

CONCLUSION

In conclusion, I have just try to give a modest attempt to understand the implications of multilateral trade liberalization on Indian Agriculture and to carefully assess the likely costs and benefits of globalization to the consumers and the producers in India. In particular the focus of the study is to examine in what way the establishment of a free and liberalized trade regime under the WTO would affect the living standards and the fortunes of the Indian farmers.

India which is one of the founding member of the WTO, having signed the agreement in 1995. India started their economic reforms and gradually dismantling its very high tariff and other tariff barriers. The establishment of the WTO Agreement and that of Agreement on Agriculture (AoA) was to create a free multilateral trade regime. The aim was to eliminate or reduce obstacles to market access including restriction and controls; to eliminate or reduce domestic support and to streamline the export subsidy. The Uruguay round has significantly contributed to the liberalisation of international trade but the post-Uruguay round situation still has many distortions. The provisions of the WTO Agreement on Agriculture (AoA), the modalities adopted for making the reduction commitments and the manner in which these were actually translated into specific commitment, all suffer from serious limitations.

Firstly, in the matter of Market Access, the choice of the base year period of 1986-89, when prices were extremely low, enabled the developed to get away with much higher than the true tariff equivalents for the years immediately preceding the conclusion of the Round (1989-1993).

Secondly, most of the developed and advanced countries indulged in dirty tariffication that enabled them to come to a higher figure of base tariff equivalents. By dirty tariffication, developed countries have able to retain very stiff tariffs for several highly protected and high value agricultural commodities such as dairy and sugar products.

Thirdly, the method of making average reduction non tariffs enabled the developed countries to make minimum reduction in highly protected sensitive items and much larger reduction in products in non-competitive products with low tariffs. The maintenance of very high tariffs on many products and tariff escalation at processing stage of the developed countries constitute one of the major impediments to exports from the developing countries.

Fourthly, the administration of tariff rate quotas (TRQs) by developed countries was also discriminatory. The developed countries were allowed to count special arrangements as part of their minimum access commitments and to allocate their minimum access to traditional exporting countries having such arrangements.

Fifthly, the use of the special safeguard Mechanism of the AoA was allowed only a few (36) developed countries that had tariffied. Most of the developing countries like India which opted for binding their tariffs and not tariffying were not entitled to use the Agricultural safeguards.

Regarding the provision of Market Access, India decided not to tariffy but to bind its tariffs for both agricultural and industrial commodities. Initially India was allowed to maintain quantitative restrictions (QRs) on exports and imports on balance of payments grows. But now India has completely removed the QR's by 2001 and is now fully in the tariff regime.

As from the above analysis, there were serious limitations in the provision regarding domestic support also. Firstly, the problem arose because of creation of different Boxes like Green Box, Blue box and Amber box. Not only is total expenditure on Blue box and Green box quite high and increasing but many members were also deliberately shifting expenditure away from the amber box to those measures that are exempt from reduction commitments under the Green box.

Secondly, the estimates of domestic support for the base year for most of the countries were turned to be historically high because of low world prices during the base period, 1986-88.

Thirdly, there are several criterias as and calculations regarding AMS which are ambiguous. like the treatment of negative AMS, definition of 'resource poor' farmers for exemption from no-product specific AMS.

In case of India, regarding the provision of domestic support, despite non-product support, the total AMS works out to be highly negative and is much lower than the de-minimus level of 10 per cent. This means that India does not have any reduction commitment regarding its domestic support to agriculture. This is the sharp contrast with the developed countries that provide a high levels of support to their cultivators. Since most of their support is in terms of product specific support, India should therefore press for reduction commitments on product specific AMS rather than total AMS arguing for a ceiling of 20 to 30% on product specific domestic support. Further there is ambiguity regarding the treatment of negative product specific support for the determination of the AMS.

On the third front of AoA, regarding the export subsidy serious problems have risen regarding on export competition also. The developed and rich countries provide large subsidies to certain products which make

the exports of many commodities from developing countries non-competitive. The export subsidy have been made on the basis of groups of products and there has flexibility for increasing subsidy on a product within a group of products while reducing it on a minor product.

Regarding export subsidies India does not have any obligation in the matter of export subsidies. While under the special and differential treatment (SDT) refer to lower level of reduction of domestic support and export subsidies, exemption under the green box, including the exemption to all input subsidies to the small and 'resource poor' farmers . There are no doubt important provisions that need strengthening.

Lastly, the Agreement on Sanitary and phytosanitary measures deals with food safety and animal and plant health standards. The WTO does not set the standards but it allows countries to set their own standards which can be higher than the internationally agreed ones. The developed countries have been using this as a instrument for denying market access to exports from developing countries.

Thus, in a highly protective world characterised by higher tariff walls, large domestic and exports subsidisation and strict control an factor mobility, the developed countries have been denied effective access to their agricultural markets. These subsidies also result in depressing the border price of many agricultural commodities. Further, many non-tariff barriers like stringent sanitary and phyto-sanitary standards have further tended to discriminate against imports from the developing countries.

Agricultural trade trends: Trade reforms which constitute sharp devaluation of rupee and gradual dismantling of import, export and exchange controls made many Indian agricultural products competitive in the international market. As a result, the exports of all merchandise

including the exports of agricultural products from India recorded a growth rate of 8.12% per annum during the 90's compared with a growth only 2% per annum during the 80's. But this picture changed after 1996 with the coming of the Asian crisis. After 1996, there was a big slow down in world agricultural trade, which recorded negative growth upto 2001. Simultaneously, the prices of many commodities crashed and many Indian produces become non-competitive. The situation was made worse because of big hikes given to administrative prices of rice and wheat. All these factors contributed to the decline in the growth of agricultural exports.

The gradual trade liberalisation in agriculture including the abolition of QR's in India, India should be able to increase its exports in a big way. One of the major distorting factors that also erodes India's potential is large domestic and export subsidies being given to agriculture by the developed countries. India's potential would also depend on its competitiveness. This in turn would require increase in productivity through large investments in agricultural infrastructure, particularly agricultural research which must be location specific and more oriented towards farmers. Agricultural sector in India has not only to generate surpluses but has also to become competitive through increase in productivity.

Competitiveness of Indian Crops: The competitiveness of Indian crop is examined on export hypothesis by employing the methods: Net Protection Coefficients (NPC), Effective Protection Coefficient (EPC), Effective Subsidy Coefficient (ESC) and Domestic Resource Cost (DRC).

According to methods, domestic resource cost (DRC), India is competitive in all major crops. But the fact that DRC is less than unity for almost all the crops on the export hypothesis brings home the fact that in real terms, India has a large export potential provided that the developed

countries remove their trade barriers and withdraw high domestic support to their agriculture. Even various measures of export competitiveness bring out that most of the important agricultural commodities in India are competitive. India is also an efficient producer at current prices, but the efficiency of its production is getting reduced. This would depend on the extent to which the developed countries agree to withdraw their subsidies and reduce their tariff barriers. Secondly, it would also depend on the capability of the developing countries to continue to maintain their competitive advantage through continuous increase in productivity by application of new technology.

Given efficiency in production, there is a scope for exports to increase in temperate and to some extent tropical crops like wheat, livestock, sugar, oilseeds and rice. A much more important area for investigation in competitiveness in animal husbandry product and in the floriculture and horticultural crops. These products registered a high growth in their exports during the 1990's. However, not much work has been done in analysing the competitiveness of these products so far. In sum the govt. interventions in the food grain market have so strong that the procurement /support prices have not only raised the market prices but also influenced the movements of barter terms of trade in favour of agriculture.

Stocks of foodgrains with the public agencies accumulated over the years have played important role in controlling the market prices. In such a situation the procurement / support prices have also to be taken into account in the analytical framework while explaining the changes in the aggregate supply or relative prices over the years.

The question of phasing out of subsidies particularly fertilizer one is quite complicated issue in view of its economy wide effects. There is no

denying the fact that in the short run the marginal returns on fertiliser subsidy are the highest as compared to other policies like public investment, food subsidy and procurement, but the returns decline in the medium term. However, in the medium term perspective, the public investment in agriculture seems to be a better policy option as compared to fertilizers, procurement and food subsidy.

There are significant changes taking place in the cropping system in favour of commercial crops. At times these changes are impacting the environmental parameters and therefore, such changes need to be carefully mapped. The changes are taking place quite rapidly among the small, semi-medium and large size of holdings. Thus the viability threshold has also been changing significantly across the region. The cropping pattern change also clearly indicate a preference towards commercial crops specifically during the eighties and nineties. There is enough evidence that the farmers are also changing towards international trade oriented cropping pattern which in itself is a not good sign. Such changes are likely occur in the near future in all the regions because they will affect the area of cultivation under foodgrains and thus the production of foodgrain.

Trade theorists believe that trade brings about a great deal of flexibility in the matter of food security for developing countries. Trade helps in augmenting availability in developing countries, it helps in smoothening very large fluctuations in domestic output and is also expected to increase access of the poor to food, as free trade is expected to faster growth and increase the employment opportunities of the poor in labour intensive export activities. But the caveats are that developing countries should have enough foreign exchange resources for the import of foodgrains. The second condition is the reliability of international markets as a source of affordable food supplies. There can be serious problems on both

these accounts. Regarding availability the WTO AoA envisaged that the developing countries would reduce their support to agriculture. The consequent rise in prices would induce greater production in developing countries. But this has not happened as the developed countries have failed to reduce their domestic support to agriculture.

At present, India has no reduction commitments regarding export subsidies. But in matter of domestic support, there is an exception from reduction commitment only up to a de-minimus level of 10% both in the matter of product specific and more so in the matter of non-product specific support. At present, India's product specific support is highly negative, but its non-product support was 8.6% of value of agriculture output during 1999-00. However, total AMS support to agriculture is highly negative and well below the de-minimus levels. At the same time, India was also allowed to renegotiate its tariff in 2001. Lifting of QR's did not lead to surge of imports and did not cause any undue hardship to the producers, as feared in some quarters. India has bound its tariffs at very high rates but its MFN tariffs in most cases are much lower than the bound levels. India's current tariff levels are considered very high being much higher than industrial tariffs. Regarding the Market access case, Indian agriculture has not been able to derive large benefits from trade liberalisation. This is mainly because of the developed countries made access difficult for some high value dairy and meat products through high tariff ceilings and tariff escalation. Very high SPS standards also acted as barriers to their exports. Having despite competitive edge in many agricultural commodities, the gains to farmers from agricultural exports were much lower than expected. While liberalisation is expected to benefit Indian farmers through increased exports, the harmful effect of cheap imports on the income of the farmers cannot be negotiated in the near future.

Globalisation and liberalisation both have an impact on growth of GDP and agricultural growth. Both the GDP and per capita income registered significant acceleration during 1990-91 to 2000-01 compared with all earlier decades. This notwithstanding, it is growth of agriculture GDP that has a more direct impact on the living standards of the peasantry. It comes out that at 1980-81 constant prices, the growth rate of agricultural GDP decelerated from 3.94% per annum during 1980-81 to 1999-91 to only 1.95% per annum during 1990-91 to 1998-99. However, the revised series of GDP at 1993-94 prices show that there was a decline in the growth rate of total GDP originating from agriculture. The main reason for the discrepancy in these two estimates much higher contribution of fruits and vegetables to GDP in the 1993-94 series, which is under a question mark

In the recent years there has been sharp deceleration in both the productivity and yield of the major crops. The growth rate of output for all crops taken together decelerated from 3.19% per annum during 1980-81 to 1990-91 to only 1.96% per annum during 1990-91 to 2000-01. In the meantime, the growth rate of yield decelerated from 2.65% to 1.38% per annum. Output and yield growth of major crops like rice, wheat and cotton also decelerated significantly. The most important reason for the deceleration in agricultural growth was a sharp deceleration in total investment and more so in public investment in rural infrastructure.

One of the most important development was a sharp decline and collapse of employment growth in agriculture during the nineties. The growth of employment in the non-agricultural sectors has not been sufficient to compensate for the decline in agricultural employment. There are also some improvements in agriculture's barter terms of trade vis-a-vis non-agricultural during the 1990's despite large increases given to administered price of important agricultural commodities.

The transition from self-sufficiency to trade oriented outlook may become an important step in the crop enterprises and probably the sector should provide atmosphere to make the farmer ready for such danger. This is certainly need a big leap forward in the back ground of shrinking size of holding, imperfections in the product and factor market and absence of safety nets.

Confrontation with the constraints like market imperfections, agrarian transition, availability of the technology and participation by the stakeholders may put the farmers at the crossroads in the new millennium. If the price relatives and functioning of factor and product market are made favourable to the farmers by overtaking the existing constraints, then we may emerge into a new phase of growth which will put on the world trade map significantly.

Suggestions

The above discussion has brought out their reforms failed to bring about the expected benefits to the Indian peasantry.

- (1) The main reason for deceleration of agricultural growth was slow down of public investment in agriculture. So the important task would be to revive the deceleration of Indian agricultural growth by pumping large public sector investment in agriculture. Experience of the 1980's and the 1990's should teach the Indian policy makers that public investment in rural infrastructure continues to be of paramount importance. It can be complimented but not fully replaced by private investment. Hence there is a need to accelerate public investment in agriculture. Furthermore, the existence of very precarious fiscal situation is primarily responsible for a decline in public infrastructure investment in general and in agriculture, in

particular. So there is great need to think about the investment by the Indian planners.

- (2) To accelerate the export potentialities in agriculture India would need large investment in processing, power, communication, marketing, transport and other infrastructure.
- (3) Bringing farmers under the umbrella of an economic organisation, which takes care of their production and post harvest related activities in an integrated manner and their other social and economic needs. This is fundamental to success for any activity related to small farm agriculture. History of advanced countries shows that greater the percent of farmers under the organized fold greater is their empowerment and advancement. So there is more need to take some institutional measures that help the small and marginal farmers in sharing the potential gains of growth and export. A pro-active policy should be designed to involve the small and marginal farmers and landless labour in deriving benefits of increased agricultural exports through innovative institutions like integrated cooperatives, contract farming etc. Special efforts should be made to develop new technologies for the farming sector and reach these to the small farmers enabling them to diversifying their production towards high value commercial and export commodities.
- (4) India became the leader of the developing countries in the various WTO talks, should improve their bargaining position. It should also try to improve its competitiveness in many agricultural commodities through increase in their productivity. India could have to raise their voice against the discriminating provisions and practices in favour of the developed countries.

- (5) In traditional food sector, large and most modern companies with large capital investment and a mission of larger profit margin, cannot compete with the small individual enterprise. So, “production by masses” is preferred to “mass production” by MNC’s in India for local sustainability and also employment distribution and empowerment. The turnover of these food processing industries with a concept of “production of Masses” plays a significant role in the diversification and commercialization of agriculture in the larger economy adding value to farm produce, creating productive non-farm employment and improving farm exports.
- (6) Primary processing of food raw materials in production catchments to match conventional product range and food habits is a step for backward, forward and horizontal integration. This approach effectively combines minimisation of losses of edible material with employment and income generation.
- (7) Integration in agro-processing helps in controlling losses and increasing farmers income since, every stage in agricultural production (from sowing to harvesting to storage to processing and marketing) is under the umbrella of a single organization. The degree of integration depends upon many factors such as type of crop, nature of commodity (perishability, seasonality, command area) quantity available for processing, market condition, technology available, etc. In India various degrees of integration in agro-processing sector have been successfully followed by a number of organization – private as well as farmers organizations, especially, cooperative organizations. This approach needs to be encouraged.

- (8) A network of cottage and small-scale enterprises in rural areas for processing of agricultural produce could provide employment and income, quality food material to local population at relatively cheaper prices and primarily processed raw material to larger urban industries. A suitable packaging system needs to be adopted for this purpose. The unit operations in such facilities could include cleaning, grading, washing, sorting, packaging etc. Small scale processing units could face hardships such as non availability of efficient machines, skilled manpower, repair facilities locally, and high energy inputs. All these could affect their output which need to be set off against their main advantages listed above.
- (9) Newer crop growing techniques and varieties (to cover very greater range of commodities and geographical areas) need to be introduced. This would be best done through equitable and fair contracts, where the buyer provides knowledge and services in return for commitment of crops at mutually acceptable fair values. The contracts must be simple, mutually gainful and equitable without having to take recourse to litigation and redressal. Contracts could also help improve export prospects in the post-2004 trade regime. Such factors have created a good deal of excitement about contract farming system at present.
- (10) Necessity of adopting a collective marketing effort: A commercially-oriented, professional organisation could take on the roles of export promotion, information dissemination and actual supervision of all tasks involved from the farm gate onwards, instead of each individual exporter and trader looking to becoming an international player himself. This would be different from APEDA, since its role would be commercial and trade-driven,

rather than a government facilitator. The agency could trade its own commodities as also act on behalf of other growers. It must work in close association with some leading trade houses abroad, as their adjunct, rather than just another small supplier. The final possible outcome could be the much vaunted Brand India.

- (11) While the intermediaries can and often do perform certain essential and useful functions, there is little reason to engage a multiplicity of them. The current market – and value-addition chain needs to be shortened, equitably regulated and educated in the tasks of the future to make it more effective. The greater the role of the producers in this, the higher would be their share of consumer spending. This would be the greatest possible incentive for them to respond with improved quality and reliable quantities of the produce.
- (12) Banks and financial institutions need to develop sound knowledge base as well as management and technical expertise about the traditional food sector as well as large integrated agro-processing enterprises so that they are able to effectively promote the entrepreneurs in different sectors. If backwards and forward linkages are taken care of the appropriate technologies adopted, there is no reason why food-processing projects in India cannot be as successful as those in developed countries.
- (13) There is no gainsaying the fact that wrong-headed policies, such as unjustified restraints on the size and scale of processing, have caused inefficient, outdated and wasteful technologies to be used in India. The search instead must be for such solutions as would combine the efficiency of small producers and the scale advantages

of modern, large-scale processing, as has been effectively done in dairying. The technology policy must also include infusion of latest designs and concepts from wherever available to give a forward thrust.

- (14) The R&D policy and strategy need to be re-oriented. Most Indian R&D efforts need not be aimed at either inventing new process or replicating what is done abroad, but should focus on creating an ability to absorb developments already available elsewhere and modifying them to suit Indian realities. Greater resources and accountability are always advocated, but seldom imposed. The present, somewhat faint pursuit in this direction needs to be accelerated and made effective.
- (15) There is a need for systematic listing of technologies developed by various research institutes and publication of these for wider circulation. A peer review of the efforts of these institutes is also essential to identify the gaps and new fields for technological research.
- (16) Establishment of a number of national institutes of agro-processing technology and management, as well as reorientation and strengthening of ICAR institutions and post harvest departments in agricultural universities especially in the field of chemical processing and packaging is needed. There should also be specialised institutions for specific crops like castor, medicinal plants, and other important crops to cater to specific needs of such crops.
- (17) Quality improvement and maintenance is a continuous process. It can be achieved, if pre- and post-harvest operational measures,

storage and packaging are monitored with care and Food Regulation Laws are enforced judicially. Adoption of GMP, GHP and HACCP should be encouraged with suitable incentives to help food processing industries to maintain food quality and safety.

(18) The TV media is still not utilised by our R&D institutions for extending of technological knowledge to masses, especially to rural masses. Exhibitions of latest technologies for processing of traditional foods as well as down stream products needs to organised regularly in all parts of the country.

(19) Data and other support information need to be upgraded to meet the user's requirements. Inclusions of newer aspects and concepts is also possible with relevant data bases and case studies to support them.