Chapter VI

Overview and Conclusions

6.1 Introduction

Policies pertaining to trade in agriculture in India and elsewhere in the world have been moving from a regulatory interventionist to a more liberal and open economic framework. Due to typical characteristics associated with agriculture and food security reasons, the governments have intervened largely in the agricultural markets. The interventions are in the form of direct support to production, consumption or distribution of agricultural commodities or through indirect measures like control of external trade through the tariff and non-tariff barriers. A formal attempt towards liberalising agriculture in a multilateral setup was made with the Agreement on Agriculture (AoA) in the WTO in the mid nineties. Clauses which covered the types of distortions under the Agreement were many, the Market Access, Domestic Support and Export Subsidies being the most pertinent ones.

Following the signing of the AoA in the WTO, India with many other countries of the world faces the challenge of removing restrictions on trade through tariff and non-tariff barriers. Apart from this there are internal compulsions for revisiting the agricultural policies due to budgetary and political reasons. At the same-time, the policies formulated need to be compatible to the regulations of WTO. The changes in the policies introduced would have large implications for the agricultural sector in India and for the economy, in general.

Through the review of policies and relevant literature, the broad objective of the study was set to examine the changes in agricultural trade policy and its implications for agricultural sector and other related macro economic variables in India. The detailed objectives included examining the nature and extent of liberalisation in agricultural commodities in India; examining the restrictiveness of trade policy through the nominal protection coefficients for agricultural commodities and their relationship with the major instruments of trade policy; analysing the implications of levying a low uniform tariff for agricultural commodities as recommended by the Working Group on Tariffs (2001);
observing the changes in trade pattern in agriculture and causes for such changes and its impact on domestic prices; to examine the trend in domestic and world prices, fluctuations in them and the relationship between the two; and to examine the implications of changes in agricultural trade for some of the macro economic variables in India.

6.2 Trade Policy and Liberalisation of Agricultural Trade

From the review of trade policies, we saw that a serious move towards export promotion and import liberalisation in India began in the eighties with incorporation of recommendations of the three official committees, the Alexander Committee (1978) Dagli Committee (1979), and the Tandon Committee (1980). However, with the New Economic Reforms in 1991 many steps were introduced to promote exports. More important among these were budgetary concessions covering import licenses, input prices, freight credit for working capital, direct cash assistance to exporters and the duty drawbacks which exempted the exporting units from the payment of the indirect taxes. In addition, there were other indirect measures like the exemption from MRTP licensing or the industrial licensing to export units. Among other policy measures, devaluation of rupee, reduction in cash margins of imports, introduction of EXIM Scrips, Export Promotion Capital Goods Scheme (EPCG), Special Import License Scheme, relaxation in export control marked important steps.

Examining liberalisation in agricultural trade *per se*, it was seen that the liberalisation measures were not directly applicable to agricultural sector till very recently. In the earlier phase of liberalisation i.e., granting of Open General License status to commodities, agricultural commodities had hardly appeared in the list. Though the policy of extension of Exim Scrips to agriculture in 1991 was introduced, it included only traditional agricultural export items. For agriculture specifically, some notable liberalisation attempts were made from mid nineties. The policies towards agricultural sector specifically, were targeted only since Exim Policy 2001 like through creation of Agricultural Export Zones, Schemes like Duty Exemption Scheme and Export Promotion
Capital Goods Scheme, lowering of import duties on capital goods to be used in agriculture, increasing the credit availability for agricultural exports, relaxation of export quotas, and the abolition of Minimum Export Prices (MEPs).

Since the removal of Quantitative Restrictions (QRs) was a significant step in liberalisation in agriculture trade, the issue was dealt separately in detail for all major traded agricultural commodities in India. It was seen that, earlier in the nineties, there were a few cases of liberalisation through the removal of QRs, which were largely considered to be a part of internal reforms program. Exports of rice, edible oils, oilseeds, and imports of jute, pulses, cotton, rubber are some of the examples to mention. The later part of removal of QRs on agricultural imports in the years 1999-2001 was framed to meet the requirements of WTO covering large number of commodities. With the removal of QRs on a major bulk of agricultural items since 1999, India enters into a new regime of agricultural trade policy wherein the impacts are more unpredictable with the policy changes unlike in the earlier phases. The review of export policy on the other hand, shows us that export policies on many agricultural commodities are adhoc in nature as compared to import policies. Fixations of quotas are subject to large periodic fluctuations especially for basic items like rice, wheat, coarse cereals, sugar, etc.

Examining the changes in the tariff rates over the years, it was seen that the average tariff in agriculture has drastically declined over the years. The bindings on tariff lines were also revised on many commodities as a future safeguard against import risk. However, the tariff reduction was accomplished to meet the internal requirements than as an obligation under the WTO. But on reviewing the tariff policy in India and criteria of fixing the tariff rates in agriculture, we notice that tariffs were highly ineffective instruments of trade policy. With the removal of quantitative restrictions, as tariff is the only viable instrument of trade policy, the need for revising the tariff rates in a scientific manner was felt. An autonomous Tariff Commission under the Department of Industrial Policy and Promotion in the Ministry of Industry (at present part of the Ministry of Commerce and Industry) was created in 1997 and subsequently reformed. Later the Working Group on the Customs Tariffs (2001) was appointed to revise the structure of
customs tariff. The report recommends that the tariffs are to be fixed on the basis of effective protection rather than the nominal protection. It considers the role of exchange rate and non-tradable services in determining the overall protection. It also recommends for a uniform rate of duty of as low as 20 percent on all commodities and the deletion of all exemptions so that it solves the administrative difficulties and the problem of negative protection.

Reviewing the compatibility of India's trade policy to the requirements under certain important clauses of AoA under WTO, we see that India has largely met the requirements under the Market Access, Domestic Support and Export Subsidy clauses. In the case of tariffs, though India has not committed itself for tariff reduction programme, the tariff rates on agriculture are substantially reduced as part of the internal reform programme. Since, the tariff negotiations under the WTO are incomplete, and tariff being the most transparent of the trade policies, India would have the pressure from the trading partners to reduce the MFN and bound tariffs in the near future. Domestic Support in India, seen through the Aggregate Measurement of Support taking the 1986-88 base period, was below the 10 percent de minimus level. Therefore, India has no total AMS reduction commitment under the Agreement but is required to make regular annual notifications to the WTO on its domestic AMS, and on its direct export subsidies.

Policy scenario in the trading partners of India would play an equally important role as much as that of policies in India for its export performance. Obstructions to India's exports from the trading partners are seen in the form of tariff barriers, domestic subsidies, export subsidies and other technical barriers to trade. We see that the developed countries adopt certain strategies like tariff escalation and tariff peaks which are often concentrated in products that are of export interest to developing countries. Also the trends in Producer Subsidy Equivalents (PSEs) in these countries show that a reduction in the price support accounted for the measurement of AMS is substituted with the increase in direct payments, payment on area, income, thus providing direct income support to cope with the structural adjustment programme. Similarly, in the case of export subsidies, the products benefiting form the subsidies in the EU which is the largest
provider of subsidy, followed by US and Brazil are mainly dairy products, live animals, fruits and vegetables and sugar which are potential export items for India. This is a matter of larger concern since export subsidies have an immediate impact on export competitiveness than other measures of support for developing countries like India. Therefore, they are to be negotiated for complete eliminations, specifically in those countries. In addition, many Indian exports are facing blockade through the Sanitary and Phytosanitary measures.

6.3 Nominal Protection and Tariff Rates in Agriculture

Policies distorting agricultural trade being largely diversified in nature, measuring the extent of distortions to trade in agriculture is much debated. The review on the measures of protection shows us that Nominal and Effective Protection Coefficients, Producer and Consumer Subsidy Equivalents and Aggregate Measurement of Support are used to capture the extent of protection in commodities and sectors. We noted from the review of literature that some studies have already measured protection coefficients for select agricultural commodities up to the period of early nineties. But as larger policy changes in agriculture have taken place since the mid nineties the study was extended to the later time periods covering large number of commodities.

Examining the NPCs for the latest period, it is seen that the coefficients were less than one for large number of items indicating the existence of export barriers. This included commodities like banana, potato, groundnuts, onion, tobacco, cotton and a few oilcakes. The review of policies also shows us that these set of commodities were restricted through quota licensing, the amount of quota varying from time to time. However, for some commodities like banana, there is a barrier through infrastructure, which is not provisioned by governments in some countries as against others. Similarly, those importables which were restricted for imports showed NPCs more than one like for edible oils, apple, tea, coffee, sugar, rubber and ginger. Yet for certain other commodities like rice, wheat, cashewnut, pepper, jute and cake of groundnuts the NPCs are more than one under exportable hypothesis and less than one under importable hypothesis and hence
would neither be considered an exportable or importable. On the basis of the protection coefficients, which also show the price competitiveness of the agricultural commodities, one can predict as to what would be the likely scenario in exports and imports with the removal of trade barriers. From the review of policies and the information on the market situations, we anticipate that there would not be a drastic change in the export scenario though some changes in imports is expected. Imports of edible oils, rubber and sugar is likely to increase with the opening up of trade in those commodities. coffee and tea markets in India would not be affected to a large extent due to the reason that India produces the best quality of these products, which cannot be largely substituted. But in the case of exports, as mentioned earlier, for some commodities like the horticultural items, the barrier lies with infrastructure. For some other commodities like sesame and rapeseed/mustard, the export market exists in the form of processed products like edible oils in which India does not possess the price competitiveness. Rather India is also a large importer of edible oils. Commodity like onion and potato being essential items is subject to adhoc export policies looking into the supply and demand situations. This also holds good with other commodities like common varieties of rice in which India's NPC is near to unity. The export policy of these commodities is likely to be subject to similar state even in the future, since they are not forced for change under the WTO.

We then try to examine whether changes in the trade policies have led to changes in the protection coefficients of those agricultural commodities. The liberalisation policies, which can have an impact on trade, can be direct like the removal of quantitative restrictions or indirect like devaluation or other monetary and fiscal policies. But we see that there exists no relationship between the changes in the NPCs and changes in the trade policies. In the process we also see that trade policies were ineffective to the extent to bring about price integration between the domestic and world prices other than in the case of rice.

Examining the role of protection to agriculture through tariff rates we try to examine the relationship between the rates of protection seen through the price differences and the tariff rates as given in the tariff schedules. It was seen that there
exists no relationship between the two for most of the commodities. The exception to this was edible oils, where we observed the correlation coefficient significant for this group of commodities. This was due to the fact that the imports of these commodities are under the parastatal agencies and trade within the quota allotted to them was controlled through the tariff rates. But largely it was seen that tariff rates were highly ineffective instruments of trade policy in agriculture. Now with the removal of quantitative restrictions, tariffs occupy an important place as an instrument of trade policy. The need for revising the tariffs in a scientific manner was therefore felt. The Working Group on Customs Tariff (2001) was thus appointed to restructure the Customs Tariff Policy in India.

On discussing the desirable structure of tariffs for Indian economy by the Working Group on Tariffs (2001) there were two options, i.e., single uniform tariff or a tiered tariff structure. It was felt that having a single uniform tariff was a better measure than going for a three tiered structure. The classification of commodities into producer or consumer goods and further into intermediate and capital goods had its own difficulties due to the definitional problems. The strict application of such definitions was thought to be problematic. The 115 sector Input Output Table for the Indian economy shows that it is not possible to define a set of sectors (A) whose output is used in the production of other sectors (B) but which do not use the output of B. Each of 115 goods and services directly or indirectly enters into the production of every other good or service. It is therefore, impossible to break up the set of intermediate goods into two or more tiers in any rational manner. The IO table also shows that at this level of disaggregation all 98 goods are used as intermediate inputs out of which 60 are consumer goods. But as a practical matter, it is possible to select only a few important consumer goods for the purpose of having a distinct tariff. In addition, the differential tariff can give rise to anomalies where the tariff on the producers input is higher than on his output. It is impossible to devise a system in which every single producer has an input tariff rate lower than the output tariff. Therefore, it was recommended that the optimal best tariff structure is a uniform import duty on all imports. This would also mean that the effective protection for all producers is equal to single uniform tariff. Such a system eliminates
the possibility of negative protection as well as high rates of protection. In addition such a system is neutral, promotes efficiency and competitiveness and eliminates all administrative hassles and legal disputes about classification.

On comparing a 20 percent effective tariff with the desired tariff rate measured through effective rates of protection on agricultural commodities it was seen that protection to most of the commodities other than edible oils would not be affected since the effective tariff rates were either negative or less than 20 percent. Other than the general advantages of imposing a uniform tariff, like avoiding of smuggling, better tariff administration and lesser lobbying of large and influential industries, there are special advantages that would be gained by agriculture sector in developing countries and India in particular. Agriculture in the developing countries is biased with high protection to the manufacturing sector leading to the adverse terms of trade. Such a bias would now be offset and terms of trade shifted in favour of agriculture.

6.4 Factors Influencing Trade in Agriculture in India

We see from our analysis that liberalisation policies had limited impact on trade in agricultural commodities. Nevertheless, the contribution of agriculture to the total trade of India and its importance to the export earnings of the economy have increased since the nineties. It was therefore, essential to examine the causes for such changes in trade pattern in agricultural commodities in India. Since trade policies are diversified across commodities, the relationship of trade with the factors determining them would be varied. Similarly, trade being one of the tools to regulate the domestic prices of agricultural commodities, the changes in trade pattern would have influenced the domestic and world prices (if the volume of trade is large enough to influence the world markets) with changes in the quantity of trade. Therefore, an attempt was made to examine the changes in trade pattern in agricultural commodities, its causes and its linkages to the domestic and world prices of agricultural commodities in India.
We first try to examine the causes for those changes through the analysis of determinants of trade in agriculture with the export and import functions where export is the function of domestic production, relative prices (ratio of domestic price to world price) and the world imports and import is a function of domestic production and world imports. But we do not get significant results in most of the cases. On comparing the growth rates of those variables independently we see clearly that trade in most of the commodities are domestic supply driven. Whereas, for commercial crops like groundnuts, tobacco, cashew and pepper the domestic prices have grown at a faster rate with a moderate or high growth in exports when not accompanied by high production growth. It is also seen through the comparison of growth rates that an increase in exports is accompanied by a decline in import growth and vice versa. Therefore, one can see that agricultural trade in India was largely domestic supply driven.

6.5 Domestic and World Prices: Stability and Interdependence

The studies conducted earlier on the behaviour of domestic and world prices and on the relationship between the two show that the world prices of agricultural commodities are highly fluctuating in nature and hence with the opening up of Indian agricultural trade the volatility of world prices would be transmitted to domestic prices (Nayyar and Sen 1994). It is also stated that the recent experience with raw cotton, edible oils, pulses and wheat show that the freeing of trade or an increased linkage with the world market has increased price instability in the domestic market (Acharya, 2001). However, the comparison between domestic and world prices would be meaningful only when the prices are adjusted for the quality of the products, exchange rate, inflation and the time series nature of prices. We examine here whether this hypothesis holds good to major traded agricultural commodities in India, i.e. are the world prices more volatile than the domestic prices so that, if there is complete elimination of restrictions on the movements of commodities, the volatility is transmitted. Since the domestic prices are largely controlled through the price policy in India, it is assumed that volatility in domestic prices is controlled especially in the nineties after the restructuring of the price policy.
The coefficients of variation in domestic and world prices of agricultural commodities adjusted for trend for the two decades show that domestic prices are more unstable than world prices for most of the commodities chosen other than for coffee, sugar, apple, potato, rapeseed and rice seen for both the decades. Thus, the argument that world prices are more unstable than domestic prices for commodities traded by India or that which have the potential for trade do not hold good in most of the cases. But a careful observation reveals that other than in the case of rice and sugar the commodities that are having higher coefficient of variation in world prices are those commodities like coffee, potato, and oilcakes, which would not be a matter of great concern for food security even if the volatility is transmitted. The shocks of fluctuations can be absorbed in such cases. Even in the case of rice, India’s share in the world market is large enough to influence the world market prices rather than being influenced. A comparison of the coefficient of variation in the adjusted domestic prices in the eighties and the nineties shows that instability in nineties has reduced as compared to the eighties in case of many agricultural commodities. As the price policy of the nineties has not been effective in the nineties as seen through the earlier studies and that the quantity of trade in those commodities has increased especially with the commodities where the coefficient of variation in domestic prices have declined, one can see that external trade is more useful in reducing price instability in the domestic agricultural markets in India.

6.6 Relationship between Agricultural Trade and some Macroeconomic Variables in India

Since agriculture is an important sector of the Indian economy, in terms of the population dependent on it, the changes in trade scenario in agriculture would have larger implications on growth in output and other macro economic variables of the economy. However, the impact of trade in agriculture on its growth is not generally direct. The importance of external trade lies with the linkages it has with other sectors of the economy like the terms of trade, level of prices, trade balance, etc which act as a mechanism to enhance growth in the economy. On examining the impact of agricultural trade on the trade balance of the economy, we see that though the impact of agricultural
export on the total trade balance is minutely felt, it is essential to note the surplus foreign exchange earnings it generates to the non-agricultural imports. On trying to examine the relationship between agricultural exports and growth in GDP in agriculture it is seen that there is a two way causation between the two seen through the trends in simple growth rates and also through the results of the Granger Causality Test. The causality from growth to exports is clearly established even by looking at the simple growth rates in those variables. An increase in export growth is preceded by a favourable growth in GDP in agriculture. But establishing the causality from exports to growth seems to be difficult since the variables affecting the growth in agriculture are many. Considering other factors like the capital formation, fertiliser consumption along with the movement in prices, we see that the growth in these variables too moved in the same direction along with exports and GDP in agriculture. The period of early nineties and mid nineties were favourable for all as against the late nineties, which showed a declining growth in prices, capital formation, exports and the GDP. Hence, separating the impact caused by trade through prices from other non-price factors seems to be difficult. Similarly, the terms of trade has shifted in favour of agriculture in the nineties which seems to play a greater role in inducing the growth in the sector and in the economy as evident from earlier studies. However, attributing this situation for agricultural exports may not be appropriate since the terms of trade was largely influenced by the declining prices in manufacturing.

6.7 Overview and Policy Implications

1. Though trade liberalisation assumed a special significance in the context of economic reforms in the late eighties and early nineties in India, they were not directly made applicable to the agricultural sector due to its unique characteristics. We come across some instances of policy changes through the removal of quantitative restrictions on a few items of agricultural exports and imports since the mid nineties. But these were introduced to meet the internal requirements of domestic supply and demand situations. Now with the removal of QRs on imports of large set of agricultural commodities since the late nineties, India enters into a new regime of agricultural trade policy. But the export policy of some of the agricultural commodities which are basic and essential continue to be ad hoc in nature largely for food security reasons.
With widespread import liberalisation measures, promotion of exports in other agricultural commodities in which India has price competitiveness is now inevitable.

2. With the Agreement on Agriculture (AoA) under the WTO, trade policies are to be governed by the rules under the AoA. On examining the compatibility of trade policies in agriculture to the AoA it is seen that India has largely met the requirements of AoA under the Market Access, Domestic Support and Export Subsidy clauses. In addition, the reduction in average tariff rate in agriculture was the outcome of internal reforms, as India has not committed for the tariffication program in the WTO.

3. The trade policies towards agriculture in trading partners of India would play an equally important role in the export performance of agricultural commodities form India. It is seen that the policies in the developed countries are being restructured more strategically to retain the support towards agriculture. It is however, a budgetary constraint for India and other developing countries to adopt a similar strategy as in those countries. It is therefore, wise for developing countries including India to oppose the support measures that are retained in a strategic manner. Since much of the support in the developed countries is retained through the exemption categories like the Green and Blue Boxes, it is essential to revise the limits in subsidies under these categories. As the export subsidies are directly applicable to the export performance of developing countries they are to be bargained for complete eliminations. There is a need for clear harmonisation of standards regarding the Sanitary and Phytosanitary measures and other technical barriers to trade in agricultural commodities. It would also be in the interest of India to join hands with other developing countries to form more unions and trading agreements to have a better bargain in international forums.

4. Analysis of nominal protection for major traded commodities shows that Nominal Protection Coefficients (NPC) indicated the export and import barriers to trade largely through the quantitative restrictions. A review of trade policies on those
commodities shows that though quantitative restrictions acted as a main barrier towards trade in agriculture for certain set of commodities the barrier to export is seen through infrastructural bottlenecks which acts as an indirect barrier to trade in agricultural commodities. From the information on the policies and the market situations we anticipate that there would not be a drastic change in the export scenario though some changes in imports is expected. Imports of edible oils, rubber and sugar is likely to increase with the opening up of trade in those commodities.

5. On trying to examine the relationship between changes in trade policies and that of NPCs, it is seen that there exists no relationship between the two. Protection coefficient as an indicator of trade policy cannot be used in a dynamic sense. There also exists no relationship between the rate of protection and tariff rates in agriculture. The significance of tariff as a tool to regulate trade has now increased with the QRs on agricultural commodities. Tariffs now turn out to be the only viable instrument to regulate trade under the WTO. Therefore, there is a need to revise the tariffs in a scientific manner.

6. The Working Group on Tariffs (2001) recommends for a low uniform tariff on all commodities, which avoids the problem of classification, anomalies and administrative difficulties. On making a comparison of effective rates seen through the price differences with the 20% uniform tariff, it is seen that protection to agriculture would not be worse off with the introduction of such a policy. Only a few commodities like edible oils, milk products and sugar would be affected. But agriculture sector, in general would gain. It is seen that agricultural sector is biased with high protection to manufacturing, leading to adverse terms of trade towards the agriculture sector. An introduction of low uniform tariff on the other hand would reduce the tariff rates on manufacturing. This would lead to favourable terms of trade to agriculture due to reduced price of inputs from the manufacturing sector.

7. On examining the factors influencing trade in agricultural commodities, it is seen that trade in agriculture is largely domestic supply driven especially for many
commodities like rice, wheat, sugar, edible oils, which are the basic food items. Trade is used as an instrument to regulate the domestic prices in those commodities. Therefore, the domestic prices of these commodities have grown at a slower rate than other commercial crops, the trade of which is relatively free. It is also seen that the liberalisation policies through the removal of QRs were not effective, since it had no impact on the domestic and world prices leading towards integration. Similarly, indirect measures like devaluation, fiscal and other monetary policies too had limited impact on increasing the export earnings of the economy.

8. The earlier stated argument that world prices are more fluctuating than domestic prices, and therefore, with the opening up of trade the volatility in the world prices would be transmitted to domestic prices does not hold good. Examining the coefficient of variation in the domestic and world prices adjusted for exchange rate, inflation and the trend shows that the domestic prices are more fluctuating than world prices. Hence there is no fear of volatility being transmitted to the domestic prices in opening up of trade. It is also seen that the coefficient of variation in prices of many commodities have declined in the nineties as against the eighties. This is largely seen for commodities, which have shown an increase in the quantity of trade in the nineties. As it is seen that price policy has not been effectively implemented and that there has been an increase in trade volume of those commodities which showed a decline in the coefficient of variation in domestic prices in the nineties one can see that external trade is more useful in reducing price instability in the domestic agricultural markets in India.

9. Since agriculture is an important sector of the Indian economy, the changes in trade scenario in agriculture have larger implications on growth and other macro economic variables of the economy. Though the importance of agricultural trade in contributing to the trade balance of the economy is not largely felt, the increasing importance of the agricultural surplus to non-agricultural imports would have an indirect impact on the sector. On trying to examine the relationship between agricultural exports and growth in agriculture in India we see a two-way causation between these two
variables using the Granger Causality Test. The causality from growth to exports is clearly established even by looking at the simple growth rates in those variables. An increase in export growth is preceded by a favourable growth in GDP in agriculture. But establishing the causality from exports to growth seems to be difficult since the variables affecting the growth in agriculture are many. The role of non-price factors like investment, capital formation, etc in agriculture too seems to have occupied an importance place in determining the growth in the sector.