Abstract
Globalization is an inevitable phenomenon which is advancing at a high pace and affecting the economics of all countries. The process of Globalization sends the world economical, political, social, and cultural alterations. In a very simple language, Globalization of economy may be defined as the further integration of national economy into global economy in which attention is given to all aspects of the problems related to the economy. Further integration has had many effects on the production structure of national economies, the role of multinational corporations, Foreign Direct Investment, Interdependence between all Nations of this world etc. Trade is an essential part of economic development. The establishment of WTO is an important milestone in the history of international trade. India played an important role in establishment of GATT and then in establishment in WTO. India became the member of GATT in 1947 and started to play its part and now it’s an active member of WTO, the replacement of GATT, which came into effect on 1st January 1995 in Uruguay Round. India is very favor of governance of international trade which is based on international rules and regulations. It believes that trade will not only benefit its economy but will also benefit all 134 members. When developing countries were liberalizing and expanding their economies, they felt the need for better export opportunities. The W.T.O. provides opportunities to the developing countries to grow and expand their business.

Introduction
Globalization is the process of integrating the domestic economy with world economy. Globalization is the process of integrates the domestic market with world market for international trade, finance, and goods and services. Globalization makes world as a small village. The competition has become large in every field. To develop the Indian economy the government makes new policy
for agricultural sectors. Agriculture plays a very important role in GDP in India. More than 60 percent peoples in India involved directly or indirectly in agriculture. For improve the agricultural sectors, the government makes new policy for agriculture. Government gives some subsidies on the agricultural products like fertilizers, seeds, and pesticides. The agriculture was mainly rained and was being done as a subsistence farming using mainly animate sources of farm power and traditional tools and equipment’s. More than 80% of the population living in rural areas was dependent on agriculture for their livelihood.

**Objectives of study**

The main object of this research is to examine the economic effects of Globalization and trade openness on India’s agricultural sector. The researcher could reach the following objectives during the research.

1. To review the agricultural sector’s exports, imports and policies in India during the period from 1980 to 2016.
2. To study the future prospects of agricultural exports and imports.
3. To investigate opportunities and threat of Globalization of economy in the development of agricultural in India etc.

**Economic Impact of globalization in India**

- Multilateral agreements in trade, taking on such new agendas as environmental and social conditions.
- New multilateral agreements for services, Intellectual properties, communications, and more binding on national governments than any previous agreements.
- Market economic policies spreading around the world, with greater privatization and liberalization than in earlier decades.
- Growing global markets in services. People can now execute trade services globally -- from medical advice to software writing to data processing that could never really be traded before.

**Impact of Globalization on Indian Agriculture**

The specific objectives of the study of positive impact of globalization on agriculture are (i) to examine how globalization of agriculture would affect agricultural production, change efficiencies and influence social issues in India, and (ii)
to appraise the development in agriculture in the changing scenario to take advantage of the globalization process.

With the operationalisation of the provisions of the WTO, the process of globalization commenced in the major parts of the world. There has always been an air of confusion among the members and non-members of the WTO in assessing the pros and cons of globalization on the health of their economy. The sector which has created the highest number of deliberations in the WTO as well as views and counterviews has been the agriculture- and area of utmost concern for the developed and the developing world’s alike. India is no exception to it better say it has been among few countries in the world spear-heading the campaign against the biased provisions of the WTO concerning agriculture.

**Imports**

**Exports**
Future agriculture in India

The stark observation made in the Economic Survey of 2015-16 that “Indian agriculture, is in a way, a victim of its own past success – especially the green revolution”, shows the dark reality of the agriculture sector at present and the havoc that has been wreaked by the green revolution.

The green revolution, which is often characterized by the introduction of high-yielding variety of seeds and fertilizers, undoubtedly increased the productivity of land considerably. But the growth in the productivity has been stagnant in recent years, resulting in a significant decline in the income of farmers. There have also been negative environmental effects in the form of depleting water table, emission of greenhouse gases, and the contamination of surface and ground water. Needless to say, the agriculture sector is in a state of distress, which is severely affecting peasants and marginal farmers, and urgent policy interventions are required to protect their interests.

The government has responded to the problem by constituting a panel, which will recommend ways to double the income of farmers by 2022. While this may be an overtly ambitious target, if we want to boost stagnated agricultural growth a shift has to be made, as finance minister Arun Jaitley said in parliament, from food security of the nation to income security of the farmers. However, there are many hurdles that have to be crossed if we want to achieve this objective.

Rainbow revolution holds the key

The first major barrier to overcome is declining productivity. Data from 2013 reveals that India’s average yield of cereal per hectare is far less than that of many countries (including several low income countries), but the difference is huge when compared to China. For instance, our average yield per hectare is 39% below than that of China and for rice this figure is 46%. Even Bangladesh, Vietnam and Indonesia fare better than India in case of rice yield.

Further, there is a huge inter-regional variation; the wheat and rice yield from Haryana and Punjab is much higher than from the other states.

In order to cross the declining productivity barrier there is a need to herald a rainbow revolution by making a shift from wheat-rice cycle to other cereals and pulses. Since wheat and rice coupled with other crops are backed by minimum support prices (MSP) and input subsidy (whether water, fertilizer or power) regime, there is a huge incentive
for the farmers in the irrigated region of Northwest India to grow these crops. These crops are not only input intensive, but also have negative environmental consequences in the form of depleting water table and the emission of green house gases. The policy response to this problem has always been to disincentives’ farmers from growing these crops by making meager enhancements in the MSP. However, this is not sufficient and has to be complemented with huge investment in public infrastructure. For example, due to the rice milling industry in Haryana and Punjab, there is now a proper established market in place for different varieties of rice that also incentivizes farmers to cultivate paddy. Until such a marketplace is not created for other cereals and pulses, farmers are unlikely to make a shift to cereals and pulses.

**Per drop more crop**

The second major barrier is the scarcity of two major resources for agriculture – cultivable land and water. While the cultivable land per person is declining because of the fragmentation of farms due to rising population, India also has much less per capita water as compared to other leading agrarian countries. This problem exacerbated because India has been exporting virtual water embedded in crops, which is marked by its feature of non-replenishment. Once it is exported, it cannot be recovered. According to a report by Prashant Goswami and Shiv Narayan Nishad, in 2010, India exported about 25 cu km of water embedded in its agriculture exports, which is about 1% of the available water every year. Given this scenario, it is time to make a shift to micro irrigation so that the efficient and judicious use of scarce water resources can be made. A study conducted by the National Mission for Sustainable Agriculture on micro irrigation in 64 districts of 13 states (Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Karnataka, Maharashtra, Odessa, Rajasthan, Tamil Nadu, Sikkim, Uttar Pradesh and Uttarakhand), reveals that there were significant reductions in the use of water and fertilizer but the yield of crops increased up to 45% in wheat, 20% in gram and 40% in soybean. However, high initial costs deter farmers to adopt this technology. While big farmers can easily avail this technology, the government should consider giving subsidies to small farmers to boost the adoption of this technology.
Further, as A. Vaidyanathan notes, due to populist politics charges, the prices of electricity and diesel oil are far below the actual cost and hence there is over exploitation of groundwater. While Vaidyanathan recommends water charging at actual costs, this may be not possible in the present scenario because of the sensitive nature of the issue and also because of its direct bearing on farm productivity and farmers’ income.

**Opening up of the markets**

The National Agricultural Policy of 2000 stated that private sector participation will be promoted through contract farming and land leasing arrangements to allow accelerated technology transfer, capital inflow and assured market for crop production. However, there has not been any significant participation by the private sector in agriculture.

One of the major factors that have deterred private players from entering the agricultural sector is the long pending reform of wholesale markets, which are regulated by the Agriculture Produce Management Committee (APMC) Act. The AMPC forces the farmers to sell their produce in government-controlled marketing yards. While the objective of APMC was to regulate markets and increase market yards, it has acted as a major obstacle to private investment.

In 2003, however, the central government mooted a model APMC, but as noted by the task force on agriculture constituted by NITI Aayog, this has not been implemented by many states in east India. Therefore, to increase private sector participation in agriculture, it is imperative to remove these entry barriers. Further, although the government has launched the National Agriculture Market, which provides farmers an electronic, medium to sell their produce anywhere in India, it is yet to be seen whether farmers can actually derive benefits from this platform.

**R&D is the future**

One of the major barriers to boosting farm productivity is the lack of new technologies and major breakthroughs. While the National Agriculture Research System played a major role in the green revolution, in recent years there hasn’t been any major breakthrough in research. One of the main reasons for this is the lack of financial resources.

If we compare the data of the percentage of agricultural GDP spending on research and development in Asia, then the figures are
revealing. While India spent 31% of its agricultural GDP on research and development in 2010, in the same year China spent almost double that amount. Even our neighbor Bangladesh spent 38% of its agricultural GDP on research and development in that year. As a result of this resource crunch there has not been diffusion of new agricultural innovations and practices that is critical for enhancing farm productivity.

Further, there is a lack of interest of students in pursuing research in agriculture. As the Economic Survey notes, even in states where agriculture is relatively more important (as measured by their share of agriculture in state GDP), agriculture education is especially weak if measured by the number of students enrolled in agricultural universities. There has also not been any major contribution from the private sector towards research and development. Government should thus woo private players by giving them incentives to play a major role in agricultural research and development.

Many have cast doubts over the ambition of government to double the income of farmers by 2022. As Ashok Gulati, former chairman of Commission for Agricultural Costs and Prices notes, doubling of real incomes of farmers would be a “miracle of miracles”, as it would imply a compound growth rate of 12% per annum. Further, India Spend is also skeptical of government ambition as their analysis shows that after adjusting for rising costs, an Indian farmer’s income effectively rose only 5% per year over a decade (2003-2013). All this, in many ways, paints a bleak picture of future of Indian agriculture. If we however want to save the future of our farmers and permanently cure the ills of Indian agriculture, major policy interventions have to be made at the earliest.

India's food grain production is forecast to hit a record in the crop year ending June 2017, with good monsoon rains last year boosting the estimated output of wheat, rice, coarse cereals, and pulses. The Agriculture Ministry's third advance estimates of major crops pegged the production at 273.38 million tonnes, 0.51% higher than the second advance estimate. This year's output betters the record production of 2013-14 by 3.15%. The first advance estimate was issued in September 2016, followed by the second in February. The final assessment is released in August. As per the second advance estimate for 2016-17, total food grain production was pegged at 271.98
million tonnes. "As a result of very good rainfall during monsoon 2016 and various policy initiatives taken by the government, the country has witnessed record food grain production in the current year," the agriculture ministry said. The government expects rice production to reach 109.15 million tonnes this crop year, 0.26% higher than the second advance estimate output and breaking the previous record production of 106.65 million tonnes achieved during 2013-14. The country had its highest wheat production in 2013-14 at 95.85 million tonnes, while last year, the output was 92.29 million tonnes. Output of pulses - largely gram, urad and tur - is projected at 22.40 million tonnes, an increase of 1.17% over the second advance estimate as a result of significant increase in the area coverage and productivity of all major pulses, said the Agriculture ministry. Coarse-cereals production is estimated at 44.39 million tonnes, higher than 44.34 million tonnes during the second advance estimate. The government predicts cotton production will increase 0.22% over the second advance estimate to 32.58 million bales in the third estimate. Each bale weighs 170 kg. "Despite lower area coverage during 2016-17, higher productivity of cotton has resulted into higher production of 32.58 million bales (of 170 kg each), i.e. an increase of 8.57%, as compared to 30.01 million bales during 2015-16," said the government statement. Meanwhile, the production of sugarcane is estimated at 306.03 million tonnes, 1.27% lower than the second advance estimate. It is lower by 42.42 million tonnes (or 12.17%) than the last year's production of 348.45 million tonnes. Further, the production of oilseeds including groundnut, mustard and soyabean saw a decline of 3.2% to 32.52 million tonnes over the second advance estimate. However, with an increase of 7.27 million tonnes (28.80%) over the previous year, total oilseeds production in the country is estimated at 32.52 million tonnes.

**Conclusion**

Though India has demonstrated that there exists broad political support to its economic reform programmer, as has been proved by transition of several Governments in the last decade through the political space, agricultural trade policy reforms need to be accelerated much more than what has been done so far. The challenge is to make soften the inefficiency that exists in the Indian agriculture to close the gap between its potential and actual performance through a
proper policy framework. India being a net exporter in agricultural products, it has more to gain from the trade reforms. It has sufficiently high bound rates on most of the products and therefore, flexibility can be ensured against fair competition. India does not have to worry about its subsidy, as it is already below the required line and it also does not have any domestic support to reckon with. All these place India in an advantageous position. Moreover, the ongoing negotiations are likely to yield enough flexibility in product choice and tariff selection. A multilateral trading system is in the interest of India, given the fact that it is placed in such a situation where no clear group fits well. Therefore, India should work towards the success of the Doha round and in the mean time make use of the opportunity to reform its domestic market to bring in more efficiency. The interests of India are certainly at different from the common interest of least developed countries, which became clearer during the Tokyo and Doha Ministerial, when the least developed countries left India alone. Many of these countries are net importers of food and the subsidy in the exporting countries makes them better off. The services sector for India is adverse to its growth and increasing the speed of industrial growth is its necessity. The situation is highly tenacious for India, particularly in view of the fact that the developed countries have managed to link agriculture subsidy with the market access in services and industry. If the European Union needs to do more on agricultural tariffs, and the US needs to do more on reducing agricultural subsidies, then the G20 group of countries, where India is main member, is also needed to do more on industrial tariffs. This is a hard ball game. Moreover, all these issues are continuously linked to the future agenda of the WTO in terms of substantial opening up trade in services; rules governing transparency in bilateral trade agreements, anti-dumping and subsidies; trade facilitation; trade & environment.

Reference
Development Perspectives in the context of Globalization’, Mumbai, India.
