SUMMARY AND CONCLUSION

The present study entitled 'WTO Provisions and Haryana Agriculture' makes an attempt to evaluate the likely impact of Agreement on Agriculture (AoA) under WTO provisions on Haryana agriculture. Haryana is one of India's leading agricultural states. The state is dominated by the agricultural sector. In 2001, 71% of Haryana population lived in the rural areas where agriculture is the main occupation. Agriculture is the main source of livelihood in the state. About 75% of the state's population lives in rural areas and depends directly or indirectly on agriculture. In 2001, about 52% of the workers were engaged in agricultural sector against about 62% in the year 1981. The contribution of agriculture in Gross State Domestic Product (GSDP) during 2000-01 was Rs. 10628 crore at 1993-94 prices, which constituted 32.3 percent of the GSDP.

The Uruguay Round (1986 – 1994) was the turning point in the history of world trade in agriculture. This round included the Agreement on Agriculture (AoA) under which various reforms in the agriculture sector are to be carried out. The Agreement on Agriculture came into force on 1 January 1995 and is to be implemented over a six-year period ending 31 December 2000 for developed countries and over a ten-year period ending 31 December 2004 for developing countries.

The AoA commits all WTO members to long-term reforms, which would make agricultural trade fairer and more market-oriented. The
main elements of AoA relate to the following three areas of policy: Market Access i.e. opening markets by removing various restrictions on imports, Domestic Support i.e. reducing input subsidies and output price support operations so that the relative profitability is least disturbed and Export Subsidies i.e. reducing the subsidies on export operations.

Another agreement negotiated during the Uruguay Round closely linked with the Agreement on Sanitary and Phytosanitary (SPS) measures. It provides rights to the government to restrict trade when necessary to protect human, animal and plant life and health. However, these SPS measures should not be discriminatory between countries with the same conditions and are not to be applied as a disguised restriction on trade. One more agreement, which has strong bearing on the AoA, is the patenting rights granted to seed breeders under the agreement on Trade related Aspects of Intellectual Property Rights (TRIPS).

Most of the provisions of AOA apply at the national level. But, WTO provisions would have significant implications for the regional economies like Haryana, which produce agricultural surplus. But these implications would differ for different regions since India is a conglomeration of diversified agro-climatic regions with varied socio-economic conditions. The implications of AoA under WTO provisions deserve the region-wise or state level studies as well.

Haryana is an agricultural dominant state in India, with considerable surplus of food grain for other parts of the country. Agriculture has a major importance in Haryana economy. The present study attempts to examine the likely impact of AoA on Haryana agriculture. The objectives of the study are: to calculate the AMS and show the competitiveness of
Haryana agriculture, to examine the implications of tariffication, TRIPS and SPS for Haryana agriculture. This study is based on the Secondary data base and take the period from 1986-87 to 2000-01. The following broad conclusions can be drawn from the study.

9.1 Domestic Support to Agriculture in Haryana

Under the AoA, all forms of support to domestic producers are subject to rules. There are two basic categories of domestic support: support classified as having no, or minimal, distorting effect on trade (Green Box and Blue Box measures) and trade-distorting support (Amber Box measures). Green box measures are exempt from reduction commitments and can be increased without any financial limitation. These include domestic food aid programme, public stockholding programmes for food security, agricultural research programmes, training programmes, and pest and disease control programmes etc. Amber Box, or the aggregate measure of support (AMS), covers direct payment to producers, which may be commodity specific support and other price distorting measures. WTO member states had to quantify and give monetary value to the total level of such subsidies during the Uruguay Round negotiations (1996-1994), the resulting value being their base AMS. Base AMS figures are subject to reduction of 20% by 2000 for developed countries, and 13.3% by 2004 for developing countries. Least developing countries (LDCs) are exempt from reductions.

Domestic Support or Aggregate Measurement of Support (AMS) to Haryana agriculture was computed. The results reveal that product specific support remained negative during the period of study i.e. 1986-87 to 2000-01. This is due to the fact that the administered price support given by
the government is lower than their respective reference price (fob/cif). Domestic support can be summarised as follows:

\textbf{9.1.1 Product-Specific Support}

The market support given to seven major crops namely wheat, paddy, bajra, gram, rapeseed & mustard, cotton and sugarcane, together constitute total product specific AMS. Total product specific support remained negative during 1986-87 to 2000-01. It increased in negative from Rs.\(-17313\) millions in 1986-87 to Rs. \(-27008\) millions in 2000-01. The total product-specific support to Haryana as a percentage of value of crops (wheat, rice, bajra, gram, rapeseed & mustard, cotton and sugarcane) lies between \(-107.61\) percent in 1986-87 to \(-26.71\) percent in 2000-01. Whereas, the product specific support to Haryana, as a percentage of GSDP in agriculture, lies between \(-23.69\) percent in 1988-89 and \(-60.21\) percent in 1996-97.

Product specific support on three years average basis indicates that the negative product specific support decreased in negative from \(-96.53\) percent in triennium ending 1988-89 to \(-33.20\) percent in triennium ending 2000-01 as a percentage of value of crops. But, in the case of product specific support as a percentage of GSDP in agriculture, it has increased from \(-31.13\) percent in TE 1988-89 to \(-46.92\) percent in TE 1997-98. After this period, it declined to \(-29.04\) percent in TE 2000-01.

\textbf{9.1.2 Non Product-Specific Support}

The support extended towards the Haryana agriculture through seed, fertilizer, electricity, credit and irrigation constitute the total non-product specific AMS. Total non-product specific AMS has increased from
Rs. 1239.49 million in 1986-87 to Rs. 19342.32 million in 2000-01. Total non-product specific AMS to Haryana agriculture as a percentage of total value of agriculture crops has increased from 7.70 percent to 1986-87 to 19.13 percent in 2000-01. But if, we calculate the total non-product specific AMS as a percentage of GSDP in agriculture, it increased from 2.54 percent in 1986-87 to 17.85 percent in 2000-01.

Total non-product specific support to Haryana agriculture increased from 10.41 percent of total value of crops in triennium ending 1988-89 to 15.89 percent in triennium ending 2000-01. Total non-product specific support has shown increasing trend over the period triennium ending 1988-89 to 2000-01. The increasing trend is shown by non-product specific support as a percentage of GSDP in Haryana agriculture.

9.1.3 Total Aggregate Measures of Support (AMS)

Total Aggregate Measure of Support is the sum of the total product specific and the total non-product specific aggregate measures of support. Total AMS has decreased in negative from Rs. -16073.54 millions in 1986-87 to Rs. -7665.68 millions in 2000-01 in absolute terms. It was the highest Rs. 42025.75 millions in the year 1996-97. Total AMS as a percentage of total value of crops lies between -108.91 percent in 1987-88 to -7.58 percent in 2000-01. But if, we calculate the total AMS as a percentage of GSDP in agriculture of Haryana, it ranges between – 48.89 percent in 1996-97 to –7.07 in 2000-01. The negative support is due to the fact that prices of different crops have been fixed below their international levels.

Total AMS to Haryana agriculture decreased from – 86.11 percent of total value of crops in triennium ending 1988-89 to – 17.31
percent in triennium ending 2000-01. Total AMS as a percentage of GSDP of agriculture in Haryana, increased from - 27.76 percent in triennium ending 1988-89 to - 36.05 percent in triennium ending 1997-98, but after that it declined to - 14.83 percent in triennium ending 2000-01, which is less than half of total AMS as a percentage of total value of crops.

Thus, the result shows that Haryana is net taxed according to WTO methodology and Haryana has no obligation to reduce subsidy to agriculture under WTO provisions.

9.2 Competitiveness of Haryana Agriculture

The question of competitiveness of Haryana agriculture has assumed great importance in the light of the WTO's Agreement on Agriculture because Haryana is agriculturally dominant state in India, with considerable surplus of food grains for other parts of the country. Competitiveness of Haryana agriculture has been estimated as follows:

9.2.1 Domestic Competitiveness

To show the domestic competitiveness of Haryana agriculture cost of cultivation data has been used. In case of wheat, Haryana is the least cost producer in most of the year except 1999-00 and 2000-01. In paddy, bajra, gram and rapeseed & mustard, Haryana is not cost efficient producer state in India. But, in case of cotton, Haryana has emerged as the least cost producing state. Haryana was never cost efficient in the production of sugarcane.

9.2.2 International Competitiveness

In terms of international competitiveness of Haryana agriculture, results show that Haryana is no more competitive in the
production of wheat, rice, bajra, gram and rapeseed & mustard. This is due to the decline in the international price of agriculture commodities after 1996 and increase in the wholesale price of these products in Haryana, as a result of increase in the minimum support price (MSP) year after year. But in the case of cotton, it remained competitive during 1986-87 to 2000-01. In sugar, Haryana was never competitive due to the high domestic price in comparison to the international price.

To a great extent competitiveness of agriculture crops depends on the trend in the international prices of agriculture commodities. International prices of agriculture commodities have shown declining trend after the establishment of WTO. If, this trend continues then the magnitude of uncompetitiveness of Haryana agriculture in the production of wheat, rice, bajra, gram, rapeseed & mustard and sugar will increase in future. But, according to Chand,¹ long run series of international prices of these agricultural commodities show cyclical movement. These prices have a tendency to rise for 4-5 years and then decline for about same number of years. If this happened, in the near future Haryana will again become competitive in the production of wheat and rice, which are its main crops.

9.3 Agricultural Tariffication

At the Uruguay Round, all non-tariff barriers to trade in agriculture were converted into tariffs in a process known as “tariffication”. The resulting tariff amounts were set as ceilings above which tariffs could

---

not henceforth be set. Rules were then created to push all members in the direction of ultimate elimination of agricultural tariffs. Industrialized countries were expected to lower tariffs on agricultural imports by an average of 36% between 1995 and 2000, and each tariff was to be reduced by at least 15%. Developing countries were mandated to reduce agricultural tariffs by an average of 24% between 1995-2004, with each tariff being reduced by at least 10%.

The AoA was supposed to deliver a simple "tariff only" regime for world trade. But tariffs in the agricultural sector have become increasingly complex, with an increasing number of tariff lines designed to accommodate a series of different tariffs applicable to the same product. These include seasonal, in-quota, and above-quota tariffs, as well as the frequent use of non-ad-valorem tariffs (fixed charge per unit of product imported). Moreover, health and quality standards by developed nations (sanitary and phyto-sanitary provisions), rather than the levels of tariffs, pose the greatest threat to market access for developing and least developed country exports.

In the Uruguay Round agreement ceiling tariff bindings had to be submitted for all agricultural products, which were covered under quantitative restrictions (QRs) for Balance of Payment (BOP) reasons. For developing countries, provided the tariff had not been previously bound under the GATT, there was no limit on the level of these bindings. In addition, there was no obligation to reduce them during the implementation period. India had previously bound only some of the agricultural tariffs, such as rice etc. But for other products for which no tariff had been bound earlier, India has submitted very high ceiling binding of 100, 150 and 300 percent.
Within the agricultural sector, for different commodities also there could be two possibilities. First, there could be identical ceiling bindings for all the commodities across the board. This will provide equal protection to all the commodities. From the efficiency point of view such a tariff will be ideal. The other alternative is to have different bindings for different commodities. Certainly, binding tariffs at zero levels is problematic because domestic producers are subject to excess of taxes and in case international prices fall below domestic prices, domestic producers should be protected to a certain extent.

In case of market access, the modality of the choice of the base period 1986-88 for conversion of the non-tariff measures into equivalents has led to problems. Since the prices during this period were very low the choice of this base period resulted in tariff equivalents that were much higher than the true tariff equivalents for the years immediately preceding the conclusion of the Round.

The dairy enterprise has been the saviour of Haryana farmers in the wake of dwindling of other sources of growth of their incomes, such as, increase in irrigation and cropping intensity and stagnating crop productivity with relevant problems getting more accentuated. Moreover, Indian dairy sector to an open economy environment, which would have significant impacts on the Indian dairy sector in general and the Haryana dairy farmers in particular because the marketed surplus of milk in these states contributes significant share of farmers' incomes particularly of the small and marginal farmers.

It is important that the implementation of tariffs to protect the domestic producers should be timely to avoid the harsh effects of imports on
domestic profitability of production and not after the event. Secondly, the presently levied tariff rates are much below the bound rates. In case of dairy products, the current tariff rate on fresh milk and cream is 35 percent. This rate for fresh milk and cream may be extended upto 100 percent. Likewise, on the other dairy products i.e. Butter, dairy spreads and melted butter (ghee) etc., tariff rate are low, which can be increased so that the domestic producers may be protected.

9.4 TRIPS and Agriculture

TRIPS is a very important Agreement because it incorporates the trade in "ideas" within the sphere of WTO's activities. It obliges signatory countries to define in their national legislation the minimal standards for protecting intellectual property, as well as the means to ensure compliance with these norms. Agriculture in developing countries is very much affected since this Agreement covers all living organisms (animals, plants, micro-organisms, genes, etc). It clearly addresses the question of the appropriation of seeds, biological resources or traditional knowledge and, in exchange, the cost of access to them and their use.

India, as a developing country has a transition period of five years with effect from January 1, 1995 to comply with the provisions of the Agreement. This deadline expires on December 31, 1999. An additional period of five years i.e. till December 2004 is also available for extending product patent protection to areas of technology not protected so far. This would mainly be in the areas of pharmaceuticals and agricultural chemicals. During the transition period relating to the extension of product patent protection to pharmaceuticals and agricultural chemicals, the Agreement stipulates certain conditions relating to a 'mailbox', in which product patent
applications can be received during the transition period for consideration with effect from January 1, 2005. It also stipulates certain provisions for granting Exclusive Marketing Rights (EMRs) for five years or till the patent is granted or rejected whichever is earlier. India has already made these transitional arrangements through an amendment of the Patents Act, 1970, notified on March 26, 1999.

In respect of plant varieties, there is an obligation to provide for protection either by patents or by an effective sui generis system or by any combination thereof. The Agreement does not spell out the elements of an effective sui generis system and it is left to each Government to determine the elements, which could be deemed to be providing effective protection.

Developing countries demand the preservation of traditional peasant practices, in particular the right to make their own seeds, trade them, and sell their harvest. Developing countries want all rights or practices that could weaken the food sovereignty of developing countries to be banned. Recognition of their rich biodiversity, use of these resources, sharing the profits earned from their use, recognition of traditional knowledge and the rights of farmers would be conditioned to a great extent by the type of national legislation chosen to ensure protection.

TRIPS agreement has significance in Haryana agriculture in particular and India as a whole because of rich bio-diversity. This agreement provides that technologies used in the production of traded goods will be patented and their use for production will not be made by any country except the one where it has been patented. This will obviously make many of the imported commodities, using patented technology, more costly. So, far as the Haryana agriculture as well as India is concerned, it is the cost of new
varieties of imported seeds, which will increase, as the technology used in their development is obviously a foreign one. Thus, agricultural production may suffer.

9.5 Implications of SPS Measures

Sanitary and Phytosanitary (SPS) measures have grown in importance in the last few years. Intended to protect consumers, animals and plants, SPS measures can cover production areas, inspection of goods, production procedures or the content of pesticide residues. The Agreement on Agricultural refers explicitly to the SPS Agreement.

Generally, developing countries face the same problems associated with divergent SPS measures and/or conformity assessment procedures as developed countries. On the one hand, suppliers may face additional costs in meeting different national standards of the importing country. On the other hand, domestic suppliers may face additional costs in meeting international standards that are required to be competitive not only in the international market but also in their domestic market. The framework of the SPS Agreement puts in place a number of institutional innovations that will aid in reducing the trade distorting effect of SPS measures.

The WTO Agreements on standards seek to prevent being used for the discrimination and protection of internal markets. With the reduction of tariff and non-tariff barriers, standards can in fact become very effective instruments of protection. These agreements therefore reflect the principle of national treatment (non-discrimination between foreign and national products) and define a certain number of criteria to ensure that standards avoid unnecessary obstacles to trade.
Haryana state in particular and developing countries like India in general feel that technical standards and sanitary and phytosanitary measures are, first and foremost, protection tools. In addition, they do not always have sufficient material, financial and human resources to apply the standards imposed by developed countries. For instance, it can be very expensive to modify fishing methods, as well as the preservation, processing and transport of fish, and to be able to guarantee almost zero risks for consumers. International standardisation systems are very complex and restrictive and developing countries like India participate very little in their elaboration. This is why their interests are rarely taken into account.

9.6 Policy Suggestions

There are several problems relating to Aggregate Measurement of Support. There are problems of systematic calculation. There is no clarity regarding treatment of negative Aggregate Measurement of Support and "eligible production". There are also some genuine mistakes in certain calculations arising out of mistakes in base period prices, currency rates etc. With regard to the Aggregate Measurement of Support, the options that may be considered are as follows:

- Set product-specific AMS as compared to total AMS
- Correct/clarify methodological problems
- Allow developing countries to recalculate AMS/revise schedules

There are certain support measures, which are exempt from reduction commitments and have been enumerated in what is popularly known as the "green box". This is so since these measures have "no, or at most minimal, trade distorting effects on production" and do not have the
effect of providing price support to producers. The Green Box also provides for the use of direct payments to producers, which are not linked to production decisions. i.e. although the farmer receives a payment from the Government, this payment does not influence the type or the volume of agricultural production. It is thus, "decoupled". A review of the measures listed under the Green Box, which may require a tightening of criteria or re-classification may also be examined.

It is suggested that to make the Haryana agriculture more competitive, the production cost has to be brought down effectively. This can be done either through technological development or through providing support to the agriculture. Although the government is providing price support through minimum support price (MSP), yet the MSP is very low as compared to the international market process of different crops. So, there is still enough scope to adjust it upward.

The major agricultural crops, in Haryana, are wheat and rice. Due to the rotation of these crops, some problems arise like ground water level, environmental hazards etc. So, to avoid such type of problems, the rotation of wheat and rice should be broken to adopt the policy of diversification for these crops.

It is suggested that India should set up required mechanism quickly to decide and implement tariffs on a continuing basis. There should be continuous assessment of the possible impacts on agriculture and accordingly adjustment in the tariff levels.

In case on TRIPS, Haryana state in particular and developing countries like India in general should demand the preservation of traditional
peasant practices, in particular the right to make their own seeds, trade them, and sell their harvest.

It is suggested that the existence of standards for traded goods is nonetheless necessary. These standards increase only the cost of production. Therefore, due to high cost of production, it is much difficult to compete at international level to export their products for the state like Haryana and for the developing countries like India.

Here, it is important to mention that there is a scope for further research. The various aspects of the AoA under WTO provisions may be examined for Haryana agriculture. In this series, agro-industries with export potential may be identified and supported keeping WTO regime into consideration and the work on dairy products may be considered.