas of skilled and educated persons and, on the other hand, it has created the problem of urban congestion. If agriculture is on the road to prosperity and is in a position to absorb fruitfully the growing talent in rural areas, the dual problem of urban congestion and rural brain drain will be solved.

Problems of Indian Agriculture

Rural- Urban Divide

India's most of the farming is done in rural parts of the country. While India has witnessed an improvement in rural fortunes, it has not been enough to bridge India's rural-urban gap.

While rural monthly per capita expenditure grew at an insipid annual rate of 0.8% between 1993-94 and 2004-05, it grew at a much faster pace of 3.3% a year between 2004-05 and 2011-12 (at constant 1987-88 prices). But, the growth rate of urban incomes has been faster, and the difference between rural and urban consumption increased slightly over this period. Thus, despite rising rural incomes and falling rural poverty, disenchantment with farming has only grown in the countryside.

A 2014 survey by Lokniti showed that around 40% of farmers were dissatisfied with their economic condition. The figure was more than 60% in eastern India. More than 70% farmers thought city life was better than village life.

Lack of Investment in Agriculture

There has been a paucity of fresh investments in agriculture sectors. Several economists have given various reasons for this. Many believe that land inequality as the root cause of agricultural stagnation. It is argued that under the landlord-tenant farming arrangement, all production expenses were borne by the latter because of the competition to secure tenancy.

And the tenants lacked investible resources which adversely affected agricultural productivity.

It would take extraordinarily high rates of profits for the landlord to undertake investment in agriculture instead of investing capital in otherwise high-return activities like usury, which had assured returns. As a result, investments in agriculture were lacklustre and the sector suffered.

Lack of Effective Policies

Despite several efforts done by the governments in order to solve the problems related to agriculture in India, India has no coherent agriculture policy in place. There is also a broad agreement on the need for a coherent farm policy that addresses issues of sustainability and productivity growth in Indian agriculture.

There are both political and economic reasons for the neglect of broad-based farm interventions by the Indian state over the past decades. Like India, most of the developing countries after they gained independence in the second half of the past century have ignored the structural development of their agriculture sector. India has focused more on its industrial development than it has thought about its agricultural development.

Negligence of Natural resources

India has not preserved and developed its natural resources when it comes to farming. Little was done in order to preserve resources mainly related to irrigation. The severity of the situation is evident from the stories of migration and severe water crisis in Maharashtra and elsewhere.

Impact of Demonetization

Incidences of stress in agriculture have begun to appear because of demonetization. In this fiscal year, there was a decrease in farm products. Cash is the primary mode of transaction in agriculture sector which contributes 15% to India's total output.

Agriculture is impacted through the input-output channels as well as price and output feedback effects. Sale, transport, marketing and distribution of ready produce to wholesale centres or mandis, is dominantly cash-dependent.

Apart from it, other disruptions were caused by the demonetization such as increased wastage of perishables, breaks in the supply chains, lower revenues that show up as trade dues instead of cash in hand and when credited into bank accounts with limited access affect the sector.

Excessive Interventions on Prices

In India there are several restraints on price control. Those restraints are to be freed from Indian agriculture. Apart from it, commercial risks due to volatile prices, restrictions on movement of farm produce, and the lack of access to global markets are in need of corrective measures. Many experts argue that the solution to farm distress lay in dismantling the system of state controls that were in effect a massive tax on farming.

Irrigation Facilities

Government statistics have rarely shown any increase in the total net irrigated area in India. Total irrigated area has been rotating around 63 million hectares and constitutes only 45 per cent of the total area sown in the country. Some improvement in irrigation facility has happened in Assam, Madhya Pradesh, Jammu and Kashmir and Rajasthan in recent years. But it seems to be insignificant in view of a massive increase in real public investment in major, medium and minor irrigation from Rs .235 billion in 2004-05 to Rs. 309 billion in 2013-14.

India has increased its capital expenditure in major projects by 3.5 times, while the investment in minor irrigation increased by 2.5 times only. A virtually stagnancy in irrigated area puts questions about the efficiency of the ongoing investments and the quantum of investment that is also required to widen area under irrigation.

The government data also reveals that the ratio of irrigation potential created from public expenditure is higher for minor irrigation projects than medium and large irrigation projects. Making it worse, minor irrigation projects have received only scant attention from policymakers over time. But, in reality, minor irrigation structures are very important for recharging of wells, flood control and drought mitigation.

Sluggish Fertilizer Industry

In India, the fertilizer sector has not witnessed any major fresh investment in the last 15 years. Some urea manufacturers are even seriously thinking of downing their shutters. Such scenario is arising when the highest growth in demand for fertilizers in the world is in India. As a result, imports are rising and production is largely stagnant.

The reason of this is that Indian fertilizer policy is in a mess. Unpaid fertilizer subsidy bills to the industry have reached beyond Rs 40,000 Cr, and will likely reach Rs 48,000 Cr by the end of this fiscal year. The budgetary allocation of about Rs 73,000 Cr for fertilizer subsidy is nowhere near the reality on the ground — arrears are mounting year after year. Apart from it, India imports nearly more than one-third of nitrogen for consumption today, compared to less than 10 per cent or so in 2000-01.

Dependency on Monsoon

In India, most of the agricultural areas are un-irrigated. That is why monsoon remains crucial for the overall growth in the agricultural sector. In such a case the dependence of the rural economy on monsoon cannot be overstated.

The pattern in area sown is completely guided by the variation in the monsoon season as a bad monsoon directly impacts the cost of cultivation and makes sowing of large areas unprofitable for the farmers. Similar issues are also linked with the production and yield of the kharif crops which are rain-fed in most agricultural states.

Inefficiency of Farmer Producer Organizations

In India, Farmer producer organizations (FPOs) must be strengthened. One issue which must be addressed is that whether small and marginal farmers are benefiting from FPOs. And, the lessons should be learnt by FPOS from milk cooperatives. Incentives can be given to commodity-specific FPOs to develop value chains. For example, FPOs for pulses can be developed on a large scale.

Green Revolution

The term Green Revolution refers to the technological breakthrough in of agricultural practices. During 1960's the traditional agricultural practices were gradually replaced by modern technology and agricultural practices in India. Initially the new technology was tried in 1960-61 as a pilot project in seven districts. It was called as the High Yielding Varieties Programme (HYVP).

Achievement of Green Revolution

- The major achievement of the new strategy was to boost the production of major cereals viz., wheat and rice. India was depending on the US for the food grain. The US by using Public Law 480 (PL480) exported wheat to India. Indians were waiting for the ships to sip their food. On the other hand, India lost lots of minerals. The US could strategically exploit Indian mineral resources at cheapest price for manufacturing missiles and weapons, which gave job opportunity for larger US youth and largely contributed to US GDP. But now India is food surplus, exporting food grains to the European countries.
- The Green revolution was confined only to High Yielding Varieties (HYV) cereals, mainly rice, wheat, maize and jowar.
- This Strategy was mainly directed to increase the production of commercial crops or cash crops such as sugarcane, cotton, jute, oilseeds and potatoes.
- Per hectare productivity of all crops had increased due to better seeds
- Green Revolution had positive effect on development of industries, which manufactured agricultural tools like tractors, engines, threshers and pumping sets.

- Green Revolution had brought prosperity to rural people. Increased production had generated employment opportunities for rural masses. Due to this, their standard of living had increased.
- Due to multiple cropping and more use of chemical fertilizers, the demand for labour increased.
- Financial resources were provided by banks and co-operative societies. These banks provided loans to farmer on easy terms

Weaknesses of Green Revolution

- Indian Agriculture was still a gamble of the monsoons.
- This strategy needed heavy investment in seeds, fertilizers, pesticides and water.
- The income gap between large, marginal and small farmers had increased. Gap between irrigated and rain fed areas had widened
- Except in Punjab, and to some extent in Haryana, farm mechanization had created widespread unemployment among agricultural labourers in the rural areas.
- Larger chemical use and inorganic materials reduced the soil fertility and spoiled human health. Now organic farming is encouraged.

Second Green Revolution

- The Government of India had implemented 'Second Green revolution' to achieve higher agricultural growth. -e target of Second Green Revolution was to increase 400 million tons of food grain production as against about 214 million tons in 2006-07. -is is to be achieved by 2020. In agricultural sector, the growth rate of 5% to 6% has to be maintained over next 15 years. -ere may be changes in these statistics.

Rainbow Revolution

In July 2000, the Centre Government had announced the first-ever national agriculture policy. The policy aimed at achieving a growth rate of over 4 per cent per annum by introducing rainbow revolution' in the next two decades so that the total GDP growth can be sustained at 6.5 per cent.

Revolutions of agriculture

Black revolution	Biodiesel / petroleum production
Blue revolution	**Fish production**
Brown Revolution	**Leather/non-conventional(india)/cocoa production**
Food chain revolution	Double income of Indian farmers until 2020
Golden revolution	**Fruit / Horticulture / honey production**
Golden fiber revolution	**Jute production**
Green revolution	**Food grain production**
Grey revolution	**Fertilizer production**
Pink revolution	Onion / Prawn production
Rainbow / Evergreen revolution	Overall development of agriculture
Red revolution	Tomato / Meat production
Round revolution	**Potato production**
Silver revolution	**Egg / poultry production**
Silver fiber revolution	Cotton production
White revolution	**Milk Production**
Yellow revolution	**Oil Seed Production**

New Agriculture Strategy

Greater Usage of Modern Technology

The components of modern technology in terms of improved seeds, fertilizers and pesticides have to be made available easily to the farmers at fair prices. Farmers are required to be given training about the usage of these components especially fertilizers and chemical pesticides. The services of constant expertise, guidance and counseling about seeds sowing, time of sowing etc needs to be developed. In fact a second green revolution is required to distribute these technological inputs including improved variety of seeds to the cultivators.

Better Credit Facilities

The timely and sufficient financial assistance is the precondition to improve usage of better technology. Government had launched various schemes and institutions to improve agricultural credit such as establishment of cooperative banks, rural branches of nationalized banks, grameen banks etc. However, there is a lack of coordination under the multi-agency credit system. Further, there is an absence of appropriate motivation and knowledge especially amongst commercial banks to provide agriculture credit in the rural areas. In fact, the rural credit system should be developed as comprehensive financial cum service constancy organization that provides financial and farm-related help to the farmers

Restructuring Cropping Pattern

The scientific research has mainly focused upon two major crops viz, wheat and rice. The breakthrough in terms of improved varieties of seeds has to be explored for other crops.

Development of Irrigation Facilities

The main obstacle in the exploitation and use of modern technology is the water shortage. The inter-linking of river projects needs to be implemented speedily to reduce the ill-effects of floods and droughts. The greater use of dry and commercial cropping that requires lesser use of water should be encouraged. The surface-irrigation and water-pumping arrangements should be increased.

Development of Research Institutes

The research labs and agricultural universities have to be established, upgraded and sustained. The problems such as lack of resources, equipments and experts in these institutes need to be addressed immediately. The weakening of link between laboratory research and application on farm has to be minimized

Betterment of Warehousing and Distribution Services

The warehousing facilities are so under-developed that it renders the stored goods unsuitable for consumption. It is paradoxical that the country suffers from deficient food supplies in many regions and the food grains are rotten in warehouses. The modern warehousing facilities, transportation system and marketing methods needs to be developed to increase the availability of food to the masses. This would provide incentives to marketable surplus among farmers and go a long way to improve productivity. The public- private alliance may be encouraged to increase investment in warehousing services.

Population Control

The continuous growth in the population especially in the rural areas is the major cause of uneconomic land-holding which limits the usage of modern technology. Thus the family planning and population control remain national priority.

Introduction of Co-Operative Farming and Marketing

The co-operatives in India are suffering due to strict Government controls and legislations. The co-operative should be given greater operational freedom and allowed to enlarge their activities including banking and marketing of agro products.

Agriculture Policy, 2000

The Government on 28th July 2000 made public a National Agriculture Policy aimed at catapulting agricultural growth to over 4 per cent per annum by 2005. This growth is to be achieved through a combination of measures including structural, institutional, agronomics and tax reforms

- Price protection to farmers in the post- WTO regime when all the quantitative restrictions are removed.
- Private sector participation would be promoted through contract farming and land leasing arrangements to allow accelerated technology transfer, capital inflow, assured markets for crop production, especially of oilseeds, cotton and horticultural crops.
- Private sector investment in agriculture would be encouraged, particularly in areas like agricultural research, human resource development, post harvest management and marketing.
- Government would enlarge coverage of futures markets to minimise the wide fluctuations in commodity prices as also for hedging their risks. The policy hoped to achieve sustainable development of agriculture, create gainful employment and raise standards of living

- The Policy envisages evolving a "National Livestock Breeding Strategy" to meet the requirement of milk, meat, egg and livestock products and to enhance the role of draught animals as a source of energy for farming operations.
- Plant varieties would be protected through a legislation to encourage research and breeding of new varieties. Development of animal husbandry, poultry, dairy and aquaculture would receive top priority.
- The restrictions on the movement of agricultural commodities throughout the country would be progressively dismantled. The structure of taxes on foodgrains and other commercial crops would be reviewed.
- The excise duty on materials such as farm machinery and implements and fertilisers used as inputs in agricultural production, post harvest storage and processing would be reviewed.
- Appropriate measures would be adopted to ensure that agriculturists, by and large, remained outside the regulatory and tax collection system.
- Rural electrification would be given high prioity as a prime mover for agricultural development.
- The use of new and renewable sources of energy for irrigation and other agricultural purposes would be encouraged.
- Progressive institutionalisation of rural and farm credit would be continued for providing timely and adequate credit to farmers.
- Endeavour would be made to provide a package insurance policy for the farmers, right from sowing of crops to post-harvest operations, including market fluctuations in the prices of agricultural produce.

National Policy for Farmers, 2007

Government of India has approved the National Policy for Farmers, 2007 taking into account the recommendations of the National Commission on Farmers and after consulting the State Governments. The National Policy for Farmers, among other things, has provided for a holistic approach to development of the farm sector. The focus will be on the economic well being of the farmers in addition to improved production and productivity

Asset reforms: To ensure that a farmer household in villages either possesses or has access to a productive asset or marketable skill.

Water use efficiency: the stress on awareness and efficiency of water use will be given.

New technologies like biotechnology, information and communication technology (ICT), renewable energy technology, space applications and nano-technology would be encouraged for improving productivity per unit of land and water on a sustainable basis.

National Agricultural Bio-security System would be established to organize a coordinated agricultural biosecurity programme.

Seeds and Soil Health: Quality seeds, disease free planting material and soil health enhancement hold the key to raising small farm productivity. Every farmer is to be issued with a soil health passbook containing integrated information on farm soils with corresponding advisories.

Support services for women: Appropriate support services like crèches, child care centres and adequate nutrition needed by women working in fields would be funded.

Credit & Insurance: The financial services would be galvanized for timely, adequate and easy reach to the farmers at reasonable interest rates.

Gyan Chaupals will promote learning of farmers thereby strengthening extension services

Necessary steps would be taken to put in place an appropriate social security scheme for farmers.

Minimum Support Price (MSP) mechanism to be implemented effectively across the country so as to ensure remunerative prices for agricultural produce.

Food Security basket is to be enlarged to include nutritious millets such as bajra, jowar, ragi and millets, mostly grown in dry land farming areas.

Agricultural marketing

Agricultural marketing, essentially being a sub-set of the overall marketing system, refers to all the activities, agencies and policies involved in the procurement of farm inputs by the farmers and the movement of agricultural produce from the farms to the consumers/manufacturers/ exporters. An efficient marketing system minimizes costs and maximizes benefits to all the sections of the society. It ought to provide remunerative prices to the farmer, food of the required quality at reasonable prices to the consumers and adequate margins to the middlemen.

Structure of Agricultural Marketing in India

At present, the structure of Indian agricultural marketing system consists of: Agricultural Co-operative Marketing Societies; Regulated Markets; Public Trading and Futures Trading. Besides, there is private trading, which takes place out of these segments

- Agricultural Co-operative Marketing Societies
- National cooperative development corporation(NCDC)
- National Agricultural Co-operative Marketing Federation(NAFED)
- Regulated Markets

Problems facing Agriculture Marketing in India .

- Poor Warehousing Facilities
- Poor Transportation Facilities
- Problem of Distress Selling
- Infrastructure Bottlenecks and Corruption in Mandis
- Lack of agro-Processing at large scale

Government Measures to improve Agricultural Marketing in India:

- **Grading and Standardization:** The grading stations have been established to grade and standardize many agricultural goods. The graded goods are stamped with the seal of the Agricultural Marketing Department-'AGMARK'. The goods bearing the 'AGMARK' command better prices in the market

- Provision of Warehousing Facilities
- Marketing Surveys:
- Cooperative Movement in Agriculture Marketing
- Encouragement of Exports of Agricultural Products
- Setting up of Regulated Markets:

Agricultural Price Policy

Agriculture price has significant impact on producers and buyers of agriculture products. The agriculture price offers incentives to improve production and marketable surplus to the cultivators and affect the allocation of resources.

Nature of Agriculture Price in India

Agriculture prices depict large fluctuations and except for few years in the beginning of planning since 1951 there has been an almost continuous uptrend in the agriculture prices

- Dependence on Rainfall
- Low price Inelasticity of demand of Agricultural Goods

Objective of Agriculture Price Policy

The stability of agriculture price is essential since the higher agriculture prices affect purchasing power of consumers and greater input cost to the industrial users. The reduction in the purchasing power of the consumer has implication on demand for industrial goods.

- To set remunerative prices with a view to encourage higher investment and production in the agriculture.
- To set the prices at levels so that the consumers are not adversely affected.
- Agriculture prices should be such that the terms of trade between agriculture and nonagriculture sector is not adversely affected.

- To set price in such a manner so that optimal crop mix can be achieved.

Major Instruments of Agriculture Price Policy (APP) in India

MSP and Procurement Prices:

The price support policy was initiated by the Government to provide protection to agricultural producers against any sharp drop in farm prices. If there is a good harvest and market prices tend to dip, the government guarantees an MSP or floor price to farmers, which covers not only the cost of production, but also ensures a reasonable profit margin for the producers. MSP is announced each year and is fixed after taking into account the recommendations of the CACP (Commission for Agricultural Costs and Prices). CACP is an agency which advises the Government on a continuing basis about the level of MSP. Procurement prices are the prices of Kharif and Rabi cereals at which the grain is to be domestically procured by public agencies (for example, FCI [Food Corporation of India]) for release through public distribution services (PDS). Normally, the procurement price is lower than the open market price and higher than MSP. In the present system only one set of prices is announced for crops.

Buffer stocks and Public Distribution System:

Buffer stock operations are an integral component of agriculture price in India. It is used as an instrument to minimize the fluctuations in the prices of agriculture products. Buffer stocks have a price stabilizing impact on the economy. Under the buffer stock policy, government builds up stock of agricultural commodities either through purchases from domestic market or through imports and release these stocks in the domestic market when the prices are rising. The government supply thus moderates the sharp increase in the price of agricultural products. In the event of bumper crop, the market price is substantially reduced. In this situation government make procurements at MSP or procurement price and prevent fall in price. This helps to prevent distress sales among farmers.

Suggestions for Reorientation of Agricultural Price Policy:

Minimum Support Prices:

Two economic criteria should govern the operations based on MSP.

- ✓ MSP should only cover the cost of production of an efficient producer;

- ✓ Farmers should make profits by responding to market signals and
- ✓ MSP should help the farmers in making the necessary adjustments and not in obviating their need

Procurement Price:

Procurement prices are fixed at a higher level as compared to the MSP and are meant for the purchase of quantities needed by the government for maintaining the public distribution system and for building up buffer stocks. A lower procurement price would serve the purpose of procurement well enough

Maximum price:

The primary responsibility of the government in relation to the fixing of maximum level for the price of a commodity is

- ✓ to keep in check the inflationary forces bringing about increases in the overall price level,
- ✓ elimination of collusive and manipulative practices leading to artificial scarcity and high prices for particular commodities.

Reforms of the Institutions:

Two important institutions are directly connected with the management of the food economy viz., the CACP and the FCI. The CACP should retain its expert character rather than trying to be representative of various interests. The FCI should be decentralised and debureaucratised and the states should be made major stakeholders

Land Reforms in India

Meaning of Land Reforms

The term 'land reforms' specifically refers to land tenure reforms. The word 'tenure', derived from the Latin word 'teneo', means 'to hold'. Therefore, land tenure is used to refer to the condition under which land is held. It may also be looked at as an arrangement by which farmers hold or control land and the conditions that must be observed for its use and occupancy. Land is expropriated or confiscated and redistributed, in order to maintain this system

Land reforms mainly encompass the following components:

- ✓ Abolition of intermediary tenures
- ✓ Tenancy reforms
- ✓ Ceiling of land holdings and distribution of surplus land
- ✓ Consolidation of holdings
- ✓ Compilation and updating of land records
- ✓ Reorganization of agriculture
- ✓ Cooperative farming

Objectives of Land Reforms

- Restructuring of agrarian relations to achieve an egalitarian structure;
- Elimination of exploitation in land relations;
- Actualization of the goal of "land to the tiller";
- Improvement of socio-economic conditions of the rural poor by widening their land base;
- Increasing agricultural production and productivity;
- Facilitating land-based development of rural poor; and
- Infusion of a great measure of equality in local institutions.
- In fine, growth and social justice are the basic objectives of land reform measures.

Land Reforms in India after Independence

According to P. C. Joshi, various attempts to directly alter the pattern of the distribution of land holdings assumed four types of approaches in land reforms. They are enumerated below

- ✓ Land reform through statutory enactments made and implemented by the state legislatures on the lines broadly indicated by the Central Government
- ✓ Land reform due to tile pressures of militant peasant action (Telangana and Naxalbari movements, for instance) and to some extent, land grab movement by various left peasant organizations

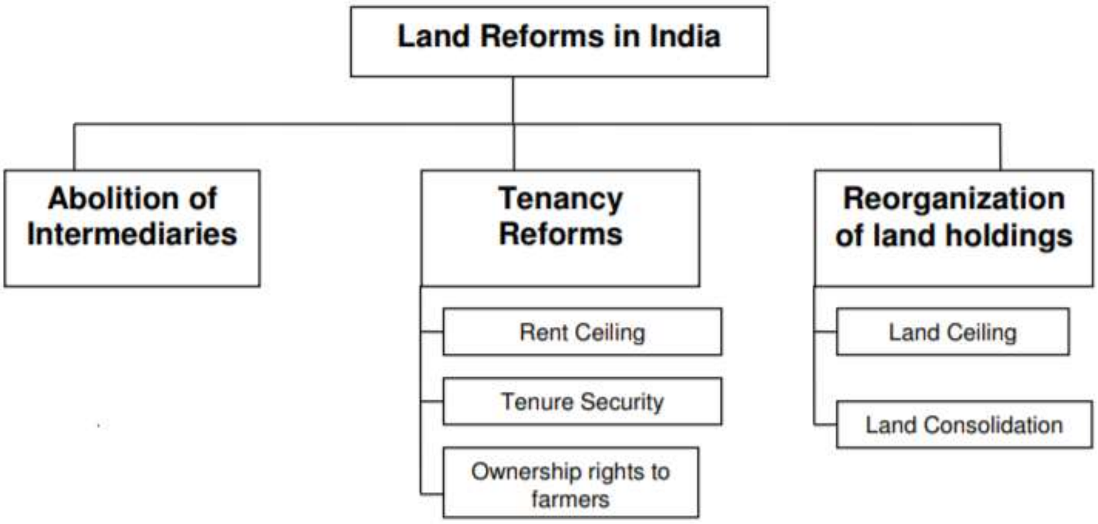
- ✓ Land reform by persuading landlords and through peaceful pressure by peasants (like the bhoodan and gramdan movements under the leadership of Vinoba Bhave)
- ✓ Land reform through legislative enactments in combination with peasant mobilization (like the controlled land seizure in West Bengal under the United Front Government during 1967–69 and protection of poor peasants in Kerala under the CPI Ministry)

Measures of Land Reforms

Abolition of intermediaries:

Abolition of zamindari and similar intermediary tenures during 1950-55 essentially involved removal of intermediary levels or layers of various amorphous and parasitic groups in land between the State and the actual cultivators. However, such abolition of intermediaries involved compensation to the owners of land.

As a result of this measure, about 2.5 crore farmers were brought into direct relationship with the State. This facilitated distribution of 61 lakh hectares of land to landless farmers. Large areas of privately-owned forests and wasteland now vested in the State.



Tenancy Reforms: குத்தகை சீர்திருத்தம்

- o Regulation of rent,

- Providing security of tenure, and
- Conferring rights of ownership for tenants.

Ceiling on Landholdings: நில உச்ச வரம்பு

To reduce the existing disparities in the pattern of land-ownership and make some land available for distribution to landless agricultural workers, the Second Plan (1956-1961) recommended the imposition of ceilings on agricultural holdings.

Causes for Slow Progress of Land Reforms

Lack of political will:

Considering the structure of the political power in the country, it was only natural that the required political will was not forthcoming.

Absence of pressure from below:

Besides a few scattered and localized pockets, poor peasants and agricultural workers were passive, unorganized and inarticulate all over the country. In these circumstances, it is no wonder that there has been no insistent pressure from them, a prerequisite for the effective implementation of land reform laws.

Inadequate policy instrument:

The administrative organization has proved to be an inadequate instrument for the speedy and efficient implementation of land reforms.

Legal hurdles:

Legislations relating to land reforms were full of loopholes. Some loopholes were deliberately built in, while others were the result of poor drafting. In almost all states, protracted litigation has delayed and often frustrated the implementation of land reform laws.

Absence of correct updated land records:

A programme that aims at the redistribution of income and wealth in the rural areas cannot succeed unless the beneficiaries can produce evidence of their rights. The position regarding records of tenancies, particularly in the matter of entries relating to the rights of sharecroppers is not satisfactory anywhere in the country and in some areas there are no records. The problem is largely administrative. The absence of up-to-date records is a serious obstacle in the implementation of land reforms.

Shortcomings in the Past

Since land reforms constitute a state subject, the Central Government's role is restricted to formulating general directions on this issue and persuading the state governments to take them up for implementation. The political will on the part of the state governments to enforce the legislation is weak, and the bureaucracy rather indifferent. However, the following points must be noted:

- ✓ Legal definitions of the terms have left room for different kinds of interpretation affecting the process of realizing the goals of the programmes.
- ✓ Distribution of land continues to be skewed. Agricultural workers, particularly scheduled castes and scheduled tribes, who constitute the bulk of the agricultural labour force, have not gained much from the abolition of zamindari.
- ✓ There remains a wide gap between the land distributed and its actual occupation by the beneficiaries, which is obstructed by physical prevention and litigation (the beneficiaries like landless labourers and poor peasants can hardly afford it)
- ✓ Identification of benami land (land held under a different name to circumvent the law) is not possible through the efforts of the administration alone. For this, support of the local organizations of the beneficiaries or the organizations representing the interest of the beneficiaries of land distribution is necessary

Impact of the Land Reform Policy:

Land reforms are being attempted for twofold reason: to improve production and productivity and the distribution of income/asset. Land reform measures are costless methods of increasing production in the agricultural sector. It serves the purpose of social justice too. Let us see how far land reform measures have improved productive efficiency of the agricultural sector and ensured social justice.

On productive Efficiency:

So far as productive efficiency is concerned, the land reform measures adopted in recent years have not made any significant impact. The probable reason is that the reforms have not been effectively implemented.

The ownership of land has not yet been fully transferred to the tillers. The actual rents still rule high. The consolidation of holdings has not been completed. Cooperative farming has not made much headway. In the- absence of economical holding being in actual possession of the tiller, in which he has a permanent interest, the modern techniques cannot be applied to land. Naturally, productivity continues to be low.

On Social Justice:

The objective of social justice has, however, been achieved to a considerable degree. The intermediary rights have been abolished. India no longer presents a picture of feudalism at the top and serfdom at the bottom. The tenancy laws have given the tillers protection from exploitation by providing them security of tenure and fixing maximum chargeable rents.

It is true that the pace of implementation of land reform measures has been slow. Moreover, there is a marked unevenness in respect of progress in various states. This does not, however, mean that there has been no achievement at all in the sphere of land reform since independence.

But the progress has been slow and it needs to be accelerated. The manifold problems of our land are to be solved through the introduction of a suitable land policy.

Food Security in India

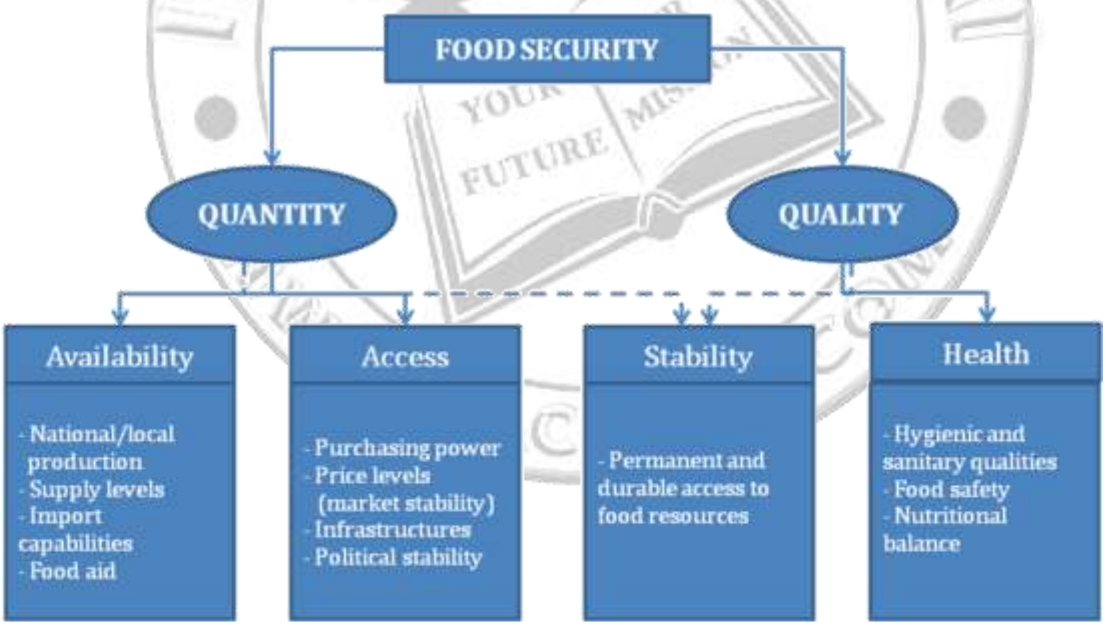
India is a proud nation having attained food security for its 1.3 billion populations despite several odds and challenges. According to Food and Agriculture Organization of United Nations, food security is a situation when all people at all times have sufficient food to meet their dietary and nutritional needs to lead a healthy and productive life. In this sense, food security necessary includes nutritional security.

Soon after independence, especially in post-green revolution era, India strived for 'food for all' by developing technological interventions, supporting policies and strategies and a vast network of public distribution system.

These initiatives enabled the country to increase the production of food grains by 5-fold, horticultural crops by 6-fold, fish by 12-fold, milk by 8-fold, and eggs by 27-fold since 1950-51. Such steep enhancements improved per capita availability of major food commodities and made a visible impact on national food and nutritional security.

Food security also implies food affordability, that is, an individual's capacity to purchase proper, safe, healthy and nutritious food to meet one's dietary needs. Realising the wide-spread poverty as a major threat to food security, Government of India launched several social welfare schemes which ensure food to poor and 'poorest of poor' sections of the society. However, to sustain food security in future, India faces several challenges of varied nature

Four Dimensions of Food Security



<u>Approach to food security in India</u>

<u>'First Generation'.</u>

- Traditionally, India's approach to food security was based on the 'availability' dimension of food security- looking at only the qualitative aspect

- Policies and programmes were designed to ensure "self sufficiency" in food grains
- The Green revolution which was launched after two consecutive droughts in mid 1960s increased the production of food grains (mostly rice and wheat) by providing farmers an improved technology package consisting of high yielding seed varieties, modern farm inputs and credit, and assurance of a remunerative and fixed price
- The Green revolution though positively impacted the macro-level food security, had insignificant impact on ensuring access to food and hunger and malnutrition persisted. Further, it had adverse and persistent impact on the environment.

Second Generation'

- Since 1980's there was an increasing acknowledgement that physical and financial access to food had a determining role in achieving food security in the country.
- Further, Amartya Sen's Nobile Prize winning theory (Poverty and famine, 1998) highlighted that hunger and starvation result from some people not having access to enough food – what he called entitlement. This implied inspite enough food being available in the country people suffered from hunger and starvation because they were physically or financially unable to reach to food.
- The approach shifted from food production to access to food and from charity to a rights-based approach

Public Distribution System

One of the support systems for food security which India has been using since the world war is Public Distribution System (PDS). PDS provides rationed amounts of basic food items (rice, wheat, sugar, edible oils) and other non-food products (kerosene, coal, standard cloth) at below market prices to consumers through a network of fair price shops disseminated over the country. With a network of more than 4.99 lakh fair price shops (FPS) distributing commodities worth more than Rs

30,000 crore annually to about 160 million families, the PDS in India is perhaps the largest distribution network of its kind in the world.

Both the central and state governments shared the responsibility of regulating the PDS. While the central government is responsible for procurement, storage, transportation, and bulk allocation of food grains, State governments hold the responsibility for distributing the same to the consumers through the established network of Fair Price Shops (FPSs). State governments are also responsible for operational responsibilities including allocation and identification of families below poverty line, issue of ration cards, supervision and monitoring the functioning of FPSs.

The Government initiated the steps to revamp the PDS to improve its reach based on an area approach. Preference was planned to be given in this revamped system to the population living in the most difficult areas of the country. This included areas such as the drought prone areas, desert areas, tribal areas, certain designated hilly areas and the urban slum areas. Revamped Public Distribution System (RPDS) was thus launched in June 1992 in 1700 blocks.

Since June 1997 PDS turned into the Targeted Public Distribution System. The latent problem was that a sizeable number of marginalized people, in the absence of cash income that can be transformed into purchasing power are excluded from the planning process because they do not constitute effective demand. This system divides the potential beneficiaries into families Below Poverty Line (BPL) and those Above Poverty Line (APL). The state governments were assigned the task to streamline the PDS by issuing special cards to BPL families and selling essential items under TPDS to them at specially subsidized prices, with better monitoring of the delivery system.

Challenges of PDS

- An important institutional concern is that of the economic viability of FPSs, which appears to have been badly affected by the exclusion of APL population from the PDS. The virtual exclusion of the APL population has led to a big decline in off take. With fewer ration cards to serve, lower turnover, and upper bounds on the margins that can be charged to BPL consumers, the net profits of FPS owners and dealers are lower under the TPDS than before. Since there are economies of scale here, for instance, with respect to transport, the distribution of smaller quantities is likely to make many shops unviable. When FPSs are economically viable, there are fewer incentives to cheat. The number of ration cards attached to a FPS, their BPL-APL break-up, offtake of grains (and other commodities), margin on commodities, cost incurred on transport and handling, rents, etc. are the determinants of viability of FPSs. Only 22.7% FPSs are viable in terms of earning a return of 12% on capital.

- There are large errors of exclusion and inclusion and ghost cards are common. PDS suffers from diversions of subsidized grains to unintended beneficiaries (APL households) because of Error of Inclusion. Some States have issued more cards than the number of households, while some others have the problem of unidentified households. It also questions the BPL methodology used for identification of households at State level. The survey estimated that TPDS covers only 57% BPL families.
- The PDS is also infected with leakages. The major part of leakages is due to diversion of food grains to open market because of wide spread prevalence of corrupt practices. Leakage and diversion imply a low share of the genuine BPL households of the distribution of the subsidized grains. In aggregate, only about 42% of subsidized grains issued by the central pool reach the target group, according to a Planning Commission study released in March 2008 and for every Rs 4 spent on the PDS, only Rs 1 reaches the poor.
- There are considerable regional disparities in the distribution of PDS benefits. For example, offtake per BPL cardholder is high in WB, Kerala, Himachal Pradesh, and Tamil Nadu as compared to that in Bihar, Madhya Pradesh, Uttar Pradesh and Rajasthan which account for largest amount of poverty in India.

National Food Security Act, 2013

Objective:

To provide for food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices.

Key Features:

- Provides statutory backing for right to food
- Up to 75% of the rural population and 50% of the urban population will be covered under TPDS, with uniform entitlement of 5 kg per person per month. Entitlement of existing AAY households protected at 35 kg per household per month.
- Food grains under TPDS made available at subsidised prices of Rs. 3/2/1 per kg for rice, wheat and coarse grains for a period of three years from the date of commencement of the Act. Thereafter prices to be linked to Minimum Support Price (MSP).
- Pregnant women and lactating mothers are entitled to a nutritious "take home ration" of 600 Calories and a maternity benefit of at least Rs 6,000 for six months.
- Children 6 to 14 years of age are to receive free hot meals or "take home rations".
- In case of non-supply of entitled food grains or meals, the beneficiaries will receive food security allowance.
- Appoints district grievance redressal officers; establishes State Food Commissions; and vigilance committees at state, district, block and ration shop levels

Agricultural Insurance

Indian agriculture has little more than half (53 percent) of its area still rain fed. This makes it highly sensitive to weather conditions, causing uncertainty in agricultural output. Extreme weather conditions such as floods, droughts, heat waves, cyclones and hailstorms cause extensive crop damage. Subtle fluctuations in weather during critical phases of crop development can have a substantial impact on yields. Climate change increases agricultural risk by increasing variability in rainfall, causing water stress, enhancing susceptibility to plant diseases and pest attack and, more importantly, raising the frequency, intensity and duration of extreme weather events like droughts, floods, cyclones and storm surges. According to the fifth report of the Inter-governmental Panel on Climate Change (IPCC), the average combined land and ocean surface temperature data has shown an increase of 0.85°C over the period 1880 to 2012. Climate change will be particularly hard on agricultural production in Africa and Asia. For wheat, rice and maize in tropical and temperate regions, climate change without adaptation is projected to negatively impact production.

Successive governments have dealt with agricultural distress by relying on the practice of announcing relief packages from time to time. Although agricultural insurance has been present in the country since 1972, it suffers from operational weaknesses and it has not been able to adequately protect farmers against yield and price volatility.

National Agricultural Insurance Scheme (NAIS)

In the Rabi season of 1999-2000, the NAIS was launched with an objective to provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crops as a result of natural calamities, pests and diseases. This would stabilize the farm incomes, particularly in the time of disasters.

- The scheme was not for all crops but only those crops which were notified under the scheme
- It was available to all farmers – loanee as well as non-loanee. Small as well as big. However, the scheme was made compulsory for the loanee farmers
- The scheme covered all food crops, oilseeds and annual commercial/ horticultural crops in respect of which past yield data is available for adequate number of years.
- For non-loanee farmers, it was an optional scheme.
- Under the scheme, flat premium rates ranging between 1.5% to 3.5% for food and oilseeds crops was charged. In case of annual commercial/horticultural crops, actuarial rates have been charged.

- A 50% subsidy to small farmers was provided on first premium. however, this subsidty was to be phased out in 5 years.

Modified National Agriculture Insurance Scheme (MNAIS).

To address the implementation issues of the NAIS, the government launched the Modified National Agriculture Insurance Scheme (MNAIS). Here are some features in contrast with the older NAIS

- The Modified NAIS has more crops under its coverage than the NAIS
- The Modified NAIS does the calculation of premium on actuarial basis. This means that there is higher premium for riskier crops
- Along with the Agriculture Insurance Company (AIC) of India, the Since a farmer would pay actuarial premium to insure his crops, the entire liability of claim is on insurer. Private sector insurers were also allowed to implement this scheme. The Private Player should have adequate infrastructure and experience and selected by the Government of India for implement the scheme
- In the previous scheme, the state government had to notify the unit areas. In the MNAIS, the unit area was reduced and fixed to Gram Panchayat Area for major crops.
- The minimum indemnity level in previous scheme was 60%. In modified scheme it was made to 70%.
- The calculation of threshold yield was done in previous scheme on the basis of 5 years data, in the new scheme it has been made 7 years so that calculation becomes more precise.
- The MNAIS envisages that loanee farmers, are to be covered compulsorily for at least equal to the amount of crop loan sanctioned/advanced for notified crops, which may extend upto the value of the threshold yield of the insured crop at the option of insured farmers. Where value of the threshold yield is lower than. he loan amount per unit area, the higher of the two is sum insured. Maximum sum insured can be opted up to 150% of value of threshold yield/normal sum insured.

Weather-based Crop Insurance Scheme (WBCIS)

Efforts have been made to bring more farmers under the fold of Crop Insurance by introducing a Weather-based Crop Insurance Scheme (WBCIS) from the Kharif, 2007 season. WBCIS is intended to provide insurance protection to the farmers against adverse weather incidence, such as deficit and excess rainfall, high or low temperature, humidity, etc. which are deemed to impact adversely the crop production. It has the advantage of settling the claims within the shortest possible time.

The WBCIS is based on Apart from Agricultural Insurance Company (AIC) of India Ltd. the private insurance companies with experience in rural insurance and possessing good infrastructure have been allowed to undertake Pilot WBCIS. Here are some notable features which you need to note

Pradhan Mantri Fasal Bima Yojana

Pradhan Mantri Fasal Bima Yojana (PMFBY) is the new crop insurance scheme launched by Central Government. PMFBY will replace the existing two schemes National Agricultural Insurance Scheme as well as Modified NAIS which have had some inherent drawbacks. Pradhan Mantri Fasal Bima Yojana which will be implemented in every state of India, with association with the respective State Governments. This crop insurance scheme will be administered under the Ministry of Agriculture and Farmers' Welfare, Government of India.

Features of Pradhan Mantri Fasal Bima Yojana

Some of the innovative features of the scheme are:

- Lower premiums compared to existing insurance schemes.
- Insuring income of the farmer and not crop per se.
- In PMFBY, there will not be a cap on the premium and reduction of the sum insured.
- Promises to provide prompt and easy settlement of claims through the use of technology like GPS, smart phones, remote sensing and drones to access actual crop damage.

- 25 per cent of the likely claim will be settled directly on farmers account.
- There will be one insurance company for the entire state.
- The scheme also provides for coverage of post-harvest losses.
- Covers localised crop losses like hailstones.

Government committed to doubling farmers income by 2022

Seven-point' strategy /

- Emphasis on irrigation along with end to end solution on creation of resources for 'More crop per drop'
- 'Provision of quality seeds and nutrients according to the soil quality of each farm.
- Large investments in warehouses and cold chains to prevent Post-harvest losses.
- Promotion of value addition through food processing.
- Implementation of National Agricultural Markets and e-platforms (e-NAM) to eliminate shortcomings of all the 585 centers.
- To mitigate the risk, introduction of crop insurance scheme at a lower cost.
- Promotion of allied activities such as Dairy-Animal husbandry, Poultry, Bee-keeping, Medh Per Ped, Horticulture, and Fisheries.

Pradhan Mantri Kisan SAMPADA Yojana பிரதான் மந்திரி கிசான் சம்பதா திட்டம்

- Government is implementing the Central Sector Scheme – PRADHAN MANTRI KISAN SAMPADA YOJANA (PMKSY)with an allocation of Rs. 6,000 crores for the period 2016-20 coterminous with the 14th Finance Commission Cycle. The scheme is expected to benefit 20 lakh farmers and generate 5,30,500 direct/ indirect employments by the year 2019-20.

Under PRADHAN MANTRI KISAN SAMPADA YOJANA the Ministry of Food Processing Industries is implementing various Central Sector Schemes in the food processing sector. The PMKSY has the following schemes:

- Mega Food Parks (on going)
- Integrated Cold Chain and Value Addition Infrastructure (on going)
- Creation / Expansion of Food Processing & Preservation Capacities (new)
- Infrastructure for Agro-processing Clusters (new)
- Creation of Backward and Forward Linkages (new)
- Food Safety and Quality Assurance Infrastructure (on going)
- Human Resources and Institutions (on going)

Agriculture Export Policy, 2018

The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved the Agriculture Export Policy, 2018. The Cabinet has also approved the proposal for establishment of Monitoring Framework at Centre with Commerce as the nodal Department with representation from various line Ministries/Departments and Agencies and representatives of concerned State Governments, to oversee the implementation of Agriculture Export Policy.

The Government has come out with a policy to double farmers' income by 2022. Exports of agricultural products would play a pivotal role in achieving this goal. In order to provide an impetus to agricultural exports, the Government has come out with a comprehensive "Agriculture Export Policy" aimed at doubling the agricultural exports and integrating Indian farmers and agricultural products with the global value chains.

Objectives of the Agriculture Export Policy are as under:

- To double agricultural exports from present ~US$ 30+ Billion to ~US$ 60+ Billion by 2022 and reach US$ 100 Billion in the next few years thereafter, with a stable trade policy regime.

- To diversify our export basket, destinations and boost high value and value added agricultural exports including focus on perishables.
- To promote novel, indigenous, organic, ethnic, traditional and non-traditional Agri products exports.
- To provide an institutional mechanism for pursuing market access, tackling barriers and deal with sanitary and phyto-sanitary issues.
- To strive to double India's share in world agri exports by integrating with global value chain at the earliest.
- Enable farmers to get benefit of export opportunities in overseas market.

WTO AND INDIAN AGRICULTURE

The Agreement on Agriculture forms a part of the Final Act of the Uruguay Round of Multilateral Trade Negotiations, which was signed by the member countries in April 1994 at Marrakesh, Morocco and came into force on 1st January, 1995. The Uruguay Round marked a significant turning point in world trade in agriculture. For the first time, agriculture featured in a major way in the GATT round of multilateral trade negotiations. Although the original GATT – the predecessor of the World Trade Organisation (WTO) – applied to trade in agriculture, various exceptions to the disciplines on the use of non-tariff measures and subsidy meant that it did not do so effectively. The Uruguay Round agreement sought to bring order and fair competition to this highly distorted sector of world trade by establishment of a fair and market oriented agricultural trading sector

The root cause of distortion of international trade in agriculture has been the massive domestic subsidies given by the industrialised countries to their agricultural sector over many years. This in turn led to excessive production and its dumping in international markets as well as import restrictions to keep out foreign agricultural products from their domestic markets. Hence, the starting point for the establishment of a fair agricultural trade regime has to be the reduction of domestic production subsidies given by industrialised countries, reduction in the volume of subsidised exports and minimum market access opportunities for agricultural producers worldwide.

The obligations and disciplines incorporated in the Agreement on Agriculture, therefore, relate to (

- ✓ market access;
- ✓ domestic subsidy or domestic support;
- ✓ export subsidy

Domestic Support:

It includes the classification of agricultural subsidies into 'boxes' depending on their effects on production and trade-

Box	**subsidies**
GREEN	• Subsidies that don't disrupt trade balance OR • Only cause minimum damage to trade balance. • E.g. agriculture research-development, extension services, farmer training programs, pest-disease control program, flood/drought relief money paid to farmers etc. • WTO Limit: nothing. Governments can give as much as they want.
BLUE	• Amber type Subsidies that aim to limit production. • Subsidies that don't increase with production. For example subsidies linked with acreage or number of animals. • Very few countries use blue box- Iceland, Norway, Slovenia etc. • WTO limit: Nothing.
AMBER	• Subsidies that disturb trade balance like, subsidies on fertilizers, seeds, power and irrigation. • They distort trade balance because they encourage excessive production,therefore given country's product becomes cheaper than others, in the international market.

Market Access:

Market access refers to the reduction of tariff (or non-tariff) barriers to trade by WTO members. The 1995 Agreement on Agriculture required tariff reductions of:

- 36% average reduction by developed countries, with a minimum per-tariff line reduction of 15% over six years.

- 24% average reduction by developing countries with a minimum per-tariff line reduction of 10% over ten years.

Least developed countries (LDCs) were exempt from tariff reductions, but they either had to convert non-tariff barriers to tariffs—a process called tariffication or "bind" their tariffs, creating a ceiling that could not be increased in future.

Export Subsidies:

The Agriculture Agreement prohibits export subsidies on agricultural products unless the subsidies are specified in a member's lists of commitments. Where they are listed, the agreement requires WTO members to cut both the amount of money they spend on export subsidies and the quantities of exports that receive subsidies. Taking averages for 1986-90 as the base level, developed countries agreed to cut the value of export subsidies by 36% over the six years starting in 1995 (24% over 10 years for developing countries). Developed countries also agreed to reduce the quantities of subsidized exports by 21% over the six years (14% over 10 years for developing countries). Least-developed countries do not need to make any cuts.

Impact of the Agreement

Implications of the Agreement would differ from country to country and would depend largely on the overall agricultural scenario in the country. Indian agriculture is characterised by a preponderant majority of small and marginal farmers holding less than two hectares of land, less than 35.7 per cent of the land, is under any assured irrigation system and for the large majority of farmers, the gains from the application of the science & technology in agriculture are yet to be realised.

Farmers, therefore, require support in terms of development of infrastructure as well as extension of improved technologies and provisions of requisite inputs at reasonable cost. India's share of world's agricultural trade is of the order of 1 per cent. There is no doubt that during the last 30 years, Indian agriculture has grown at a reasonable pace, but with stagnant and declining net cropped area it is indeed going to be a formidable task to maintain the growth in agricultural production. The implications of the Agreement would thus have to be examined in the light of the food demand and supply situation. The size of the country, the level of overall development, balance of payments position, realistic future outlook for agricultural development, structure of land holdings etc.

Short Term Impact

Regarding freedom to pursue our domestic policies, it is quite evident that in the short term India will not be affected by the WTO Agreement on Agriculture. The safeguards provided for developing countries give enough manoeuvre to insulate ourselves from any major impact of trade liberalisation in agricultural commodities.

India has been maintaining quantitative restrictions (QRs) on import of 825 agricultural products as on 1.4.97. QRs are proposed to be eliminated within the overall time frame of six years in three phases – 1.4.97 to 31.3.2003. (All our trading partners barring the US have agreed to this phase-out plan and dispute with the US is pending with Dispute Settlement Body of WTO for adjudication). Within the provisions of the GATT Agreement India has bound tariffs at high levels of 100 per cent, 150 per cent and 300 per cent for primary products, processed products and edible oils respectively. Therefore, the QRs can be replaced with high import tariff in case we want to restrict imports of these commodities.

In India, for the present, the minimum support price provided to commodities is less than the fixed external reference price determined under the Agreement. Therefore, the AMS is negative. Theoretically, therefore, we could increase the product-specific support upto 10 per cent, the only restraint being the fiscal sustainability in the country's context.

Long Term Impact

Regarding the impact of liberalisation of trade in agriculture in the long term, Indian agriculture enjoys the advantage of cheap labour. Therefore, despite the lower productivity, a comparison with world prices of agricultural commodities would reveal that domestic prices in India are considerably less with the exceptions of a few commodities (notably oilseeds). Hence, imports to India would not be attractive in the case of rice, tea, sunflower oil and cotton. On the whole, large scale import of agricultural commodities as a result of trade liberalisation is ruled out. Even the exports of those food grains which are cheaper in the domestic market, but are sensitive from the point of view of consumption by the economically weaker sections are not likely to rise to unacceptable levels because of high inland transportation cost and inadequate export infrastructure in India. Through proper ratification, however, we will have to strike a balance between the competing interest of 10 per cent farmers who generate marketable surpluses and consumers belonging to the economically poor sections of the society

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