India has been witnessing a blinding pace of growth and development in recent times. Agricultural sector is the mainstay of the rural Indian economy around which socio-economic privileges and derivations revolve and any change in its structure is likely have a corresponding impact on the existing pattern of social equity. India is the seventh largest country in geographical level and second largest country in population wise and twelfth largest country in economic wise. The economy of India is as diverse as it is large, with a number of major sectors including manufacturing industries, agriculture, textiles and handicrafts, and services. Agriculture is a major component of the Indian economy, more than 75% of our people have their live hood as agriculture and agriculture oriented works. Mahatma Gandhi said “Indian economy lives in rural villages”, and many of the industries getting their raw material from agriculture sector.

We must adopt all possible methods to improve our agriculture and raise its productivity. The natural factors militating against the raising of agricultural productivity must be overcome. Ample irrigation facilities must be provided through the extension of major and minor irrigation works. Liberal supplies of insecticides should be distributed among the farmers free or at very cheap rates.

INTRODUCTION:
India’s already large population is expected to become the world’s largest in the next 20 years, while its economy will soon overtake Japan’s to become the world’s third largest. The resulting increase in the demand for food will need to be met through higher agricultural productivity or by increasing food imports. This article discusses some of the key areas of progress and challenges for India’s agricultural sector, including: productivity, water management, government policies and programs, and food distribution and storage.

IMPORTANCE OF AGRICULTURE IN INDIAN ECONOMY:
Agriculture is a basic and important occupation as it provides not only food-stuff but also essential raw materials of industry. It is the oldest business in the world and nearly two-thirds of the population of the world is dependent on agriculture directly or indirectly for its livelihood. In India, agriculture is the backbone of the economy. Nearly 50 per cent of the national income of India is derived from agriculture.

Following are the importance of Agriculture in our Indian Economy:
Source of Livelihood: More than two-thirds (70 per cent) of our working population are engaged directly in the cultivation of land and, when we take into account the people who are indirectly dependent upon agriculture, the ratio rises to more than even three-fourths. This is indeed a very high proportion. In developed countries, the proportion of the working population dependent on agriculture is generally less than 15 per cent – in some cases even less than 5 per cent. Besides, this proportion has generally been declining, while in India it has remained unchanged over the last 80 years.

Major Component of National Income: Nearly one – half of our total annual national income comes from agriculture. Even after more than twenty-five years of economic planning, which laid so much emphasis on industry, agricultural production was a high as 40 per cent of the net home production of the Indian Union.

Supplier of Food: It is agriculture that feeds the country’s population. During the last three decades, it failed to meet our food requirements fully and we have to rely on heavy annual food imports to feed our teeming millions. All the same, the total value of food grains produced in the country would come to a very large figure, imports constituting on an average only 2 per cent of the total food requirements of the country. Lately, we have become self sufficient.

Sustenance to Industry: Agriculture sustains many industries with a supply of raw material not only in the quasi-agricultural sector but also in core industrial sectors like those of tobacco-products and textiles.

Commercial Importance: It is the agricultural raw material which constitutes the main articles of India’s internal and external trade. Some of the leading exports from the country have been jute goods, tea, oil, cakes, tobacco, spices, coffee, etc. By exporting them, it has been possible to import in return the much-needed machinery and manufactured goods.

Source of Government Revenue: Agriculture is one of the main sources of revenue for the Government, especially for the state Governments. Not only does the Government get a substantial income from land revenue but the prosperity of the railways and income from many other sources is also dependent on favorable agriculture. Indeed, a bad agricultural year is a bad year all round both for the Government and for the people.

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**Agricultural Development under the Plans:** We suffered from acute food shortage and industries lacked the essential materials either in quality or in quantity. The partition was itself a greater blow to Indian agriculture. This was the situation when planning came to India.

**Natural Factors:** Agriculture in India is dominated by nature, especially rainfall. It is said to be a gamble in the monsoons. The rains may be insufficient or unevenly distributed; they are uncertain and sometime we have too much of rain resulting in floods causing widespread damage and destruction. There may be other natural calamities befalling Indian agriculture, e.g., hailstorm, frost or attack by pests and insects. These inclemency’s of weather seriously handicap the Indian farmer in stepping up agriculture output.

- Techno – Economic Factors
- Disguised Unemployment
- Lack of Improved Seeds
- Lack of Mechanization
- Lack of Irrigation Facilities and their underutilization
- Lack of Adequate finance
- Lack of Productive investment
- Lack of Marketing Facilities and Price-Incentive
- Neglect of Agriculture Research
- Small Sized Farms
- Soil Erosion
- Soil Land Reforms
- Lack of use of Chemical Fertilizers

c) **Socio-economic factors:** Low agricultural productivity in India is no less due to the operation of the socio-economic factors. Among them we may mention the conservative outlook of the farmer, his fatalism, ignorance and illiteracy. They stand in the way of the adoption of modern techniques.

Another socio-economic factor responsible for low agricultural yields is the antiquated organization of agriculture run by illiterate, ignorant and ill-equipped individuals. The corporate entrepreneur is altogether absent in India. Hence, progressive agriculture is out of the question.

**ECONOMIC SUSTAINABILITY:**

For agriculture to be sustainable it should be economically viable over the long term. Conventional agriculture involves more economic risk than sustainable agriculture in the long term. Sometimes governments are inclined to view export-oriented production systems as more important than supply domestic demands. This is not right. Focusing on exports alone involves hidden costs: in transport, in assuring local food security, etc. Policies should treat domestic demand and in particular food security as equally important to the visible trade balance. It is a popular misconception that specific commodities promise high economic returns. But market production implies certain risks as markets are fickle and change quickly. Cheap foreign food may sweep into the national market, leaving Indian farmers without a market. As a World Trade Organization sagnatory, the Indian government is under pressure to deregulate and open its economy to the world market so it cannot protect its farmers behind tariff walls. The main source of employment for rural people is farming. Trends towards specialization and mechanization may increase narrowly measured “efficiency”, but they reduce employment on the land. The welfare costs of unemployment must be taken into account when designing national agricultural support programs. Sustainable agriculture, with its emphasis on small-scale, labor-intensive activities, helps overcome these problems.

**MILE STONES IN INDIAN AGRICULTURE:**

Policy makers and planners, concerned about national independence, security and political stability realized that self sufficiency in food production was an absolute prerequisite for sustainable agriculture development. The policies considered to be a mile stone in agriculture development of the country are:

**Green Revolution (1968):** This revolution includes packages of programs like, Intensive Agriculture District Program (IADP) which eventually led to the Green Revolution. The National Bank for Agriculture Development (NABARD) was set up. The emphasis was on high yielding varieties along with other modern inputs like chemicals, fertilizers, pesticides and mechanization and also on how productivity could be raised in agriculture sector without having substantial influences on increasing area under cultivation.

**Ever Green Revolution (1996):** Father of India’s Green revolution, Prof. M.S. Swaminathan claims to be pro-woman, pro-nature and pro-poor. The conservation of biodiversity, maintaining soil fertility, increasing the climate resistance of food crops combined with better and more education and technological innovation are the key to the ever green revolution. The main aim of this revolution is to produce more using less land, less water and less fertilizer. The recent visit of US President in New Delhi in March 2010, announced a new partnership with India in an agriculture sector for an evergreen revolution to achieve global food security.

**White and Yellow Revolution:** The Green Revolution generated a mood of self confidence in our agriculture capability, which led to the next phase characterized by the Technology Mission. Under this approach, the focus was on conservation, consumption, and commerce. An end-to-end approach was introduced involving attention to all links in the production-consumption chain, owing to which progress was steady and sometimes striking as in the case of milk and egg production.

**Blue Revolution (Water, Fish):** It has been brought about in part by a trend towards healthier eating which has increased the consumption of Fish. Additionally the supply of wild fish is declining. This revolution could give landless laborers and women a great opportunity for employment which empowered them.

**Bio-Technology Revolution:** India is well positioned to emerge as a significant player in the Global Bio-tech Arena. Agriculture biotech in India has immense growth opportunity and the country could become the fore runner in the transgenic production rise and several other genetically engineered vegetables by 2010.In agri-biotech sector India has been growing at a blinding rate of 30% since the last five years. The food processing sectors which is considered to be prime drivers of Indian economy is currently growing at 13.5%.

**IMPACT OF ECONOMIC REFORM ON INDIAN AGRICULTURE:**

The Indian agriculture sector has been undergoing economic reform since 1990s in a move to liberalize the economy
to benefit from globalization. India, which is one of the largest agriculture based economies, remained closed until the early 1990s. In 1991, the new economic policies stressed both external sector reforms in the exchange rate, trade and foreign investment policies and internal reform in areas such as industrial policies, price and distribution controls, and fiscal restructuring in the financial and public sector. India’s economic reforms were initiated in June 1991, but it was observed that the expected increase in exports due to liberalization did not occur. In addition, the agriculture sector’s output growth decreased during 1992-1993 to 1998-1999.

The reason behind this was the decline in the environmental quality of land which reduced the marginal productivity of the modern inputs. Agriculture sector is the mainstay of the Indian economy around which socio-economic privileges and deprivation revolve, and any change in its structure is likely to have a corresponding impact on the existing pattern of social equality. No strategy of economic reform can succeed without sustained and broad based agriculture development, which is critical for raising living standards, alleviating poverty, assuring food security, making substantial contribution to the national economic growth. Since agriculture continues to be a tradable sector, this economic liberalization and reform policy has a far reaching effect on:

- Agricultural exports and imports
- Investment in new technologies
- Pattern of agricultural growth
- Agricultural income and employment
- Agricultural price
- Food security

ISSUES & CHALLENGES:

The central issue in agricultural development is the necessity to improve productivity, generate employment and provide a source of income to the poor segments of population. Studies by FAO have shown that small farms in developing countries contribute around 30-35% to the total agricultural output. The pace of adoption of modern technology in India is slow and the farming practices are too haphazard and unscientific. Some of the basic issues for development of Indian agriculture sector are revitalization of cooperative institutions, improving rural credits, research, human resource development, trade and export promotion, land reforms and education.

FUTURE PROSPECTS AND SOLUTION FOR INDIA:

Agriculture sector is an important contributor to the Indian economy around which socio-economic privileges and deprivations revolve and any change in its structure is likely to have a corresponding impact on the existing pattern of social equity. Sustainable agricultural production depends upon the efficient use of soil, water, livestock, plant genetics, forest, climate, rainfall and topology. Indian agriculture faces resource constraints, infrastructural constraints, institutional constraints, technological constraints and policy induced limitations. Sustainable development is the management and conservation of the natural resource base and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for the present and future generations. Such sustainable development (in the agriculture, forestry and fisheries sector) conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable. So, to achieve sustainable agriculture development the optimum use of natural resources, human resources, capital resources and technical resources are required. In India the crop yield is heavily dependent on rain which is the main reason for the declining growth rate of agriculture sector.

CONCLUSION:

The use of agricultural land is reduced. During the last one decade agriculture lands are converted in to residential houses and factories hence the number of agriculture labour lost their work and move to urban areas. This leads to low output in agricultural products, insufficiency and rise in food articles prices. Number of surveys said that the world will go to face food insufficiency in near future. In India Maximum of landholders fall under the category of Small farmers, so they are not able to meet out the increasing input cost and not able to introduce any new technological machineries in their farms, due to this reason our “farmers are born in debt, live in debt and died in debt”.

Change is happening in rural India but it has still a long way to go. Agriculture has benefited from improved farming techniques but the growth is not equitable. Land use is changing in rural areas as farmers are getting good value for their holdings. The effort should be to stop the migration to urban areas. Wholesale prices are primarily used to monitor the weekly price movements. The number of essential commodities should be reduced to an absolute minimum, especially the non-food crops.

References