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TRADE AND AGRICULTURE

IMPLICATIONS OF GATT-94 ON EXPORTS OF INDIAN AGRO-PROCESSING FIRMS

Pradeep K. Keshari, Tara Nair and Dinesh Awasthi

INTRODUCTION

Agricultural sector is normally subsidised and prices of agricultural products are distorted both in developing and developed countries. These distortions have occurred due to the provisions of domestic subsidies, export subsidies and restriction or ban on import of agricultural products in a country.

The intention behind subsidising agriculture sector have differed greatly between developed and developing countries. Developing countries have been subsidising agriculture primarily to mitigate the food shortage so as to provide food at affordable prices to those who cannot otherwise purchase it at economic prices. On the contrary the developed countries subsidise agricultural sector in order to enhance the exportability of this sector.

Pursuing a new policy for the agriculture sector, Government of India now not only wants to achieve or maintain self-sufficiency in agriculture and agro-based products but also intends to become a major exporter of the same. Thus, in the new policy scenario, the objectives of India do not differ significantly from the developed countries.

Due to the availability of cheap raw material, labour, varied seasons and variety of crops, India, infact, enjoys comparative cost advantage in agriculture and agro-based products. In contrast to this, the exportability of developed countries largely rest on domestic and export subsidies provided by their states.

One of the major objectives of the agreement signed in the Uruguay Round of the Multilateral Trade Negotiations on 15 April, 1994 at Marrakesh (hereafter GATT-94) is to eventually remove the distortions in the prices of agricultural products and thereby promote trade in line with comparative advantages of the nations. In order to fulfil this objective, the

following commitments were made by the contracting parties in Uruguay Round of GATT.¹

(a) Commitment on Domestic Subsidies

Every developed country has to limit the (product plus non-product specific) subsidies to the extent of 5 per cent of the total value of its agricultural production. However, a developing country can subsidise upto 10 per cent. In a developed country, if the domestic subsidies exceed the stipulated ceiling, it is to be reduced from its existing level by 20 per cent over a period of 6 years. In the case of developing countries, if the domestic subsidies exceed the stipulated ceiling, it is to be reduced by 13.3 per cent over a period of 10 years. According to the calculations of the Ministry of Commerce, Government of India, Aggregate Measure of Support (AMS), the total of all subsidies given by India to its agriculture sector was 5.2 per cent i.e. below the limit of 10 per cent. Thus, India has no obligation to reduce its present level of domestic subsidy.

(b) Export Subsidies

Various types of subsidies, as mentioned in GATT-94 accord, for agriculture related exports are to be reduced. Over a six year period in the developed countries, the subsidised volume of export under these subsidies is to be reduced by 21 per cent while the value of budgetary support for export subsidies is to be reduced by 36 per cent. Developing countries have to undertake smaller reduction of 24 per cent and 16 per cent respectively in terms of subsidised volume of exports and budgetary support for export subsidies (over a longer period of 10 years). Moreover, the developing countries are free to support agricultural export in two ways: (i) by subsidising internal and international transport and freight; and (ii) by subsidising the international marketing of agricultural products.

(c) Commitment on Market Access

i) The Countries which do not permit the import of agricultural products presently have to convert their import restrictions into tariffs and these tariffs must be reduced by 36% over 6 years with effect from 1995.

ii) These countries must give opportunity for import of 3% of their domestic consumption rising to 5% at the end of 6 years. The developing countries which are facing the problem of balance of payment (BoP) deficits are not required to adhere to this agreement.

Based on the above-mentioned commitments of the contracting parties, supporters of GATT-94 argue that the Indian exports of agriculture and agro-processed products will increase significantly.² This optimism is based on two main assumptions: (i) With the reduction in domestic and export subsidies of developed countries, international prices of agro-processed products would go up considerably. Indian firms, therefore, can take advantage of this situation due to the competitive prices of their agro-products: (ii) Although the Indian subsidy is well below 10 per cent (or even negative by some estimates), the Government of India is not required to reduce it in future.

Contrary to the optimism shown by the protagonists the skeptics state that the prospective export gains to Indian firms, particularly to the smaller firms would be negated by certain other clauses or sub-clauses of GATT-94. These include the following:³

(i) The developed countries have commitment to reduce the level of subsidies only by 20 per cent during 1995-2000. Moreover, GATT-94 combines the agricultural subsidies given to different crops instead of taking subsidy for each crop separately. This would give them flexibility to heavily subsidise those items in which they do not face the threat of competition. Further, the decrease in

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subsidy which developed countries have to bring about may not come at the beginning of the 6 years period but may come only towards the end of 2000.

(ii) India will not be able to meet the strict sanitary and phytosanitary conditions imposed by the GATT-94 accord on agro-based exports.

(iii) India will have to follow the Trade Related Intellectual Property Rights (TRIPs) agreement on patent for agrochemicals and provide protection to plant varieties either through patent or 'effective' *sui generis* system or by any combination thereof. It is believed that these will lead to substantial rise in input cost of seeds, plant materials and agrochemicals, thereby making the final product uncompetitive in the international market.

In the above background of controversy on the prospective effect of GATT-94 on the exports of agro-processing firms, this paper seeks to achieve mainly four objectives: (i) To know the agro-based firms perceive the effect of GATT-94 on their performance with particular focus on exports, (ii) To analyse the determinants of competitiveness as perceived by their entrepreneurs in the aftermath of GATT-94, (iii) To explore the strategies planned by them to exploit the opportunities or cope up with the challenges arising out of GATT-94 and (iv) To focus on the obstacles to exports faced by entrepreneurs and suggest specific measures

to remove the same.

2.0 METHODOLOGY

Our study is based on the opinion survey of 40 entrepreneurs drawn from agro-processing firms and industry associations. These entrepreneurs had sufficient knowledge of the major features of the agreement on agriculture sector. Two types of structured schedules were utilised for conducting opinion survey. The first one was used to record the perceptions of entrepreneurs about the likely impact of GATT-94 on their own firms. The second one was used to know the views of a few industry associations on the major obstacles to export faced by the firms and effect of GATT-94 on the entire industry. Respondents were contacted at 5 major cities, namely Ahmedabad (5), Bombay (10), Pune (10), Bangalore (10) and Delhi (5). Distribution of size of responding firms in terms of sales turnover and export intensity (measured by export as a proportion of sales) are shown in Table 1.

3.0 FINDINGS

All the respondents of the sample were of the opinion that the GATT-94 accord to be implemented by the newly formed World Trade Organisation will lead to reduction in subsidies provided to the agricultural sector in the developed countries. This will render agro-based products of these countries less competitive. On the other hand, most of the Indian agro-processed products,

which are already competitive in terms of prices, will become more competitive internationally due to reduction in subsidies and competitive pressure being exerted by the new economic environment. As export improves efficiency and export of agro-processed products will become much more profitable than selling in the domestic market, almost all the firms have welcomed the signing of GATT-94 by the Gove-

rnment of India.

3.1 PROSPECTIVE GROWTH PERFORMANCE

The sample firms on the average perceived significant growth in their export primarily due to GATT-94 in the short run as well as in the long-run. Mainly on account of increase in exports, the sales turnover of firms on the average is also expected to achieve 'significant' growth both in short run as well as in the long run. The exploitation of export opportunities may not be possible without considerable investment, in modern plant and machinery technology, etc. Therefore, the investment by firms has also to be stepped up in order to support the growth in export. The respondents confirmed that they plan to raise investment significantly in the short run as well in the long-run. Although the growth in investment, average employment in the sample firms is also expected to grow but at a slower rate. Thus, there is no need to fear that the more export orientation of agriculture sector will lead to displacement of labour. (Table-2)

Despite the overall optimism of agro-based entrepreneurs on GATT-94 a few firms of the sample were found concerned about the agreement on sanitary and phytosanitary conditions which may affect their exports adversely, particularly those directed to the developed countries. A few exporters stated that it would be extremely difficult for them to fulfil the sanitary and phytosanitary conditions in the present Indian conditions. Therefore their exports may suffer due to non fulfillment of these conditions. During the course of interview, it was also revealed to the authors that the Indian firms are already facing certain barriers to exports of their agro-based products as the certificates/clearance given by the Indian authorities are not recognised by their foreign counterparts. These barrier to export, for example take the form of fulfilling the conditions of Food and Drugs Authority (FDA) of the USA and prior approval of the processing facilities (ie Good Manufacturing Standards) required by certain countries in Western Europe. A few sample firms reported that they would be able to manage the situation by improving quality, technology, packaging, processing etc. and on the basis of price advantage which they have vis-a-vis the products of the developed countries.

Table-1
DISTRIBUTION OF SIZE AND EXPORT INTENSITY OF FIRMS

Sales Turnover (Rs. Lakh)	Number of Respondents
below 100	8
100-500	8
500-1000	14
above 1000	10
Total	40
Export Intensity(%)	Number of Respondents
0	4
0-50	4
50-100	12
100	20
Total	40

Table-2
PERCEIVED GROWTH IN PERFORMANCE INDICATORS IN THE AGRO-BASED SECTOR

(Short Run)				
Indicators	Negative	Positive but insignificant (0-5%)	Positive and significant (Above 5%)	Uncertain
	Number	of	Responses	
Sales Turnover	3	20	12	0
Investment	3	18	14	0
Employment	3	18	14	0
Exports	3	22	10	0
Profits	3	18	14	0
(Long Run)				
Indicators	Negative	Positive but insignificant (0-5%)	Positive and significant (Above 5%)	Uncertain
	Number	of	Responses	
Sales Turnover	3	22	10	0
Investment	3	18	14	0
Employment	3	23	9	0
Exports	3	23	9	0
Profits	3	18	14	0

3.2 IMPACT OF TRIMs

Majority of the respondents felt that the TRIMs agreement which puts foreign firms on par with domestic firms will result in increased participation of the latter in the Indian agro-processing industry. Foreign firms are already attracted towards India because: (i) domestic market for agro-based products is quite large and (ii) sourcing the products from India can provide substantial benefits to MNCs due to the availability of cheap raw material and manpower (skilled as well unskilled). It was also felt by the majority that TRIMs alongwith TRIPs agreement will make it easier for SMEs to tie-up with MNCs. MNCs will have more confidence on the Indian firms because their products/technology will be protected and they will enjoy the same status as the Indian firms.

The majority of the respondents also perceive that the increased operation of a foreign firm in agro-based industry will provide a number of benefits to their firms. These benefits range from greater scope

for subcontracting to access to international market (Table-3)

3.3 IMPACT OF INTELLECTUAL PROPERTY PROTECTION

A number of respondents mentioned that the *sui generis* system for plant varieties to be introduced in India or Plant Breeder Rights (PBRs), would either be not applicable to them or they were not sure of its effect on their performance. Some of the respondents observed that the possibility of improved seeds might lead to better quality of product, while some stated that protection of plant varieties would improve India's image as a

protector of intellectual property rights. This will fetch better prices for their products when or if sold abroad as well as make it easier for them to obtain better quality plant materials from developed

Table-3	
IMPACT OF IRIMS AGREEMENT ON FIRM'S PERFORMANCE	
Parameters	Number
1. More scope for job work	30
2. Additional access to modern technology and marketing know-how opportunity for learning	30
3. Advance organisational method and management techniques	30
4. Improvement in quality due to copetecion with MNCs.	32
5. Efficiency in resource use due to competitive pressure from the entry of MNCs.	32
6. Access to international market.	28

countries. As regard to the patent protection provided to agro-chemical sector, the respondents said that it might not significantly affect the prices of fertilizers and pesticides they use. Therefore, the prices of their final products will not be adversely affected (Table-4).

3.4 DETERMINANTS OF COMPETITIVENESS IN THE WAKE OF GATT-94

Sample firms were asked to rate a number of factors which may become important determinants of their competitiveness in the wake of GATT-94 accord. Their responses have been presented in Table-5. It can be seen from this Table that the firms on the average, consider labour cost to be 'somewhat' important in the domestic market while the same is considered 'very' important in the export market. Quality is considered to be 'most' important in the export market while it was rated only 'important' in the domestic market. Delivery in time, R&D, reliability and productivity of labour were perceived, by most of the respondents as 'very' important factors in achieving competitiveness in export market while the same were looked at by them as 'important' determinants in the domestic market.

3.5 STRATEGIES TO MAXIMISE BENEFITS OR MINIMISE THREATS

Certain strategies are generally followed by the firms to meet the challenges or exploit the opportunities which arise in the changed business environment. The

responses were collected for a set of strategies which might become important, for a firm in the aftermath of GATT-94. The rating of these responses, as presented in Table-6 show that the firms on the average consider entry or increased involvement in export business, improvement in quality, change in the management and marketing practices, indigenous technological

Table-4
**IMPORT OF TRIM AGREEMENT
 ON FIRMS PERFORMANES**

Parameters	No. Of Respondents
1. Fetch better price for these products, particularly of flowers	23
2. Help in obtaining latest variety of plant material from abroad.	23
3. Improvement in quality due to availability of better quality of seeds and plant material.	24
4. Increase in cost	02
5. No effect on cost	03
6. Not applicable/Uncertain	14

development and subcontracting to be 'very' important strategies in the wake of opportunities (or threats) arising out of GATT-94. The respondents also perceived the technological and financial collaboration and tie-up for marketing the products with the MNCs and retraining of workers as the 'important' strategies which could be followed by them in future for improving their technological capability and enhancing exports.

3.6 CONSTRAINTS TO EXPORT GROWTH

The respondents mentioned that the opportunity to growth for agro-processed export created by GATT-94 accord cannot be translated into reality, unless the Government of India undertakes proper measures to remove the obstacles faced by them. They specifically mentioned the following as constraints to the growth of their export business:

1 Production Related Constraints

- i) Lack of knowledge about creation of a perfect climate controlled closed growing system;
- ii) High construction cost of green houses and high cost of cultivation of crops in green houses;
- iii) Non-availability of plants and seeds of high quality and latest international varieties;
- iv) Poor knowledge of harvesting and post harvest handling of agricultural products;
- v) Lack of modern processing facilities; and

iv) Lack of cold storage facilities at airports and refrigerated trucks to transport flowers, ornamental plants and other perishable commodities; and

v) No guarantee regarding the availability of cargo space and lack of co-ordination between National and International Carriers.

3. Other Infrastructural Constraints

- i) High power tariffs;
- ii) Fragmented nature of land-holding and ceiling on extent of land-holding;
- iii) Poor water supply and resulting unhygienic conditions at slaughter houses; and
- iv) High price for and interrupted supply of electricity.

4. Procedural Hurdles

- i) Lengthy and cumbersome procedure for obtaining licenses for importing mother plants; and
- ii) Phytosanitary procedures for the import of plants and seeds and export of the same involves certifications from several agencies causing undue delay and hardships to exporters and importers.

5. Research & Development and Technology

- i) Inadequate efforts to preserve the genetic diversity of various plant, species required for plant breeding;
- ii) Slow dissipation of know-how from

vi) High import, duty on consumables including spare parts, required for machineries used in production.

2. Transport Related Constraints

- i) Slow speed of transport and bad conditions of roads;
- ii) High cost and unreliability of transport services;
- iii) Inadequate capacity to transport the products;

the universities/research institutions required for plant breeding.

iii) Inadequate information on and lack of facilities related to patent and plant breeders right;

6. Finance

- i) High cost of bank finance; and
- ii) Poor customer services in banks and cumbersome procedure for obtaining finance.

7. Miscellaneous

- i) Unfavorable labour laws and resulting unionism;
- ii) Fixing up of floor price for export of rice and frequent changes in the same by the Government;

iii) No safety from non-tariff barriers imposed by several countries, particularly the developed one; and

iv) Lack of knowledge about potential competitors, demand conditions and procedures to be followed for export in the international market.

3.7 SUGGESTIONS

A number of suggestions for improving infrastructure, technological capability, export and import procedures were provided by the respondents. These suggestions are listed below:

a. Import-Export Procedures

- i) At present, all the planting materials and seeds imported against required documents are kept for about 45 days at the point of entry. To facilitate timely planting, seeds must be released within 7 days in the case of vegetable seeds and 3 days in the case of flower seeds and tissue culture plant in vitro. The consignments should be released within 12 hours from the time of receipt at the point of entry.
- ii) Custom clearance procedures should be simplified for perishable commodities like tissues and live ornamental plants.
- iii) Import duty on consumable items should be reduced to 15 per cent.
- iv) Since certain varieties/strains of germplasm, which are in great demand in the international market, are unavailable in India, they should be allowed to be imported in large quantities.
- v) A single nodal agency should be

Table-5
DETERMINANTS OF COMPETITIVENESS

Factors	Domestic Market (Score)	Export Market (Score)
Quality	3	5
Cost of Labour	2	4
Reliability	3	4
Timely Delivery	3	4
Productivity of Worker	3	4
Technological Capability	3	4
Brand Name/Company's Image	3	3
Packaging	3	4
Overall Mean	3	4

Note: Score is the weighted average of the response ranked in the descending order from the most important (= 5), very important (= 4), important (= 3), somewhat important (= 2) to least important (= 1).

created that can issue all export certificates at all major export centers. The agency authorised to issue the certificate can depute its representatives who can periodically inspect the live plants in the production area and issue the necessary certificates on the spot. This will avoid opening up cartons at the airports and exposing the plants to the adverse weather conditions.

vi) Export clearance for perishable items like flowers and live ornamental plants must be given the highest priority at the airports and custom offices.

b. R&D and Technology

i) Information on the latest food preservation techniques should be made available to the firms in agro processing sector.

ii) R&D should be encouraged in private firms by providing them major incentives on expenditure incurred on R&D.

iii) Interactions between agro-processing firms and government R&D institutions should be encouraged.

iv) A large number of micro propagation laboratories should be created to fulfil the domestic requirement of planting materials.

v) Import of materials for ornamental plants should be allowed against payment of royalty to the breeders abroad.

vi) Some system of intellectual property protection applicable for the agriculture sector should be created and information/knowledge about patent, plant breeders right etc, should be given to the entrepreneurs.

c. Infrastructural Facility

i) Overall infrastructure including transport, electricity, water, refrigeration and cooling and communication facilities should be greatly improved at least in the major cities like Pune, Bangalore, Bombay, Delhi, Madras, Calcutta, etc.

ii) Coolroom facility should be provided at all the domestic and international airports for perishable live plants, vegetables, flowers and fruits.

iii) Power tariff should be reduced.

iv) Interest rate on bank lending and export credit should be reduced.

v) Legal help should be provided by the government in case of dispute over intellectual property right.

d. Miscellaneous

i) The practice of setting minimum export price for agro-processed commodity like rice should be stopped by the government. The firms should be allowed to use their discretion in this regard.

4.0 CONCLUSIONS

In the wake of GATT-94 accord, an

Table-6
IMPORTANT STRATEGIES FOR EXPLOITING THE OPPORTUNITIES ARISING OUT OF GATT-94

Factors	Score
Quality Up gradation	4
Change in Managing and Marketing Practices	4
Tie—ups for Marketing with MNCs	3
Indigenous Technological Development	4
Eetraining of Workers	3
Technological Collaborations with MNCs	3
Financial Collaborations with MNC	3
Sub-contracting for Exports	4
Penetration into Export Market	4
Overall Mean	3.5

Note: Score is the weighted average of the response ranked in the descending order from the most important (= 5), very important (= 4), important (= 3), somewhat important (= 2) to least important (= 1).

opportunity for increasing the export of agro-processed products has been created. Given the comparative cost advantage of India, these opportunities can very well be exploited by the agro-based firms. Imposition of sanitary and phytosanitary conditions can create an obstacle to growth of for their exports. However, if the firms take appropriate measures to improve quality, sanitary and phytosanitary conditions, packaging, technological capabilities, etc. and Government of India implements the suggestions listed above particularly those related to the improvement in overall infrastructural facilities, simplification in customs regulations export clearance mechanism, Indian agro-processing industry will emerge as one of the most important foreign exchange earners of the country.

Notes

1. The views expressed in this article are those of the authors and do not reflect the views of the organisations they represent.

2. See, for example, Government of India, Economic Survey, 1993-94, Chapter 7, p.127.

3. See, for instance, B.K. Keayla, Final Act of GATT Negotiation: Myth and Reality, (New Delhi: National Working Group on Patent Laws, 1994).