EXPORT PROSPECTS OF INDIAN AGRICULTURE WITH URUGUAY ROUND AGREEMENT

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MASTER OF PHILOSOPHY

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CERTIFICATE

Certified that the dissertation entitled "EXPORT PROSPECTS OF INDIAN AGRICULTURE WITH URUGUAY ROUND AGREEMENT", Submitted by **Miss Radha Bashyam** in partial fulfillment for the award of Degree of Master of Philosophy of Jawaharlal Nehru University is her own work and has not been submitted to any other university for the award of the Degree.

We recommend that it should be placed before the examiners for evaluation.

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Chairperson

(Prof. Manmohan Aggarwal)
Supervisor

Dedicated to

My Father

CONTENTS

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Radha Bashyam

CHAPTER 1

DEVELOPMENT IN AGRICULTURAL TRADE

1.1 INTRODUCTION

The most significant aspect of Indian agriculture may be its diversified nature which may be due to climatic and soil conditions. The vastness of the country allows for this variety and thus evokes the availability of many different crops and other agricultural activities. India has foodgrain crops, commercial crops, floriculture, horticulture, viticulture, poultry, animal husbandry, dairy sector, pisciculture and forestry products. Since independence, Indian agriculture has acquired great strength and resilience. For example, the Green Revolution which occurred in the 60's & early 70's may be considered as a standing testimony to the capabilities of Indian agriculture. Technological change coupled with appropriate economic policies brought about this change. Development and application of high yielding seed technology, use of fertilizers and pest control measures, modernization of irrigation facilities, mechanism of minimum support prices, strengthening of extension services, and marketing services both for inputs and outputs have contributed significantly to augmenting production.

Agricultural development in India can have significant impact for world output and trade in agriculture. The liberalization of trademacro-economic stabilization combined with fiscal adjustment, and structural reforms in India initiated in 1991 would be constrained by events in the agricultural sector. Conversely, liberalization of world's tade would have a significant impact on Indian agriculture as it moves domestic prices of inputs and outputs closer to world prices. Furthermore the conclusion of the Uruguay Round (UR) of multilateral trade negotiations, would inevitably change the structure of agricultural prices in the world economy.

The possible impact of Indian liberalizing its policies regarding international trade in agricultural commodities would be governed by the following two facts:

1. World agricultural trade occurs in a highly imperfect setting, because various non-tariff barriers imposed by developed and developing countries in see late domestic production from world prices, and these are being determined by the relatively small surplus/deficits which enter world trade.

2. While India is a very large producer and consumer of agricultural commodities by world standards, it is marginal in international trade in such commodities.

India's involvement in world agricultural trade has been declining during the past 25 years. Both Indian imports and exports of agricultural commodities have declined as a share of world trade as a share of India's own trade, and as a share of India's national income. Success in import substitution brought about by the Green Revolution has been the main course for this. Self sufficiency in order to provide food security has motivated the import substitution.

India has at least maintained its share of world output of major agricultural crops during the period, with particularly strong perofrmance in the case of wheat (the prime green revolution crop) and a rather weak performance in tea. While India accounts for a large share of world output, particularly jute, rice and groundnuts, and also other crops such as wheat, sugar, cotton, tobacco and a number of fruits and vegetables, India has a small share of world trade in most of these commodities. However, opening up of India's large (and recently closed) agricultural sector to world trade may have an extremely large effect on the nature of world equilibrium in terms of prices and outputs.

However, agricultural liberalization by India would not necessarily lead to big changes in world relative prices, if Indian domestic relative prices were already close to world relative prices, and if India continues to account for a much smaller share of world trade than of world output.

1.2 WORLD TRADE

There are two major areas in which developing countries can contribute to international agricultural trade reform; in providing support to issue-specific coalitions which pursue the goal of agricultural trade reform within a multilateral framework, and in liberalising their own protective regimes.

The 'Cairns group' is an issue-specific coalition of agricultural exporting nations across the developed/developing country division. Although the developing countries in the Cairns group produce food commodities typical of the developed countries, some of them are also major producers and exporters of tropical agricultural commodities. Therefore, many other developing countries which are not members of the group but important exporters of tropical agricultural products have a commonality of interest with the Cairns Groups. Consequently, such developing countries would support the group in multilateral agricultural trade negotiations.

Table 1 summarizes briefly the results of the Uruguay Round, and shows the effect on exports, imports, terms of trade, wage rate and return to capital. Trade has been classified into the following categories: industrial products, agricultural products and services. Here, an attempt has been made to analyse agricultural trade in the USA, Canada, Mexico, Europe, Japan, Asian NIC's, Australia, New Zealand and other trading nations. The table indicates that developed countries (DC's) dominate as exporters of agricultural products. After the UR there are likely to be significant changes in production in agriculture which are expected to significantly increase international trade in agricultural products. Details of agricultural imports for selected countries such as Japan, Hongkong, Korea, U.A.E., China, Singapore, Malaysia, Indonesia, Iran, Algeria, Thailand, Australia, India, S.Africa, Pakistan, Philippines, Israel, Morocco, Libya, Iraq, Lebanon, Nigeria, Jordan, Bangladesh, N.Zealand, Kuwait, Oman Angola, Sri Lanka, Zimbabwe are reported in table 2.

TABLE 1 : SUMMARY RESULTS OF THE URUGUAY ROUND: CHANGES IN COUNTRY IMPORTS, EXPORTS, TERMS OF TRADE, WELFARE AND RETURN TO LABOUR AND CAPITAL

(Trade in Millions of US Dollars)

COUNTRY	EXPORTS*	IMPORTS*	TERMS OF TRADE PERCENT CHANGE	EQUIVALENT VARIATION PERCENT	EQUIVALENT VARIATION MILLIONS	WAGE RATE PERCENT CHANGE	RETURN TO CAPITAL PERCENT CHANGE
A. Industrial Products Trade Liberalization							
United States	13,147.7	13,165.7	0.0	0.3	14,583.1	0.2	0.2
Canada	1,886.3	1,625.4	-0.2	0.3	1,971.3	0.4	0.3
Mexico	47.6	108.6	0.1	0.1	196.9	0.2	0.1
Europe	16,075.6	15,805.6	0.0	0.3	20,346.9	0.3	0.2
Japan	10,333.7	10,776.1	0.1	0.6	17,313.4	-0.6	-0.2
Asian NICs	7,542.0	9,428.0	0.7	2.0	10,094.7	-2.4	-0.2
Australia-New Zealand	2,872.0	2,310.1	-1.0	0.9	1,808.8	2.0	1.2
Other Trading Nations	7,971.4	5,866.0	-1.4	-0.1	-756.7	3.4	1.8
B. Services Trade Liberalization							
United States	21,448.5	22,900.2	0.3	0.7	37,070.7	-0.4	-0.1
Canada	4,983.4	4,722.6	-0.2	1.5	8,784.3	-0.2	0.1
Mexico	1,833.9	1,711.1	-0.3	2.4	5,802.0	0.8	0.6
Europe	17,861.0	18,424.3	0.1	0.6	39,331.9	-0.2	0.0
Japan	13,781.9	12,089.5	-0.5	0.8	22,239.4	0.9	0.5
Asian NICs	6,845.4	7,303.2	0.2	1.4	6,893.0	-0.5	0.1
Australia-New Zealand	3,210.3	2,964.1	-0.4	2.6	5,200.2	1.1	0.7
Other Trading Nations	6,492.5	6,033.2	-0.3	0.9	10,805.3	0.8	0.5
C. Agricultural Trade Liberalization							
United States	1,965.9	3,951.8	0.4	-0.1	-7,496.3	-0.8	-0.5
Canada	-378.7	-94.1	0.2	-0.1	-514.4	-0.6	-0.4
Mexico	-16.3	-70.3	0.0	-0.1	-243.1	-1.1	-0.6
Europe	330.0	395.4	0.0	0.0	-899.0	-0.4	-0.2
Japan	3,331.3	2,092.5	-0.4	0.4	12,290.2	0.2	0.3
Asian NICs	2,099.5	1,355.5	-0.3	0.4	1,990.6	0.0	0.2
Australia-New Zealand	-65.4	62.1	0.2	-0.1	-197.4	-0.4	-0.3
Other Trading Nations	64.5	318.6	0.1	-0.1	-979.9	-0.8	-0.4
D. Industrial products Services Trade Liberalization							
United States	34,596.1	36,065.7	0.2	1.0	51,799.4	-0.2	0.0
Canada	6,869.9	6,348.2	-0.3	1.9	10,778.2	0.2	0.4
Mexico	1,881.6	1,819.7	-0.2	2.5	6,005.0	1.0	0.7
Europe	33,937.7	34,230.8	0.1	0.9	59,995.6	0.1	0.2
Japan	24,116.2	22,865.6	-0.4	1.4	39,826.4	0.2	0.3
Asian NICs	14,387.6	16,731.5	0.9	3.5	17,321.3	-3.0	-0.5
Australia-New Zealand	6,082.4	5,274.3	-1.4	3.4	6,895.3	3.1	1.9
Other Trading Nations	14,464.4	11,899.4	-1.8	0.8	9,643.3	4.2	2.3

Source:

* Exports and Imports valued in U.S. dollar base period prices.

TABLE 2: DETAILS OF AGRICULTURAL IMPORTS FOR SELECTED COUNTRIES OF ASIA AFRICA AND MIDDLE EAST IN 1992

COUNTRY	IMPORTS	SHARE IN WORLD IMPORTS
TOTAL AGRICULTURE		
JAPAN	31374128	8.22
HONG KONG	8435716	2.21
KOREA, REPUBLIC OF	7018619	1.84
SAUDI ARABIA, KINGDOM	4750618	1.24
CHINA	4625944	1.21
SINGAPORE	4265212	1.12
EGYPT	2624428	0.69
MALAYSIA	2591904	0.68
INDONESIA	2541262	0.67
IRAN, ISLAMIC REP.	2356640	0.62
ALGERIA	2250538	0.59
THAILAND	2139967	0.56
AUSTRALIA	1834068	0.48
INDIA	1676486	0.44
SOUTH AFRICA	1635103	0.43
PAKISTAN	1319665	0.35
PHILIPPINES	1298052	0.34
ISRAEL	1225874	0.32
MOROCCO	1154872	0.30
LIBYAN ARAB JAMAH	1122653	0.29
IRAQ	1071473	0.28
LEBANON	1027669	0.27
NIGERIA	941158	0.25
JORDAN	733374	0.19
BANGLADESH	655713	0.17
NEW ZEALAND	653474	0.17
KUWAIT	637247	0.17
OMAN	528672	0.14
ANGOLA	521340	0.14
SRI LANKA	485357	0.13
SENEGAL	433862	0.11
ZIMBABWE	396482	0.10
KOREA, DEM. PEOPLE	391225	0.10
CEREALS		
JAPAN	4780677	8.62
CHINA	1721388	3.10
KOREA, REPUBLIC OF	1501327	2.71
SAUDI ARABIA, KINGDOM	1263262	2.28
EGYPT	980380	1.77
IRAN, ISLAMIC REP.	904241	1.63
ALGERIA	707566	1.28
INDIA	687859	1.24
SOUTH AFRICA	675800	1.22
MALAYSIA	650584	1.17
INDONESIA	613042	1.10
IRAQ	492711	0.89
MOROCCO	415906	0.75
HONG KONG	414986	0.75
LIBYAN ARAB JAMAH	400970	0.72
PHILIPPINES	377530	0.68
PAKISTAN	351148	0.63
ISRAEL	339000	0.61
SINGAPORE	298290	0.54
THAILAND	264267	0.48
NIGERIA	251448	0.45
ZIMBABWE	249498	0.45
JORDAN	236616	0.43
BANGLADESH	201776	0.36

ETHIOPIA	199789	0.36
MOZAMBIQUE	198792	0.36
SRI LANKA	179792	0.32
KOREA, DEM. REPUBLIC	149420	0.27
SENEGAL	144463	0.26
LEBANON	134130	0.24
KUWAIT	132058	0.24
SUDAN	114100	0.21
KENYA	106235	0.19
ZAMBIA	105292	0.19
MALAWI	105126	0.19
OMAN	101579	0.18
JAMAICA	93112	0.17
AUSTRALIA	92559	0.17
GHANA	82957	0.15
ANGOLA	80900	0.15
NEW ZEALAND	72157	0.13
ZAIRE	66350	0.12
VIETNAM	65010	0.12
TANZANIA, UNITED	63100	0.11
AFGHANISTAN	62300	0.11
LIBERIA	56745	0.10

SUGAR

JAPAN	689750	4.14
KOREA, REPUBLIC OF	377182	2.26
ALGERIA	318271	1.91
IRAN, ISLAMIC REP.	274600	1.65
CHINA	272606	1.63
MALAYSIA	233932	1.40
NIGERIA	210220	1.26
IRAQ	197430	1.18
HONG KONG	189088	1.13
ISRAEL	142341	0.85
INDONESIA	132725	0.80
EGYPT	132612	0.80
SINGAPORE	109452	0.66
MOROCCO	96073	0.58
KOREA, DEM.PEOPLE	93000	0.56
SAUDI ARABIA, KINGDOM	92273	0.55
SRI LANKA	91935	0.55
LIBYAN ARAB JAMAH	63130	0.38
NEW ZEALAND	62430	0.37
ZIMBABWE	58157	0.35
GHANA	48125	0.29
KENYA	47609	0.29
ANGOLA	47000	0.28
JORDAN	46982	0.28
LEBANON	43830	0.26
AUSTRALIA	43610	0.26
PAKISTAN	40699	0.24
KUWAIT	31153	0.19
BOTSWANA	26410	0.16
NAMIBIA	26400	0.16
PHILIPPINES	24597	0.15
GAMBIA	22440	0.13
SOUTH AFRICA	21737	0.13
SENEGAL	20752	0.12
JAMAICA	18529	0.11
OMAN	17649	0.11
BANGLADESH	16180	0.10

COFFEE/TEA/COCOA

JAPAN	1239552	5.50
SINGAPORE	345720	1.53
SAUDI ARABIA, KINGDOM	257447	1.14
HONG KONG	244520	1.09
AUSTRALIA	235651	1.05
EGYPT	189085	0.84
PAKISTAN	186367	0.83
KOREA, REPUBLIC OF	183320	0.81
MOROCCO	117949	0.52
IRAN, ISLAMIC REP.	95460	0.42
ALGERIA	90552	0.40
MALAYSIA	76935	0.34
ISRAEL	75624	0.34
LIBYAN ARAB JAMAH	64380	0.29
CHINA	63280	0.28
NEW ZEALAND	55446	0.25
SOUTH AFRICA	53949	0.24
KUWAIT	40880	0.18
LEBANON	36746	0.18
SENEGAL	36573	0.16
PHILIPPINES	28214	0.13
OMAN	27824	0.12
JORDAN	26102	0.12
THAILAND	25301	0.11

TOBACCO

JAPAN	1966224	10.93
HON KONG	1729645	9.62
SINGAPORE	590042	3.28
SAUDI ARABIA, KINGDOM	361400	2.01
LEBANON	262250	1.46
CHINA	201979	1.12
KOREA, REPUBLIC OF	179646	1.00
EGYPT	154753	0.86
IRAN, ISLAMIC REP.	108000	0.60
PHILIPPINES	105357	0.59
AUSTRALIA	85367	0.47
MALAYSIA	84998	0.47
THAILAND	79742	0.44
INDONESIA	77153	0.43
SOUTH AFRICA	74300	0.41
MOROCCO	66247	0.37
KUWAIT	62200	0.35
ISRAEL	58850	0.33
IRAQ	57000	0.32
OMAN	50775	0.28
MACAU	29768	0.17
ALGERIA	27700	0.15
KOREA, DEM. PEOPLE	26200	0.15
SENEGAL	22380	0.12
SRI LANKA	21919	0.12

OIL SEEDS

JAPAN	1995043	17.03
KOREA, REP. OF	391619	3.34
INDONESIA	225614	1.93
MALAYSIA	159166	1.36
ISRAEL	150282	1.28
SOUTH AFRICA	86697	0.74
SINGAPORE	63269	0.54
AUSTRALIA	46548	0.40
THAILAND	44294	0.38
HONG KONG	42457	0.36
CHINA	37234	0.32
ZIMBABWE	33002	0.28
BANGLADESH	31500	0.27

LEBANON	28100	0.24
SOUTH ARABIA, KINGDOM	25285	0.22
MOROCCO	22338	0.19
PHILIPPINES	20300	0.17
JAMAICA	19171	0.16
NEW ZEALAND	16321	0.14
EGYPT	14863	0.13
PAKISTAN	14598	0.12
ALGERIA	11207	0.10
TEXTILE FIBRES		
JAPAN	1721090	12.05
CHINA	104722	7.33
KOREA, REP. OF	998967	6.99
INDONESIA	675692	4.73
THAILAND	621886	4.35
HONG KONG	551187	3.86
INDIA	275031	1.93
MALAYSIA	120563	0.84
VIETNAM	88500	0.62
PHILIPPINES	84934	0.59
MOROCCO	72673	0.51
PAKISTAN	62264	0.44
BANGLADESH	61668	0.43
SOUTH AFRICA	56993	0.40
EGYPT	56697	0.40
KOREA, DEM. PEOPLE	52340	0.37
ALGERIA	50849	0.36
SINGAPORE	43018	0.30
AUSTRALIA	42410	0.30
NIGERIA	36835	0.26
MACAU	31200	0.22
ISRAEL	28594	0.20
IRAN, ISLAMIC REP.	28093	0.20
IRAQ	27660	0.19
MAURITIUS	25000	0.17
SRI LANKA	19715	0.14
EL SALVADOR	18184	0.13
	15961	0.11
MEAT/DAIRY PRODUCTS		
JAPAN	7057295	10.33
SAUDI ARABIA, KINGDOM	1063543	1.56
HONG KONG	1003864	1.47
KOREA, REP. OF	600826	0.88
ALGERIA	507640	0.74
SINGAPORE	479610	0.70
MALAYSIA	359365	0.53
IRAN, ISLAMIC REP.	345705	0.51
EGYPT	315262	0.46
PHILIPPINES	293497	0.43
THAILAND	225812	0.33
JORDAN	156462	0.23
INDONESIA	154300	0.23
KUWAIT	153923	0.23
LEBANON	152480	0.22
SOUTH AFRICA	133121	0.19
AUSTRALIA	130384	0.19
CHINA	122488	0.18
OMAN	120360	0.18
ANGOLA	120020	0.18
MOROCCO	10302	0.15
ISRAEL	101168	0.15
LIBYAN ARAB JAMAH	95960	0.14
NIGERIA	75425	0.11

It is interesting to observe that Japan has the largest share in world imports (MS) of agricultural products 8.62%, followed by Hongkong (2.21%), Korea (1.84%), Saudi Arab (1.24%), China (1.2%) and Singapore (1.12%). The share in world imports of other countries is found to be less than 1%. The table indicates that only a few countries dominate as importers of agricultural commodities.

As regards cereals, Japan has the highest share followed by China, Korea, Saudi Arab, Egypt, Iran, Algeria, India, S.Africa, Malaysia and Indonesia. As far as sugar is concerned, Japan is followed by Korea, Algeria, Iran, China, Malaysia, Nigeria & Hongkong. With respect to tropical beverages -- coffee, tea and cocoa -- Japan is followed by Singapore, Saudi Arab, Hongkong, Australia and Egypt. For tobacco, Japan is followed by Hongkong, Singapore, S.Arabia, Lebanon, China and Republic of Korea. For oilseeds, Japan's share in world imports is 17.03% which is the highest followed by Rep. Of Korea (3.34%), Indonesia (1.93%), Malaysia (1.36%), Israel (1.28%). Regarding textile fibers, Japan is again the top importer (12.05%), followed by China (7.33%), Korea (5.99%), China (4.3%), Thailand (4.3%), Hongkong (3.86%), and India(1.96%). Regarding meat and dairy products, Japan's share is once again the highest (10.33%), followed by Saudi Arabia (1.76%), Hongkong (1.46%), Rep. Of Korea (0.86%).

These results indicate that Japan is the one country whose share is the highest for many agricultural products.

TABLE 3: BASE AND FINAL SUBSIDY COMMITMENTS FOR SELECTED COMMODITIES IN MAJOR SUBSIDIZING COUNTRIES ('000 METRIC TONNES)

Country	1986-90	1995	2000
US	18,382.4	20,238.3	14,522.1
EU	17,008.1	19,118.6	13,436.4
Canada	11,204.8	13,590.3	8,851.8
Turkey	2,306.0	2,600.2	1,461.2
Hungary	1,444.0	1,393.0	1,141.0
TOTAL (Top 5)	50,345.3	56,940.3	39,412.4
Total 1/	53,018.3		
World Trade 1991/92	108,289.0		
% Top 5 is of export subsidies	95.0		
% Top 5 is of world trade 1991/92	46.5		
		RICE	
Country	1986-90	1995	2000
Indonesia	299.8	295,553.0	257,785.0
EU	183.7	177,300.0	145,100.0
Uruguay	53.2		45,712.0
US	48.8	271,660.0	38,554.0
Colombia	18.9		16,263.0
Total (top 5)	604.3	744,513.0	503,414.0
Total 1/	604.5		
World reade	14,080.0		
% Top 5 is of total export subsidies	100.0		
% Top 5 is of world trade in 1991/92	4.3		
		VEGETABLE OIL	
Country	1986-90	1995	2000
Brazil	552.1	544.3	474.7
Hungary	185.0	179.0	146.0
Us	178.9	587.5	141.3
Canada	117.4	113.3	92.8
Turkey	72.2	94.5	76.5
TOTAL (top 5)	1,105.6	1,518.7	931.3
Total 1/	1,197.2		
World trade	21,470.0		
% Top 5 is of total export subsidies	92.4		
% Top 5 is of world trade in 1991/92	5.1		
		COARSE GRAINS	
Country	1986-90	1995	2000
Eu	12,624.5	12,182.6	9,973.4
Canada	4,392.0	4,418.9	3,617.6
Mexico 1/	3,577.8	3,513.1	2,951.0
US	1,975.4	1,906.3	1,560.6
Rep.of south africa 2/	1,893.5	1,827.3	1,495.9
Total (top 5)	24,463.2	23,848.2	19,598.5
Total 1/	28,328.6		
World trade	91,680.0		
% top 5 is of total export subsidies	86.4		
% top 5 is of world trade in 1991/92	26.7		

1/ Corn and sorghum subsidy volumes have been added

2/ Barley,maize and maize products, oats, and grain sorghum subsidy volumes have been added together.

Table 3 indicated subsidy commitments for selected agricultural commodities in the major subsiding countries in the world. These major countries are the USA E.U., Canada, Turkey, Hongkong, Indonesia, Uruguay, Colombia, Brazil, Mexico.

The table indicates the share of the top 5 exporting countries in world trade in that commodity as also their share of total subsidies acceded to that commodity. For instance, in the case of wheat the share of the top countries in world exports is 46.5%. But their share of total world subsidies granted to wheat is 85%. Similarly for the cereals for which figure are reproduced in the table the share of the top 5 countries in subsidies is considerably higher than their share in world exports; they actually account for almost all the subsidies.

Table 4 indicates the export structure of the main categories of agricultural products including groundnuts, cashew, cotton, wool, banana, sheep, goats, coffee, sugar, jute, rubber, sugarcane, tea, cotton and foodgrains. Further, the structure of exports of all food and agricultural raw material for the period 1970-90 has been shown in the table. The share of all food products in total exports increased in the following countries: Bangladesh, Laos and Sudan. But in other countries, the share has declined, eg., Gambia, Binkinda Fan, Togo, Senegal, Berlin, Mala, Haiti, Dominican Republic, Afghanistan, Sri Lanka etc. Similarly in the case of agricultural raw materials while their importance the exports increased in Gambia, Somalia, Comos, Ethopia, Bunkinda Foto, Togo, Benin, Rwanda Male, Samoa, Loas, its importance decreased for the following countries: Mozambique, Senegal, Mauritania, Haiti, Nicaragua, Sri Lanka, Egypt, Yeman and Sudan.

TABLE 4 EXPORT STRUCTURE BY MAIN CATEGORIES (PERCENTAGE OF TOTAL VALUE OF EXPORTS)

COUNTRY	ALL FOOD		AGRICULTURAL RAW METERIALS	
	1970	1990	1970	1990
CAPE VERDE	80.6	83.3[2]	1.9	-
GAMBIA	99.8	87.3[6]	0.2	1.6+6+
LESOTHO	...	...	...	...
DJIBOUTI	...	...	...	...
MOZAMBIQUE	57.2	65.7[7]	23.1	4.0[7]
GUNEA-BISSAU	...	...	...	...
SOMALIA	85.5	85.6+3+	8.2	11.1+3+
COMOROS	69.3	71.0[7]	0.4	1.6[7]
SIERRA LEONE	16.4	31.1[7]	0.7	0.5[7]
ETHOPIA	85.9	72.2[6]	10.7	16.8[6]
BURKINA FASO	67.9	24.5[6]	27.6	43.2[6]
TOGO	67.2	22.1[7]	2.2	16.2[7]
SENEGAL	64.8	45.6[7]	4.1	2.6[7]
BENIN	70.9	61.8[2]	18.3	25.0[2]
RWANDA	60.7	79.5	3.2	11.0
MALI	64.8	22.6	23.9	65.8
MAURITANIA	8.3	64.3[5]	2.5	0.2[5]
HAITI	51.7	21.7[7]	5.8	1.0[7]
NICARAGUA	56.8	73.4[4]	23.8	13.8[4]
DOMINICAN REPUBLIC	87.8	22.0	0.1	0.5
SAMOA	94.4	89.1[7]	1.0	3.4[7]
BANGLADESH	9.8[1]	15.0[7]	26.4[1]	7.7[7]
CAMBODIA	...	...	...	...
AFGHNISTAN	36.1	23.9[6]	35.8	16.0[6]
NEPAL	28.6[1]	22.1[7]	39.8[1]	11.6[7]
LAOS	5.5	30.9[2]	27.7	38.6[2]
SRI LANKA	72.6	34.0	25.3	8.6
MALDIVES	...	...	...	...
EGYPT	21.3	8.9[7]	46.3	11.4[7]
YEMEN	82.7	50.0[4]	7.6	6.2[2]
SUDAN	24.6	38.7	74.6	58.4

[1] Data collected in 1975.
[2] Data collected in 1980.
[3] Data collected in 1985.
[4] Data collected in 1986.
[5] Data collected in 1987.
[6] Data collected in 1988.
[7] Data collected in 1989.

With the UR agreement, it is likely that support policies for agriculture in major developed countries will be changed and that overall assistance will be gradually reduced. The decision to include agriculture in these negotiations reflected the recognition by countries with high levels of agricultural protection of the substantial cost of providing such protection and recognition by major efficient food exporters of the effects the policies of highly protected countries were having on world markets.

It is obvious that the major developed economies, such as the United States, the European Community and Japan, will have a leading role in trade liberalization, because of their relatively large shares, the extensive nature of their domestic agricultural support policies and the substantial trade effects of these policies on world markets (Anderson and Tyres 1988). In addition, several developed and developing food exporting countries, will benefit from liberalization of agricultural trade. But it is not clear whether such trade liberalization is in the interests of all developing countries, eg. major importers of food.

1.3 INDIA'S TRADE

World exports of agriculture, fishery and forestry products were estimated at around $ 491 billion in 1992. Of these, exports of developing countries were $ 124 billion (25.2%) while exports of developed countries were $ 368 billion (74.9%). World exports of agricultural products amounted to $ 352 billion. Exports of developing countries were $ 259 billion (73.6%). World exports of food products were estimated at $ 238 billion in 1992. Exports of developing countries were $ 57 billion (23.9%) and that of developed countries were $ 181 billion (76.1%). World exports of beverage crops were estimated at $ 11 billion and that a raw materials $ 61 billion.

India's exports of agricultural products in 1992 were Rs.3.27 billion. These constituted less than 1% or world exports.

Agriculture is the backbone of many nations, especially the primary producing countries where the livelihood of a majority of the population depends on agriculture. Besides, it is a major source of foreign exchange earnings for the developing countries. In India, for instance the livelihood of per cent of the population depends on agriculture and nearly 17 percent of the country's foreign exchange earnings come from export of agricultural commodities. Lawmakers, therefore, throughout the world have an emotional soft spot for farmers, particularly as custodians of our common agrarian past. By bolstering farmer's incomes, politicians try to get them to stay on the soil ensuring consumers a stable supply of high quality, home grown food. According to a US Democrat, "every country, if for no other reason than that human nature so demands it, is committed to keeping the small farmer on the land".

An important aim of Indian agricultural policy is to become self reliant. India has been able to achieve great success in the agricultural sector. Foodgrain production has increased from 52 million tonnes in 1951-52 to more than 180 million tonnes in 1993-94, as productivity has gone up from 536 kg/ha in 1951-52 to 1400 kg/ha in 1994-94. There are two major ways to consolidate and improve the Indian economy through agriculture : (1) Self sufficiency in foodgrains and allied items; (2) Promoting and enhancing agro-exports.

The performance of the agricultural sector holds the key to real incomes and living standards of the bulk of India's population. In order to accelerate GDP growth rate, a longterm trend growth rate of at least percent in agriculture is necessary. The Indian economy is going through a reformation aimed at creating the conditions for faster growth of the economy. The priorities of the policy makers are growth, equity, self-reliance and modernization. Rapid and sustained growth of output and employment opportunities is the surest antidote to the problem of poverty in India.

After the introduction in July 1991 of wide ranging reforms the Indian economy recorded a growth rate of 4.3% in each year 1992-92 and 1993-94 and of 5.3% growth in 1994-95 because of strong, broad-based industrial growth of around 8%, supported by a robust agricultural performance. Foodgrains production which declined to 168 million tonnes in 1991-92 attained a record level of about 190 million tonnes in 1994-95. Public stocks of foodgrains with the Central Pool were 34 million tonnes in August, 1995 compared to 13.9 million tonnes three years earlier.

Of the highest ever foodgrains production of 189.77 million tonnes in 1994-95, rice production is estimated at 81.61 million tonnes and wheat production at 63.01 million tonnes. Coarse cereal production is estimated at 31.27 million tonnes while production of pulses is estimated at 13.88 million tonnes .

Keeping in view that arable land is shrinking due to continuous soil erosion, land degradation, diversion of good cultivation land for urban/industrial use, it is essential to increase productivity for output to increase. For raising rainfed/dry land crop yields, more emphasis is required for the use of location specific varieties alsowater conservation technologies need to be vigorously pursued if productivity on marginal and rainfed land holdings is to be raised. High yielding seed revolution which have had an impact only on cereals varities of till now, should be extended to pulses, oil seeds, vegetables and fruits.

This requires that the declining trend in the rate of investment in agriculture in recent years needs to be reversed. Special provisions are required for operation and maintenance of public capital assets. Public investments in agriculutre, rural communication and schemes of prevention and control of land and water degradation will need to be increased. Equally, it is necessary to encourage private investments in agriculture.

Higher agricultural production is necessary if the needs of the domestic market are to be met, while at the same time exports are to be increased.

Agriculture sector's contribution to India's exports is very significant. In 1993-94 agricultural exports at Rs.130.210 million (US $ 1.15 million) constituted 18.7 percent of all Indian exports. However, the share of agricultural exports in All India exports has been declining- it was 30.7 per cent in 1980-81, despite a significant increase in the value of agricultural exports during this period.

Agriculture suffers from many ailments. Some of these are:-

Low Growth Rate: The growth rate in agricultural production since independence has been only of the order of 2.6 per cent annum. This has been sufficient to meet the demand arising from growing population and higher incomes. But a higher growth rate would be required in future years particularly if agricultural exports are to rise significantly. Value added agricultural outout should grow at 3.5 per cent to 4.5 per cent annually corresponding to 5 to 6 per cent in output terms to achieve a 6 to 7 per cent GDP growth rate between now and 20 10 AD.

Low Productivity : Inefficient management of the natural resources of land, water and sunshine has prevented a higher rate of growth in agriculture. India still has a lower agricultural productivity, 1.6 tonnes average yield per hectare, than developed countries and many developing countries such as China, Indonesia, Bangladesh, Mexico and Brazil.

Dependence on Monsoon Dependence of agriculture on monsoon has created distortions n agricultural production. The management of irrigation systems remains inadequate.

Low Investment: The share of investment in agriculture as a percentage of the total has declined considerably, over recent plans.

Inadequate Credit: Only 17 per cent of the total bark credit is made available to the agriculture sector which is contributing about 30 per cent to the national income, while 36 per cent of the total bank credit is going to manufacturing sector whose share in the national income is much less than that of agriculture.

Low Fertiliser Consumption: Fertiliser consumption remains very low despite subsidies.

India's Exports

Indian farm products are characterised by extremely low import content compared to non-farm exportables. The exchange rate convertibility on trade account has, therefore, enabled many of the farm-based products to become internationally competitive.

Imports of agricultural products into the country are very low, and are undertaken mainly to marginally supplement domestic production and for buffer stock operations. Imports of agricultural products into India, however, declined from Rs.23.140 million in 1992-93 to Rs.17.050 million in 1993-94. Imports of agro-products constituted only 2.3 per cent of total imports in 1993-94.

Overall exports of agricultural commodities increased in 1993-94 by 24.3 per cent over exports in 1992-93 in dollar terms. In most of the commodities there have been increases in quantities exported and foreign exchange earned. Fish and fish products are the most important among agricultural exports with exports amounting to Rs.25,520 million. However, exports of meat & meat products have been sluggish and their potential remains largely unexploited. Tea exports are gradually coming into their own after their earlier from performances. There has been a significant thrust in the exports of oilcakes as also that cashew kernes. Spices also recorded an impressive growth when exports touched a new high of 182,400 tonnes valued at Rs.5,690 million. Rice exports because of basmati, earned Rs.12,870 million. Exports of fresh fruits and vegetables and processed foods are also growing

TABLE 5 INDIA'S AGRICULTURAL EXPORTS AND IMPORTS 1992-93)

Qty : Thousand tonnes
Value : Rs. crore
US $ Million

Commodity	Qty	Value(Rs)	Value(US$)
Exports			
Coffee	114.1	376	130
Tea and mats	108.1	977	337
Oilcakes	3578.0	1545	534
Tobacco	89.3	474	164
Cashew Kernels	62.7	749	288
Spices	128.7	393	136
Sugar and molasses	485.1	354	122
Raw cotton	63.7	182	63
Rice	1085.4	976	337
Fish and fish preparations	210.8	1743	602
Meat and meat preparations	-	257	89
Fruits, Vegetables and pulses (excl. cashew kernels, processed fruits & Jucices)	-	366	126
Miscellaneous processed foods (include. processed fruits & juices)	-	373	129
Total (include. others)	-	9457	3265
Total exports of all products from India	-	53683	18537
Percentage share of agricultural exports in All-India exports	-	17.6	17.6
Imports			
Cereals and cereal preparations	1613.0	966	334
Cashewnuts (unprocessed)	139.4	376	130
Crude rubber (including synthetic and reclaimed)	67.1	261	90
Raw Wool	38.4	315	109
Raw Cotton	52.6	218	75
Raw Jute	12.5	11	4
Edible Oils	102.7	167	58
Total	-	2314	800
Total imports of all products into India	-	63375	21882
Percentage share of agricultural imports in All-India imports	-	3.65	3.65

Source: DGCI&S as culled out from Economic Survey, Ministry of Finance, Government of India, 1992-94.

India's Share in Global Exports

India's share in world agricultural exports remained very low in many items over the years despite the inherent strengths of Indian agricultural. Table 6 indicates India's share in world exports of selected agricultural commodities.

TABLE:6 INDIA'S SHARE IN WORLD AGRICULTURAL EXPORTS(1992)

US$ Million

Commodity	World	India	India's Share (%)
Meat and Meat preparations	39253	74	0.2
Fish, Crustaceans and Molluscs & preparations	37225	661	1.8
Cereals and cereal preparations	49013	161	0.3
Rice	3929	133	3.4
Vegetables and fruits	56654	394	0.7
Sugar, sugar preparations and honey	14225	79	0.6
Coffee, tea, cocoa, spices & manufactures	20665	433	2.1
Coffee and Coffee substitutes	7865	98	1.2
Tea and mate	2129	224	10.5
Spices	1395	121	8.7
Feeding stuffs for animals	7975	451	2.5
Tobacco and tobacco manufactres	21101	81	0.4
unmanufactured tobacco and refuse	6060	77	1.3
manufactured tobacco	15041	8	0.0
Oilseeds and oleagineous fruit	10165	20	0.2
Cut flowers	1968	4	0.2

In respect of each of the commodities, it should be noticed that India's share in world exports is very low, exceptions being tea, spices and rice. India is losing ground even in traditionally established commodities. In tea, India's share declined steeply from 38.4 per cent in 1970 to 10.5 per cent in 1992. In spices too, India's share declined drastically from 20 per cent in 1970 to 8.7 per cent. Indian agriculture hardly had any export-orientation and the thinking all through has been to export only after meeting the domestic consumption needs and when there are clear surpluses. Infrastructure remained very weak and inadequate.

Export potential in the agricultural sector, is very high in India and its strength lies in the diversity of crop produced because of varied climatic and soil conditions. India is one of the largest producers of fruits and vegetables. It is next only to Brazil and China with 32 million tonnes of production of fruits and 66 million tonnes of vegetables per annum. But we are not taking full advantage taken of this production as a substantial quantum of fruits and vegetables are wasted because of lack of post harvesting technology and poor marketability. What is needed is a close coordination among the small farmers, business consortia in the public and private sector, developmental agencies, scientific organisation, credit institutions and other marketing organisations so that the growers get remunerative prices, post harvesting technology could be transferred to the concerned parties and the our exports potentiality utilised. According to an OECD-World Bank study, the world income after the completion of the Uruguay Round, would record an annual increase of US \$ 213 million of which a large portion is likely to be generated by the liberalisation in the agricultural sector. The same study estimated India's income gains at US \$ billion annually which would occur through exports as well as increased national income generated efficiency gains, resulting from import tariff reduction. Another study concluded that India's exports would increase by about US \$ 1.6 to 2 billion per year, assuming an unchanged share in agricultural would trade of 0.5%.

TABLE 7 SHARE OF AGRICULTURAL EXPORTS IN TOTAL EXPORTS

(Rs. billion at 1980-81 prices)

Year	Total Exports	Agricultural Exports	Share of Total Exports (96)	Share of Agri. in G.D.P.* (96)
1980-81	67.11	20.57	30.65	39.53
1981-82	71.10	20-23	28.45	39.67
1982-83	76.43	21.27	27.83	38.40
1983-84	78.89	21.17	26.83	39.29
1984-85	89.06	22.73	25.52	37.88
1986-87	85.47	23.49	27.48	34.83
1987-88	99.42	22.23	22.36	33.64
1988-89	119.43	21.98	18.40	35.49
1989-90	152.03	26.82	17.64	33.86
1990-91	162.29	31.49	19.41	33.67
1991-92	193.04	36.06	18.68	32.78
1992-93	213.82	37.66	17.61	32.97
Compound growth rate	10.39** (1.03)	4.92** (0.86)		

* At 1980-81 prices.

** Significant at 1 per cent level of significance.

Notes: (i) Compound growth rates have been estimated by fitting exponential trend of the type $Y = ab^{t}$

(ii) Figures in parentheses are respective standard errors.

Source: Government of India, Ministry of Finance, Economic Survey, various issues.

FIURE 1 : SHARES OF DIFFERENT COMMODITIES IN TOTAL AGRICULTURAL EXPORTS, TE 1992-93

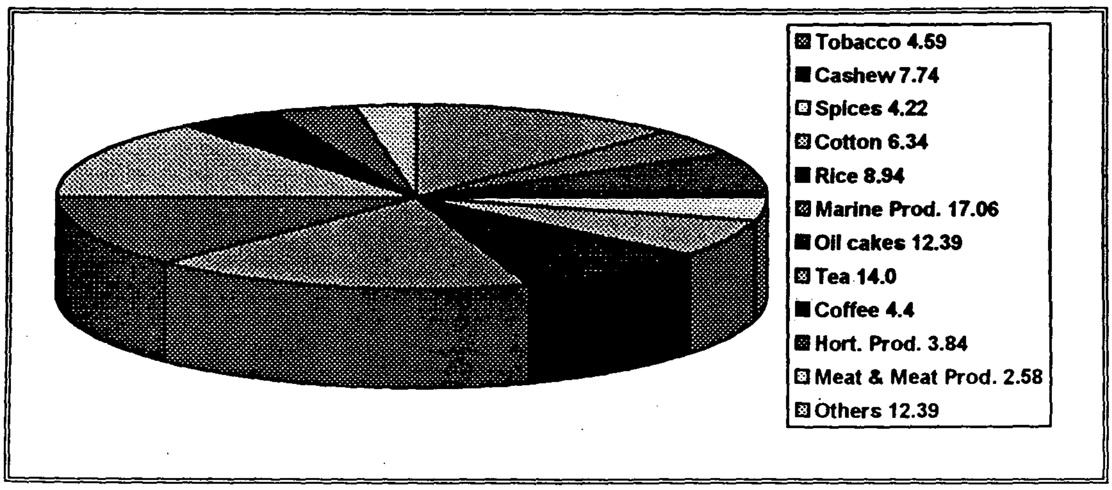

Table 8: Shares of Different Commodities in Total Agricultural Exports

Year	Coffee	Tea and mate	Oil Cakes	Tobacco	Casbew kernels	Spices	Sugar and Molases	Raw Cotton	Rice	Fish and Fish Preparations	Meat and Meat products	Fruits, Vegetables and pluses	Procesed Foods	Others	Total
1960-61	0.07	1.24	0.14	0.16	0.19	0.17	0.03	0.12	0.00	0.05	0.01	0.06	0.01	0.59	2.84
	(2.46)	(43.66)	4.93)	5.63)	6.69)	(5.99)	(1.06)	(4.23)	(0.00)	(1.76)	(0.35)	(2.11)	(0.35)	(20.77)	(100.00)
1970-71	0.25 (5.13)	1.48 (30.39)	0.55 (11.29)	0.33 (6.78)	0.57 (11.70)	0.39 (8.01)	0.29 (5.95)	0.14 (2.87)	0.05 (1.03)	0.31 (6.37)	0.03 (0.62)	0.12 (2.46)	0.04 (0.82)	0.32 (6.57)	4.87 (100.00)
1980-81	2.14 (10.40)	4.26 (20.71)	1.25 (6.08)	1.41 (6.85)	1.40 (6.81)	0.11 (0.53)	0.40 (1.94)	1.65 (8.02)	2.24 (10.89)	2.17 (10.55)	0.56 (2.72)	0.80 (3.89)	0.36 (1.75)	1.82 (8.85)	20.57 (100.00)
1985-86	2.65 (8.78)	6.26 (20.74)	1.34 (4.44)	1.70 (5.63)	2.25 (7.46)	2.78 (9.21)	0.16 (0.53)	0.68 (2.25)	1.96 (6.49)	4.09 (13.55)	0.74 (2.45)	1.24 (4.11)	0.82 (2.72)	3.51 (11.63)	30.18 (100.00)
1990-91	2.52 (3.99)	10.70 (16.94)	6.09 (9.64)	2.63 (4.16)	4.47 (7.08)	2.34 (3.70)	0.38 (0.60)	8.46 (13.39)	4.62 (7.31)	9.60 (15.20)	1.40 (2.22)	2.13 (3.37)	2.13 (3.37)	5.70 (9.02)	63.17 (100.00)
1991-92	3.32 (4.04)	12.12 (14.73)	9.22 (11.21)	3.77 (4.58)	6.76 (8.22)	3.94 (4.79)	1.57 (1.91)	3.05 (3.71)	7.56 (919)	14.43 (17.54)	2.31 (2.81)	3.52 (4.28)	3.05 (3.71)	7.66 (9.31)	82.28 (100.00)
1992-93	3.76 (3.98)	9.77 (10.33)	15.45 (16.34)	4.74 (5.01)	7.49 (7.92)	3.93 (4.16)	3.54 (3.74)	1.82 (1.92)	9.76 (10.32)	17.43 (18.43)	2.57 (2.72)	3.66 (3.87)	3.73 (3.94)	6.92 (7.32)	94.57 (100.00)
Growth Between 1980-81 & '92-93 (at '80-81 prices)	-1.04 (1.21)	1.59 (1.34)	... 14.49 (2.68)	-2.34 (2.37)	... 6.86 (1.36)	.. 12.92 (5.38)	-3.06 (10.96)	1.13 (6.91)	. 4.55 (3.08)	... 8.28 (1.06)	.. 2.95 (1.52)	.. 3.15 (1.38)	... 11.63 (1.57)	.. 8.04 (3.27)	... 4.92 (0.86)

*** Significant at 1 per cent level of significance.

** Significant at 5 per cent level of significance.

* Significant at 10 per cent level of significance.

Notes: (I) Figures in parentheses are percentages to total agricultural exports. However, figures in parentheses under growth rates are respective standard errors.

(II) Compound growth rates have been estimated by using exponential trend of the type Y - AB

Source: Government of India, Ministry of Finance, Economic Survey, various issues.

TABLE 9: INDIA'S INTERNATIONAL TRADE IN AGRICULTURAL COMMODITIES

Year	As % of World Agricultural Trade imports	Exports	As % of India's GDP Imports	Exports	As % of India's Total Trade Imports	Exports
1966	2.1	1.3	37.2	34.2	2.8	1.5
1970	0.9	1.2	31.4	35.2	1.2	1.2
1975	1.1	1.3	27.4	41.9	1.9	2.0
1981	0.5	1.1	9.4	36.0	0.8	1.7
1985	0.6	1.0	10.9	29.3	0.8	1.2
1989	0.4	0.8	7.8	18.3	0.6	1.4

Source: UNCATED Commodity Year book 1991.

TABLE 10: INDIA'S OUTPUT OF SELECTED CROPS

Crop	As % of World Output			World Trade as % of World Output 1989	Indian Output as % of World Trade 1989
	1970	1980	1989		
Wheat	6.3	7.1	10.0	19.8	50.7
Rice	20.0	20.1	21.2	4.1	512.5
Groundnut	34.0	29.6	35.4	6.4	549.5
Soybean	0.0	0.5	1.7	22.4	7.7
Copra	10.3	8.4	7.8	6.4	121.2
Cotton	7.9	8.6	8.1	32.3	25.2
Jute	33.3	42.6	40.9	11.7	349.7
Rubber	3.0	3.9	5.3	91.1	5.9
Tobacco	7.2	8.3	6.1	19.2	31.8
Sugar	6.4	5.0	9.7	10.2	94.7
Tea	32.7	30.5	27.7	47.6	58.1
Coffee	1.7	3.1	3.7	80.0	4.6
Banana	9.2	11.7	10.9	18.8	57.8

Source: The Same as of Table 9.

1.4 Problems in international Trade:

GATT agreement on agriculture is confined to various aspects such as market access, domestic support, export subsidies, special and preferential treatment to developing countries particularly least developing countries (LDCs) and environment protection measures undertaken by developed countries as part of their agricultural policies in recent years. There are mainly 3 elements to the commitments on market access - tariffication, tariff reduction and access opportunities. Further, the general approach adopted to domestic support has been to divide policies into two groups : a) Policies which have nominal production or trade distorting effects, those in the `Green Box' and : b) Policies subject to reduction commitments.

The agreement on agriculture spells out a list of export subsidies that are to be reduced including direct subsidies; sales from stocks by governments at prices lower than the domestic market price; export payments financed by obligatory levels, subsidised export ;marketing costs and special domestic transport charges. However, developing countries are accorded special and differential treatment which has three elements:

a) Developing countries are given more time to adjust and are expected to make smaller reductions. Green Box policies which are exempt from reduction commitments are those which do not entail price support to producers and for which the support is provided by the government and not by the consumers. The list of exempted policies is very long and includes such policies as general services (research and training, extension inspection, marketing and promotion, infrastructure), food security stocks, domestic food aid and certain direct payments to producers (decoupled income insurance), and safety net programmes, disaster relief, producers or resource retirement schemes, investment aids, environmental programmes and regional assistance in support, including a higher minimise level. Moreover, the LDCs are exempt from the reduction commitments altogether.

b) The second area concerns the various types of policies that are acceptable to the GATT. As regards subsidies, developing countries are allowed to provide subsidies to reduce the marketing costs of agricultural products and differential internal transport costs, which developed countries, must curtail. As regards domestic support, the `Green Box' category has special provision for developing countries in and regard to public stockholding for food security purpsesand domestic food aid. Developing countries may also exclude from the calculation of the total AMS the following policies:

i) investment subsidies which are generally available to agriculture. ii) domestic support to producers to encourage diversification from the growing of illicit narcotic crops: iii) agricultural input subsidies provided to low income or resource poor producers which are available to all producers.

c) There are special provisions for developing countries contained in the Decision on "Measures concerning the possible negative effects of the reform programme on least developed and net food importing developing countries. The idea behind this decision was that agricultural trade liberation is likely to lead to higher world prices for food while a reduction in export subsidy will also increase the effective price paid by importers. There was also some concern that the volume of food aid, which historically has been itself linked to the level of surplus stocks, could contract in the future with a rundown of surplus stocks. The agreement on agriculture represents only a partial liberalisation agreement. Overall, the cuts in support for agriculture are relatively small and spread over a number of years. Regarding domestic support, a large number of policies have been excluded from reduction commitments and only a part of those included are to be reduced. The market access provisions are likely to have greater effect on trade. Perhaps, the most important provision is the commitment to reduce subsidised exports. Overall, however, a large degree of distortion in the world agricultural trade will still remain ever after the complete implementation of the reduction commitments.

CHAPTER 2

INTERNATIONAL TRADE AND MULTILATERAL TRADE NEGOTIATIONS

2.1 Pre 1986

2.2. Uruguay Round Results

2.1 PRE 1986

Following a period of generally strong and relatively stable growth in agricultural and non-agricultural trade from 1945 to the end of the 1960s, world commodity and food markets were generally depressed at the beginning of the 1970s. In 1972, however, poor seasonal conditions in both wheat and rice producing countries, combined with production restraints in major exporting countries, resulted in a sharp drop in agricultural production and higher in world import demand and prices for grains. Of particular note was the entry of the Soviet Union into the world market as a major purchaser of grains. By 1973-74, coinciding with the first oil price increase, world food markets reached boom levels, contributing to speculation at the time that the world was facing a crisis in food supplies rather than a temporary period of excess demand (Paarlberg 1982). A further commodity market boom, though less spectacular than the first, followed the second oil price increase in 1979-80.

The growth in import demand during the 1970s came principally from the developing nations and the centrally planned economics (Andrews, Roberts and Adams 1984). Between 1972 and 1980, agricultural imports grew by 107 per cent in developing countries and by 66 per cent in the centrally planned economics.

Many oil-rich developing countries, constrained by limited arable land contributed strongly to the increase in world food demand. Strong import demand also came from other developing countries which were experiencing rapid population growth and, in some cases, strong income growth. Their economic growth and development were facilitated by significant amounts of funds recycled by oil exporting developing countries.

Industrialisation and associated economic growth were particularly rapid in the developing nations of East Asia, and increased their demand for food commodities. Significantly, the rise in per capita incomes experienced in those countries also induced consumers to substitute relatively high protein foods such as meat and dairy products for their traditional starch-rich foods (Anderson and Tyers 1988).

In the centrally planned economies, growth in import demand arose from gradually rising incomes and from sluggish domestic production. In the Soviet Union, in particular, a rise in hard currency earnings from increased oil prices helped to expand import capacity.

In contrast to the developing countries and centrally planned economies, developed countries increased their agricultural imports by only 5 per cent between 1972 and 1980 (excluding internal trade between members of the European Community). This small increase can be explained by two factors. First, on the demand side, they did not share the income or population growth experienced in many countries in the developing world, and in addition, at high incomes, further increases in income have less effect on demand for food than at low incomes. Second, their agricultural production was stimulated by the high international food prices and by their farm support policies.

Overall, the expansion in world agricultural imports in the 1970s was met by increased exportable supplies, principally in the major developed countries. In 1972, the developed counties supplied about 53 per cent of the volume of world agricultural exports, excluding intra-EC trade. By 1980, this proportion had risen to 65 per cent. North America and Western Europe accounted for 76 per cent of this increase in developed country farm exports (food and Agricultural Organization 1982). Contributing factors included rapid advances in agricultural technology, a depreciation of the US dollar which increased export returns to US farmers, and high levels of farm support, particularly in Western Europe (Andrews et al. 1984).

Farm support policies in developed countries range from those affecting domestic producers and consumers directly, to various trade measures. The main instruments aimed at affecting domestic producers include guaranteed producer prices, target prices and deficiency payments, production and marketing quotas, imports controls, storage and buffer stock programs, and subsidised inputs and services. Regarding domestic consumer support, its extent and mechanisms vary among developed countries but the most widely used policy tool is consumer subsidies. A variety of tariff and non-tariff barriers have been used in developed countries as policy tools to affect trade flows. The most important of these for the agricultural sector are import tariff, variable import levies, import quotas, and export aids such as restitutions. (See OECD 1987 for a review of various agricultural policies in major developed countries).

Since the mid-1960s, many developing countries have also promoted agriculture, by making substantial investments in improving rural infrastructure, irrigation facilities, and agricultural research and extension services. As a result, food production, particularly, in Asian and Latin American developing countries, has grown rapidly since the early 1970s. In addition, significant policy changes in the major food consuming and importing economies of China and India, relating to prices and incentives, have reduced impediments to agricultural activities, thereby providing productivity gains and growth in production above previous expectations. (See US Department of Agricultural 1988 for a comprehensive review of agricultural policies in developing countries).

Despite the progress made in agricultural development in the developing world, in some countries sector-specific taxes, subsidies, price controls and marketing arrangements have discriminated against agricultural to a considerable extent (Ray 1986; US Department of Agriculture 1988). In a number of developing countries export crops are subject to border taxes or quotas to increase government revenue, to exploit perceived monopoly power in the production of certain agricultural commodities, and to encourage certain agricultural processing industries. Most of these taxes and controls are implemented through export marketing boards having statutory monopoly powers.

Price subsidies on imported food commodities are often used in developing countries, to assist consumers. However, these subsidies can depress prices received by competing domestic producers and discourage domestic production. Furthermore, they take up a substantial proportion of budgetary expenditures and shift the burden of foreign exchange *constraints* to other activities.

Public sector agricultural marketing agencies are widely used in developing countries to influence producer and consumer prices. Numerous studies indicate that many of these agencies are not functioning efficiently due to various operational and management deficiencies (Lee 1985; Babiker 1986; Christensen and Witucki 1986; Tickner 1986).

Furthermore, in many developing countries the stance of monetary and fiscal policies and inflexible exchange rate regimes have adversely affected the structure of incentives for agricultural exports (Chibber and Wilton 1986).

Growth in world import demand slumped in the early 1980s as the world economy moved into recession. This recession was association with shifts in macroeconomic policies in leading developed countries: in an effort to control inflation, most OECD member countries adopted restrictive monetary and fiscal policies. The resultant downturn in growth in developed countries was quickly transmitted throughout the world via reduced export opportunities and other international linkages.

Generally, monetary policies remained tight during the first half of the 1980s. However, the United States pursued an expansionary fiscal policy whereas Japan and West Germany continued to apply restrictive fiscal policies. As a result, the international recovery in 1983-84 was marked by disparate growth performances (largely reflecting differences in trade relationships with the United States) and was, on the whole, only moderate. There were associated rises in US real interest rates relative to those of other industrial countries, and in the US real effective exchange rate.

Within this economic environment, both the value of foreign borrowings denominated in US dollars and the burden of debt servicing requirements of many developing countries rapidly increased, and the international debt crisis began to grow. Despite widespread food shortages in many developing countries, import demand was curtailed (United Nations 1986).

In spite of the levelling off in world import demand for agricultural products induced largely by these broad macroeconomic factors, agricultural support remained at high levels during the mid-1980s, particularly for farmers in the European community, the United States and Japan. For a number of major food commodities, the gap between administered internal support prices and world market prices increased markedly in major developed countries in the mid 1980s. As a result, production remained well ahead of consumption, and stocks of major food commodities grew strongly (Miller 1987).

While there has been an overall tendency for major agricultural commodity prices to decline throughout much of the 1980s, some commodity prices have recovered since mid 1987, reflecting stronger than expected import demand and declining stocks of a number of agricultural commodities, both food and non-food. There are signs of supply adjustments, which however vary among commodities. Despite this recovery in prices, the basic structure of intervention in agricultural, particularly in major developed countries, has not undergone major changes.

Among the developing countries, some have begun to implement various changes in agricultural changes. The most significant have been those of China, covering various aspects of farm production, pricing and marketing of output and allocation of labour between farm and non-farm activities. Far-reaching changes in agricultural policies have also occurred in a number of low and middle income countries in Asia and Africa. These have included reduced food subsidies, increased involvement of the private sector in agricultural marketing, and emphasis on agricultural export expansion and crop diversification. Despite these changes, many developing countries continue to intervene extensively in the system of prices affecting agricultural production and trade, either through consumer subsidies or export taxes (World Bank 1986: ESCAP 1987).

2.2 URUGUAY ROUND AND RESULTS

The multilateral trading system, embodied in the General Agreement on Tariffs and Trade, is applicable, in principle, to international trade in all goods but differentiates, in practice, between manufactured goods and agricultural commodities. For the past four decades, trade in agriculture has, de facto, been excluded from the GATT system. First, there is no discipline on domestic support, with the exception of a non-operative clause for consultations in the event of serious prejudice. Second, in the sphere of export subsidies, there is a "virtual" waiver or exception for agriculture specified in Article XVI on subsidies. Third, in the realm of imports, for agriculture there is a departure from the commitment to eliminate quantitative restrictions, as set out in Article XI, for foodstuffs, critical raw materials and, in general, for stabilization measures in the agricultural sector. Taken together, these exceptions means that trade in agriculture is simply not subject to the regime of international discipline embodied in the GATT. The Uruguay Round of Multilateral Trade Negotiations brings trade in agriculture under GATT discipline.

The stipulations on export subsidies are straightforward insofar far as trade in agriculture is to be progressively subjected to GATT discipline. The new regime for subsidies on exports is not to be implemented overnight. Over a period of six years, the subsidized volume of exports is to be reduced by 21 per cent while the budgetary support for export subsidies in terms of value is to be reduced by 36 per cent. The stipulations on the import regime, as also the plans for liberalization of trade in agriculture, are more elaborate and complex. First, imports, that is market access, may be restricted only for balance-of-payments considerations and all restrictions must be price-based alone, so that all non-tariff measures including quantitative restrictions would have to be converted into their tariff equivalents, with a commitment to reduce these tariffs by 36 per cent over a period of six years. Third, in addition, countries must provide a guaranteed minimum market access to imports which would be 3 per cent of domestic consumption to start with and would be expanded to reach 5 per cent over a period of six years; in the case of developing countries the minimum market access commitment would be less, at two - thirds of what is specified for others, i.e. 2 per cent to start with and then increasing to 3.33 per cent over a longer period of ten years; it is also stipulated that the market access so provided cannot, at any stage, be less than actual average annual imports during the period 1986-1988.

The limits placed on permissible government domestic support for agriculture seek to subject domestic agricultural economic policies to international discipline.

The proposed multilateral liberalization of trade in agriculture and the introduction of an international regime of discipline for domestic support to agriculture would obviously influence the output of, the trade in, and the prices of, agricultural commodities in the world economy. This, in turn, is bound to have far-reaching implications for the agricultural sector in India. But it is difficult to estimate the precise quantitative impact. Our analysis below is quantitative.

(i) World Prices

The most important consequence would be a progressive withdrawal of agricultural subsidies in the industrialized countries, particularly in the European Economic Community, and the consequent increase in the world prices of such subsidized commodities, taking account of the price responsiveness of supply and demand. The benefits would accrue to the countries that exports these commodities, while the costs would be borne by the countries that import them. The cuts in agricultural subsidies mandated by the Uruguay Round would, by and large, raise the prices of temperate crops. The prices of most tropical products, which constitute India's traditional agricultural exports and where India has a known comparative advantage, would not be influenced by the outcome of the Uruguay Round. The withdrawal of subsidies in Europe would raise the world prices of temperate crops such as wheat, oilseeds(hence edible oils) and sugar-beet(hence sugar), just as it would raise the world prices of dairy products, or of temperate fruit and vegetables. The withdrawal of subsidies in Japan would raise the world prices of rice.

India would be worse off insofar as it s a definite net importer of oilseeds or edible oils. India would be better off insofar as it can become a major net exporter of wheat, rice, sugar and investock products. But is unlikely that India can transform itself rapidly from bare self-sufficiency to emerge as a large net exporter of cereals, whether wheat or rice, because of the demographic pressure on land, the neglect of agricultural investment and existing structural imbalances. also large exports may result in an escalation in prices of cereals in India, which would inevitably hurt the poor.

(ii) Subsidies and support:

It has been estimated by the Ministry of Commerce that the aggregate measure of support to agriculture in India is 5.2 per cent, and would be even lower if the exemptions allowed for low-income resource-poor farmers were to be taken into account[25]. As this is less than the 10 per cent de minimis provided for in the UR agreement, it appears that subsidies need not be reduced.

(iii) Public Distribution System and Government Intervention [26]

The agreement would impose two basic constraints on the public distribution system. First, the Government would buy foodgrains for its buffer stocks only at market prices and under no circumstances at less than market prices, Second subsidized food, below market prices, would have to be limited to a targeted group in the population below a nutritional minimum. These limitations would erode the basis of the present public distribution system and inevitably limit its further expansion. consequently an important element of the food security system in India would be at risk, because subsidies for consumers of food, as also the method of financing them, would be subjected to international discipline.

The capacity of the Government to intervene in the market, in keeping with the needs of food security, would be significantly circumscribed. Thus far, it has been possible for the Government to build up buffer stock of foodgrains, sometimes through procurement in the domestic market below market prices and sometimes through imports canalized through state Trading Organizations. The inventories so acquired, by the Food Corporation of India for the Public distribution system are, on occasions, released in the domestic market to dampen prices or inflationary expectations. It would no longer be possible for the Government to decide on imports. Whereas decanalization followed by tariffication would raise domestic prices of such imports. The possibilities of market intervention by the Government to stabilize food prices and hence the general price level would thus be clearly curbed by the Uruguay Round .

(iv) The implications of the Uruguay Round

The implications of the Uruguay Round for the agricultural sector in India are not confined to the section on agriculture. The agreement on trade related aspects of Intelluctual Property Rights stipulates that countries "shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof." The system for protection of plant varieties implicit in the original version, UPOV 1978, was confined only to production for commercial marketing in designated species, so that farmers could retain a part of their produce to be used for sowing in the following season. The later version, UPOV 1991, is far more stringent and has moved the system of protection of plant-varieties closer to a patents system. There are restriction on the rights of farmers to retain produce for their own use as seed in the next season, while the coverage has been extended from designated species to the entire plant kingdom. It is clear, that while a sui generis system may allow some relief from immediate patentability for plant varieties developed out of purely biological processes. full patent protection will have to be extended to developments flowing from non-biological or micro-biological processes, such as in the realm of bio-technology.

These provisions for the protection of intellectual property rights have two important implications for Indian agriculture. First, access to new technology, embodied in high-yielding or disease resistant varieties, would become more difficult in terms of both availability and price. Secondly, even if new technologies do become accessible, their diffusion across the rural hinterland would become more difficult and would inevitably slow down.

This is because farmers would not be able to adapt, propagate, sell or exchange seeds, even if seeds can be retained for their own use, without adding significantly to transactions costs. In an economy such as India, where a large proportion of seed requirements in agriculture are met through exchange or sales transaction between farmers such a regime would inevitably constrain the quick dissemination and spread of new seeds and varieties.

(v) The Sequence of Liberalisation.

The preceding discussion suggests that the impact of the Uruguay Round on Indian agriculture would not be limited to the volume, the prices or the value of trade in agricultural commodities. It would extend much beyond trade into domestic spheres such subsidies and support for agricultural production, the public distribution system, market intervention by the Government and access to and diffusion of technology.

Since India is a large world producer and consumer of agricultural commodities, liberalization of India's agricultural policies is likely to have a significant impact on world prices. And since agriculture is such a large part of the Indian economy, supplying wage goods and raw materials to other sectors, price repercussions in agriculture would have a profound impact elsewhere in the Indian economy. The important qualitative issues can be identified and the likely direction of the ensuing changes indicated.

(i) Terms of Trade

India accounts for a significant share of world output and that a relatively small proportion of world output enters world trade for most agricultural commodities, a larger participation by India in world trade is bound to worsen its terms of trade.

Similarly, an increase in the prices of importables is expected to follow any significant increase in the volume of imports. Thus, if the existing protection to oilseeds is removed and oilseed production thereby reduced, there may be a significant increase in both the volume and the price of such imports.

Even more significant may be the implication for sugar, of which India is now the world's largest consumer and whose domestic prices are currently almost double world prices. Freeing sugar imports (currently banned as a consumer good) may lead simultaneously to large imports and a considerable hardening of world prices. A similar effect is expected for coconut, and, somewhat less, for rubber.

(ii) Balance of Trade

In view of the adverse terms of trade implications of trade liberalization, the consequences for the balance of trade would depend largely on what happens to trade volumes. In the medium terms, a worsening in the balance of trade may be expected, because the trade policy changes so far have been asymmetrical with agricultural imports liberalized but without a corresponding degree of liberalization of agricultural exports.

However, even if exports are liberalized, export earnings may not improve much without another significant devaluation. This is because in the case of rice, an expected world price decline following exports, combined with the smallness of domestic price elasticities (for both demand and supply), is likely to mean only a small increase in the exportable surplus and an even smaller increase in export revenue. For cotton, there may well be a fairly quick increase in the earnings form raw cotton exports, but in the absence of devaluation this may well be swamped by a contraction in exports of cotton manufactures. In fact, the real export potential from agriculture may not lie in these major crops at all but in the development of horticulture and food processing. And, in the case of these, it is not at all clear that current trade policy restrictions are the major handicaps at present. The requirements here are marketing, technology and quality control and, besides much improved infrastructure, the supply of these would probably required added incentives for transnational firms.

(iii) Domestic Prices and Food Security

Since food and clothing prices are likely to increase with agricultural trade liberalization even without devaluation, and since further devaluation is likely to become necessary to keep the current account deficit in the balance of payments within manageable proportions, an increase in the degree of openness of the economy following liberalization is bound to increase domestic prices in absolute terms, and also lead to relative price changes, which hurt the poor more than the rich or even the non-poor.

(iv) Distribution of Income and Comparative Advantage

Clearly, as with any liberalization, there will be gainers and losers from liberalisation of agricultural trade in India. The gainers will be the producers of crops such as rice and cotton which are currently priced below world prices and consumers of foods such as sugar and oilseeds which are currently priced above world prices. And, producers of oilseeds and sugar will lose along with consumers of rice and cotton.

(v) Output and Employment

It is sometimes argued that trade liberalisation is, on balance, desirable because of its supposed positive impact on agricultural output and employment. This impact, acting mainly through the income and incentive effects of higher agricultural prices consequent to liberalisation, is dependent entirely on whether prices do increase (and the reverse will generally be the case for some important commodities like edible oils and sugar) and on the likely supply response of agriculture. The latter will, of course, depend on the degree of price-responsiveness of agricultural output, which though high for certain individual crops is low for aggregate output, but there is also much else.

Impact of Gatt on India's Agricultural Exports - Some Issues

The studies by EXIM Bank,[1] Gulati and Sharma,[2] answers an important question and corroborate the answer by Ganesan A.V.[3] and the information given by the Press Information Bureau (PIB), Government of India[4] which claimed that the GATT accord on Agriculture would not adversely affect the Indian agricultural sector. Instead, it is likely to be beneficial for India and provide a lot of scope for exports in future for India. While there is no need to fear any adverse effect on India's Agricultural sector consequent to India accepting the GATT accord, nevertheless some issues have to be carefully dealt with, to turn the potential gains into actual ones.

1. Acquired Comparative Advantage:

Economists feel that reduced support levels and rationalisation of trade barriers will increase production and export of various commodities in countries like India which have comparative advantage in the production of

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1 EXIM Bank : The Uruguay Round Agreement: Implications for Indian Exports, Occasional paper No. 28, March 1994.

2 Gulati Ashok and Sharma Anil : 'Agriculture under GATT : What it holds for India' Economic and Political Weekely, July 16, 1994, pp. 1857-1863.

3 Ganesan A.V. : Dunkel Text and GATT? (Some important questions and answeres in layman's language), An 'Interpat' publication, Reprinted from ASSOCHAM Bulletin , October 1993.

4 Press Information Bureau, Government of India : 'GATT Accord on Agriculture: India to Benefit', Foreign Trade Bulletin, IIFT, Vol. XXIV, No. 12, June 1994, pp. 21-23.

agricultural commodities[5]. What possibly can be said is that with the reduction of subsidies and rationalisation of trade barriers, our comparative disadvantage will become less[6]. But in the GATT agreement major agricultural programme like research, plant protection & disease control, extension and advisory services, training, marketing and promotion services provision of infrastructure (capital cost only), regional assistance programmes, income support programmes, public stock holding for food security purposes, crop insurance schemes etc. are excluded from reduction commitments in the case of domestic support. While these exemptions no doubt are helpful to countries like India, there is also another side of the coin i.e. these are the very areas where the advanced economies have acquired comparative advantage. While economists like Nayyar Deepak and Sen Abhijit[7] are concerned with the impact of GATT on India's food security system `which would be at risk, because subsidies for consumers of foods, as also the method of financing such subsidies, would be, subjected to an international discipline', A.V. Ganesan's[8] reply would be `The agreement will not in any way interfere with our freedom to pursue our public

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5 Gulati & Sharma, op. cit. p. 1861.

6 See Panchamukhi V.R. : Recent Developments in Trade Theory and Practice, Presidential Address, Platinum Jubilee Annual Conference of the Indian Economic Association, Bombay, February 1921, 1994, pp. 48-51.

7 Nayyar Deepak and Sen Abhijit: `International Trade and the Agricultural Sector in India' in ISTD : Agricultural Policies in the New Economic Environment , ISTD - FAO Workshop Discussion Papers, 6-10 September, 1993 p, 134.

8 Ganesan A.V. : OP. cit, p. 5.

procurement operations or to carry on with out public distribution system. The public distribution system in India is essentially meant for subsidising the poor consumer and it is not a subsidy for the farmer'. However, there is one more aspect of food security about which we have to be concerned with, namely, buffer stocks. However, there is a saving grace in the GATT document which says the volume and accumulation of such stocks shall correspond to predetermined targets related solely to food security.

2. **Terms of Trade**

The second issue is regarding the Terms of Trade. The literature on terms of trade shows that the terms of trade for primary commodities are adverse; the terms of trade for developing countries are adverse because they are exporters of primary commodities and further even if the developing countries shift to manufactures, their terms of trade are adverse[9] . The study by Prasad Ashok Chandra H.[10] shows in majority of the cases, the codes o, 1, 2 and 4 in India's export unit value index are higher than the import unit value index of these codes with respect to India's trade with USA, Japan, West Germany, U.K. etc. (See Table 1). While the export prices of food items have been high, the quantity of exports has been lower compared to the quantity of imports from the respective trading partners in the developed countries. While factors like the composition of commodities

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9 See : a) Singer H.W. and Sarkar P: `Manufactured exports of developing countries and their terms of trade since 1965', World Development , Volume 19, Number 4, pp.. 333-340, 1991.

10 Prasad Ashok Chandra H : Bilateral Terms of Trade of Selected Countries from South with North and South , (Prepared for the UNCTAD), 1991.

in the export and import basket are responsible for this, the subsidies given by the advanced countries also partly contribute to this. Now, consequent to GATT negotiations, if subsidies are reduced, then as shown by many studies[11] the prices of agricultural goods in the developed countries may rise leading to increase in prices of India's imports of agricultural commodities. Nayyar and Abhijit Sen[12] have argued that `it is unlikely that India would emerge as a large net exporter of cereals, whether wheat or rice. For another, should this happen, it would be associated with a deterioration in the terms of trade, in as much as India's exports may be large enough to dampen world prices, and an escalation in domestic prices, of cereals, which would inevitably hurt the poor'. Now with rise in prices of imports of agricultural items, either primary-primary terms of trade of India with advanced countries will turn adverse.

India's Schedule of Commitments filed in GATT Domestic Support

India does not provide any product specific support other than market price support. During the reference period (1986-87), India had market price support programmes for 22 products, out of which 19 are included in the list of commitments filed in GATT. The products are - rice, wheat, bajra, jawar, maize, barley, gram, groundnut, rapeseed, toria, cotton, soyabean yelklow), soyabean (black), urad, moong, tur, tobacco, jute and sugarcane.

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11 See for example UNCTAD/UNDP/WIDER Agricultural Trade Liberalization in the Uruguay Round: Implications for Developing Countries, UNCTAD/ITP/48,UN, New York, 1990.

12 Deepak Nayyar and Abhijit Sen : op. cit. p. 134.

Since India's total AMS is below that allowed and that too by a huge magnitude, the question of undertaking any reduction commitment does not arise. As such, India's has not undertaken any commitment in the schedule filed in GATT.

Market Access

As stated earlier, the minimum market access commitment applies only if a country is obliged in the first place to render its import controls in terms of tariffs. India is under a balance of payments cover in GATT and is therefore free to maintain quantitative restrictions on imports. India has not undertaken any commitments in regard to market access and this has been made clear in the schedule filed in GATT. The only commitment undertaken in the area of market access is indicating ceiling tariff levels which is 100% for primary products, 150% for processed products and 300% for edible oils.

Export Subsidy

Coming to export subsidies, as mentioned earlier, the agreement on agriculture lists six types of subsidies to which the reduction commitments will apply. None of the subsidies is clearly written in the Agreement. Further, India has stated in its Schedule of Commitments to GATT that concessional sales of foodgrains through the PDS and other schemes with the objective of meeting the basic food requirements as a social safety net are in conformity with the provisions of the Agreement. The schedule has been verified and accepted by India's trading partners. The apprehension is, therefore, baseless.

Strong protest has been expressed by some people in India against the "seeds provision" in the Agreement on TRIPS on alleged ground that farmers will not be able to make across the fence sales, the prices of seeds will increase, and that substantial "payments" will have to be made to those who have developed new plant varieties.

To begin with, it should be clear that the Agreement on TRIPS does not impose an obligation to provide patent protection to new plant varieties. Countries are free to choose whether to provide patent protection or protection through a sui generis system. So far as India is concerned, new legislation which will protect farmers' rights and plant breeders' is being enacted and the Ministry of Agriculture has already initiated steps for bringing about such legislation important features are likely to be:

1. The farmers can choose the best seed that he likes, at the price that he likes.

2. The farmer can save seed from one crop and use it in the next crop. He can also exchange his seed with other farmers.

3. The farmer can sell his surplus seed but not under a brand name in case of a protected variety.

4. The farmer can also become a whole-time seed producer and sell protected seed as a commercial enterprise with the consent of the right holder.

5. Our scientists shall be free to use all seed varieties, including protected varieties, for experiment and research for developing further new varieties.

6. If a company having breeding rights of any particiular variety of seed fails to produce sufficient quantities of seeds and provide at reasonable prices, compulsory licence can be given to another party to produce that variety of seed and supply it at reasonable prices.

The Uruguay Round Agreement on Agriculture will create opportunities for India's agricultural exports. The industrialized countries have to reduce their subsidies and to provide increased market access. Reduction of subsidies will raise the prices of agricultural products in the world market and this will make India's exports more competitive. The liberalization measures will create market openings which will be available to Indian exporters.

CHAPTER 3

IMPACT OF URUGUAY ROUND IN AGRICULTURE ON WORLD TRADE

3.1 Agricultural Outlook

3.2 Comparison of Approaches

3·1 AGRICULTURAL OUTLOOK

Project LINK forecasts for overall and agricultural output, exports and imports. Noteworthy features include:

Prospects for overall economic and agricultural growth appear significantly brighter than were forecast last year. This is true for the developing countries as a whole and, to varying degrees, all individual regions. Agricultural GDP growth in Asia and the Pacific is still forecast to be the highest among the developing country regions. This would be a continuation of past trends as would be, on the opposite side, the low growth rates forecast for sub-Saharan Africa. For Latin America and the Caribbean the projected levels of agricultural GDP growth in 1995-98 would represent a vast improvement over the mediocre performances of the 1980s and 1990s. For the developing countries as a whole, the average yearly growth in agricultural GDP in 1994-98 is forecast at 5.7 percent, compare with 3.7 percent during the 1980s. The comparable figures for the two periods are 2.2 and 1.2 percent for sub-saharan Africa; and 3.8 and 2.3 percent for Latin America and the Caribbean. In Asia and the Pacific agricultural GDP should expand at approximately the same pace as it did in the previous decade, while in the Near East and North Africa region some slowdown is expected.

Forecast for total and agricultural trade in the developing country regions are summarized in Figure. Performance in the recent past presents a general picture of a strong increase in total exports in 1994 and 1995, spearheaded by booming agricultural exports; The link report focus on countries for which agricultural trade matters most, and the results are reported in the next section.

Outlook for developing country economies highly dependent on agricultural trade

The prospects for two groups of countries economies that are highly dependent on agricultural exports (EHDAEs); and low-income food-deficit countries (LIFDCs) that face particular problems in financing their food imports (FDCs). The country composition of these groups is 'shown in Tables 1A and 1B. The following section presents a special analysis, of the problems and issues facing FDCs.

Given its pronounced agricultural export orientation, the EHDAE group is forecast to benefit greatly from the recent increase in commodity prices. Its agricultural export growth is expected to accelerate from 4 percent in 1993 to 10 percent in 1994 and then settle at around 6 percent per year for 1995-98. EHDAEs in Africa are forecast to enjoy a more dramatic but short-lived commodity price bonaza than those in Latin American and the Caribbean. Agricultural export growth in the African countries in this group is expected to bounce to over 20 percent in 1994 but then to slow down to only 3-4 percent in 1995-96. This may be explained by the more narrow agricultural export base of African countries and by the strong weight of single commodities such as cocoa, for which market prospect do not appear encouraging in the long term.

The strengthening of commodity prices should contribute to a significant improvement in the terms of trade, the purchasing power of agricultural exports and trade balances of these countries.

Table 1A Economies highly dependent on agricultural exports[1]

Sub-Saharan Africa	Latin America and the Caribbean	Asia and the Pacific
Cote d'lvoire	Argentina	Srilanka
Malawi	Paraguay	Thailand
Zimbabwe	Honduras	Afghanistan
Mali	Cuba	Vietnam
Sudan	Uruguay	Malaysia
Madagascar	Brazil	
Burundi	Guatemala	
Cameroon	Costa Rica	
Liberia	Saint Vincent and the Grenadines	
Uganda	Ecuador	
Kenya	Guyana	
Ethiopia	Belize	
Rwanda	Dominica	
Swaziland	Nicaragua	
Marutius	El Salvador	
Central Afican Republic	Dominican Republic	
Tanzania United Republic	Sao Tome and Principe	
Chad		
Burkina Faso		
Somalia		
Benin		
Guinea-Bissau		
Gambia		

[1]Countries for which agricultural, fishery and forestry exports were equivalent to 20 percent or more of their total export earnings or 20 percent or more of their total imports, in 1988-90.

In African EHDAEs, after a long period of almost uninterrupted deterioration, the barter terms of trade of agricultural exports improved by an estimated 25 percent in 1994 and an improvement of a further 7 percent is forecast for 1995. This would enable the purchasing capacity of agricultural exports to increase by about 24 percent in 1994 and 3.3 percent in 1995. However, these gains are forecast to be largely eroded in the following years, as the deteriorating trend of agricultural terms of trade is expected to resume in 1996. The forecast trends are similar, though less pronounced, for EHDAEs in Latin America and the Caribbean. In particular, gains in purchasing capacity of agricultural exports are forecast to be relatively small in 1994-95 but the succeeding deterioration is also expected to be more gradual and moderate.

Table 1B LIFDCs with the lowest capacity to finance food imports (FDCs)[2]

Sub-Saharan Africa	Latin America and the Caribbean	Asia and the Pacific	Near East and North Africa
Cape Verde	Haiti	Samoa	Egypt
Gambia	Nicaragua	Bangladesh	Yemen
Lesotho	Dominican	Cambodia	Sudan
Djibouti	Republic	Afghanistan	
Mozambique		Nepal	
Guinea-Bissau		Laos	
Somalia		Sri Lanka	
Comoros		Maldives	
Sierra Leone			
Ethiopia			
Burkina Faso			
Togo			
Senegal			
Benin			
Rwanda			
Mali			
Mauritania			

[2] LIFDCs for which food imports accounted for 25 percent ormore of their total export earnings in 1988-90.

FDCs present the somewhat paradoxical feature of being both food-import dependent and agricultural export-based economies. Indeed, several countries belong to both the FDC and EHDAE categories. The increase in commodity exports can be expected, therefore, to have mixed effects for this group. On the one hand, their rising food import costs are likely to become more of a financial burden (even though the cereal price increase following the GATT Uruguay Round and agricultural reform in major exporting countries may be smaller than were suggested by early estimate. On the other hand, these countries will also benefit from the increase in prices of several of their main export products. The net result of these opposing influences is expected to be positive in the short term, as food import costs in FDCs are forecast to rise at a slower pace than export earnings from agriculture (approximately 7 percent and 18 percent per year, respectively, in 1994-95). In the longer term (1996-2000), however, the growth in food import costs is expected to rise to over 8 percent per year, while that in agricultural export earnings is forecast to decelerate sharply to less than 2 percent in 1996-97 and to increase only moderately thereafter. The agricultural trade deficit is forecast to narrow initially (from $US2.5 billion in 1993 to $2 billion in 1994 and $1.8 billion in 1995), but widen again to $3.3.5 billion in the following years. The overall trade deficit, estimated at about $17 billion in 1994 (about the same as in 1993), is forecast to increase slightly in 1995 and more markedly in the following years.

A number of observations can be drawn from the above review. Two general influences will largely determine the economic and agricultural outlook of the developing countries; the first of these is the expected continuing improvement in the global economic environment, which the developing countries will both contribute to and benefit from. The second influence is the strengthening of international prices of several important export commodities. The better economic conditions can be expected to sustain the demand for and prices of agricultural commodities, while, on the other hand, the windfall gains from improved commodity markets not only provide a welcome boost to many stressed economies, but reform, would enable countries to take better advantage of the improved economic environment. The latter effect is, however, conditional on a number of factors. There is a well-documented tendency for long-strained governments and individuals to consume, rather than capitalize on, sudden and large windfalls. The risk of this happening is all the more pronounced if complacent perceptions emerge on the nature and sustainability of such windfalls.

In the worst of scenarios, the windfall gains would contribute little to enhancing growth and welfare in the long term. In the short term they would create immediate financial management difficulties and "Duct disease" effects leading to excessive currency appreciation and competitive losses. In other words, the windfalls may create as many problems as they solve and may mean, for the countries concerned, an eventual return to the status quo ante.

However, sound and timely policy action can avert this negative turn of events. Such action involves: first, a full awareness of the narrow base and transient nature of the commodity price bonanza; second, that governments view the bonanza as a development, rather than a short-term political opportunity; and third, that the right choices are made among a wide range of policy options. For instance, windfall gains can be used to invest in the most productive sectors or to encourage a broad-based participation of less favoured segments of the society. Governments may place priority on reducing macroeconomic imbalances and debt or decide that productive investment comes first. Financial resources may be used on domestic assets, programmes or projects, or invested in a diversified international portfolio as a means of reducing risks. The relative merit of the various options will depend on country-specific needs and circumstances. It is important, in any case, that due priority be given to the agricultural sector, bearing in mind its food security and economic role in the countries concerned and the disastrous sequels of past policies that neglected or overtaxed the sector.

The Uruguay round Agreement was signed in April 1994 after almost a decade of hard bargaining and protracted negotiations. The negotiations started with differing perceptions of the developed and developing countries. While the developed countries were insisting on completely freeing world trade in all goods and services, the developed countries attached primary importance to domestic growth and development and wanted to treat international trade as one of the many growth instruments.

The most important among the controversial issues under negotiations were : trade in services: intellectual property rights (IPR): investment regime: and agriculture. In the meeting at Puna-del-Este held in September 1986, a compromise was reached among the developed and developing countries on most issues. In general, while the developing countries agreed to negotiate on services, intellectual property rights (IPR), investment regimes and agriculture, the mandate incorporated safeguards which were meant to protect the interests of developing countries. In particular, although the developing countries agreed to have negotiations in services, these were to be kept outside the juridical framework of GATT and in the IPR negotiations, sovereignty in terms of having national patent laws was to be respected. Finally, in agriculture while the controversy about removal of export and other subsidies between the EEC on the one hand and major exporters of agricultural products such as Australia, New Zealand, Argentina, Uruguay, Thailand, Canada and USA on the other constituted the central objective of negotiations, the developing countries were able to put across their concerns about domestic agricultural production and food.

The Rationale for Trade Liberalisation in Agriculture

The issues regarding multilateral trade liberalisation and its impact on developing countries has been widely discussed by scholars. The protagonists argue that freeing of international trade and dismantling of protective barriers would not only lead to increase in the quantum of international trade but would also increase developing countries' share in it. The inclusion of the hitherto highly protected and subsidised agricultural sector in the GATT accord would require both the developed and developing countries to liberalise their agricultural policies. The developing countries are expected to gain maximum advantage from trade in labour intensive agriculture and labour intensive manufacturing in which they are supposed to enjoy a distinct comparative advantage for several reasons. Firstly, it is argued that most developing countries pursued an import-substitution strategy of industrilaisation, thereby discriminating against agriculture. The high protection given to industry meant that farmers had to pay an exorbitant price for inputs bought domestically. On the other hand, farmers were paid lower prices for their outputs in the interest of consumers. The over valuation of exchange rates further discriminated against agriculture by reducing domestic currency equivalent of the foreign price of exports. Domestic policies that kept output prices low and imposed numerous controls on internal movements and trade also harmed agriculture. The freeing of international trade combined with removal of domestic restrictions on agriculture are expected to end discrimination against agriculture and lead to an improvement in its terms of trade. The envisaged withdrawal of import and export subsidies by the developed countries under the Agreement is likely to result in gradual reduction of agricultural surpluses in the European Economic Community (EEC) and other developed exporting countries and lead to rise in prices of particularly temperate and to some extent, tropical crops.

The critics point out that many of the envisaged gains are rather illusory. Firstly, most of the arguments about gains from international trade are based on a small country assumption and do not hold for large countries like India and China, which account for a large proportion of world agricultural production and trade in certain important commodities like rice, wheat, cotton, sugar and oil seeds. Consequently, their entry in the world market would substantially alter world prices. Hence, the gains for them may not be as large as envisaged. Secondly, it has been established that international prices for most commodities are more volatile than domestic prices. Thirdly, and this is important, large countries like China and India cannot afford to completely free their trade in foodgrains as this would adversely affect their food security because of expected rise in food prices as well as increased price fluctuations.

On the other hand, some of the provisions like trade related intellectual property rights (TRIPS) and trade related Investment Measures (TRIMS) are likely to be detrimental to the interests of developing countries.

Critics also argue that the envisaged benefits to developing countries are highly exaggerated and the long time period given to developed countries for withdrawal of subsidies on agriculture would erode most of the expected gains to the developing countries. It is now estimated that as against an earlier expected average rise in international prices of about 25 per cent, the increase an international price may not exceed 5 per cent. Fourthly, the benefits would depend on the generation of large surpluses particularly in temperate crops like wheat, oilseeds, sugar, dairy products, etc. These surpluses would emerge only if developing countries invest a large amount in rural infrastructure including irrigation, electricity, communication and in new technology. Since Public investment in agriculture, has stagnated in India and as public investment crowds in private investment, the latter has stagnated also. In the case of India, real investment in agricultural has gone down since the mid 80's and particularly since 1991 after the introduction of the new economic policy. This is bound to adversely affect the prospect for long term growth. On the other hand, the domestic demand for many of the commodities is expected to rise sharply.

Fifthly, some of the provisions such as that on IPR included in the GATT Agreement could have serious adverse impact on economies of developing countries. So far, inventions relating to agricultural and horticultural products are not patentable in many developing countries. For the first time, protection of plant varieties would come under multilateral surveillance. The patenting of discoveries would make the research results much more costly and would only benefit the patent holder at the cost of a large section of farming community. Despite the possibility of adopting **sui-generis** system of IPR production the research institutions would find it extremely difficult to keep up with the latest technological changes in agriculture and would face a genuine challenge in fostering research and extension.

Finally, GATT is likely to exacerbate both inter personal and inter regional inequalities. It is only the large resourceful farmers who would be able to undertake the large investments needed for diversification for exports. Similarly, it would be the well endowed regions with developed infrastructure that are likely to gain the most.

The State of World Agricultural Trade

Since the GATT came into existence, trade in agriculture has come under increasing protection by governments worldwide. In fact, "during" the mid-1960s the nominal rate of trade protection imposed on agricultural goods in industrial nations was about 21 percent. Today, it has climbed to about 40 percent. During the last thirty years agricultural trade has become more protectionist in contrast to the trade in industrial goods.

The problems in agricultural trade stem from recent technological changes combined with the economic policies adopted. During the 1970s application of modern farming methods aided by scientific improvements, when combined with price support programs and other government subsidies, resulted in a phenomenal increase in productivity and fostered intensive utilization of the agricultural land base. This dramatic increase in supply, was not met with a corresponding increase in demand--demand in most developed countries grew very slowly as consumers faced a very high price for food products.

The early 1980s brought an increase in real interest rates and a worldwide recession that brought economic growth in developing nations to a halt. As world supply exceeded world demand, commodity prices fell. Furthermore, as a result of the worldwide recession, developing countries were forced to reduce their imports of agricultural commodities and the demand for improved foodstuff declined even more sharply. To protect the trade that countries had gained in the 1970s, many governments granted agricultural subsidies. As protection expanded, subsidy wars developed. Income supports, border measures, export subsidies, export assistance programs, production subsidies, variable levies and other schemes were developed by countries that shielded domestic farmers from the instabilities of the world marketplace. With subsidy wars, increased government intervention, and falling prices, the crisis in agriculture came to a head.

World agricultural trade represents only ten per cent of total world trade, with a value of around $500 billion per year. It is not the percentage of world trade, but rather, it is the players in this trade who make agriculture an important trade issue. The E.C. and the U.S. account for approximately one-third of world agricultural trade. As world agricultural trade has been thrown into disarray in recent years, the U.S. and E.C. have become the main antagonists on the world scene. While other trade issues may concern more money, there are few issues that have caused more heated debate.

During the Uruguay Round, the U.S. found itself as the main supporter for comprehensive reform of world agriculture. The E.C., on the other hand, has fought all attempts at major reform. But in contrast to the situation during the Tokyo. Round, the US was not isolated in its championship for liberalization. The Cairns group provided an effective forum for coordinating the reform efforts. Furthermore, the opposition of the EC was muted by the increasing cost, particularly the fiscal cost, of agricultural protection.

International Trade and Agricultural Sector

The current policy regime in India, in effect, taxes producers of agricultural commodities (and the effective taxation also varies substantially across crops) while subsidising consumers of these commodities. The situation is exactly the opposite in much of the industrialised world, particularly in the European Community and Japan, where the policy regime subsidizss producers of agricultural commodities directly from the exchanger or indirectly through implicit taxation of consumers. The reluctance of Europe and Japan to liberalize trade in agriculture stems from a concern about the adverse income distribution consequences for producers. In contrast, in India, where average income levels are low, the concern is about consumers. To the extent that the poor (most of whose expenditure is on food) are a major beneficiary of these implicit subsidies, there will be an adverse redistribution of income as a result of the freeing of international trade. There is thus an equity argument against rapid trade liberalization. Similarly, some major manufactured exports are in effect subsidised because of the lower domestic price of agricultural inputs (for example, cotton); and cheap food may also to a considerable extent be seen as providing an indirect wage subsidy. To the extent that such implicit subsides to exports and employment are desirable in a labour surplus, foreign exchange constrained economy, there is a `second best or third best' efficiency arguments for not removing trade controls on agriculture indiscriminately.

While one can argue that direct income transfer would be more efficient, and less costly, such an argument has its limitations. Even in terms of orthodox theory, such a tax-subsidy alternative may not be first-best if the taxes levied involve large collection costs or impose sizeable distortions elsewhere and if the disbursement costs of subsidies are significant. The feasibility of such a policy prescription is limited even more in view of the administrative and political problems inherent in collecting the necessary taxes, and because some of the required subsidies may also be GATT inconsistent. In any case, the equity and efficiency considerations involved mean that trade liberalization should follow rather than precede steps to put in place the required transfers-subsidies framework and the revenue collection mechanism to sustain it. It should also be remembered that trade liberalization is itself likely to lead to some loss in tax revenue. This could adversely affect public investment in agriculture, much of which (especially in infrastructure and research) is complementary to, and will not be replaced by, private investment even if farmers become better off. Thus, the relative price changes consequent to trade liberalisation may, in the absence of an adequate fiscal effort, result in slowing down the pace of long-run technological progress in agriculture, already under threat from the TRIPS agreement.

So much for relative prices. In addition, there is an absolute price implication which needs to be considered, especially in relation to the maintenance of good security. It follows from the fact that nominal wages in the unorganized sectors of the Indian economy have a very low degree of price indexation so that sudden increases in nominal food prices can cause large declines in food consumption of the poor. This has been a major cause for higher mortality during famines in the past. To guard against such an outcome, it is necessary to prevent any sharp upward movement of food prices whether in the process of transition to a new set of relative prices or in the course of normal price movements. Since world prices are currently more volatile than Indian domestic prices, it would be desirable to continue with the present domestic buffer stock policy of food security instead of replacing it with a policy of maintaining foreign exchange reserves and relying on foreign trade to even out production-consumption imbalances. What is more, since such a buffer stock policy is credible only if some wedge is retained between domestic and foreign prices, this is a further argument not to move towards complete free trade in foodgrains. There are of course, gains to be derived from trade, but an open trade regime in foodgrains, which raise a absolute prices and increases their instability, would put food security at risk.

The CAP was designed to ensure an adequate supply of food for Europe. Unfortunately, while the CAP did achieve food security it also drove up food prices. The overall result of the agricultural policies and development in European farming was an increase in production at high and guaranteed price levels.

This resulted in surpluses that created all kinds of problems. The surpluses were problem because domestic prices have higher than the world prices as a result of the CAP. To overcome this difference, the E.C. provided exporting farmers with export restitution's or subsidies (that) are paid to E.C. farmers selling their products overseas to close the gap between the high E.C. internal price and the lower world price. With export restitutions, E.C. farmers could be competitive with foreign producers. This resulted in high budgetary expenses, but incomes of small farmers do not seem to have been maintained. In recent year agricultural supports, as a percentage of the EC's total expenditures, have accounted for about seventy percent of the total E.C. budget. Thus, price stability and self-sufficiency have carried a high price.

The CAP has also had a considerable impact on international trade. While the CAP's original goals were aimed at domestic supply, it performed so well that it transformed the E.C. from the world's biggest importer of several commodities, to an aggressive exporter. For instance, "in the 1960s, the E.C. was the world's largest importer of grains, purchasing about 20 million metric tons annually. By the early 1970s, the CAP had helped the E.C. reach self-sufficiency in most major agricultural products. By the early 1980s, E.C. countries realized significant shares of export markets. The E.C. had achieved this increased market share through the policies of the CAP. As a result, many countries began to place political pressure on the E.C. to restrict the application of the CAP.

Move to Liberalize World Agricultural Trade

With the CAP, the E.C. soon became a prominent player in agricultural export trade. However, other countries, especially the U.S., began countermeasures to hold on to their market share of exports. When U.S. complaints about the CAP were ignored, the U.S. began to retaliate with its own program of export subsidies. The U.S. Food Security Act of 1985 drastically cut price supports to American farmers. In their place explicit export subsidies were used.

While the U.S. did gain back a substantial amount of its lost market share, the flood of cheap agricultural products on world markets caused prices to drop significantly. In turn, this caused the E.C. to pay high export restitutions to counter the drop in world prices. This subsidy war brought the problems in agriculture to the forefront. Therefore, a new world consensus that recognized the need for reform soon developed.

For the first time in the history of the multinational trade negotiations, the Uruguay Round proclaimed agriculture as a top priority. With this, the Contracting parties sought to solve the most difficult issue in the history of GATT.

Agriculture

The negotiations on agriculture is divided into the following parts. Those dealing with (a) Import Access (b) Export Competition (c) Internal Support and (d) Sanitary and Phyto sanitary measures. A part from the dicscussion on these aspects those dealing specifically with the developing countries called special and differential treatment are aslo of importance to assess the likely impact of these negotiations for Indian agriculture.

In these negotiations the European Community and the United States were the main actors. Apart from them a group of countries which undertake agricultural exports without subsidies were also important. This group known as the Dairns Groups consistsed of Argentina, Autralia, Brazil, Canada, Chile Colombia, Fiji, Hungary, Indonesia, Malaysia, New Zealand, the Philippinese, Thailand and Unrugay. The Cairns Group took a position close to that of the United States in the negotiations. Although there are some developing countries in the Cairns Group, it needs to be pointed out that the agriclutural trade of these countries is dominated by multinational corporations, as in the case of Cargil in Argentinian grain trade.

Import Access

The aim of the negotiations on import access is to increase the access of the traders to the markets. Import controls are generally of two types; tariffs and quantitative controls. One of the main question in import access is related to the removal of quantitative restrictions. Under the agreement all QRS are to be replaced by equivalent tariffs,the process is called tariffication and no Qrs can be used henceforth. The tariffs themselves are to be then reduced by a minimum of 75 per cent over ten years.

Internal Support

The aim of the negotiations on internal support is to reduce the level of support for the production and marketing of agricultural products so that market distortions are reduced. The discussion was mainly on the kind of supports to be included for calculating the reduction, and the level of reduction. USA had divided the support measures in three categories, prohibited (red) those to be disciplined (amber) and those permitted (green) and wanted the support measures in the red category to be totally phased out. These are generally commodity specific measures. This was the approach that was the approach that was broadly accepted in the final agreement.

Export Competition

The USA wanted a reduction of 90 per cent over ten years in the export support given to the agricultural products.

Sanitary And Phytosanitary Measures

The agreement of sanitary and phytosanitary measures obliges the members to ensure that the measures are applied "only to the extent necessary to protect human, animal or plant life or health, are based on scientific principles and are not maintained against available scientific evidence".

Special And Differential

GATT recognizes the need for special provisions for developing countries, but in Uruguay round of negotiations these provisions known as special and Differential treatment and granted in 1965 were under attack by developed countries mainly the USA. To begin with in the GATT negotiations, the USA took the position that all countries without exception should climinate policies which increase production. Later USA agreed to some exceptions but was willing to grant them only to those developing countries with "proven need". The European Community is also supported the US position that the more advanced of the developing countries should comply with all Urguay Round agreements.

Intellectual Property Rights

The UR agreement impinge on agriculture also through the agreement TRIPs (Trade Related aspects of Intellectual Property Rights).

Patcnts are granted for plants or animals which are not only novel and useful but also not obvious. Patents are being granted for particular characteristics so that a whole clas of new plants/animals and not merely one variety of plant/animal can be monopolized.

Implications

Whether India get integrated into the new world agricultural system as an exporter of agricultural products or as an importer, the prospects are not good because of the manner in which the incorporation is taking place. Two major facts stand out in the method of incorporation: removal of the sovereign right of the governemnt to intervene to support Indian agriculture and the establishment of the supreme hegemony of multinational corporations.

Exports

The reason why exports cannot under these circumstances really contribute to the welfare of the Indian people comes from the conditions under which they would be taking place and the nature of international trade. Trade does not take place between totally independent producers under conditions of perfect competition. Today international trade including that in agricultural commodities can be considered as the movement along a commodity chain spread across the globe which is controlled by a few multinational corporations through a few strategic elements. In such a structure farmers in the developing countries will be incorporated as the supplier of cheap products, while the marketing would be in the hands of the multinationals from the developed countries. The more value adding operations would occur in the developed countries.

Imports

The threat of the distruction of Indian agriculture is also made very real through the kind of reforms being demanded through GATT in the name of liberalizatio. While the developing countries are going to be prevented from having quantitative restriction on imports, the developed countries would be still be subsidizing their agriculture at a very high level ever after reducing the subsidies by 35 per cent. This is for two reasons.

One of the most shocking demands of the GATT negotiations is that on internal support. Independent of whether one agrees with the support given to particular commodities in the countries today, it is fifficult to question the use of the instrument of subsidies altogether. As per the current suggestions in GATT. India will no be able to give any kind of subsidies for the production of oilseeds or pulses, since the CIF prices of these commodities is lower than the domestic prices.

This type of enforced dependence on imported agricultural commodities can have serious consequences, since there is no guarantee about the ready availability of these commodities even in case India has enough foreign exchange to pay for the imports. Food imports are notorious for being used as foreign policy instruments for instance in the mid sixities, the USA delayed grain shipments in order to force the Indian government to change its policy on investments in the fertilizer sector.

Obstructing Technological Developments

The most crucial impact of the conditions which are being imposed through GATT will be on the possibility of technological progress in agriculture. In case intellectual property rights in plants and animals are allowed and in case total freedom is given to the multinational to import the seeds then it will not be possible for Indian agriculture to really gain from the developments in biotechnology which are taking place.

Unlike in the case of the green revolution where the seeds of the high yielding varieties were in the public domain, during the current developments the new varieties will be made the property of multinational corporations. The success of the green revolution in India was achieved not merely by the introduction of the Maxican varieties such as Sonor-64 and Lerma Rojo-64, but adapt through in them to Indian conditions. The new intellectual property regime would precisely prevent such adaptations. In other words, the new technologies will remain inaccessible.

3.2 THE COMPARISON OF APPROACHES

The U.S. seized the initiative in July, 1987 by proposing a comprehensive and ambitious plan for the reform of agricultural trade. This plan proposed the "complete phase-out over 10 years of all agricultural subsidies which directly or indirectly affect trade". This included all export subsidies, tariffs, quotas, and all domestic subsidies.

The initial U.S. plan had a two-tiered approach. First, the Contracting Parties to the GATT would have to decide how to measure aggregate government support. Unlike tariffs, the forms of agricultural protection across the world are varied and often are not readily apparent. The PSE measures the amount of income benefit that producers receive from their government. There is a modified PSE that is called a Trade Distortion Equivalent (TDE). Instead of measuring the amount of total benefit, the TDE includes only the interventions that distort trade. Therefore, the TDE is a better indicator of how much individual countries are contributing to the distortions in the international marketplace. Once a level of aggregate support is determined, the Contracting Parties can then negotiate the specific policy changes that are to be taken.Countries would then be held to their commitments, allowing for modifications where necessary.

Later in 1989, the U.S. advanced a proposal called "tariffication.". While the concept is not new, it was a new idea for solving the agricultural problem. Tariffication involves the conversion of all nontariff agricultural trade barriers into equivalent tariffs. The idea is that once all trade distorting measures are converted into more visible tariffs, the levels of tariffs can be easily negotiated.

The U.S. proposal had a precedent. In the case of bilateral negotiations between the U.S. and Japan, it was agreed to convert beef and citrus quotas into tariffs. First, quotas and other import barriers for beef were replaced by an equivalent tariff of ninety-six percent in Japan. Over the next five years, the Japanese agreed to remove the quotas and barriers and lower the tariff to fifty percent, with further reductions to be negotiated.

The important aspect of the U.S. proposal is that it does not matter to the U.S. how high the tariffs are set. As one article stated:

> The Americans say they do not care if this calculation produces a tariff of, say 200% or 250% on any farm product. The aim is to simplify the negotiations by producing a concrete measure of protectionism, making it visible and then eliminating it through gradual reduction, just as gradual tariff reduction has worked in manufacturing.

Later in the same year, Secretary Yeutter added the idea of dividing internal support programs into red, yellow and green categories. Internal supports that distorted trade would be put into the red category. These supports would be phased-out over a period of ten years. Those supports that were less distorting would be put into the yellow category. These supports would be closely monitored and negotiations would attempt to control their effects. Finally, the supports such as income supports and conservation supports, which do not affect trade, would be placed in a green category. Income supports, while arguably a subsidy, generally do not affect trade, because they are not tied to production.

Decoupling represents a means of escape from collective stupidity. By allowing prices to move and determine production levels, surpluses will disappear, production will be located where costs are lowest, and a world price will result that reflects the costs of meeting world food needs.

Decoupling is simple in design. It aims to convert price supports and other programs based on production into non-trade distorting programs which still assist the farmer. Instead of price supports, export subsidies, and variable levies, the government would implement land retirement schedules, acreage controls, deficiency payment controls, income support, and minimum salaries for farmers. In this way, rather than adjusting supply, the government provides a safety net for farmers, while allowing market forces particularly in the shape of demand to dtermine production.

Unfortunately, while decoupling is economically wise, it may be politically impossible. The problem with decoupling is that it converts cheap government programs into an expensive support system for farmers. Instead of consumers paying higher prices for food, the government must provide farmers with direct financial assistance.

Two economists, Rod Tyers and Kym Anderson, have done an extensive study concerning the benefits from such proposals. As market distorting policies are eliminated the liberalization of agriculture would have the general effect of increasing world prices. In addition, in countries that have erected market barriers or have provided subsidies for agriculture, there would be a drop in internal prices as their markets adapted to renewed competition from exports.

Tyers and Anderson concluded that producers in the E.C., Japan and the U.S., the developed nations, would suffer a net loss due to the loss of governmental supports that would be replaced by the mechanics of the income maintenance progress. However, many developing nations that can't afford expensive programms for subsidizing exports would experience a net gain because their products would be more competitive with unsubsidized products from developed nations.

The Sanctity of the CAP

While understanding the need for liberalization in world agricultural trade, the E.C. has its own internal agenda. The effects of liberalization would have many adverse effects on politically strong lobbies which results in the E.C. opposing the reforms that the U.S. seeks.

During the first few years of the Uruguay Round of negotiations, the E.C. listened to ideas but neither took positions nor offered its own program for reform. As late as November 6,1990, the trade ministers from the various countries of the E.C. still could not agree on their own negotiating position at the Uruguay Round. Their negotiating position evolved gradually.

First, the E.C. proposed that internal supports should be reduced by ten percent to thirty percent (depending on the commodity) a measured by an aggregate measurement of support (AMS) over a period of ten years.

Second, the E.C. accepted the basic concept of tariffication, with an important twist. The E.C. approach would divide their tariffs into two components. The first component would be a negotiated fixed rate. The second component would be a "corrective rate" that would continue to protect European farmers in much the same way that the current variable levy does.

Third, along with tariffication the E.C. offered the concept of rebalancing. Since the E.C. would be lowering tariffs on most agricultural goods, it would seek increases in other agricultural products to offset its sacrifice. Specifically, the E.C. would reintroduce custom duties on oilseeds and non-grain foodstuffs. These duties had previously been zero.

Finally, on the important issue of export subsidies, the E.C. argued that there would be no need to make a specific commitment on reducing these subsidies. The E.C. believed the reduction in internal supports would decrease export subsidies in Europe because of the decrease in the difference between internal prices and world prices.

After failing to reach agreement by the Uruguay Round dead-line of December 7,1990, most of the Contracting parties met in Brussels. During the negotiations, hope was heightened by a proposal from the Swedish Agricultural Minister. This program encompassed a thirty percent reduction in export subsidies, a thirty percent improvement in market access, and a thirty percent reduction in internal supports. And it was on this basis that a final agreement was reached.

CHAPTER 4

PROSPECTS FOR INDIA'S AGRICULTURAL EXPORTS

4.1 Agricultural Policy in India during the Planning Era

4.2 The Reforms and Agricultural Exports

4.3 Development of Agriculture in India

4.4 Accords and Gains for India

Economic Review of India

With a per capita income of about US$ 310 in 1994, India is one of the world's low-income countries. Unlike the economies of most East Asian countries, the economy in India was characterized by slow growth during most of the period since the second world war. It was only during the 1980s that the GDP growth rate accelerated to 5.4 percent and per capita income grew by 3.3 percent per annum. This decade of high growth was followed in 1990 by one of the severest foreign exchange crises in the history of the country. In response, India initiated radical stabilization measures and a structural adjustment programme in June 1991.

The Main Components of New Economic Policy

The aim of the new policy was to bring about a realignment of domestic demand with available resources and to initiate changes in supply and production structures with a view to eliminating the external imbalance. The economy was to be liberalized and gradually integrated with the world economy by the dismantling of tariff walls, the encouragement of foreign direct investment and upgrading the technology of production in various fields. The broad thrusts of the programmes were financial stability, outward-looking policies and deregulation of domestic markets.

4.1 AGRICULTURAL POLICY IN INDIA DURING THE PLANNING ERA

Prior to the liberalization of the Indian economy of June 1991, agricultural policy was governed by a planning framework. The entire gamut of macroeconomic policies, notably trade, fiscal and monetary policies, was designed to serve planning objectives. The plans for the agricultural sector, including its financing and production targets, were all decided through a series of governmental processes at the state and central levels.

The nature and role of planning for the Indian agricultural sector was primarily determined by the sector's specific characteristic of being under the operation of million of independent producers. Hence, agricultural planning in India consisted in creating a rural infrastructure combined with providing modern inputs and a framework of incentives for farmers that would enable them to increase output through the adoption of modern technology.

Because food availability emerged as a major concern and constraint to the development process, accelerating agricultural and foodgrains growth with a view to providing food security became the central objective of India's agricultural policy. There were several agricultural components in the five-year plans. The first and most important was the implementation of land reforms during the mid 1950s with the objective of eliminating intermediaries and bringing about a greater degree of equality in land distribution.

The second component was the undertaking of substantial investment in rural infrastructure. A very high priority was accorded to public investment in irrigation and power (large-medium and small-scale) in both the central and the state plans. Simultaneously, policies were introduced to provide cheap institutional credit and other subsidies to the farmers to encourage private investment in irrigation. Large subsidies were also given for charges to users of both irrigation and power and fees were kept significantly below the costs of operation. The main thrust of this effort was to create a macroeconomic environment to encourage private investment by farmers and, thus, stimulate production. Promotional policies, including the Special Food Production Programme and agroclimatic regional planning, land and water development programmes, were aimed at accelerating agricultural development.

Large investments were also undertaken for the development of a research system under the aegis of the Indian Council of Agricultural Research and the State Agricultural Universities. Simultaneously, a well-designed extension network was instituted for disseminating new technologies to cultivators. The result was a rapid extension of the land area under high-yielding varieties (HYV).

From 1950 until 1967, the Community Development Programme and a network of extension services were the main instruments in transforming traditional agriculture. These were supplemented by programmes to intensify production in a few well-endowed districts during the early 1960s.

The advent of the green revolution in the mid-1960s marked a turning point in the technological "upgrading" of Indian agriculture. The agricultural research and extension system received special attention during this period since Mexican wheat and International Rice Research Institute (IRRI) rice varieties had to be adapted to Indian conditions and made acceptable to farmers through extension and training.

Initially, new technology was confined to wheat production in the northwestern states of India. In the early 1970s, however, new varieties of rice were successfully introduced and the rice revolution spread not only in Punjab and Haryana but also to many other parts of India including the southern coastal areas. The focus of agricultural policy became the modernization of agriculture through extending seed-fertilizer technology to different parts of the country. Measures were also taken to involve small and marginal farmers in the production process by providing them with new inputs, including seeds, fertilizers and credit at subsidized rates.

Administered prices were the third area of policy during the planning era. In the context of pervasive food shortages until the mid-1950s, agricultural price policy had aimed at serving the main planning objective of keeping foodgrain prices low in the interest of food security. With the founding of the Agricultural Price Commission in 1965, price policy also provided incentives to farmers to increase production by establishing remunerative prices and assuring minimum support prices. The objective of the price policy was to reconcile two opposing interests -

that of the farmers for fair remuneration and that of the consumers for reasonable prices.

The fourth important component of policy was the establishment of a comprehensive management system for the procurement, storage and public distribution of foodgrains to provide food to consumers at reasonable prices. During periods of scarcity, minimum support and procurement price operations were combined with compulsory procurement, reviews on millers, zonal restrictions and other measures to enable the distribution of foodgrains (at subsidized rates) through the public distribution system (PDS). Sufficient food stocks were kept for running the PDS and also to help to stabilize prices through open market operations.

The fifth component was tightly controlled trade and exchange rate policies. In the case of agriculture, except for a few traditional commercial crops, the sector was insulated from world markets through the almost total control of exports and imports. The estimated surplus over domestic consumption requirements determined the quantities to be exported and vice versa for imports. Foodgrains, sugar and edible oils were imported in times of scarcity to prevent domestic prices of essential commodities from rising and to impart a measure of stability to domestic prices in the interest of both producers and consumers. Foreign trade in most agricultural goods was subject to quota or other restrictions such as minimum price requirements.

Finally, financial policy attempted to mobilize resources for public sector expenditure and for public investment. A system was created to extend cooperative and institutional credit to the rural sector, thus facilitating private investment in infrastructure and encouraging the adoption of new technology.

The impact of macroeconomic reforms on the agricultural sector

The short-term stabilization resources in 1991 which restricted demand resulted in economic growth decelerating from 5.4 percent in 1990-91 to only 0.9 percent in 1991-92, but the economy revived subsequently and the growth rate of GDP rose to 4.3 percent during 1992-93 and 1993-94. It accelerated to about 5.3 percent during 1994-95.

The growth rate in agriculture, which was 3.8 percent in 1990, dropped to -2.3 percent in 1991, but revived to 5.1 percent in 1992, 2.9 percent in 1993 and 2.4 percent in 1994. However, the vagaries of monsoons make it very difficult to establish a link between economic reforms and the growth rate in agriculture over a short period of time.

The fiscal adjustments that had the most significant effect on agriculture were the reductions of public investment in irrigation, power and other rural infrastructure, including agriculture research, roads and communications.

The devaluation of the rupee, reductions in tariff barriers and removal of protection to industry (through quotas and licensing) were expected to help end discrimination against agriculture and enable it to obtain more inputs at lower international prices.

The withdrawal of subsidies on fertilizers, electricity and irrigation was an important component in reducing the fiscal deficit. The most important capital input in agriculture is fertilizer. While most of the nitrogenous (N) fertilizers are produced indigenously, most potassium and phosphatic fertilizers are imported. The subsidy to nitrogenous fertilizers was partially withdrawn in 1991. Soon after raising the price of urea by 35 percent, the government reduced it by 5 percent under pressure from the Kulak Lobby.[1] Later, on the recommendation of the Joint Parliamentary Committee on fertilizer Pricing, the price or urea was reduced by a further 10 percent effective 25 August 1992. The phosphatic (P) and potassic (K) fertilizers were no longer controlled in 1992 and their prices registered a sharp rise as demand increased. To enable indigenous fertilizer producers to compete with importers, the import duty on phosphoric acid was abolished. An adverse consequence

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[1] The Kulak Lobby is the wealthy farmers' lobby. In India, rich farmers are fairly well organized. The more important of their organizations include Bhartiya Kisan Union (Indian Farmers' Union) in the northern part of India and Krishak Samaj (Farmers' Society) in the south. In addition to these organizations, many political parties have, for a long time, supported the demand for higher output prices. Many of the organizations that until the mid 1960s were opposed to any rise in foodgrain prices, have since openly backed rises in output prices as a way of winning the support of a large section of medium-income and rich rural people.

of the disproportionate rise in the prices of P and K has been the highly unbalanced use of fertilizers. As against an overall desired N, P, K ratio of 4:2:1 aggregated for the country, the consumption ratios were 9:3:3 prior to the reforms. In order to resotre some balance, the government once again raised the price of urea, by 20 percent, with effect from 10 June 1994. Fertilizer consumption increased to 12.4 million tonnes in 1993-94 and is expected to register a sharp increase to 14.1 million tonnes in 1994-95, mainly as a result of increased demand from the eastern states.

State governments are also giving large subsidies for power and irrigation use. In some cases, these subsidies are so large that states are unable to finance long-term investment in irrigation and power production. This is one important cause of the decline of public investment in agriculture.

A substantial nominal devaluation of the rupee in June-July 1991 made exports of many agricultural commodities more competitive. Thus, exports of rice, wheat, cotton, fruit and vegetables, fish and fish products and meat received a significant boost. Agricultural and agroprocessing industry exports increased from US$3.38 billion in 1991-92 to $4.151 billion in 1993-94.

Despite recommendations for a complete overhaul of the rural credit structure, the abolition of subsidized credit and the closure of regional rural banks, the structure has not been changed in any radical manner since liberalization.

Procurement price adjustments aimed at increasing incentives to producers constitute an important component of the reform package. Prices had to be increased to compensate farmers for increases in the price of inputs such as fertilizers and electricity. Earlier concerns to follow the traditionally policy of keeping food prices low as a critically important anti-poverty measure have been swept away by the need for giving greater incentives and increased profitability to producers. However, given the technical and institutional constraints to agricultural production. Indian experts have generally questioned the efficacy of using higher agricultural prices alone to bring about faster agricultural growth. Various studies on short and long term price elasticities demonstrate that output responds more readily to infrastructure (especially irrigation) than it does to prices.[2]

In the case of wheat, for example, the procurement, minimum support price was raised from Rs.225 in April 1990 to Rs. 350 per quintal in January 1994 while its price was raised from Rs. 234 to Rs.330 per quintal per quintal during the same time. In the case of paddy, the procurement price was raised from Rs. 205 in 1990/91 to Rs. 340 per quintal in 1994/95. The release price of rice was raised from Rs. 377 to Rs. 537 per quintal in April 1994. The price rises of these cereals have created a peculiar situation as the release price for wheat and rice from the public distribution system (PDS) have become even higher than

G. S. Bhalla, ed. 1994. Economic liberalization and Indian agriculture. New Delhi, New United Press.

the market price. Consequently, the off take from public stocks has declined sharply, leading to a large buildup of food stocks to more than 30 million tonnes. As a result of these hikes in administrative prices, Indian rice has become uncompetitive in the international market and wheat exports have also become unfeasible.[3] Moreover, the sharp increases in foodgrain prices and release prices from the "fair price shops" has had a negative impact on food security for the poor in India. Recent reports indicate that the extent of poverty has increased over the last three years.

Liberalization of Indian agriculture and policy issues

Providing food security continues to be the central objective of India's agricultural policy. With a large and objective of India's agricultural policy. With a large and growing population of 844 million and an expected acceleration in per caput income over the next decade, the demand for foodgrains is likely to grow at a rapid rate. Policy makers recognize that accelerating growth in foodgrains production is an essential prerequisite for meeting the rising food demand.

Higher agricultural growth requires both public and private investment in irrigation and other rural infrastructure. However, the rate of investment in agriculture has declined since the early 1980s. An important reason has been that in most states a large proportion of the government budget is required for huge subsidies on power, transport

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[3] Government of India. 1995. Economic survey 1994-95. New Delhi, Government Press, p.80.

and water and on the inefficient functioning of both power and irrigation systems. In addition, policy-makers are considering decentralizing and privatizing irrigation projects (with explicit subsidies to be provided for socially important schemes), leasing distribution systems to panchayats and forming irrigation cooperatives to establish and collect water charges and to manage and maintain distribution channels.

Private investment in agriculture is likely to increase if public investment grows to allow farmers to adopt yield-raising technology and if farmers have the incentives of remunerative prices.

4.2 THE REFORMS AND AGRICULTURAL EXPORTS

There is a general agreement among economists and policy-makers that India has export potential in some agricultural products. In addition to traditional commodities, such as tea and coffee, exports of many new commodities, including fish products, rice, fruits and processed food, have shown a rapid increase. Some studies argue that there is major scope for increasing exports of foodgrains such as rice and wheat. In the short term, however, the competitiveness of several agricultural commodities is gradually being eroded because of high inflation attributed to the new economic policy.

The extent to which India should free its trade in foodgrains, oils and sugar, as a consequence of becoming a signatory to GATT, is an issue that has generated a great deal of debate. The main argument in favour suggests that India would stand to gain immensely from complete trade liberalization and that even the interest of food security would be served in a much more efficient and less costly way if, instead of relying on huge food stocks, imports and exports of foodgrains were used as a way of countering domestic supply fluctuations.

The opposite point of view argues that India should not free its trade immediately and that its demand for foodgrains should be met through domestic production instead. This view suggests that, because food production is the predominant means of living for a large percentage of the country's workforce whose fortunes depend on the growth rate of output and productivity in the foodgrains sector, India should be insulated from international price changes. This group argues that free trade is likely to accentuate the variability in domestic market prices in the short term as a result of large fluctuations in the international prices of agricultural commodities. This would expose market prices to great risk and uncertainty. These fluctuations would adversely affect food security for the poor.

India's Strategy for Augmenting Agro-Exports

It is high time that the Government creates necessary conditions to boost Indian agriculture through new investments, greater availability of credit and development of infrastructure for production, internal marketing and exports.

Taking advantage of the dependence of nearly two-thirds of the population on agriculture in the country. Indian agriculture will have to be commercialised to compete internationally. Commercialised agriculture will help in generating higher incomes, reduce income disparities and increase competitive exports.

Public investment into agriculture is very vital. At the same time, private sector investments also need to be encouraged to exploit the full potential or agriculture and to make agriculture development sustainable.

The following measures are needed to exploit the full export potential of the farm sector:

- Jettison the present policy which prescribes that only those farm products should be exported in which the country has a surplus.
- Removal of physical barriers (particularly in cereals) on quantities to be exports.
- Trade policy for the farm sector should be open, free, and outward looking with complete freedom to the farmer to dispose off his produce without any Government restrictions on quantity, price, etc.,(cotton exports from the country are controlled by quotas monitored by the Textile Commissioner. Exports are permitted to be undertaken by designated agencies only).

Investments, both public and private into infrastructure, need to be encouraged to boost agro-exports (Exports of fruits and vegetables could be increased manifold it refrigeration facilities are created at all points: storage at the farm level, during transportation and also at airports).

Abolish all export controls and regulations like canalisation.

Persistent efforts are required in the areas of post-harvest technology in order to preserve and utilise the produce both for domestic consumption and export purposes (wastage of fruits and vegetables, if prevented, would lead to greater availability for production and exports).

To promote farm production and to encourage agro-based industries, the farm sector should be given the status of an industry with all the facilities extended including cheap credit, specialised funding institutions, storage and marketing facilities.

Agriculture sector should be excluded from taxes including capital gains tax.

Ensure proper use of farm land while taking ecological concerns into account. In the semi-arid regions, agricultural expansion in areas not suited for cultivation should be prohibited to avoid environmental problems.

Foreign capital and technology should be encouraged liberally.

- Eastern states need to be geared to increase production of various agricultural commodities with the help of improved techniques.

- Productivity of various crops needs to be increased as land resources are likely to be scarcer in future. India has lower agricultural productivity at around 1.6 tonnes average yield per hectare, which is lower to that of not only developed countries but also to that of developing countries like China, Indonesia. Bangladesh, Mexico and Brazil. To achieve a high agricultural growth rate the average yield has to be 2.5 tonnes or more per hectare.

- Agricultural growth has to be substantially stepped up to 3.5% to 4.5% in value added terms corresponding to 5% to 6% in output terms. Efforts should be to double farm production within the next 15 years which require an average annual growth rate of 4.7%.

- Investments into agriculture have to be stepped up substantially, as a percentage of the total expenditure, in five year plans, on a continuous basis.

- Irrigation systems need to be improved, strengthened and expanded so as to reduce drastically the dependence of agriculture on monsoon. Minor irrigation needs to be promoted very widely. Ground water should be treated as the principal source of irrigation in many areas. Sprinkler and drip irrigation are to be popularised through incentive mechanism.

- State Governments should amend the Agricultural Land Ceilings Act.

- Consolidation of land holdings needs to be implemented with vigour. More than 60 per cent of and holdings in the country remain unconsolidated.

- Fertiliser consumption has to be promoted to increase production to meet the increasing domestic requirements and exports. Profitability of farming operations could be increased only through higher productivity. Use of bio-fertilizers, bio-persticides, organic manures and micro-nutrients has to be promoted vigorously.

- India should have a plant protection regime, Production of high-value seeds involves the process of hand pollination which is highly labour intensive and India would stand to gain.

- India should become a member of the International Union for the Plant Protection of New Varieties of plants (UPOV) to protect and promote India's interests.

- In order to give a boost to exports of various commodities, is necessary to operate commodity exchanges and encourage use of commodity futures and options contracts by buyers and sellers of commodities. This is required to enable markets to function more efficiently forces to determine international commodity prices requires the efficient and transparent operation of price formation mechanism. In particular, it is essential that both buyers and sellers have full confidence in the ability of commodity exchanges to form prices which reflect the basic supply/demand situation". Government of India should establish commodity exchanges and popularise the mechanism.

Impact of the Uruguay Round on Agro Exports from India.

Agriculture is the backbone of the Indian Economy. India would continue to enjoy a significant competitive advantage only in those sectors which are either labour-intensive or land/agriculture oriented. In future, tremendous pressure would be exercised on the agricultural sector not only or/to provide food but also to supply industrial raw materials. With a view to achieving this twin-objectives, it is necessary to do away with the uneconomic land holdings, give up the age-old cultivation techniques adopted by the Indian farmers, use better quality seeds in place of low quality seeds enabling them to get good jeck of the crops they sow.

4.3 DEVELOPMENT OF AGRICULTURE IN INDIA

The development of agriculture has been and is being given the top priority with a view to achieving an addition 75 million tonnes capacity by the turn of the century. The figure has been arrived at on the basis of the present foodgrains production ranging between 175 million tonnes and 120 million tonnes. It has also been estimated that the country would need 250 million tonnes of foodgrains by 2000 AD. Vigorous efforts have been and are being made by the Govt. of India to achieve the agricultural production target through enhance public investment.

The target for foodgrains output by 1996-97 has been put at 210 million tonnes. During the year 1985-86, the foodgrains production in India was 150.4 million tonnes and in 1989-90 India produced foodgrains about 171.0 million tonnes, registering an increase of 20% million tonnes or in other words the foodgrains production in the country grew by an annual average of 5% million tonnes.

During the two years of the Eighth Plan, The Green Revolution of the Sixties which received a further thrust in the Seventies seems to have lost the desired pace in the recent years. In the first half of the nineties, the foodgrains production targets remained largely unfulfilled despite the fact that the monsoons were normal for the last six years, or so This relatively low growth in agricultural production during 1993-94 was due to the fall in the production of coarse grains from the level of 37 million tonnes during 1992-93 to about 33.7 million from during 1993-94.

Among the commercial crops, while oilseeds production grew to million tonnes in 1993-94 from the level of 16.9 million tonnes during 1989-90, sugarcane reduction fluctuated being about 225.6, million tonnes during 1989-90 to 241 million tonnes in 1990-91 and to 230.8 million tonnes in 1992-93. The likely production of sugarcane during

1993-94 was estimated at 231 million tonnes. The production of cotton, jute and mesta also fluctuates considerably.

The 1991 census estimated the country's population at 846 million and it is now reckoned at 900 million. During the decade 1981-91, as many as 163 million people were added to the population at an exponential growth rate of about 2 per cent per annum. Therefore, India's foodgrains output ought to the between 185 million tonnes and 190 million tonnes to feed the Indian people. With a view to achieving this target, it is absolutely necessary to step up the overall production, including the production of commercial crops.

India's Exports of Principal Agricultural Commodities

India's exports of principal commodities, as per the DGCI&S, Calcutta amounted to Rs.6,218.8 crore during 1990-91, Rs.8,087 crore in 1991-92 and in the following year exports here at a level of Rs.8,977 crore. In terms of percentage share, India's exports of Principal Agricultural Commodities contributed 19.1 per cent, 18.4 per cent and 16.8 per cent respectively India's total exports of all commodities, The most important items exported from India during 1992-93 were Marine Products accounting for Rs.1743.1 crore, oil Meals (Rs.1538.1 crore), tea & mate (Rs.972.6 crore), rice basmati (Rs.793.8 crore), cashew kernels inc. CSNL (Rs.745.1 crore), processed food (Rs.597.5 crore), pices (368.8 crore), coffee and coffee substitutes (Rs.366.3 crore), tobacco unmanufactured and refuse (Rs.365.6 crore), meat & meat preparation (Rs.257 crore) etc.

India's Imports of Principal Agricultural Items

India's imports of principal Agricultural Commodities were 3.4 per cent, 3.2 per cent and 4.2 per cent respectively of India's total imports of all commodities during 1990-91,1991-92 and 1992-93.

India has enjoyed a comfortable share in the world Agricultural Exports during 1990. During this year, India shares 11 per cent in Lea and mate. Her share of Spices to the world in 1990 was 9.5 per cent. The third item of her export was Rice in which her share was 6.1 per cent during the same year. The next agricultural products were coca, spices and manufactures which accounted for 2 per cent in the world exports. Fish, Crustaceans and molluscs and preparations shared 1.7 per cent. Coffee and coffee substitutes shared 1.2 per cent and unmanufactured tobacco and refuse exports from the country contributed to 1.1 per cent in the world Exports.

The reduction by developed countries of import tariffs by an average 37 per cent, will benefit developing countries like India which exports products such as fruits and vegetables, flowers, dairy products, grains and tobacco.

4.4 ACCORD AND THE GAINS FOR INDIA.

Market experts believe that though the reduction in the subsidies in the EC and the US are to be phased out over 10 years, its spin-offs for the developing world would begin much sooner. Once the western farmers are apprised of the phasing out schedule, they would then shift to growing other crops. In the immediate future, therefore marketmen expect a big boost to exports. However, while Japan and South Korea are expected to import substantial quantities of Rice, most of this would be of the Japonica variety, produced only in small quantities in India.

India is already competitive in export of meat products, but market watchers expect a big boost in value realisation, as prices of meat are expected to firm up dramatically. Eggs and poultry exports are also expected to get a big boost on account of the GATT Accord.

Patent protection to seeds and planting materials is likely to be most important factor which the Indian agriculture has to content with under the GATT. The farmers should not at all worry as far as seeds for agriculture crops are concerned.

Mr. Sutherland has explicitly stated that a *sui generis*[4] system for the protection of new plant varieties which incorporates a "farmers privilege" clause would be consistent with GATT provisions. With such a clause, farmers would be free to retain part of the seeds from the harvest for their own use without paying royalties. and would not be burden.

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[4]* See appendix 1.

World agricultural prices should rise from their currently depressed levels, as developed countries begin cutting subsidies to their farmers. This will make many Indian farm exports competitive.

India does not have to reduce the non-product specific subsidies such as those on fertilisers, irrigation, water, seeds and cost of credit, as the total value of the non product specific subsidies is well below the qualifying 10 per cent of the value of agricultural products, 17 are non-subsidised for the domestic prices of these products are lower than the international price. In the case of sugarcane, groundnut and tobacco, the subsidy is positive but again it is less than the qualifying 10 per cent of the total value of the output of those products.

The reduction of subsidies by the developed countries would enhance the price of agricultural items in the world markets. With the enhancement of agricultural items, India's exports would stand competitive enabling the Indian farmers to get a handsome price for their export products.

The Agricultural and Processed Food Export Development Authority (APEDA) is confident that Indian farm products would perform exceedingly well during the Post-Gatt era. Once the Western Countries phase out subsidies and Indian farmers respond to the demand for quality, APEDA is sure that the Agricultural Exports from India would have an edge over others.

In addition to the export of traditional items from the Indian agricultural Section, there is considerable scope for the export of mushrooms, floriculture products and vegetables, especially beans and asparagus to push up India's export earnings substantially besides exports of fruits like litchis and bananas. Infrastructure is a constraint and is hampering the growth rate of the country's far exports. However, APEDA has been trying to solve, to some extent, the infrastructural problems by providing assistance to the Organisation for making available the post harvest facilities to the Indian farmers.

Need to Develop Strong Infrastructure

Indian ports need to be developed to be comparable with the ports of Singapore and Hong Kong. This would make India, which has one of the longest coast Lines in the world, very competitive in handling goods for international trade. Ports have to handle larger tonnage than what is being done at present. The daily loading capacity at the India ports hovers around 2,500 to 3,500 tonnes which is 10 per cent of what ports of developed Asian countries handle. Thus modern ports hold the key to the growth in exports. Lack of proper loading facilities, scarcity of modern warehousing capacity near ports, shortage of railway wagons for ferrying goods are adversely affecting competitiveness of India's exports.

Infrastructure needs to be developed at various stages like storage, movement, transportation and marketing. Any restrictions and impediments in this regard need to be removed. Apart from restrictions on the inter-state movement of products, the Motor vehicles act also specifies load limits for vehicles used in the transportation of commodities. A recent World Bank study found that on an average a transporter encounters six to seven check points. Also the Cold Storage Act, acts as a deterrent to the holding of stocks. So while fruits and vegetables worth many millions of rupees value are damaged due to lack of storage facilities, the cold storages are bound under different forms of controls of the State Governments. Violation of the Storage Control Act is a non-baliable offence. Lack of adequate refrigerated transport facilities is also inhibiting the growth of processed fruit and vegetables industry.

In the case of foodgrains, the Government is burdened with nude stock of 34 million tonnes. The railways and the port authorities are not equipped to handle the transport of grain. India has already established herself, although in small measure, as a supplier of many commodities including tea, coffee, cashew kernels, oilcakes, cotton, fish and fish products, meat and meat products, rice, fresh and processed fruits and vegetables, apices and tobacco to world markets. Rice cotton, bananas, grapes, sapota, litchis, onion, tomato and processed mushrooms are highly competitive. Wheat, mango, potato and tomato paste are moderately competitive while maize, sorghum apple, mango pulp and juice are less competitive. It is considered possible to achieve at least 30 per cent export growth annually in value or volume terms, these "extreme focus items" are aquaculture, floriculture, fresh fruits, tomato paste and products, tropical fruit juices, pulp and concentrates, preserved mushrooms, rice grapes, sugar, molasses, alcohol including Ethyl.

In addition, meat and meat products, poultry and poultry products and milk and milk products have good potential for export from India.

CHAPTER 5

CONCLUSIONS

5.1 Policy Changes that needs to be taken up by the Uruguay Round

5.2 Policy Recommendations

5.1 POLICY CHANGES THAT NEEDS TO BE TAKEN UP BY THE URUGUAY ROUND

To achieve exportable surpluses and to be competitive agricultural production and productivity needs to be increased in India. The Government has already initiated certain measures to accelerate the growth of agricultural out put and exports :-

1. Minimum Export Price (MEP) on basmati rice, pepper, quargum, orchids, meat of sheep, goat and buffalo has been removed;

2. Exports of milk products have been decanalised;

3. Permission has been granted to freely export superfine non-basmati rice subject to a MEP;

4. Exports of mustard seeds and rape seeds have been allowed against quota;

5. Exports of wheat products have been decontrolled and exports of high value durum wheat and of non-FAQ jowar permitted subject to ceiling;

6. Cess on sugar exports has been waived and cess on pepper exports suspended.

But those are only short-term enabling measures. More far-reaching changes are required.

Short and Long-Term Measures

In order to realise the full export potential of agricultural sector, the following steps are required to be initiated by the Government:

- Jettison the present policy which prescribes that only those farm products should be exported in which the country has a surplus.
- Removal of physical barriers (particularly in cereals) on quantities to be exported.
- Trade policy for the farm sector should be open, free, and upward looking with complete freedom to the farmer to dispose off his produce without any Government restrictions on quantity, price, etc.
- Improve information regarding prospects in foreign markets
- Improve the infrastructure catering to exports

Summary and Conclusions

The impact of GATT commitments in agriculture which fall under three main categories, i.e., market access, domestic support and export competition is explored in this paper. The analysis reveals that India stands to gain rather than lose from trade liberalisation by the GATT members. The domestic support levels in India are negative in most of the agricultural commodities studied here, which is in sharp contrast to the support levels prevailing in developed countries provide positive support to their cultivators and their support levels are quite high (generally more than 10 per cent of the total value of agricultural output). In India the product specific and non-product specific AMS (for 17 products out of 22 total products which India maintains market support programmes) works out to be negative i.e. (-) Rs.196 billion, which forms (-)22.50 per cent of the value of agricultural output during the base period 1986-87 to 1988-89. This indicates the massive amount of `taxation' that the Indian agriculture, in reality, is subjected to, contrary to the general impression of huge input subsidies which flow to this sector. In fact over the years, this negative support has increased in absolute amount to Rs.(-)341.45 billion during TE 1992-93, but in percentage terms, has slightly come down to (-) 21 per cent.

This indicates that there is no excess protection of Indian agriculture. If there had been excess protection this would have had to eliminated with adverse effects on production and farmers' incomes. So the accord will have no adverse effects on Indian farmers.

A few studies that have been carried out in the recent past indicate, that international prices of agricultural commodities will rise and so will their production and trade volumes. Also the variability in world prices will reduced. Though the increase may be a modest one, it can be said with reasonable degree of certainty that reduced support levels and rationalization of non-tariff barriers will allow for increased production and export of various commodities in countries like India, which have comparative advantage in the production of agricultural commodities. Diverse agroclimatic conditions in India and the existing differentials in actual and potential yields, all augur well for exports of agricultural commodities. To cash on the trade opportunities which will emerge from the post-GATT scenario, India will have to change its export strategy of treating export markets as residuals. In addition to this various stringent measures which act as irritants like export quotas, canalization and minimum export prices must be done away with completely. The analysis also reveals that future export items will be fish and fish preparations, cereals like rice and wheat, tea and tobacco, fruits, vegetables and their processed items. This calls for making additional efforts in terms of devising appropriate policies for these future export items in which the country has comparative advantage.

Table 2

India's Gains and Losses

MEASURE		LIKELY IMPACT ON INDIA
Reduction in Farm Subsidies and Export Subsidies by developed countries	-	Prices of Developed countries Products will go up.
	-	Indian products will be more competitive
	-	Exporters of farm products will get higher prices for which there is demand.
Agricultural Subsidies clubbing of products and non-product subsidies	-	Allows India greater maneuverability to provide subsidies for increasing agricultural production.

(Table contd...)

	-	GATT agreement allows upto 10% subsidy in terms of value of agricultural produce but Indian subsidy level is far below this. Hence India can increase subsidy in deserving cases.
Public Distribution system in India (PDS)	-	No danger to it. It can continue as consumer subsidies under PDS are recognised as legitimate ones.
When Sui generis legislation is introduced to protect plant varieties	-	Indian farmers, will not be affected as the farmers' right to retain and exchange seeds are protected.
	-	Patenting of Seeds not required under the Accord.
	-	UPOV convention for protection of plant varieties to be followed.
	-	The plant breeder is given the sole and exclusive right for commercial production alone.
As a result of various measures	-	The developed countries are likely to lose competitiveness in certain products and may vacate them even, and in such countries would gain.
Market access to farm products	-	India need not accede to this as long as there is Balance of Payment Problem.
Farmer and the protected seed	-	He can use for his own purpose.
Patenting of naturally occurring genes and macro-organisms	-	Not required as these are only discoveries and not inventions.

Agro-exports contribute only 16 per cent of India's total exports. India being an agricultural country, there is a great/potential for agro-exports due to competitive price. With the increase in agro-exports, the majority of India's population would be benefited. Some of the strategies, as given below have to be adopted to the advantage of the Uruguay Round trade agreement::

i Majority of the farmers are small, i.e. 50 per cent of farmers are having land holding size with less than 4 hectares. There is a need to consolidate the land to harvest maximum yield and have surplus production for market either indigenous or export. Also services to raise productivity on smallholdings need to be strengthened; this is particularly important as the new technologies are scale neutral.

ii Need for efficient utilization of irrigation facility to achieve higher yields. In India, about 70 per cent area is dry land. Hence, water storage techniques in these areas need to be propagated to harvest rainwater which would help in increasing yield in these areas.

iii In India, there is huge area not available for cultivation due and to degradation is about 50-60 million hectares. Regeneration of these areas this would result in substantial increases in production.

iv Appropriate technology and use of balanced agro-inputs are required on wider scale to raise yields from the current 1.6 tonnes/hectares to those prevailing its developed countries, about 5 tonnes/hectare.

v The use of fertilizer, one of the most important agro-inputs in agricultural production, should be further enhanced to get higher productivity.

vi Due attention be given to research and development. In recent years, more and more use of biotechnology has been emphasised for higher agricultural productivity.

vii To boost agro-exports, government control on agriculture sector be minimized.

ix The latest processing technology should be deployed to increase value addition of exports.

x More emphasis need to be given in areas like horticulture, floriculture, plantation crops, aqua-culture, etc. where there is a vast potential for exports.

Future Strategy

In order to take the maximum benefits from the new world trade environment, it would be essential to properly assess the available export surpluses of various commodities in the country and to give greater emphasis to devising a production strategy for the commodities in which the country has comparative advantage. In view of the increasing population pressure, the country may not have large surpluses of average quality of foodgrains in the long run. Therefore, focus will have to be on the high value products like Basmati and other superior varieties of rice and value added processed products. The rate of growth of production of fruits and vegetables in the country has been around 4.5 per cent per annum which is higher than the rate of growth of population of about 2.11 per cent per annum during the period 1981-91, which may provide good export surpluses of these products. If properly handled, stored and processed, export of fruits and vegetables may be expanded significantly as the country has significant cost advantage in its export.

The new technology in the case of cereals has helped in reducing its cost of production in real terms. There is a need to improve the technology for other agricultural commodities, particularly in the case of fruits and vegetables which would help in reducing the cost of production, as also for processing and production of value added products. It may also be essential to create the required infrastructure through appropriate investment both in public and private sectors which would facilitate to provide storage, packing and marketing facilities. In view of domestic inflationary pressures it is essential to adopt an appropriate exchange rate policy.

Prospects for Farmers - Some Propositions

However, the crucial requirements for small farmers to gain from liberalisation is that, in addition to achieving a higher production, they in a position to operate in commodity markets with good understanding of market dynamics and adequate bargaining power. Considering the prevailing market environment, it is doubtful that these farmers would be able to meet such requirements. In fact, the available evidence seems to show that in areas experiencing rapid agricultural growth the small farmers have an economic status not much better than that of the agricultural labourers.

Liberalisation implies guidance of producer decisions by markets rather than by government interventions. However, the changes in crops which occurred during the eighties appear to have been influenced as much by the latter as by the former. The wide fluctuations in commodity prices suggest that reading market signals is a difficult and confusing task. As regards the future, the interventions to help the farmers with infrastructure, research, extension and critical inputs and those designed to reduce fluctuations in commodity markets would have to remain a priority items on the policy agenda. However, it would be desirable to limit the direct interventions by the government in the commodity markets to exceptional situations like price collapse or extreme scarcity of critical commodities.

Some of the major policies pursued so far cast a shadow on the prospects for value addition and exports. The policies for promoting industries through restricting imports and taxing agriculture have had the effect of impairing their competitive strength. Similarly, the policies with respect to agricultural exports continue even today to permit exports only when there are domestic surpluses. Even if it is assumed that there would now be a thorough overhaul in such policies, it would need several years for the industries to gather strength and for the exports to establish themselves in the international markets and to adjust to their structure and dynamics. Hence, the prospects appear to be that, considered against the vast expanse of Indian agriculture, value addition and exports would remain modest in pace and spread in the medium-term future. In such a scenario, the small farmer would tend to remain on the periphery of the growth process.

Another failure of value addition and exports is that they involve transactions between the farmer and organised industries having capacity to influence market prices to their own advantage. Both cotton and oilseeds, crops holding considerable promise for backward areas, appear to have market structures in which the farmer bears the burden of fall in prices but does not receive his due when the prices are high. Such asymmetry is likely to be the rule rather than an exception when farmers deal with organised groups and the two parties differ markedly in bargaining power.

Considering the fluctuations in commodity prices, factors constraining the pace and spread of value addition and exports and the market influence of organised groups involved in these activities, it is clear that the policies for liberalisation would place the farmer in a market environment which could be hostile both to his efficiency and welfare. He would have to overcome the problems facing him primarily through his own efforts - by producing and selling more, by getting acclimatized to markets and, above all, by building up and operating professionally competent bodies which can fight his battles in the market place. Crucial to his success would be the supportive interventions by the government and a strategy which seeks to promote growth by developing agriculture and not by discriminating against it.

CONCLUSION

The Uruguay Round Agreement on agriculture represents only a partial liberalisation. Overall, the cuts in support to agriculture are relatively small and spread out over a number of years. Regarding domestic support, a large number of policies have been excluded from reduction commitments and only part of those included would be reduced. The market access provisions are likely to have a greater effect on trade. Perhaps the most important provision is the commitment to reduce subsidized exports. Overall, however, a large degree of distortion in the world agricultural commodity market will still remain even after the complete implementation of the reduction commitments.

5.2 POLICY RECOMMENDATIONS

The study makes some recommendations for institutional and organizational changes with a view to deriving maximum benefits from trade liberalisation in agriculture. The main suggestions are:

Technology

Along with appropriate institutional framework including land relations and a highly developed rural infrastructure in irrigation, rural electrification, roads and communication, markets and credit and research etc., it was the introduction of new Borlaug seed fertilizer technology that put Punjab agriculture on a higher path of growth. The opportunities from trade liberalisation can also be exploited by undertaking further investment in new technology which in the ensuing years is likely to be bio-technology. This is important for reducing production costs and for obtaining a quantum jump in productions through the introduction of new bio-technological innovations. Large investment in technological research and its upgradation would be needed in not only increasing the yield of existing crops for meeting increasing food demand but also for diversification of crops towards horticulture and animal husbandry.

There is a need to strengthen the public research system including the Indian Council of Agriculture Research and the agricultural universities. Much higher investment in research and development and in extension has become essential to counteract the likely adverse impact of patents rights contained in the GATT provision of Trade Related Intellectual Property Rights (TRIPS). Public research would have to be strengthened with a view to enabling the small and marginal farmers to avail of the new technological developments.

The minimum supports price policy currently followed in the case of wheat, paddy, cotton, and sugarcane crops should be carried out in future also. The role of farmer cooperatives, trade and private traders in procurement, storing and trading of these commodities for both the domestic and export markets should be strengthened so that the farmers share of final prices increases.

There exist large opportunities for the export of superior quality of rice as well as certain special quality of wheat. In wheat an increasing area should be brought under the Durum wheat and in the case of paddy, cultivation of Basmati variety ought to be encouraged. Local trading houses and farmers' cooperatives need to be encouraged for popularizing these varieties for exports and research should be directed towards evolving high yielding superior varieties of rice crop and for retaining and further developing more aromatic varieties of Basmati.

There exist bright prospects for the export of high value crops like flowers, fruit, vegetables, mushrooms, animal husbandry products, poultry products and fisheries. Diversification through these crops should be through vertical integration of production, processing and marketing.

Appropriate institutions like farmers' cooperatives, trading houses and export houses and market intelligence agencies should be organised for augmenting agricultural exports.

Besides farmers' cooperatives contract farming seems to be an appropriate institution for agricultural diversification and for augmenting exports.

The contract farming between farmers and exporters and/or processors could prove beneficial in the case of the highly perishable crops, fruits, vegetables and flowers. However, so far only large farmers seem to be involved in contract farming. Steps have to be taken to ensure that small and marginal farmers also benefit from this arrangement.

With a view to realising better return to the farmers immediate steps should be taken to encourage agro-processing and agro input industries that have maximum forward and backward linkages with other sectors/sub-sectors of the state economy. The following industries seems to have good potential for development and should be put on the priority list:

1. Dairy products
2. Bakery products
3. Animal/poultry feed
4. Liquor, malt and products
5. Cotton spinning
6. Weaving and Finishing of cotton textiles
7. Textile garments
8. Knitted cotton textile products

9. Blankets, shawls, carpets, etc.
10. Pulp, paper and related products
11. Tanning and preparation of leather
12. Leather footwear
13. Other leader products
14. Animal meat
15. Poultry meat

The public sector has to continue to play important role in the development of infrastructure including irrigation, rural electrification, research and development and extension etc. This is all the more important since public sector investment has a crowding-in effect on private investment. In spite of numerous efforts, very few proposals have come for development of rural infrastructure by the private sector. Consequently, the role of public sector becomes all the more crucial.

The resources for public investment in rural infrastructure could be significantly augmented through cutting down the losses of public these enterprises both through appropriate price policy as well as through increasing their efficiency.

Besides subsidization, the functioning of many of the state enterprises is not efficient and this tends to add to their losses. It is important that the supply cost of these inputs and services should be recovered from their users. However, due care need to be taken to avoid the burden of well known inefficiencies of public sector undertaking being passed on to the ultimate users.

Farmers need to be involved in both decision making and in management of infrastructural service at the micro level such involvement could also help in proper managment of valuable water resources.

To build a strong credit framework the indiscriminatory waiving off of loans should be discouraged as it adversely affects the recovery of outstanding credit as well as the long term viability of these cooperative credit and other financial institutions.

There is a need to develop port facilities and bulk handling facilities at Kandla for the export of rice and wheat. Specialized facilities like processing and canning, refrigerated trucks, roads, railways and air transport network and handling facilities at ports would have to be developed to facilitate export of perishable commodities like fresh fruits, vegetables, meat, eggs, poultry and fisheries.

Adaption of appropriate policies is needed to taken advantage of the prospects opened up by the UR Agreement.

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GATT : URUGUAY ROUND

AGREEMENT ON AGRICULTURE

Members,

Having decided to establish a basis for initiating a process of reform of trade in agriculture in line with the objectives of the negotiations as set out in the Punta del East Declaration:

Recalling that their long-term objective as agreed at the Mid-Term Review of the Uruguay Round is to establish a fair and market-oriented agricultural trading system and that a reform process should be initiated through the negotiation of commitments on support and protection and through the establishment of strengthened and more operationally effective GATT rules and disciplines.

Recalling further that 'the above-mentioned long-term objective is to provide for substantial progressive reductions in agricultural support and protection sustained over an agreed period of time, resulting in correcting and preventing restrictions and distortions in world agricultural markets".

Committed to achieving specific binding commitments in each of the following area: market access; domestic support; export competition; and to reaching an agreement on sanitary and phytosanitary issues. Market access, developed country Members would take fully into account the particular needs and conditions of developing country Members by providing for a greater improvement of opportunities and terms of access for agricultural products of particular interest to these members, including the fullest liberalization of trade in tropical agricultural products as agreed at the Mid-Term Review, and for products of particular importance to the diversification of production from the growing of illicit narcotic crops.

Noting that commitments under the reform programme should be made in an equitably way among all members, having regard to non-trade concerns, including food security and the need to protect the environment; having regard to the agreement that special and differential treatment for developing countries is an integral element of the negotiations, and taking into account the possible negative effects of the implementation of the reform programme on least-developed and net food-importing developing countries.

Hereby agree as follows:

Part I

Article I

DEFINITION OF TERMS

In this Agreement, unless the context otherwise requires:

a) "Aggregate Measurement of Support" and "AMS" means the annual level of support, expressed in monetary terms, provided for an agricultural product in favour of the producers of the basic agricultural product or non-product specific support provided in favour of agricultural producers in general, other than support provided under programmes that qualify as exempt from reduction under Annex 2 to this Agreement, which is:

(i) with respect to support provided during the base period, specified in the relevant tables of supporting material incorporated by reference in part IV of Member's Schedule: and

(ii) with respect to support provided during any year of the implementation period and thereafter, calculated in accordance with the provisions of Annex 3 of this Agreement and taking into account the Constituent data and methodology used in the tables of supporting material incorporated by reference in Part IV of the member's Schedule.

(b) "basic agricultural product" in relation to domestic support commitments is defined as the product as close as practicable to the point of first sale as specified in a Member's Schedule and in the related supporting material.

(c) "budgetary outlays" or "outlays" includes revenue foregone.

(d) "equivalent Measurement of Support" means the annual level of support, expressed in monetary terms, provided to producers of a basic agricultural product through the application of one of more measures, the calculation of which in accordance with the AMS methodology is impracticable, other than support provided under programmes the qualify as exempt from reduction under Annex 2 to this Agreement, and which is:

  (i) with respect to support provided during the base period, specified in relevant tables of supporting material incorporated by reference in Part IV of a Member's Schedule: and

  (ii) with respect to support provided during any year of the implementation period and thereafter, calculated in accordance with the provisions of Annex 4 of this Agreement and taking into account the constituent data and methodology used in the tables of supporting material incorporated by reference in Part IV of the member's Schedule.

(e) "export subsidies" refers to subsidies contingent upon export performance, including the export subsidies listed in Article 9 of this Agreement.

(f) "implementation period" means the six-year period commencing in the year 1995, except that for the purposes of Article 13, it means the nine-year period commencing in 1995.

(g) "market access concessions" includes all market access commitments undertaken pursuant to this Agreement.

(h) 'total Agreement Measurement of Support" and "Total AMS" mean the sum of all domestic support provided in favour of agricultural producers, calculated as the sum of all aggregate measurements of support for basic agricultural products, all non-product-specific aggregate measurements of support for agricultural products, and which is:

  (i) with respect to support provided during the base period (i.e. the "Base Total AMS") and the maximum support permitted to be provided during any year of the implementation period or thereafter (i.e. the "Annual and Final Bound Commitments Level"), as specified in Part IV of a Member's Schedule; and

  (ii) with respect to the level of support actually provided during any year of the implementation period and thereafter (i.e. the "Current Total AMS"), calculated in accordance with the provisions of this Agreement, including Article 6, and with the constituent data and methodology used in the tables of supporting material incorporated by reference in Part IV of the Member's Schedule.

(i) "Year" in paragraph (f) above and in relation to the specific commitments of a members refers to the calendar, financial or marketing year specified in the Schedule relating to that Member.

Article 2

Product Coverage

This Agreement applies to the product listed in Annex 1 to this Agreement, hereinafter referred to as agricultural products.

Part II

Article 3

Incorporation of Concessions and Commitments

1. The domestic support and export subsidy commitments in Part IV of each Member's Schedule constitute commitments limiting subsidization and are hereby made an integral part of GATT 1994.

2. Subject to the provisions of Article 6, a Member shall not provided support in favour of domestic producers in excess of the commitment levels specified in Section I of Part IV of its Schedule.

3. Subject to the provisions of paragraphs 2(b) and 4 of Article 9, a member shall not provide export subsidies listed in paragraph 1 of Article 9 in respect of the agricultural products or groups specified in Section II of Part IV of its Schedule in excess of the budgetary outlay and quantity commitments levels specified therein and shall not provided such subsidies in respect of any agricultural product not specified in that Section of its Schedule.

Part III

Article 4

Market Access

1. Market access concessions contained in Schedules relate to bindings and reduction of tariffs, and to other market access commitments as specified therein.

2. Members shall not maintain, resort to, or revert to any measure of the kind which have been required to be converted into ordinary customs duties, except as otherwise provided for in Article 5 and Annex 5

Article 5

Special Safeguard Provisions

1. Notwithstanding the provisions of paragraph 1(b) of Article II of AGG 1994, any Member may take recourse to the provisions of paragraphs 4 and 5 below in connection with the improtation of an agricultural product, in respect of which measures referred to in paragraph 2 of Article 4 of this Agreement have been converted into an ordinary customs duty and which is designated in its Schedule with the symbol "SSG" as being the subject of a concession in respect of which the provisions of this Article may be invoked, if;

(a) the volume of imports of that product entering the customs territory of the Member granting the concession during any year exceeds a trigger level which relates to the existing market access opportunity as set out in paragraph: or, but not concurrently;

(b) the price at which imports of that product may enter the customs territory of the Member granting the concession, as determined on the basis of the c.i.f. import price of the shipment concerned expressed in terms of its domestic currency, falls below a trigger price equal to the average 1986 to 1988 reference price[1] for the product concerned.

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[1] The reference price used to invoke the provisions of this subparagraph shall, in general, be the average c.i.f. unit value of the product concerned, or otherwise shall be an appropriate price in terms of the quality of the product and its stage of processing. It shall, following its initial use, be publicity specified and available to the extent necessary to allow other Members to assess the additional duty may be levied.

2. Imports under current and minimum access commitments established as part of a concession referred in paragraph 1 above shall be counted for the purpose of determining the volume of imports required for invoking the provisions of subparagraph 1(a) and paragraph 4, but import under such commitments shall not be affected by any additional duty imposed under either subparagraph 1(a) and paragraph 4 or subparagraph 1(b) and paragraph 5 below.

3. Any supplies of the production question which were enroute on the basis of a contract settled before the additional duty is imposed under subparagraph 1(a) and paragraph 4 shall be exempted from any such additional duty, provided that they may be counted in the volume of imports of the product in question during the following year for the purposes of triggering the provisions of subparagraph 1(a) in that year.

4. Any additional duty imposed under subparagraph 1(a) shall only be maintained until the end of the year in which it has been imposed, and may only be levied at a level which shall not exceed on third of the level of the ordinary customs duty to effect in the year in which the action is taken. The trigger level shall be set according to the following schedule base on market access opportunities defined as imports as a percentage of the corresponding domestic consumption[1] during the three preceding years for which data are available:

(a) where such market access opportunities for a product are less than or equal to 10 per cent, the base trigger level shall equal 125 per cent;

(b) where such market access opportunities for a product are greater than 10 per cent but less than or equal to 30 per cent, the base trigger level shall equal 110 per cent;

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[1] Where domestic consumption is not taken into account, the base trigger level under subparagraph 4(a) shall apply.

(c) where such market access opportunities for a product are greater than 30 per cent, the base trigger level shall equal 105 per cent.

In all cases the additional duty may be imposed in any year where the absolute volume of imports of the product concerned entering the customs territory of the Member granting the concession exceeds the sum of (x) the base trigger level set out above multiplied by the average quantity of imports during the three preceding years for which data are available and (y) the absolute volume change in domestic consumption of the product concerned in the most recent year for which data are available compared to he preceding year, provided that the trigger level shall not less than 105 percent of the average quantity of imports in (x) above.

5. The additional duty imposed under subparagraph 1(b) shall be set according to the following schedule:

(a) If the difference between the c.i.f. import price of the shipment expressed in terms of the domestic currency (hereinafter referred to as the "import price") and the trigger price as defined under that subparagraph is less than or equal to 10 per cent of the trigger price, no additional duty shall be imposed.

(b) If the difference between the import price and trigger price (hereinafter referred to as the "difference") is greater than 10 per cent but less than or equal to 40 per cent of the trigger price, the additional duty shall equal to 30 per cent of the amount by which the difference exceeds 10 per cent;

(c) If the difference is greater than 40 per cent but less than or equal to 60 per cent of the trigger price, the additional duty shall equal 50 percent of the amount by which the difference exceeds 40 per cent, plus the additional duty allowed under (b);

(d) If the difference is greater than 60 per cent but less than or equal to 75 percent of the trigger price, the additional duty shall equal 70 per cent of the amount by which the difference exceeds 60 per cent, plus the additional duty allowed under (b) and (c)

(e) If the difference is greater than 75 per cent of the trigger price, the additional duty shall equal 90 per cent of the amount by which the difference exceeds 75 per cent, plus the additional duties allowed under (b), (c) and (d).

6. For perishable and seasonal products, the conditions set out above shall be applied in such a manner as to take account of the specific characteristics of such products. In particular, shorter time periods under subparagraph 1(a) and paragraph 4 may be used in reference to the corresponding periods in the base period and different reference prices for different periods may be used under subparagraph 1(b)

7. The operation of the special safeguard shall be carried out in a transparent manner. Any Member taking action under subparagraph 1(a0 above shall give notice in writing, including relevant data, to the Committee on Agriculture as far in advance as may be practicable and in any event within 10 days of the implementation so such action. In cases where changes in consumption volumes must be allocated to individual tariff lines subject to action under paragraph 4, relevant data shall include the information and methods used to allocate these changes. A Member taking action under paragraph 4 shall afford any interested Members opportunity to consult with it in respect of the conditions of application of such action. Any Member taking action under subparagraph 1(b) above shall give notice in writing, including relevant data, to the Committee on Agriculture within 10 days of the implementation of the first such action or, for perishable and seasonal products, the first action in any period. Members undertake, as far as

practicable, not to take recourse to the provisions of subparagraph 1b where the volume of imports of the products concerned are declining. In either case a Member taking such action shall afford any interested members the opportunity to consult with it in respect of the conditions of application of such action.

8. Where measures are taken in conformity with paragraphs 1 through 7 above. Members undertake not to have recourse, in respect of such measures, to the provisions of paragraphs 1(a) and 3 of Article XIX of GATT 1994 or paragraph 2 of Article 8 of the Agreement on Safeguards.

9. The provisions of this Article shall remain in force for the duration of the reform process as determined under Article 20.

Part IV

Article 6

Domestic Support Commitments

1. The domestic support reduction commitments of each Member contained in Part IV of its Schedule shall apply to all of its domestic support measures in favour of agricultural producers with the exception of domestic measures which are not subject to reduction in terms of the criteria set out in this Article and in Annex 2 to this Agreement. The commitments are expressed in terms of Total Aggregate Measurement of Support and "Annual and Final Bound Commitment Levels".

2. In accordance with the Mid-Term Review Agreement that government measures of assistance,whether direct or indirect, to encourage agricultural and rural development are in integral part of the development programmes of developing countries, investment subsidies which are generally available to agriculture in developing country

Members and agricultural input subsidies generally available to low-income or resource-poor producers in developing country Members shall be exempt from domestic support reduction commitments that would otherwise be applicable to such measures, as shall domestic support to producers in developing country Members to encourage diversification from growing illicit narcotic crops. Domestic support meeting the criteria of this paragraph shall not be required to be included in a Member's calculation of its Current Total AMS.

3. A Member shall be considered to be in compliance with its domestic support reduction commitments in any year in which its domestic support in favour of agricultural producer expressed in terms of Current Total AMS does not exceed the corresponding annual or final bound commitment level specified in Part IV of the Member's Schedule.

4. (a) A Member shall not be required to include in the calculation of its Current Total AMS and shall not be required to reduce.

(i) product- specific domestic support which would otherwise be required to be included in a Member's calculation of its Current AMS where such support does not exceed 5 per cent of that Member's total value of production of basic agricultural product during the relevant year; and

(ii)non-product-specific domestic support which would otherwise be required to be included in Member's calculation of its Current AMS where such support does not exceed 5 per cent of the value of that Member's total agricultural production.

(b) For developing country Member's the minimum percentage under this paragraph under this paragraph shall be per cent.

5. (a) Direct payments under production-limiting programmes shall not be subject to the commitment to reduce domestic support if:

(i) such payments are based on fixed area an yields; or

(ii) such payments are made on 85 per cent or less of the base level of production; or

(iii) livestock payments are made on a fixed number of head.

(b) The exemption from the reduction commitment for direct payments meeting the above criteria shall be reflected by the exclusion of the value of those direct payments in a Member's calculation of its Current Total AMS.

Article 7

General Disciplines on Domestic Support

1. Each Member shall ensure that any domestic support measures in favour of agricultural producers which are not subject to reduction commitments because they qualify under the criteria set out in Annex 2 to this Agreement are maintained in conformity herewith.

2. (a) Any domestic measures in favour of agricultural producers, including any modification to such measure, and any measure that is subsequently introduced that cannot be shown to satisfy the criteria in Annex 2 to this Agreement or to be exempt from reduction by reason of any other provision of this agreement shall be included in the Member's calculation of its Current Total AMS.

(b) Where no Total AMS commitment exists in Part IV of a Member's Schedule the member shall not provide support to agricultural producers in excess of the relevant de minimis level set out in paragraph 4 of Article 6.

Part V

Article 8

Export Competition Commitments

Each Member undertakes not to provide export subsidies otherwise than in conformity with this Agreement and with the commitments as specified in that Member's Schedule.

Article 9

Export Subsidy Commitments

1. The following export subsidies are subject to reduction commitments under this Agreement:

(a) the provision by governments or there agencies of direct subsidies, including payments-in-kind, to a firm, to an industry, to producers of an agricultural product, to a cooperative or other association of such producers, or to a marketing board, contingent on export performance;

(b) the sale of disposal for export by governments or their agencies of non-commercial stocks of agricultural products at a price lower than the comparable price charged for the like product to buyers in the domestic markets;

(c) payments on the export of an agricultural product that are financed by virtue of governmental action, whether or not charge on the public account is involved, including payments that are financed from the proceeds of a levy imposed on the agricultural product concerned or on an agricultural product from which the exported product is derived;

(d) the product of subsidies to reduce the costs of agricultural products (other than widely available export promotion and advisory services) including handling, upgrading and other processing costs, and the costs of international transport and freight;

(e) internal transport and freight charges on export shipments, provided or mandated by governments, on terms more favourable than for domestic shipments;

(f) subsidies on agricultural products contingent on their incorporation in exported products.

2. (a) Except as provided in subparagraph (b), the export subsidy commitment levels for each year of the implementation period, as specified in a Member's Schedule, represent with respect to the export subsidies listed in paragraph 1 of this Article:

(i) in the case of budgetary outlay reduction commitments, the maximum level expenditure for such subsidies that may be allocated or incurred in that year in respect of the agricultural product or group of products, concerned; and

(ii) in the case of export quantity reduction commitments, the maximum quantity of an agricultural product, or group of products, in respect of which such export subsidies may be granted in that year.

(b) In any of the second through fifth years of the implementation period, a Member may provide export subsidies listed in paragraph 1 above in a given year in excess of the corresponding annual commitment level kin respect of the products or groups of products specified in Part IV of the member's Schedule, provided that;

(i) the cumulative amounts of budgetary outlays for such subsidies, from the beginning of the implementation period through the year in question, does not exceed the cumulative amounts that would have resulted from full compliance with the relevant annual outlay commitment levels specified in the Member's Schedule by more than 3 percent of the base period level of such budgetary outlays;

ii) the cumulative quantities exported with the benefit of such export subsidies, from the beginning of the implementation period through the year in question,does not exceed the cumulative quantities that would have resulted from full compliance with the relevant annual quantity commitment levels specified in the Member's Schedule by more than 1.75 per cent of the base period quantities;

(iii) the total cumulative amounts of budgetary outlays for such export subsidies and the quantities benefiting from such export subsidies over the entire implementation period are no greater than the totals that would have resulted from full compliance with the relevant annual commitment levels specified in the Member's Schedule; and

(iv) the member's budgetary outlays for export subsidies and the quantities benefiting from such subsidies, at the conclusion of the implementation period, are no greater than 64 per cent 79 per cent of the 1986-1990 base period levels, respectively. For developing country Members these percentages shall be 76 and 86 per cent, respectively.

3. Commitments relating to limitations on the extension of the scope of export subsidization are specified in Schedules.

4. During the implementation period, developing country Members shall not be required to undertake commitments in respect of the export subsidies listed in subparagraphs (d) and (e) of paragraph 1 above, provided

that these are not applied in a manner that could circumvent reduction commitments.

Article 10

Prevention of Circumvention of Export Subsidy Commitments

1. Export subsidies not listed in paragraph 1 of Article 9 shall not be applied in manner which results in or which threatens to lead to. circumvention of export subsidy commitments; nor shall non-commercial transactions be used to prevent such commitments.

2. Members undertake to work toward the development of internationally agreed disciplines to govern the provision of export credits, export credit guarantees or insurance programmes and, after agreement on such disciplines, to provide export credits, export credit guarantees or insurance programmes only in conformity herewith.

3. Any Member which claims that any quantity exported in excess of a reduction commitment level is not subsidized must establish that no export subsidy, whether listed in Article 9 or not, has been granted in respect of the quantity of exports in question.

4. members donors of intonational food aid shall ensure;

(a) that the provision of international food aid is not tied direct or indirect to commercial exports of agricultural products to recipient countries;

(b) hat international food aid transactions, including bilateral food aid which is monetized, shall be carried out in accordance with the FAO "Principles of Surplus Disposal and Consultative Obligation", including, where appropriate, the system of usual marketing Requirements (UMRs); and

(c) hat such aid shall be provided to the extent possible in fully grant form or on terms no less confessional than those provided for in Article IV of the Food Aid Convention 1986.

Article 11

Incorporated Products

In no case may the per-unit subsidy paid on an incorporated agricultural primary product exceed with per-unit export subsidy that would be payable on exports of the primary product as such.

Part VI

Article 12

Disciplines on Export Prohibitions and Restrictions

1. Where any Member institutes any new export prohibition or restriction on foodstuffs in accordance with paragraph 2(a) of Article XI of GATT 1994, the Member shall observe the following provisions:

(a) the Member instituting the export prohibition or restriction shall give due consideration to the effect of such prohibition or restriction on importing Member's food security;

(b) before any Member institutes an export prohibition or restriction, it shall give notice in writing, as far in advance as practicable, to the Committee on Agriculture comprising such information as the nature and the duration of such measure, and shall consult,upon request, with any other member having a substantial interest as an importer with respect to any matter related to the measure in question. The Member instituting such export prohibition or restriction shall provide,upon request, such Member with necessary information.

2. The provisions of this Article shall not apply to any developing country Member, unless the measure is taken by a developing country Member which is a net-food exporter of the specific foodstuff concerned.

Part VII
Article 13
Due Restraint

During the implementation period notwithstanding the provisions of GATT 1994 and the Agreement on Subsidies and Countervailing Measures (referred to in this Article as the "subsidies Agreement"):

(a) domestic support measures that conform fully to the provisions of Annex 2 to this Agreement shall be:

(i) non-actionable subsidies for purposes of countervailing duties;[1]

(ii) exempt from actions based on Article XVI of GATT 1994 and Part III of the subsidies Agreement; and

(iii) exempt from actions based on non-violation nullification or impairment of the benefits of tariff concessions accruing to another Member under Article II of GATT 1994, in the sense of paragraph 1(b) of Article XXIII of GATT 1994:

(b) domestic support measures that conform fully to the provisions of Article 6 of this Agreement including direct payments that conform to the requirements of paragraph 5 thereof, as reflected in each

[1] Countervailing duties' where referred to in this Article are those covered by Article VI of GATT 1994 and Part V of the Agreement on subsidies and Countervailing Measures.

Member's Schedule, as well as domestic support within de minimis levels and in conformity with paragraph 2 of Article 6, shall be:

(i) exempt from the imposition of countervailing duties unless a determination of injury of threat thereof is made in accordance with Article VI of GATT 1994 and Part V of the Subsidies Agreement, and due restraint shall be shown in initiating any countervailing duty investigations;

(ii) exempt from actions based on paragraph 1 of Article XVI of GATT 1994 or Article 5 and 6 of the Subsidies Agreement, provided that such measures do not grant support to a specific commodity in excess of that decided during the 1992 marketing year; and

(iii) exempt actions based on non-violation nullification or impairment of the benefits of tariff concessions accruing to another Member under Article II of GATT 1994, in the sense of paragraph 1(b) of Article XXIII of GATT 1994, provided that such measures do not grant support to a specific commodity in excess of that decided during the 1992 marketing year;

(c) export subsidies that conform fully to the provisions of Part V of this Agreement, as reflected in each Member's Schedule, shall be:

(i) subject to countervailing duties only upon a determination of injury or threat thereof based on volume, effect on prices, or consequent impact in accordance with Article VI of GATT 1994 and Part V of the Subsidies Agreement, and due restraint shall be shown in initiating any countervailing duty investigations; and

(ii) exempt from actions based on Article XVI of GATT 1994 or Article 3, 5 and 6 of the Subsidies Agreement.

Part VIII

Article 14

Sanitary and Phytosanitary Measures

Members agree to give effect to the Agreement on the Application of Sanitary and Phytosanitary Measures.

Part IX

Article 15

Special and Differential Treatment

1. In keeping with the recognition that differential and more favourable treatment for developing country Members is an integral part of the negotiation, special and differential treatment in respect of commitments shall be provided as set out. In the relevant provisions of this Agreement and embodied in the Schedules of concessions and commitments.

2. Developing country Members shall have the flexibility to implement reduction commitments over a period of up to 10 years. Least-developed country Members shall not be required to undertake reduction commitments.

Part X

Article 16

Least-Developed and Net Food-Importing Developing Countries

1. Developed country Members shall take such action as is provided for within the frame work of the Decision on Measures concerning the Possible

Negative Effects of the Reform Programme on Least-Developed and Net Food-Importing Developing Countries.

2. The Committee on Agriculture shall monitor, as appropriate, the follow-up to this Decision.

Part XI

Article 17

Committee on Agriculture

A Committee on Agriculture is hereby established.

Article 18

Review of the Implementation of Commitments

1. Progress in the implementation of commitments negotiated under the Uruguay Round reform programme shall be reviewed by the Committee on Agriculture.

2. The review process shall be undertaken on the basis of notifications submitted by Members in relation to such matters that such intervals as shall be determined, as well as on the basis of such documentation as the Secretariat may be requested to prepare in order to facilitate the review process.

3. In addition to the notification to be submitted under paragraph 2, any new domestic support measure, or modification of existing measures, for which exemption from reduction is claimed shall be notified promptly. This notification shall contain details of the new or modified measure and its

conformity with the agreed criteria as set out either in Article 6 or in Annex 2.

4. In the review process Members hall give due consideration to the influence of excessive rates of inflation on the ability of any Member to abide by its domestic support commitments.

5. Members agree to consult annually in the Committee on Agriculture with respect to their participation in the normal growth of world trade in agricultural products within the framework of the commitments on export subsidies under this commitment.

6. The review process shall provide an opportunity for Members to raise any matter relevant to the implementation of commitments suffer the reform programme as set out in this Agreement.

7. Any Member may bring to the attention of the Committee on Agriculture any measure which it considers ought to have been failed by another Member.

Article 19

Consultation and Dispute Settlement

The provisions of Articles XXII and XXIII of GATT 1994, as started and applied by the Dispute Settlement Understanding, will apply to consultations and the settlement of disputes under the Agreement.

Part XI

Article 20

Continuation of the Reform Process

Recognizing that the long-term objective of substantial massive reductions in support and protection resulting in fundamental reform is an ongoing process, Members agree that negotiations for continuing the process will be initiated one before the end of the implementation period, taking into account.

(a) the experience to that date from implementing the reduction commitments;

(b) the effects of the reduction commitments on world trade in agriculture;

(c) non-trade concerns, special and differential treatment to developing country Members, and the objective to establish a fair and market-oriented and agricultural trading system, and the other objectives and concerns mentioned in the preamble to this Agreement; and

(d) what further commitments are necessary to achieve the above mentioned long-term objectives.

Part XIII

Article 21

Final Provisions

Final provisions of GATT 1994 and of other Multilateral Trade agreements in Annex IA to the WTO Agreement shall apply subject to the provisions of this Agreement.

The Annexes to this Agreement are hereby made an integral part of this Agreement.

India's Foregn Trade Exports, Imports and Trade Balance and Share in GDP

	Rs. crore			change over previous year (%)		Percentage to GDP		
	Exports	Imports	Trade balance	Exports	Imports	Exports	Imports	Trade balance
1950-51	606	608	-2			6.47	6.49	-0.02
1951-52	716	890	-174	18.15	46.38	7.18	8.93	-1.75
1952-53	578	702	-124	-19.27	-21.12	5.91	7.18	-1. 27
1953-54	531	610	-79	-8.13	-13.11	4.99	5.73	-1.27
1954-55	593	700	-107	11.68	14.75	5.89	6.95	-1.06
1955-56	609	774	-165	2.70	10.57	5.94	7.55	-1.61
1956-57	605	841	-236	-066	8.66	4.95	6.88	-1.93
1957-58	561	1.035	-474	--7.27	23.07	4.45	8.22	-3.76
1958-59	581	906	-325	3.57	-12.46	4.14	6,46	-2.32
1959-60	640	961	-321	10.15	6.07	4.33	6.50	-2.17
1960-61	642	1.122	-480	0.31	16.75	3.96	6.93	-2.96
1961-62	660	1,090	-430	2.80	-2.85	3.84	6.35	-2.50
1962-63	685	1.131	-446	3.79	3.76	3.71	6.12	-2.41
1963-64	793	1.223	-430	15.77	8.13	3.73	5.76	-2.02
1964-65	816	1.349	-533	2.90	10.30	3.29	5.45	-2.15
1965-66	810	1,409	-599	-0.74	4.45	3.10	5.39	-2.29
1966-67	1.157	2.078	-921	42.84	47.48	3.91	7.03	-3.11
1967-68	1.199	2,008	-809	3.63	-3.37	3.46	5.80	-2.34
1968-69	1,385	1,909	-551	13.26	-4.93	3.70	5.21	-1.50
1969-70	1.413	1,413	1,582	-169	4.05	-17.13	3.50	3.92
1970-71	1,535	1,634	-99	8.63	3.29	3.56	3.79	-0.23
1972-72	1,608	1,825	-217	4.76	11.69	3.48	3.95	-0.47
1972-73	1,971	1,867	104	22.57	2.30	3.86	3.66	0.20
1973-74	2,523	2,955	-432	28.01	58.28	4.07	4.77	-0.70
1974-75	3.329	4,519	-1,190	31.95	52.93	4.55	6.17	-1.62
1975-76	4.036	5.265	-1,229	21.24	16.51	5.12	6.68	-1.56
1976-77	5,142	5,074	68	27.40	-3.63	6.06	5.98	0.08
1977-78	5,408	6,020	-612	5.17	18.64	5.63	6.27	-0.64
1978-79	5,726	6.811	-1,085	5.88	13.14	5.50	6.54	-1.04
1979-80	6,418	9,143	-2,725	12.09	34.24	5.61	8.00	-2.38
1980-81	6,711	12,549	-5,838	4.57	37.25	4.93	9.23	-4.29
1981-82	7,806	13,608	-5,802	16.32	8.44	4.89	8.52	-3.63
1982-83	8,803	14,293	-5,490	12,77	5.03	4.94	8.02	-3.08
1983-84	9,771	15,831	-6,060	11.00	10.76	4,71	7.63	-2.92
1984-85	11,744	17,143	-5,399	20.19	8.29	5.08	7.41	-2.33
1985-86	10,895	19,658	-8,763	-7.23	14.67	4.15	7.50	-3.34
1986-87	12,452	20.096	-7,644	14.29	2.23	4.25	6.86	-2.61
1987-88	15,674	22,244	-6,570	25.88	10.69	4.70	6.68	-1.97
1988-89	20,232	28,235	-8,003	29.08	26.93	5.11	7.13	-2.02
1989-90	27,658	35,328	-7,670	36.70	25.12	6.05	7.73	-1.68
1990-91	32,553	43,198	-10,645	17.70	22.28	6.08	8.07	-1,99
1991-92	44,041	47,851	-3,810	35.29	10.77	7.15	7.77	-0.62
1992-93	53,688	63,375	-9,687	21.90	32.44	7.61	8.99	-1.37
1993-94	69,751	73,101	-3,350	29.92	15.35	8.71	9.13	-0.42
1994-95	82,674	89,971	-7,297	18,53	23.08	8.74	9.51	-0.77
1995-96	106,465	121,647	15,182	28.78	35.21	9.82	11.22	-1.40

Source: Foreign Trade Statistics of India, May 1996

India's Foreign Trade Exports, Imports & Trade Balance and Share in WorldExports

	US $ million			Change over previous year (%)		India's exports as % of World exports
	Exports	Imports	Trade balance	Exports	Imports	
1950-51	1,269	1,273	-4			205
1951-52	1,490	1,852	-362	17.42	45.48	1.84
1952-53	1,212	1,472	-260	-18.06	-20.52	1.55
1953-54	1,114	1,279	-165	-8.09	-13.11	1.31
1954-55	1,233	1,456	-223	10.68	13.84	1.43
1955-56	1,275	1,620	-345	3.41	11.26	1.37
1956-57	1,259	1,750	-491	-1.25	8.02	1.22
1957-58	1,71	2,160	-989	-6.99	23.43	1.04
1958-59	1,219	1,901	-682	4.10	-11.99	1.13
1959-60	1,343	2,016	-673	10.17	6.05	1.16
1960-61	1,346	2,353	-1,007	0.22	16.72	1.04
1961-62	1,481	2,281	-900	2.60	-3.06	1.03
1962-63	1,437	2,372	-935	4.06	3.99	1.28
1963-64	1,659	2,558	-899	15.45	7.84	1.07
1964-65	1,701	2,813	-1,112	2.53	9.97	00.98
1965-66	1,693	2,944	-1,251	-0.47	4.66	0.82
1966-67	1,628	2,923	-1,295	-3.84	-0.71	0.79
1967-68	1,586	2,656	-1,070	-2.58	-9.13	0.73
1968-69	1,788	2,513	-725	12.74	-5.38	0.74
1969-70	1,866	2,089	-223	4.36	-16.87	0.68
1970-71	2,031	2,162	-131	8.84	3.49	0.64
1971-72	2,153	2,443	-290	6.01	13.00	0.63
1972-73	2,550	2,415	135	18.44	-1.15	0.63
1973-74	3,290	3,759	-550	25.84	55.65	0.55
1974-75	4,174	5,666	-1,492	30.07	50.73	0.51
1975-76	4,665	6,084	-1,419	11.76	7.38	0.54
1976-77	5,753	5,677	76	23.32	-6.69	0.59
1977-78	6,316	7,031	-715	9.79	23.85	0.57
1978-79	6,978	8,300	-1,322	10.48	18.05	0.55
1979-80	7,947	11,321	-3,374	13.89	36.40	0.49
1980-81	8,486	15,869	-7,383	6.78	40.17	0.42
1981-82	8,704	15,174	-6,470	2.57	-4.38	0.45
1982-83	9,107	14,787	-5,680	4.63	-2.55	0.50
1983-84	9,449	15,311	-5,862	3.76	3.54	00.53
1984-85	9,878	14,412	-4,534	4.54	-5.87	0.53
1985-86	8,904	16,067	-7.163	-9.86	11.48	0.47
1986-87	9,745	15,727	-5.982	9.45	-2.12	0.47
1987-88	12,089	17,156	-5,067	24.05	9.09	0.50
1988-89	13,970	19,497	-5,527	15.56	13.65	0.51
1989-90	16,612	21,219	-4,607	18.91	8.83	0.56
1990-91	18,143	24,075	-5,932	9.22	13.46	0.53
1991-92	17,865	19,441	-1,546	-1.53	-19.37	0.51
1992-93	18,537	21,882	-1,068	3.76	12.73	0.51
1993-94	22,238	23,306	-2.324	19.97	6.51	0.61
1994-95	26,330	28,654	-4,538	20.88	26.91	0.800
1995-96	31,828	36,366	-4,538	20.88	26.91	0.80

Source:Foreign Trade Statistics of India, May 1996

Base: 1978-79 = 100

Year	Unit value index		Volume index		Terms of trade		
	Exports	Imports	Exports	Imports	Gross	Net	Income
1969-70	44.0	35.2	55.7	64.9	116.5	125.0	69.6
1970-71	45.0	35.3	59.0	67.2	113.9	127.5	75.2
1971-72	46.0	32.8	59.2	80.6	136.1	140.2	83.0
1972-73	51.2	34.2	66.5	76.7	115.3	149.7	99.6
1973-74	62.2	48.9	69.5	87.2	125..5	127.2	88.4
1974-75	78.0	84.5	73.7	77.2	104.7	92.3	68.0
1975-76	83.9	99.1	81.7	76.0	93.0	84.7	69.2
1976-77	89.4	96.3	96.8	76.1	78.6	92.8	89.9
1977-78	100.3	88.0	93.2	100.0	107.3	114.0	106.2
1978-79	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1979-80	105.4	114.1	106.2	116.4	109.6	92.4	98.1
1980-81	108.5	134.2	108.1	137.9	127.6	80.8	87.4
1981-82	124.1	133.1	110.1	150.6	136.8	93.2	102.7
1982-83	132.0	136.3	116.7	154.6	132.5	96.8	113.0
1983-84	151.0	125.8	113.0	185.4	164.1	120.0	135.6
1984-85	169.8	161.7	120.8	156.1	129.2	105.0	126.9
1985-86	170.8	158.8	111.3	182.3	163.8	107.6	119.7
1986-87	179.4	139.4	121.3	212.3	175.0	128.7	156.1
1987-88	195.4	160.0	140.0	204.8	146.3	122.1	171.0
1988-89	232.2	185.5	152.1	224.2	147.4	125.2	190.4
1989-90	276.6	228.4	174.9	227.8	130.2	1121.1	211.8
1990-91	292.5	267.7	194.1	237.7	122.5	109.3	212.1
1991-92	369.5	309.1	208.6	228.0	109.3	119.5	249.4
1992-93	421.5	331.0	222.9	282.0	126.5	127.3	283.8
1993-94	474.1	327.2	257.5	329.1	127.8	144.9	373.1
1994-95	494.6	248.9	292.7	532.5	181.9	198.7	581.6

Gross terms of trade = Volume index of imports as a percentage of volume index of exports.

Net term of trade = Unit value index of exports as percentage of unit value index of imports.

Income terms of trade = Product of net terms of trae and volume index of exports expressed as a percentage.

Source: Foreign Trade Statistics of India, May 1996

India's Exports

Commodity Composition of Exports

Rs.. Crore

	1990-91	1991-92	1992-93	1993-94	1994-95	April–January 1994-95	April–January 1995-96
Gemes & jewellery	5.210	6.750	8.897	12.532	14.134	10.979	13.927
RMG cotton incl. accessories	2.655	3.754	5.156	6.173	7.827	5.984	7.218
Cotton yarn fabrics, madeups	2.065	3.203	3.911	4.821	6.951	5.600	6.935
Marine products	960	1.443	1.743	2.552	3.522	2.966	2.792
Drugs, pharmaceuticals & fine chem.	829	1.550	1.533	2.010	2.494	1.973	2.647
Transport equipment	719	1.224	1.546	1.857	2.406	1.906	2.419
Manufactures of metals	959	1.1224	1.546	1.857	2.406	1.906	1.419
Machinery & instruments	1.695	1.433	1.569	2.004	2.282	1.805	2.247
Leather manufactures	2.554	1.984	2.512	1.793	2.112	1.742	2.102
Manmade yarn, fabrics, adeups	406	821	1.079	1.335	1.936	1.494	2.036
Oil meals	625	921	1.545	2.324	1.795	1.439	1.498
Footwear of leather		1.143	1.188	1.436	1.575	1.369	1.569
Dyes intermediates & coal tar chem.	350	781	958	1.151	1.486	1.197	1.286
Plastic & Linoleum products	198	276	433	1.053	1.472	1.124	1.610
RMG manmade fibres	799	1.034	1.087	1.221	1.398	1.070	1.341
Carpet handmade	608	1.004	1.259	1.'423	1.373	1.129	1.149
Petroleum & cude products	938	1.022	1.379	1.248	1.309	1.106	1.283
Iron ore	1.050	1.435	1.104	1.374	1.309	1.004	1.334
Electronic goods	342	654	615	952	1.273	1.000	1.787
Cashew	441	672	745	1.045	1.242	1.065	1.017
Primary & semifinished iron and steel	153	226	476	1.420	1.208	1.094	1.401
Leather				848	1.202	979	1.011
Handicrafts excl. Handmade carpets	429	595	799	999	1.201	1.020	1.219
Inorganic/organic/agro chem.	394	494	572	724	1.020	764	1.307
Coffee	253	332	376	546	1.019	876	1.214
Tea	1.075	1.212	977	1.059	975	839	1.017
Rubber manufactured prod.	261	287	639	816	919	749	824
Rice, basmati	440	499	801	1.061	858	691	655
Processed minerals	251	361	426	665	808	629	823
Glass/glassware/cermics/refactories/cement	107	155	299	513	618	532	551
Spices	233	372	393	569	606	480	574
Cosmetics/toileteries	552	628	262	422	514	423	478
Fruits & vegetables	217	349	312	414	489	329	422
Paper/wood products	89	129	183	344	474	356	552
Jute mfg excl. Floor carvings	299	390	352	381	457	375	528
Castor oil	58	140	117	289	428	325	593
Natural silk yarn, fabrics, madeups	219	350	401	399	410	342	348
Meat & preparations	141	231	257	345	395	324	504
Paints/enamels/varnishes	211	223	207	313	381	310	336
RMG of other textile materials	290	293	263	275	370	265	394
RMG silk	152	290	280	260	347	301	278
Carpet millmade	136	234	248	315	330	257	338
Iron & steel bar/rods	114	153	410	363	325	261	416
Rice, non-basmati		256	175	225	323	145	2,983

Source: Foreign Trade Statistics of India, May 1996

India's Exports

Commodity Composition of Exports

Rs. crore

	1990-91	1991-92	April--January 1992-93	April--January 1993-94	April--January 1994-95	1994-95	1995-96
RMG wool	146	104	145	184	305	249	264
Aluminium other than products			383	256	299	221	151
Ferro alloys	61	177	251	252	227	230	352
Sports goods	92	78	101	140	203	170	196
Processed fruits & juices	62	88	120	156	196	157	187
Woollen yarn, fabrics, madeups	23	74	114	157	191	155	164
Footwear of rubber, canvas etc.		19	37	126	181	32	33
Tobbaco unmanufactured	193	314	356	368	175	150	270
Coir & coir manufactures	48	70	90	130	172	137	172
Computer software	10	33	27	71	163	131	215
Guargum meal		93	103	141	143	119	169
Sesame & niger seeds	91	102	116	74	142	106	190
Cotton raw include. waste	855	306	182	654	141	114	129
Groundnuts	58	7	8	171	99	87	163
Pulses			53	74	90	75	100
Non-ferrous metals		258	59	50	90	80	91
Manmade staple fibre			62	38	86	39	66
Coal	9	15	59	65	80	46	80
Tobbaco manufactured	71	63	118	93	74	59	54
Sugar & molasses	37	157	354	178	62	59	315
Project goods	157	46	67	45	60	61	71
Shellac	15	26	41	65	46	39	51
Spirit & Beverage		39	42	46	46	40	41
Silk carpet			52	44	40	31	48
Wheat							
Floriculture products		15	15	19	29	21	44
Mica	35	35	24	28	22	18	20
Floor covering of jute	1	1	3	8	9	14	23
Cashew nut shell	5	4	4	3	2	2	1
Fruits/veg.seeds						14	27
Poultry & dairy products						37	39
Processed vegetables						63	109
Other commodities	1.076	1,227	1,475	2,034	3,165	2,062	2,823
Total exports	32,553	44,041	53,688	69,751	82,674	65,382	84,197

Source: Foreign Trade Statistics of India, May 1996

Commodity Composition of Exports

	Share in total eexports (%)						
						April-January	
	1990-91	1991-92	1992-93	1993-94	1994-95	1994-95	1995-96
Gems & jewellery	16.00	15.33	16.57	17.19	17.10	16.79	16.54
RMG cottion incll accessories	8.17	8.52	9.70	8.85	9.47	9.14	8.57
Cotton yearn fabrics, madeups	6.34	7.27	7.29	6.91	8.41	8.56	8.24
Marine products	2.95	3.28	3.25	3.66	4.26	4.54	3.32
Drugs, pharmacuticals & fine chem.	2.55	3.52	2.86	2.88	3.02	3.02	3.14
Transport equipment	2.21	2.78	2.88	2.66	2.91	2.92	2.87
Manufactures of metals	2.95	2.71	3.02	2.98	2.85	2.74	2.69
Machinery & instruments	5.21	3.25	.2.92	2.87	2.76	2..76	2.67
Leather manufactures	7.85	4.51	4.68	2.57	2.55	2.66	2.50
Manmade yearn, fabrics, madeups	1.25	1.87	2.01	1.91	2.34	2.28	2.42
Oil meals	1.92	2.09	2.88	3.33	2.17	2.20	1.73
Footwear of leather		2.60	2.21	2.06	1.91	2.09	1.86
Dyes intermediates & coal tar chem.	1.08	1.77	1.78	1.65	1.80	1.83	1.53
Plastic & crude products	0.61	0.63	0.81	1.51	1.78	1.72	1.91
RMG manmade fibres	2.45	2.35	2.03	1.75	1.69	1.64	1.59
Carpet handmade	1.87	2.28	2.35	2.04	1.66	1.73	1.36
Petroleum & crude Products	2.88	2.32	2.57	1.79	1.58	1.60	1.52
Iron ore	3.23	3.26	2.06	1.97	1.58	1.54	1.58
Electronic goods	1.05	1.48	1.15	1.37	1.54	1.53	2.12
Cashew	1.36	1.52	1.39	1.50	1.50	1.63	1.21
Primary & semifinished iron and steel	0.47	0.51	0.89	2.04	1.46	1.67	1.66
Leather				1.22	1.44	1.50	1.20
ssssHandicrafts excl. Handmade carpets	1.32	1.35	1.49	1.43	1.45	1.56	1.45
Inorganic/organic/agro chem.	1.21	1.1	1.07	1.04	1.23	1.17	1.55
Coffee	0.78	0.75	0.70	0.78	1.23	1.34	1.44
Tea	3.30	2.75	1.82	1.52	1.18	1.28	1.21
Rubber manufactured products	0.80	0.65	1.19	1.17	1.11	1.15	0.98
Rice, basmati	1.35	1.13	1.49	1.52	1.04	1.06	0.78
Processed minerals	0.77	0.82	0.79	0.95	0.98	0.96	0.198
Glass/glassware/cermcs/refactories/cem.	0.33	0.35	0.56	0.74	0.75	0.81	0.65
Spices	0.72	0.84	0.73	0.82	0.73	0.73	0.68
Cosmetics/toiletries	1.70	1.42	0.49	0.60	0.62	0.65	0.57
Fruits & vegetables	0 .67	0.79	0.58	0.59	0.59	0.50	0.50
Paper/wood products	0.27	0.29	0.34	0.49	0.57	0.54	0.66
Jute manfg excl. Floor carvings	0.92	0.89	0.66	0.55	0.55	0.57	0.63
Castor oil	0.18	0.32	0.22	0.41	0.52	0.50	0.70
Natural silk yarn, fabrcs, madeups	0.67	0.79	0.75	0.57	0.50	0.52	0.41
Meat & preperations	0.43	0.52	0.48	0.49	0.48	0.50	0.60
Paints/enamels/varnishes	0.65	0.51	0.39	0.45	0.46	0.47	0.40
RMG of other textile materials	0.89	0.54	0.49	0.39	0.45	0.41	0.47
RMG silk	0.47	0.66	0.52	0.37	0.42	0.46	0.33
Carpet millmade	0.42	0.53	0.46	0.54	0.40	0.39	0.40
Iron & steel bar/rods	0.35	0.35	0.76	0.52	0.39	0.40	0.49
Rice, others		0.58	0.33	0.32	0.39	0.22	3.54

Source: Foreign Trade Statistics of India, May 1996

Commodity Composition of Exports

Share in total exports (%)

	1990-91	1991-92	1992-93	1993-94	1994-95	April-January 1994-95	April-January 1995-96
RMG wool	0.45	0.24	0.27	0.26	0.37	0.38	0.31
Aluminium other than products			0.71	0.37	0.36	0.34	0.18
Ferro alloys	0.19	0.40	0.47	0.36	0.27	0.35	0.42
Sports goods	0.28	0.18	0.19	0.20	0.24	0.26	0.23
Processed fruits & juices	0.19	0.20	0.22	0.22	0.24	0.22	0.22
Wollen yarn, fabrics, madeups	0.07	0.17	0.21	0.23	0.23	0.24	0.20
Footwear of rubber, canvas etc.		0.04	0.07	0.18	0.22	0.05	0.04
Tobbaco unmnfg	0.59	0.71	0.66	0.53	0.21	0.23	0.32
Coir & coir manufactures	0.15	0.16	0.17	0.19	0.21	0.21	0.20
Machine tools		0.27	0.22	0.19	0.21	0.22	0.18
Computer softwar	0.03	0.07	0.05	0.10	0.20	0.20	0.26
Guargum meal		0.21	0.19	0.20	0.17	0.18	0.20
Sesame & Niger seeds	0.28	0.23	0.22	0.11	0.17	0.16	0.23
Cotton raw include. waste	2.63	0.69	0.34	0.94	0.17	0.17	0.15
Groundnuts	0.18	0.02	0.01	0.24	0.12	0.13	0.19
Pulses			0.10	0.11	0.11	0.11	0.12
Non-ferrous metals		0.59	0.11	0.07	0.11	0.12	0.11
Manmade staple fibre			0.12	0.06	0.10	0.06	0.08
Coal	0.03	0.03	0.09	0.09	0.10	0.07	0.09
Tobbaco mnfg	0.22	0.14	0.22	0.13	0.09	0.09	0.06
Sugar & mollasses	0.11	0.36	0.66	0.26	0.08	0.09	0.37
Project goods	0.48	0.10	0.12	0.06	0.07	0.09	0.08
Shellac	0.05	0.06	0.08	0.09	0.06	0.06	0.06
Spirit & Beverages		0.09	0.08	0.07	0.06	0.06	0.05
Silk carpet			0.10	0.06	0.05	0.05	0.06
Wheat	0.09	0.29	0.02		0.04	0.03	0.23
Floriculture products		0.03	0.03	0.03	0.03	0.03	0.05
Mica	0.11	0.08	0.04	0.04	0.03	0.03	0.02
Floor covering of Jute		0.00	0.01	0.01		0.02	0.03
Cashew nut shell	0.02	0.01	0.01				0.00
Fruits/veg. seeds						0.02	0.03
Poultry & dairy products						0.06	0.05
Processed vegetables						0.10	0.13
Other commodities	3.31	2.97	2.75	2.92	3.83	3.15	3.35
Total exports	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Foreign Trade Statistics of India, May 1996

	Change over the previous year (%)				
				April-January	
	1991-92	1992-93	1993-94	1994-95	1995-96
Gems & Jewellery	-5.01	11.36	30.05	12.70	20.58
RMG cotton include. accessories	3.65	16.06	10.53	26.72	14.67
Cotton yarn fabrics, madeups	13.71	3.18	13.80	44.08	17.73
Marine products	10.22	2.09	35.15	37.93	-10.52
Drugs, pharamacuticals & fine chem.	37.10	-16.43	21.02	24.00	27.56
Trasnport equipment		6.73	10.88	29.51	20.62
Manufactures of metals		14.84	18.36	13.07	20.08
Machinery & instruments		-7.54	17.94	13.82	18.36
Leather manufactures	-43.03	6.95	-34.11	17.76	14.74
Manmade yarn, fabrics madeups	48.44	11.02	14.22	44.94	29.57
Oil meals	8.10	41.71	38.83	-22.82	-3.69
Footwear of leather		-12.20	11.54	9.65	8.95
Dyes intermediate & coal tar chem.	63.54	3.55	11.01	28.96	2.12
Plastic & linoleum products	2.24	32.26	124.79	39.63	36.17
RMG manmade fibres	-5.14	-11.14	3.64	14.44	19.19
Carpet handmade	21.04	5.96	4.33	-3.56	-3.26
Petroleum & crude products	-20.08	14.00	-16.48	4.84	10.26
Iron ore	0.24	-35.01	14.86	-4.78	26.33
Electronic goods	40.19	-20.53	42.93	33.65	69.83
Cashew	11.52	-6.27	29.56	18.74	-9.17
Primary & semifinsihed iron and steel	8.04	78.30	175.32	-14.97	21.78
Leather				41.69	-1.78
Handicraft excl. handmade carpets	1.72	13.41	15.42	20.13	13.64
Inorganic/ organic/agro chem.	-8.19	-2.17	16.85	40.75	62.65
Coffee	-3.89	-4.27	33.87	86.62	31.76
Tea	-17.35	-31.90	0.13	-8.02	15.22
Rubber manufactured products	-19.21	87.92	17.79	12.54	4.56
Rice, Basmati	-16.82	35.52	22.37	-19.23	-9.94
Processed minerals	5.26	-0.37	44.32	21.30	24.40
Glass/glassware/ceramics/refactories/ cement	6.07	63.01	58.36	20.39	-1.66
Spices	16.99	-10.67	33.50	6.54	13.57
Cosmetics/toiletries	-16.66	-64.68	48.44	21.69	7.57
Fruits & vegetables	17.75	-24.36	22.44	17.83	21.89
Paper/wood products	6.99	19.53	73.35	37.93	47.53
Jute mnfg excl. floor carvings	-4.34	-23.64	-0.20	90.95	33.79
Castor oil	78.11	-29.00	127.52	47.76	73.57
Natural silk yarn, fabrics, madeups	17.11	-3.11	-8.23	2.61	-3.22
Meat & preperations	20.03	-5.85	23.70	14.55	47.71
Paints/enamels/varnishers	-22.59	-21.47	39.80	21.39	3.02
RMG of other textile materials	-39.64	-7.19	-3.44	34.57	41.36
RMG silk	40.10	-18.53	-14.37	33.68	-12.12
Carpet millmade	25.85	-10.68	17.29	4.96	25.29
Iron and steel bar/rods	-1.61	126.98	-18.40	-10.34	51.21
Rice, non-basmati		-42.35	18.96	43.38	1850.52

Foreign Trade Statistics of India, May 1996

	Change over the previous year (%)				
				April-January	
	1991-92	1992-93	1993-94	1994-95	1995-96
RMG wool	-47.50	17.39	17.17	65.53	0.74
Aluminium other than products			-38.25	16.76	-35.15
Ferro alloys	112.82	19.65	-7.52	-9.88	45.50
Sports goods	-38.16	10.23	27.09	45.06	9.82
processed fruits & juices	4.49	14.56	19.94	25.97	20.77
Woollen yarn, fabrics, madeups	139.57	29.70	27.81	21.56	0.93
Footwear of rubber, canvas etc.		65.43	218.69	43.44	0.45
Tobbaco unmnfg	19.53	-4.35	-4.39	-52.56	70.66
Coir & coir manufactures	7.38	8.91	32.49	32.42	19.01
Machine tools		-13.26	3.23	26.86	2.63
Computer software	132.27	-29.72	142.53	129.20	56.40
Guargum meal		-5.79	25.99	1.33	34.89
Sesame & Niger seeds	-17.72	-4.18	-41.61	93.37	69.89
Cotton raw include. waste	-73.76	-49.79	231.92	-78.51	7.84
Groundnuts	-90.73	-11.04	1939.34	-42.23	79.12
Pulses			27.12	22.71	26.88
Non-ferrous metals		-80.76	-21.16	79.95	9.07
Manmade staple fibre			-43.02	123.96	59.96
Coal	24.23	180.98	20.24	22.57	65.70
Tobbaco mnfg	-34.74	59.09	-27.57	-20.39	-12.49
Sugar & mollasses	208.34	89.95	-53.50	-65.16	409.40
Project goods	-78.47	22.22	-37.92	33.05	9.90
Shellac	28.59	35.01	47.17	-29.74	23.90
Spirit & Beverages		-10.87	1.99	-0.51	-1.66
Silk carpet			-20.75	-10.50	49.33
Wheat	218.49	-93.21	-98.14	14881.46	723.37
Floriculture products		-14.90	16.65	52.32	97.68
Mica	-26.36	-42.60	6.99	-19.28	9.92
Floor covering of Jute	-43.96	176.28	172.50	133.39	57.90
Cashew nut shell	-44.78	-19.98	-29.94	-20.62	-65.33
Fruits/veg. seeds					77.64
Poultry & dairy products					0.44
Processed vegetables					62.87
Other commodities	-16.45	1.61	27.30	55.48	30.13
Total exports	-0.81	3.00	19.94	18.45	22.42

Foreign Trade Statistics of India, May 1996

INDIA
IMPORTS 10,000 $

INDIA
EXPORTS 10,000 $

	Imports 1989	Imports 1990	Imports 1991	Imports 1992	Imports 1993	Imports 1994	Exports 1989	Exports 1990	Exports 1991	Exports 1992	Exports 1993	Exports 1994
Tot. Merchand. Trade	2124713	2418800	1961884	2408232	2339200	2838560	1660890	1821529	1805713	2040153	2232000	2634819
Agric. Products. Total	106392	108470	74243	136659	104416	191034	265712	307465	279624	294746	335790	323203
Food and animals -0	63535	57676	39065	79446	60673	124286	206235	201353	217121	234984	259165	264147
Live animals 00	630*	289	325	306	202	214	1094	677	480	608	681	687F
Meat+ meat prep -01			1	42	1		6879	7870	9490	9785	11037	12432
Dairy prod. +eggs -02	32428	211	1068	1846	566	1217	185	254	830	925	659	470
Cereals and prep -04	26579	9902	7111	36702	9295	3985	27088	29001	38735	39446	44345	42881
Fruit + vegetables -05	25488	43859	27315	34647	41567	48437	38625	40433	46446	48041	54766	62779
Sugar and honey -06	6125	914	364	533	604	60628	2083	2168	6544	13709	5910	2313
Cof.+tea+coc.+s p. -07	767	1142	1258	1878	1909	2161	91847	85763	75042	61524	64990	82295
Feeding stuffs -08	456	302	394	778	1852	2938	36952	34208	37995	58865	75070	57928
Miscellan. Food -09	62	1058	1229	2715	4676	4705 F	1483	979	1560	2081	1709	2363
Beverages + tobacco -1	816	643	321	419	520	545	11023	15417	16190	19046	16003	9955
Beverages -11	663	547	252	352	305	345	280	667	732	1032	1244	1392
Tobacco -12	153	97	70	67	215	200	10743	14750	15458	18014	14759	8563
Animal vegt. Oils -4	13982	19581	12898	19095	10210	24500	8714					
Animal fats -41	17	14	25	36	27	27F						
Fixed veget. Oils -42	12971	18538	10365	16201	5742	20033	8033	11686	6920	5551	9014	12342
Processed oils -43	993	1030	2508	2857	4440	4440F	680647	1323	1016	990	1075	
Fish + fishery pro.	19	27	131	185	450	450F	40692	46735	59008	65611	81065	81065F
Forest products	33173	50641	53131	52326	26238	27160F	2920	3925	3924	3991	1680	1663F
Agricult. Requisites	110961	91922	102604	94064	77335	59977	6559	6127	9003	7449	6898	7000F
Crude fertiliz.	16115	15480F	18642	17426	12243	10000F	39		7	1	5	
Manuf. Fert. -56	92326	74806	81236	75000F	63408	48317*	20		555	123	421	500F
Pesticides 591	2503	1620	2647	1574	1630	1600F	6021	5855	8253	6801	5898-	5900F
Agr. Machines 721-722	16	16	79	64	55	60F	480	272	188	534	576	600F

Source: **Food and Agriculture Organisation Yearbook, 1994.**