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## Effects of Trade Liberalization on Agriculture in Vietnam: Institutional and Structural Aspects

Nguyen Trung Que

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The Regional Co-ordination Centre for Research and Development of Coarse Grains, Pulses, Roots and Tuber Crops in the Humid Tropics of Asia and the Pacific (CGPRT Centre) was established in 1981 as a subsidiary body of UN/ESCAP.

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In co-operation with ESCAP member countries, the Centre will initiate and promote research, training and dissemination of information on socio-economic and related aspects of CGPRT crops in Asia and the Pacific. In its activities, the Centre aims to serve the needs of institutions concerned with planning, research, extension and development in relation to CGPRT crop production, marketing and use.

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# Effects of Trade Liberalization on Agriculture in Vietnam: Institutional and Structural Aspects

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#### **WORKING PAPER 40**

## Effects of Trade Liberalization on Agriculture in Vietnam: Institutional and Structural Aspects

**Nguyen Trung Que** 

#### **CGPRT Centre**

Regional Co-ordination Centre for Research and Development of Coarse Grains, Pulses, Roots and Tuber Crops in the Humid Tropics of Asia and the Pacific

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### **Acronyms**

ASEAN Association of Southeast Asian Countries
APEC Asia Pacific Economic Co-operation

AFTA Asian Free Trade Areas

CGPRT Coarse Grain, Pulses, Roots and Tubers crops Center

CP in Vietnamese means the Government

CKD Complete Knock Down

GDC General Department of Custom GOS General Office of Statistics GDP Gross Domestic Product GAP Gross Agricultural Production

ESCAP Economic and Social Commission for Asia and the Pacific

EU European Union

FAO Food and Agricultural Organization

FOB Free on Board

IKD Incomplete Knock Down

HDBT in Vietnamese means Council of Ministers

KTTH The decision of Government for an inspect of situation

MOT Ministry of Trade

MARD Ministry of Agriculture and Rural Development

MPI Ministry of Planning and Investment

MOI Ministry of Industry MOF Ministry of Finance

MOTC Ministry of Transport and Communication

SOE State-Own Enterprises

SNG in Russian mean Union of Independent Governments (UIG)

TTg in Vietnamese mean Prime Minister TC-TCT The circular of Ministry of Finance

TTLB/TM-CN The circular interministerial Trade - Industry

UIG Union of Independent Governments (i.e. Former Soviet Union)

USD US Dollar

VNSB Vietnam State Bank VND Vietnamese Dong

WTO World Trade Organization

#### **Foreword**

Responding to the growing concern for the effects of trade liberalization on regional agriculture, the CGPRT Centre started a research project "Effects of Trade Liberalization on Agriculture in Selected Asian Countries with Special Focus on CGPRT Crops (TradeLib)" in March 1997, in collaboration with partners from ten countries: China, India, Indonesia, Japan, Malaysia, Pakistan, the Philippines, the Republic of Korea, Thailand and Vietnam. In all these countries, important issues regarding trade liberalization were investigated with an identical research framework by national experts.

The investigation covers major crops which might receive either favorable or unfavorable effects of trade liberalization both in export and import. I believe that readers of the reports can obtain broad and practical knowledge on institutional aspects of the effects of trade liberalization; moreover, the information will be useful for researchers and policy planners in other countries in the region. A volume which includes more commodity and location-oriented study on the same subject will follow. I would like to note that, since this project was conceived and started before the current currency and economic crisis began in the middle of 1997, the analysis handles basically the period before the crisis with possible current information.

I am pleased to publish **Effects of Trade Liberalization on Agriculture in Vietnam: Institutional and Structural Aspects** as one of the fruits of the project. I certainly hope this report will be fully utilized for the improvement of agricultural trade and the encouragement of regional agriculture.

I thank Dr. Nguyen Trung Que of Vietnam for his intensive research and the Agricultural Economics Institute for allowing him to work with us and for providing continuous support. Dr Boonjit Titapiwatanakun ably coordinated the various complex steps in the study. I would also like to express appreciation to the Government of Japan for funding the project.

Haruo Inagaki Director CGPRT Centre

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Hanoi, Vietnam 1998 Dr. Nguyen Trung Que Head of Planning and Science Office

### **Executive Summary**

Vietnam is an agricultural country with 80% of the population living in rural areas and 74% of its labor force engaged in agriculture. In recent years, under the implementation of economic structural adjustment, the agriculture of Vietnam has been diversely developed, with regard not only to production for domestic demand but also for export. The main exportable crops of Vietnam, rice, coffee, rubber, cashew nut, pepper, etc. have grown both in quantity, quality and export value. They have contributed considerably to Vietnam's economic development. Vietnam also has high potential for developing various exportable upland crops and root crops such as coffee, tea, rubber, groundnut and so on. Expansion of domestic, regional and world markets has impacted significantly on the promotion of agricultural production in the country. Furthermore, promotion of agriculture, including expansion of acreage under cultivation, increase of crop yield, enhancement of quality of primary products and development of the processing industry is the key motivation to expanding and sustaining market development. The Vietnam Government has clearly recognized this matter. Therefore, numerous directions, solutions as well as strategies are adopted, encouraging farmers and agents to promote agricultural production, creating possibilities for market expansion.

In recent years, the development towards trade liberalization in Vietnam has positively affected agricultural production. As a country of mono-crop agriculture based on primitive farming technology, Vietnam, step by step, has been shifting its self-sufficient agriculture to a more commercialized one serving both domestic and export markets. In 1997 Vietnam became the second biggest rice exporter in the world, with an export volume reaching 3.55 million tons or US\$ 870 million. Other upland crops such as coffee, rubber, groundnut, pepper and cashew nut have increased both in quantity and export value. In 1997 agriculture contributed 27.1% of total export value. The quality of exported agricultural products has been considerably enhanced. The export price of each product day by day has also been increasing. The markets for Vietnam's export agro-products have been expanding. There are many factors contributing to the above-mentioned results, the most important of which is that we have oriented towards the development of a market-based agriculture. The government has promulgated many policies encouraging households and enterprises to produce goods, free commodity circulation within the country and export to the region and the world market. The policies related with tax, investment, capital, infrastructure, etc. have been gradually and firmly improved in order to catch up with economic reality.

However, there are many constraints in the production of agricultural products for export: most agricultural products were exported in the form of raw materials with low quality. The processed products have not met the requirements of international markets yet, mainly due to of the obsolete processing technology. Therefore, the result is low selling price and profit.

The capacity to expand and maintain markets has also been very limited, because of lack of experience, export opportunities and limitation of marketing skills. Furthermore, Vietnam has not yet effectively integrated into the region and the world market. In addition, due to the recent economic crisis in ASEAN countries, the markets for Vietnam's agricultural products have become constrained.

#### Introduction

Vietnam is located in Southeast Asia and has a population of more than 75 million people. The natural land is 331,040 km<sup>2</sup>. The population density is 214 people per km<sup>2</sup>. Seventy-eight percent of the country's population live in rural areas and 21.6% live in urban areas. Vietnam is a monsoon tropical country and the annual mean temperature is 23-24°C with two typical seasons: a cold winter and a hot summer. The topography stretches along the Northto-South direction and has more than 3,000 km of coastline. Vietnam is an agricultural country with favorable soil and climatic conditions for development of a diverse agriculture. Since embarking on the national economic reform, Vietnam agriculture has achieved considerable progress. The agriculture progressively transformed from self-sufficiency to commercial production following the pressure of a market oriented economy. The operation of all economic sectors is treated equally by the law. Farm households have been recognized as independent economic units and bring into full play their potential, making a great contribution to the growth of the national economy and producing a great quantity of commodities for society. At present, the annual food output of Vietnam has reached 30.6 million tons, of which 27.5 million tons are paddy. Food output per capita is 400 kg/year. In 1997, Vietnam exported 3.6 million tons of rice and became the second biggest rice exporter in the world. Products such as coffee, rubber, tea, cashew nut, pepper, coconut, vegetables, fruits, and livestock are also important export commodities. The agro-products have generally met the demand of the increasingly expanded domestic markets. The export value of farm products is now more than US\$ 2.0 billion. This achievement greatly helps speed up the current reform program of the country. Since Vietnam decided to expand its import-export market, production has been stimulated, particularly the production of farm products in order to meet the demand for export and domestic consumption.

It is believed that the study on the expansion of markets for domestic production and export of agro-products is of paramount importance and exercises great impact on farmers producing raw materials. It also bears impact on the processing industry and its material and technical bases of production and the commercial sector.

This study covers some of the major crops that are, particularly important now and for the future. The report is divided into three main parts:

- assessment of the agricultural development process and the expansion of the commercial sector in Vietnam;
- description of impacts of commercial expansion on agricultural development; and
- assessment of the potential to increase production and expand international trade.

# 2. Assessment of the Impact of Agricultural Development on Commercial Expansion in Vietnam

During the period of economic reconstruction the Vietnamese agricultural sector has gained profound success, making a substantial contribution to the overall growth of the national economy. The diversification of agricultural production has brought about an increasing amount of goods for domestic consumption and export. In recent years, agriculture grew at a relatively stable rate of 4.5-5% per year. Food production has not only satisfied domestic demand, but also generated large surpluses for export with increasing quality. By the year 1997, annual food production of Vietnam amounted to 30.6 million tons (in paddy equivalent), of which paddy rice was 27.5 million tons. Annual per capita food production, therefore, reached around 400 kg. With 3.55 million tons of rice export (or US\$ 870 million of rice export value), now Vietnam has become the second biggest rice exporter of the world, and rice is the third largest commodity in the list of Vietnamese exported goods, behind only petroleum and garment products. In general, exports of agricultural products have increased notably (Table 2.1).

Table 2.1 Major agricultural exports in 1997.

Commodity	Quantity (tons)	Value (million US \$)
Coffee	389,311	490.83
Rubber	194,581	198.85
Peanut	83,332	47.90
Tea	32,292	49.90
Cashew nut	33,334	62.77
Vegetables and fruits	•	68.26

The total value of agricultural exports, therefore, is very impressive at US\$ 2.4 billion. Agricultural products of Vietnam have established their solid position in regional as well as in international markets.

#### **02.1** Performance of the crop sub-sector

Due to the natural endowment and climatic conditions affected by tropical monsoons, Vietnam has developed a diversified and multiple-cropping agriculture. The total crop sown area of 1995 accounts for 10.497 million ha, increased by 27.22% compared to that of 1980 (Table 2.2).

The crop sub-sector has focused on development of some main crops such as annual crops (87.88% of total area) and perennial crops (12.12% of the total). Amongst the annual food crops, cereals are predominant taking a high portion of 86.42%, of which paddy is the major crop with 84.87% of total area (or 6.766 million hectares sown area). Paddy is planted mainly in the Mekong River Delta and the Red River Delta, and its production is scattered over other regions throughout the country. Besides the main food crops, which are mostly concentrated on lowland areas with better water conditions, subsidiary crops have also been developed, especially on upland areas, including maize, potato and cassava. In addition, annual industrial crops cover over 700 thousand hectares, such as groundnut, sugarcane, tobacco, jute and so on, which serve as primary materials for the industrial sector. From 1988 up to now, the production of perennial industrial crops has increased rapidly, and their planting areas have expanded

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quickly from 760.1 thousand hectares in 1987 to 902.5 thousand hectares in 1995, an increase of 64.78%. It is estimated that in 1997 the sown area was about 1.2 million hectares. The main perennial industrial crops planted in the country are coffee, tea, rubber, cashew nut, pepper and oil crops. In recent years, vegetables, beans and fruit trees have also been rapidly developed in Vietnam.

Table 2.2 Sown area of crops ('000 ha).

			Annual Crop	os		Perennial Crops	
Year	Total	Total	Food	Industrial Crops	Total	Industrial Crops	Fruit Crops
1980	8,251.0	7,772.8	7,049.3	371.7	478.2	256.0	185.6
1981	8,316.0	7,769.5	6,984.2	415.5	546.7	260.2	245.6
1982	8,388.8	7,818.7	6,968.1	467.5	570.0	288.3	236.3
1983	8,282.3	7,671.8	6,775.2	523.0	610.5	333.5	224.2
1984	8,498.2	7,816.3	6,817.3	571.9	681.9	403.5	237.7
1985	8,556.8	7,840.3	6,833.6	600.7	716.5	477.6	217.7
1986	8,606.1	7,846.3	6,812.3	601.0	760.1	498.9	261.2
1987	8,641.7	7,789.0	6,709.9	637.6	852.7	574.7	278.0
1988	8,883.5	7,999.4	6,967.8	601.0	884.1	611.9	272.2
1989	8,978.2	8,071.3	7,089.6	543.7	906.8	625.1	281.7
1990	9,040.0	8,101.5	7,110.9	542.0	938.5	657.3	281.2
1991	9,409.7	8,475.1	7,448.0	578.7	934.6	662.7	271.9
1992	9,752.0	8,755.2	7,707.4	584.4	996.8	697.8	260.9
1993	9,978.7	8,894.0	7,796.7	598.9	1,085.7	778.5	296.0
1994	10,381.4	9,000.6	7,809.0	655.8	1,171.9	851.7	320.2
1995	10,496.9	9,224.4	7,971.9	717.3	1,272.5	902.5	346.4

Source: Statistical Yearbook 1996.

#### 2.1.1 Food crops

In Vietnam staple food crops consist of paddy rice, maize, sweet potato and cassava. The cultivated land for paddy is rather large (84.87% of the total food crops). The paddy rice here can have double or triple cropping a year and is mainly concentrated in the Mekong River and Red River Deltas. In 1997 food production of Vietnam reached 30.6 million tons (in paddy equivalent). Annual per capita food production averages 400 kg. In this year, the output of paddy alone amounted to 27.5 million tons. Yield of paddy in Vietnam is 3.7 tons per hectare, but in some paddy specialized areas it can reach 5.0-6.0 tons per hectare. Vietnam has widely applied many advanced technologies in agricultural production, so that the yield and the quality of Vietnamese paddy rice has progressively improved.

There has also been much progress with regard to the performance of subsidiary crops. Their sown areas increased substantially. In 1995, total sown area of subsidiary crops accounted for 5.074 million hectares, of which maize was 1.177 million hectares (or 23.20%), sweet potatoes 1.686 million hectares (33.20%), and cassava 2.212 million hectares (43.60%). The gross output of maize reached 556.8 thousand tons. The tendency of production of subsidiary crops in Vietnam is to concentrate on maize, with the guideline to further apply advanced technologies and high yield varieties and expand area so that annual production of maize can reach one million tons as required to promote animal husbandry. Due to their low efficiency, sown area of sweet potatoes and cassava have gradually declined.

Table 2.3 Sown area and gross output of paddy.

	Sown Area ('000 hectares)				Gross Output ('000 tons)			
Year	Total	Spring	Autumn	Winter	Total	Spring	Autumn	Winter

		paddy	paddy	paddy		paddy	paddy	paddy
1980	5,600.2	1,707.2	681.2	3,212.0	11 647.4	3,874.0	1,593.8	6,179.6
1981	5,651.9	1,638.0	618.5	3,395.4	12,415.2	4,172.7	1,489.3	6,753.2
1982	5,711.3	1,623.1	704.0	3,384.2	14,390.2	4,526.5	1,958.7	7,905.0
1983	5,611.0	1,649.8	674.1	3,287.1	14,743.3	5,134.2	2,193.9	7,415.2
1984	5,675.0	1,658.3	797.1	3,219.6	15,505.6	5,560.5	2,631.7	7,313.4
1985	5,703.9	1,765.0	856.6	3,082.3	15,874.8	6,191.3	2,855.3	6,828.2
1986	5,688.6	1,828.5	914.6	2,945.5	16,002.9	6,118.2	3,008.6	6,876.1
1987	5,588.5	1,840.1	892.0	2,856.4	15,102.6	5,499.4	2,529.4	7,073.8
1988	5,726.4	1,882.1	994.3	2,850.0	17,000.0	6,974.1	3,378.7	6,647.2
1989	5,895.8	1,992.3	1,140.3	2,763.2	18,996.3	7,539.3	4,063.2	7,393.8
1990	6,027.7	2,073.7	1,215.6	2,738.4	19,225.2	7,845.8	4,110.4	7,269.0
1991	6,302.7	2,159.7	1,383.5	2,759.8	19,621.9	6,788.3	4,717.5	8,116.1
1992	6,475.4	2,279.3	1,448.1	2,747.9	21,590.3	9,153.1	4,910.3	7,526.9
1993	6,559.4	2,325.7	1,549.2	2,684.5	22,836.5	9,035.6	5,633.1	8,167.8
1994	6,598.6	2,381.4	1,576.8	2,640.4	23,528.2	10,503.9	5,629.6	7,394.7
1995	6,765.6	2,421.3	1,742.4	2,601.9	24,963.7	10,736.6	6,500.8	7,726.3

Source: Statistical Yearbook 1996.

Table 2.4 Sown area ('000 ha) and gross output ('000 tons) of other food crops, 1995.

Year Maize		ze	Sweet Potatoes			sava
	Area	Output	Area	Output	Area	Output
1980	428.8	389.6	2,417.6	450.0	3,323.0	442.9
1985	587.1	397.3	1,777.7	320.0	2,939.8	335.0
1986	569.8	400.9	1,958.7	329.0	2,882.3	314.7
1987	561.0	405.6	2,202.3	332.2	2,738.4	298.9
1988	814.8	510.5	1,901.8	336.2	2,839.3	317.7
1989	837.9	509.4	1,909.2	327.3	2,585.4	284.6
1990	671.0	431.8	1,929.0	321.1	2,275.8	256.8
1991	672.0	447.6	2,137.3	356.1	2,454.9	273.2
1992	747.9	478.0	2,593.0	404.9	2,567.9	283.8
1993	882.2	496.5	2,404.8	387.1	2,450.0	278.0
1994	1,143.9	534.7	1,905.8	343.8	2,358.3	279.4
1995	1,177.2	556.8	1,685.7	304.6	2,211.5	277.5

Source: Statistical Yearbook 1996.

#### 2.1.2 Industrial crops

Industrial crops are classified into two major groups. The first group consists of perennial industrial crops such as coffee, rubber, tea, cashew nut, pepper and coconut. The second includes annual industrial crops such as groundnut, soybean, tobacco, sugarcane and rushes. During the last decade, perennial industrial crops were well developed, producing a variety of products for export and for domestic consumption.

In 1987 there were only 92.3 thousand hectares allocated to coffee production of both Robusta and Arabica varieties. But in 1996 the sown area of coffee reached 254 thousand hectares. It is estimated that in 1997 total sown area of coffee is likely to be 280 thousand hectares. Coffee production has been mainly concentrated in provinces of the Central Highland, such as Dak Lak, Lam Dong, Gia Lai. In Dak Lak province there are 180 thousand hectares of coffee. It is estimated that by the year 1997 the total gross output of coffee in Vietnam reached a level of 400 thousand tons of the coffee seed. The 1997 coffee export from the country amounted to 389,311 tons (or US\$ 491.83 million).

Rubber has been well developed in the Northeast South, while tea has been expanded more strongly in the North Mountain and Midland. Moreover, cashew nut, pepper, coconut and some others are also in the process of development, serving as commercial cash crops and bringing about foreign earnings. Annual industrial crops have been produced to supply primary materials for industrial sectors and handicraft industries. At present, there are more than 40 sugar refineries operating in Vietnam, of which 21 have just been established. Therefore, it is necessary to develop a base of sugarcane primary material in order to satisfy the demand for

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raw inputs of these local sugar refineries. Vietnam progressively promotes the application and dissemination of new sugarcane varieties with high quality and high yield, and tries to establish raw material producing areas in order to fulfill the goal of one million tons of sugar a year.

Table 2.5 Sown area, yield and gross output of main annual industrial crops.

Crop	1990	1991	1992	1993	1994	1995		
			Sown area (tho	usands ha)				
Cotton	8.3	16.1	19.2	11.5	13.2	17.5		
Jute	11.7	10.5	11.6	14.4	6.6	7.5		
Rushes	11.4	9.4	11.0	9.9	10.9	10.4		
Sugarcane	130.6	143.7	146.5	143.2	166.6	224.8		
Groundnut	201.4	210.9	217.3	217.2	248.2	259.9		
Soybean	110.0	101.1	97.3	120.1	132.0	121.1		
Tobacco	26.5	37.7	31.4	23.5	24.5	27.7		
			Yield (quir	Tield (quintal/ha)				
Cotton	4.0	5.1	6.6	4.4	6.6	7.3		
Jute	20.3	24.0	22.0	16.2	19.4	19.6		
Rushes	55.4	57.5	70.2	63.9	63.1	72.1		
Sugarcane	413.3	426.6	439.4	425.6	453.3	476.4		
Groundnut	10.6	11.1	10.4	11.9	11.9	12.8		
Soybean	7.9	7.9	8.2	8.7	9.4	10.3		
Tobacco	8.2	10.7	8.6	8.6	8.9	9.9		
			Gross output (the	ousand tons)				
Cotton	3.1	8.3	12.8	5.2	8.7	12.8		
Jute	23.8	25.3	25.7	23.4	12.8	14.8		
Rushes	63.3	54.4	77.2	69.5	69.1	75.6		
Sugarcane	5 397.6	6 130.9	6 437.0	6 083.2	7 550.1	10 711.2		
Groundnut	213.1	234.8	226.7	259.3	294.4	334.4		
Soybean	86.6	80.0	80.0	105.7	124.5	125.5		
Tobacco	21.8	36.2	27.3	20.3	21.7	27.7		

Source: Statistical Yearbook 1996.

#### 2.1.3 Vegetable and fruit crops

Vietnam has great competitive advantage for fruit crops. Owing to the different climatic and soil conditions between the country's regions, a diversity of different fruit crops/trees can be planted in Vietnam. Fruit crops with relatively large growing areas and high outputs are mango, litchi, longan, banana, pineapple, orange and so on. The planted area of fruit crops reached 356.4 thousand hectares in 1995. In addition to meeting domestic demand for consumption goods and raw materials, fruits are also exported to other countries.

In recent years the production of vegetables has become increasingly important for the country. The total area under vegetables is now approximately 400-500 thousand hectares, including both tropical vegetables and vegetables of temperate zones. The possibility of the growing vegetables the whole year around allows the agricultural sector to meet the domestic demand and export requirements. Major exported vegetables of Vietnam are pickled cucumber, chilly, garlic, spices and so on. In 1997, the total export value of vegetables and fruits reached US\$ 68.26 million.

Table 2.6 Sown area and gross output of perennial industrial crops.

Year	Tea (dry)	Coffee (seed)	Rubber	Pepper	Coconut
		Sown a	rea (thousand l	na)	
1980	46.9	22.5	87.7	0.5	68.6
1981	44.3	19.1	85.0	0.9	82.1
1982	48.3	19.8	94.4	1.2	90.5
1983	49.0	26.5	115.2	1.6	100.1
1984	49.4	29.4	148.4	1.9	118.6
1985	50.8	44.7	180.2	2.2	127.0
1986	58.1	65.6	202.0	3.9	157.7
1987	59.2	92.3	203.7	5.9	199.3
1988	59.1	111.9	210.5	7.6	210.6
1989	58.3	123.1	215.6	8.0	206.3
1990	60.0	119.3	221.7	9.2	212.3
1991	60.0	115.0	220.6	8.9	214.2
1992	62.9	103.7	212.4	6.4	204.1
1993	63.4	101.3	242.4	6.7	207.6
1994	67.3	123.9	258.4	6.5	182.5
1995	66.7	186.4	278.4	7.0	172.9
			tput (thousand		
1980	21.0	8.4	41.0	0.6	311.3
1981	21.2	4.6	43.6	0.8	349.1
1982	25.4	4.6	46.0	0.9	406.4
1983	24.6	5.0	47.2	1.1	517.7
1984	27.4	4.1	47.2	1.1	551.9
1985	28.2	12.3	47.9	1.3	611.8
1986	30.1	18.8	50.1	3.6	711.4
1987	29.0	20.5	51.7	4.8	790.9
1988	29.7	31.3	49.7	6.2	856.5
1989	30.2	40.8	50.6	7.1	922.1
1990	32.2	92.0	57.9	8.6	894.4
1991	33.1	100.0	64.4	8.9	1,052.5
1992	36.2	119.0	67.0	7.8	1,139.8
1992	37.7	136.0	96.9	7.8 7.4	1,139.8
1993	42.0	180.0	128.8	8.9	1,184.0
1994	40.2	218.0	128.8	9.3	1,078.2

Source: Statistical Yearbook 1996.

Table 2.7 Gross output of cultivation (billion dong in constant 1989 prices).

Year	Total	Food	Vegetables and	Industrial Crops	Fruit Crops
			Beans		
1985	9,389.7	6,238.2	621.0	1,377.6	837.1
1986	9,716.2	6,307.1	708.4	1,448.9	937.5
1987	9,508.4	6,053.1	720.2	1,527.5	926.7
1988	10,158.6	6,737.1	702.6	1,567.3	838.0
1989	10,940.3	7,402.3	756.7	1,544.9	903.1
1990	11,099.5	7,395.7	756.8	1,612.5	1,007.1
1991	11,511.7	7,541.9	755.5	1,913.3	966.8
1992	12,331.2	280.9	772.2	903.4	1,004.0
1993	13,185.7	8,747.2	823.6	2,158.2	1,064.0
1994	13,800.9	8,999.0	855.7	1,472.6	1,080.4
1995	14,785.6	9,430.6	941.5	2,907.5	1,109.5

Source: Statistical Yearbook 1996.

#### 12.2 Animal husbandry

The livestock sector has increased significantly and diversely, especially for animals and poultry such as buffaloes, cattle, pigs, horses, sheep, and goats, chicken and ducks.

Table 2.8 Livestock (thousand head) and poultry (million birds).

Year	Buffalo	Cattle	Pigs	Horse	Goats and Sheep	Poultry
1980	2,313.0	1,664.2	10,001.2	115.6	173.4	64.5
1981	2,380.3	1,771.7	10,493.4	118.6	196.5	69.9
1982	2,445.1	1,944.4	10,784.9	113.2	224.9	76.9
1983	2,500.2	2,173.5	11,201.9	122.0	271.8	82.6
1984	2,549.2	2,418.0	11,759.9	128.8	354.7	89.3
1985	2,590.2	2,597.6	11,807.5	132.7	402.6	91.2
1986	2,657.6	2,783.5	11,795.9	136.6	432.4	99.9
1987	2,752.7	2,979.1	12,050.8	136.0	413.8	96.0
1988	2,806.8	3,126.6	11,642.6	133.0	410.1	96.3
1989	2,871.3	3,201.7	12,217.3	142.2	387.5	104.8
1990	2,854.1	3,116.9	12,260.5	141.3	372.3	107.4
1991	2,858.6	3,135.6	12,194.3	133.7	312.5	109.0
1992	2,886.5	3,201.8	13,891.7	133.1	312.3	124.5
1993	2,960.8	3,333.0	14,873.9	132.9	353.0	133.4
1994	2,977.3	3,466.8	15,587.7	131.1	427.9	137.8
1995	2,962.8	3,638.9	16,306.4	126.8	550.5	142.1

Source: Statistical Yearbook 1996.

#### 2.2.1 Buffalo and cattle husbandry

Buffalo and cattle husbandry is expected to ensure two goals: first, they are used as draft power for production, and second, they are used to supply meat and foodstuff. The demand for cattle is particularly stimulated by a continued increase in the demand for beef and the rather favorable conditions for raising cattle.

#### 2.2.2 Pigs

Although pork production is found in many places throughout the country, it is mostly concentrated in the two large river deltas and in the Northeast South. Pig husbandry has been carried out in small-scale household farms to take full advantage of agricultural waste. The large-scale industrial-based production to produce high quality livestock products is still very limited, and the processing industry to supply processed meats and other livestock products for export is still undeveloped. The potential for pig production in Vietnam is very promising, but it has not yet been fully exploited.

#### 2.2.3 The gross value of animal production

In 1987 the gross output value of the livestock sector was about VND2925.6 billion, but by the year 1995 it reached VND4237.3 billion, at fixed 1989 prices (i.e. an increase of 44.84% in comparison with that of 1987). The highest proportion in the gross product of the sector is assigned to animal production. The present improved performance of the livestock sector is mainly due to an increase in the number of animals as well as in the application of advanced technologies and high quality breeds.

#### 22.3 Role of agriculture in economic development of the country

Diversification of agriculture plays an important role in the process of economic structural adjustment. As Vietnam is and continues to be an the agricultural economy, the agricultural sector has a very important position with regard to both sides, providing food for domestic consumption and producing goods for export. Vietnamese agricultural exports have rapidly expanded and some exported products have gained considerable positions in regional

and world markets. The general tendency of economic improvement in Vietnam during the period of 1995-1997 is illustrated by the relatively high annual growth rate of 9%.

Table 2.9 Gross output of livestock (billion dong in constant 1989 prices).

Year         Total         Livestock         Poultry         Non-Meat Product           1985         2,551.8         1,577.6         512.9         321.0           1986         2,824.3         1,784.7         528.6         259.7           1987         3,064.9         1,956.2         529.0         415.8           1988         2,925.6         1,832.3         555.6         381.1	
1986       2,824.3       1,784.7       528.6       259.7         1987       3,064.9       1,956.2       529.0       415.8	Year
1987 3,064.9 1,956.2 529.0 415.8	1985
, ,	1986
1988 2,925.6 1,832.3 555.6 381.1	1987
	1988
1989 3,129.1 1,982.9 595.6 390.8	1989
1990 3,223.9 2,027.0 615.3 418.4	1990
1991 3,227.3 2,000.2 617.7 448.0	1991
1992 3,641.6 2,261.2 691.2 518.1	1992
1993 3,847.0 2,418.1 707.2 542.1	1993
1994 4,055.3 2,613.5 713.4 544.9	1994
1995 4,237.3 2,712.2 736.1 605.1	1995

Source: Statistical Yearbook 1996.

Table 2.10 Export and import by economic sector and by commodity (million US \$).

	1990	1991	1992	1993	1994	1995
Total Export	2,404.0	2,087.1	2,580.7	2,985.2	4,054.3	5,448.9
Heavy industry and minerals	616.9	697.1	954.8	1,014.0	1,167.6	1,377.7
Light industry and handicraft	635.8	300.1	349.5	526.5	938.2	1,549.8
Agriculture	783.2	628.0	827.6	919.7	1,280.2	1,745.8
Forestry	126.5	175.5	140.8	97.5	111.6	153.9
Aquaculture	239.1	285.4	307.7	427.2	556.3	621.4
Others	2.4	1.0	0.3	0.2	0.3	0.3
Total Import	2,752.4	2,338.1	2,540.8	3,924.0	5,825.8	8,155.4
Means of production	2,342.6	2,102.8	2,119.8	3,311.2	4,788.6	6,807.2
Machinery and equipment	752.9	509.1	547.1	922.3	1,720.7	2,096.9
Fuels and raw materials	1,589.6	1,503.7	1,572.7	2,388.9	3.067.9	4,710.3
Consumer goods	409.8	325.2	420.9	612.8	1.037.2	1 348.2
Staple food	46.1	62.2	53.9	53.5	69.3	110.4
Foodstuff	68.2	75.8	86.2	152.3	170.4	289.1
Medical good	41.0	42.1	61.4	86.0	121.8	69.4
Others	254.5	145.1	219.4	321.0	675.7	879.3

Source: Statistical Yearbook 1996.

The shift in economic structure towards gradually reducing the proportion of agriculture and increasing the shares of industry and services has obviously taken place in the country during the last two decades. This is inevitable and a sound tendency of economic development. Under the economic reconstruction towards a market-based economy, Vietnamese agriculture has achieved comprehensive development oriented to a more rational economic structure with an increasing amount of high-quality commercialized products. Table 2.10 indicates that agriculture in Vietnam still plays an overwhelmingly important role in the national economy.

Table 2.11 Composition of GDP (% in constant 1989 prices).

	1991	1992	1993	1994	1995	1996
Total	100	100	100	100	100	100
Agriculture	39.20	38.63	37.12	35.44	34.00	32.47
Industry	23.10	24.24	25.38	26.59	27.66	28.95
Services	37.70	37.13	37.50	37.97	38.34	38.58

Source: Statistical Yearbook 1996.

#### 32.4 Conclusions concerning agricultural production in Vietnam

#### 2.4.1 The achievements

The implementation of a market-oriented structure has positively affected agricultural development in different aspects as follows:

- There has been gradual diversification of agriculture away from the rice single-cropping system, with active stimulation of the development of annual and perennial industrial crops such as coffee, tea, rubber, pepper, groundnut and sugarcane for domestic consumption and export. At the same time, the livestock sector has also been encouraged to develop, reaching a proportion over 27% of gross agricultural production.
- There has been intensification of agricultural production. With increased incentive to
  apply improved and advanced technologies so as to enhance productivity, the quality
  of agricultural products gradually strengthened the competitiveness of Vietnamese
  agricultural products in regional and world markets.
- The food security program was achieved by expanding the area and increasing the yield of rice and maize. Thirty million tons of total food production, therefore, was achieved creating a large surplus for export. With 3.6 million tons of rice exported currently, Vietnam has become the second biggest exporter.

Mobilization of resources and the potential of farm households in combination with state support has significantly improved infrastructure and the processing industry facilitating the development of commercial agriculture. Specialized production of some major agro-products has been established.

#### 2.4.2 The constraints and challenges

- In Vietnam agricultural production mainly relies on unskilled labor, and the level of
  mechanization is quite low; backward technologies in processing and storing products
  lead to big losses.
- Marketed agro-products are mostly in the form of raw materials and the processed products, moreover, have styles and packages that are not appropriate for domestic and foreign customers.
- Competitiveness of Vietnamese agro-products is still constrained, due to a series of
  factors with regard to quality of products, marketing capability and management,
  institutional framework and physical infrastructure, and other facilities, which are still
  of a low level.
- Lack of necessary capital investment in agricultural production means that farmers are
  incapable of avoiding or reducing the negative impacts of natural calamity on their
  farms. It makes agro-production a very risky business.

Table 2.12 GDP by economic sector (billion dong in constant 1989 prices).

	1991	1992	1993	1994	1995	Est.1996
Total	31.286	33.991	36,735	39,982	43,797	47,888
Agriculture-forestry-fishery	12,264	13,132	13,634	14,169	14,892	15,551
Agriculture alone	10,288	11,074	11,574	12,063	12,643	13,238
Industry and construction	7,228	8,242	9,324	10,631	12,113	13,861
Services	11,794	12,617	13,777	15,182	16,792	18,476
Trade alone	3,654	3,877	4,109	4,478	4,981	5,559

Source: Statistical Yearbook 1996.

Table 2.13 Index of the gross domestic product by economic activity (in constant 1989 prices; previous year = 100).

- ·						
	1991	1992	1993	1994	1995	Est. 1996
Total	106.0	108.6	108.1	108.8	109.5	109.3
Agriculture-forestry-fishery	102.2	107.1	103.8	103.9	105.1	104.4
Agriculture alone	101.7	107.6	104.5	104.2	104.8	104.7
Industry and construction	109.0	114.0	113.1	114.0	113.9	114.4
Services	108.3	107.0	109.2	110.2	110.6	110.0
Trade alone	104.8	106.1	106.0	109.0	111.2	11.6

Source: Statistical Yearbook 1996.

#### 42.5 State policy associated with the commercial sector

#### 2.5.1 The policy system and free market mechanisms

Before 1986, the trend toward the tree market mechanism was established. However, after the 6<sup>th</sup> Party Congress (1986), there was a turning point in the renovation of economic policy and mechanisms in general, and of market and commercial service sectors in particular. First of all, the decision 217/HDBT (Council of Ministers) dated 14/11/1987 officially reflects the trend toward the commodity economy, links production with the market, sets out the selfaccounting mechanism and confirms the objective unity of the overall social market, reduces the burden on price and commercial activities, regulates income and guarantees effective implementation of social policies. The decision 193/HDBT 23/12/1988 confirms the role of state control over planning and policy, creating the environment and corridor for the operation of production units, and limiting intervention into various types of production and business. The decision also permits all the economic components to run business on legal commodities and creates equal conditions in accessing bank loans, opening banking accounts and hiring labor by enterprises. The 6<sup>th</sup> Conference of the Communist Party (Plenary Session 6) recognized that the national domestic market is a united institution which serves both as the basis and object for planning. Decision 197/HDBT dated 12/12/1989 decided to transform a central direct plan into an indirect guidance plan. The resolution of the 7<sup>th</sup> Party Congress in 1991 provided the prerequisites for the development of market and commercial services following the liberalization mechanism applied with "one business price" (free market price). The resolution also provides the right to carry out a multiple-component commercial policy, abolishes the barriers in commodity circulation and encourages economic joint ventures and a multilateral and diversified commercial sector.

For import and export, Decree 114/HDBT issued on 7 April 1992, that was later replaced by Decree 33/CP dated 19 April 1994 aimed at renovating the state-owned enterprises in import and export with a view to guaranteeing consistent state management in import and export and relaxing the management mechanism to encourage export in difficult areas, expanding the right to take part directly in export for production enterprises, updating the tariff and taxation system as well as management tools to meet the demand of the reality and in accordance with international regulations. Decree 35/CP issued on 25 April 1994 confirmed the policy of free goods circulation according to the current legal status, reorganized the market management and took steps in the struggle against smuggling and speculation. Decree 02/CP issued on 5 Jan. 1995 provided rules on prohibited and conditional commodities and services.

#### 2.5.2 Policy system and mechanism regulating overall supply-demand

Constantly carrying out a policy of liberalizing commodity circulation following market prices so that the market can freely regulate itself proved to be the most active and dynamic measure in regulating the supply-demand pattern. In addition, the state concentrates on balancing the quantity of important commodities through the plan to allocate to the key

enterprises a major amount while the rest should be regulated by the market itself. Such a transitional mechanism applied to the important commodities is suitable for some years to come. The state has already paid attention to the accumulation of national reserves for the important commodities. Besides currency-commodity balances, the state also provides loans to business enterprises to handle the essential commodities during the harvest period, utilizes the price-stabilizing fund to support the state run trading enterprises in buying commodities for reserve or distributing commodities among the regions and supporting circulation to the mountain areas in order to stabilize the market, price and the supply of essential goods.

Decision 193/HDBT indicates the policy system and management mechanism for the market components (state-owned and private). Over be last 6 years, a great number of legal documents were promulgated to provide the legal conditions for maintaining the business operation of different economic sectors. An environment that creates equality for competition among enterprises in the market has been established. The state-owned commercial enterprises have been rearranged and, step by step, subsidies were abolished, self-governing rights in running businesses were expanded, shifting from the command-planned mechanism to directive planning and financial independence along with enforced obligations to the state.

For import and export, the monetary policy (banking and pricing system, foreign exchange rate, interest rate, and taxation) is regarded as a very important management tool in regulating the international trade balance.

The banking system has also been reorganized. The functions of the central bank and the commercial banks were formerly included in the function of the State Bank. The provision of loans was decided by the State Planning Committee rather than by commercial banks. However, since the promulgation of decision 218/CT of 3 July 1987 and Decree 53/HDBT of 26 March 1988 by the Chairman of the Minister Council, specialized banks began to be separated from the Central Bank, which used to be called the "one level format" and began to run loan provision services. These business banks, however, are not called real commercial banks. In May 1990, the Vietnam State Council issued two important decrees defining "State Bank" and "Bank, Credit Co-operative and Financial Companies". The banking organization has thus been restructured from a one level to a two level bank. There is a clear cut difference between the function of the State to manage the operation of monetary and credit policies and the function of running monetary and credit policies following the principles of self-accounting by the commercial banks. The banking operation has undergone fundamental changes, from merely providing loans to state-owned enterprises (SOE), to expanding their services to all economic sectors. The structure of credit investment has been renovated through strengthening the provision of loans to encourage commodity production and export, in which long and medium term loans are provided for the major industrialization program and basic construction investment. This will help the sector quickly upgrade the existing equipment and facilities, renovate the technology and finally speed up the industrialization and modernization program of the country. The banking sector also expanded the relationship with international organizations and strengthened the relationship with the central level and commercial banks in order to attract more support for funding, technologies, training of banking officials, and exchanging work experiences on monetary control and banking operations in the market economy. The banking system has constructed and operated an active monetary policy flexibly suited to reality, guaranteed to increase the annual currency supply in order to catch up with the economic growth rate and step by step control over inflation. The relation between the monetary policy and the national budget policy has been harmoniously regulated to halt the monetary compensation for state budget deficits. Special attention has also been provided to establish and effectively carry out policies of interest, credit, management of foreign currency and regulation of the exchange rate. These are considered the key factors in the monetary policy.

Since late 1988, Vietnam started carrying out a comprehensive pricing reform and a commercial liberalization. The state abolished most of the prices applied to farm products and input materials that used to be managed by the state. The foreign exchange rate was reunified and left floating. The interest rate of savings and lending loans was increased. This means that the state let the price be self-regulated according to market realities. This may lead to a higher rate of inflation but, at least, it guaranteed the market operational capacity. Along with this measure, the state is seeking ways to reduce the total amount of money circulating in the market in order to cut down inflation and stabilize the money value. These measures have helped prevent super-inflation, stabilize the national economy, create the conditions for free trading and make the market rich in commodities. Prices often reflect the real scarcity of commodities or maintain the competition in production as well as in trading that is considered a strong push to more effective development of the economy. Before 1989, Vietnam's economy applied multiple exchange rates: the trading exchange rate (the official exchange rate was established by agreement between the Vietnam government and members of the former Council of Mutual Economic Assistance and was usually fixed), the free trade exchange rate (specifically applied to non-trade transactions such as diplomatic, student training, overseas Vietnamese. This rate was closer to the market exchange rate than the official exchange rate. The rate, however remained fixed for a long period of time); and the internal exchange rate (only applied to the state import-export companies). In the latter case, due to the high value set for the Vietnam dong against other currencies, the additional input cost is very high for import and export commodities. It is beyond the companies' capacity. Finally, there was a the spontaneous market exchange rate.

The biggest harm caused by multiple exchange rates is that it limits import and export capacity, damages the value of the domestic currency, increases the inflation rate and complicates the accounting system. The Vietnam dong then lost value and the economy plunged into a state of super-inflation (in 1989, inflation reached almost 700%). In such a situation, in March 1989, the Vietnam government abolished the state subsidy through an exchange rate to be established for the commercial operation. For the unconvertible money sector (sector I) in 1991, use of the rubble (Russian money), which was used for exchange trading, was abolished. All commercial payments between Vietnam and member countries in the Council of Mutual Economic Assistance were undertaken through the US dollar. The policy of a floating exchange rate and the policy for export decentralization and partial liberalization of the imports have brought about positive changes in trading operations and international balance of payment. Exports were strongly increased. The import and export balance was almost in equilibrium in 1991. To manage the trading activities in a liberalized commercial environment, the state issued a series of decisions to control foreign exchange in an effort to concentrate foreign currency in the state's hand. When the banking system was not strong enough, the state established two Foreign Exchange Centers in Ho Chi Minh City and in Hanoi with a network of treasury and gemstone trading transactions to control the price, monitor inflation and manage the exchange rate. Also in 1989, the power to fix the exchange rate by the Council of Ministers was authorized to the foreign trade banks to announce the daily exchange rate based on actual changes in the market.

Since the beginning of 1989, the Vietnam Government declared a basic amendment in the bank interest policy. It was the first time there was discrimination between real interest and nominal interest. The nominal interest consists of the real interest and the inflation rate. The increase of interest rate made the domestic currency more attractive and stimulated capital import. By increasing the interest rate, the banking institutions helped stabilize the money value in the foreign exchange market. However, an increase of savings interest should be done at the same time with the increase of lending interest so as to prevent a delay in the circulation of the money bought in the commercial banks. This will guarantee the constant long-term operation of the banks. There appears now a trend to decrease the interest rate for both savings and loans in

order to encourage borrowing by production and trading enterprises. The interest on foreign currency has also been increased to the same level as for domestic currency to encourage capital import.

#### 2.5.3 Fiscal policy

The system of tax and fee policies was issued and has been amended since 1990. The improvement of tax collection and management has helped obtain an increase in taxes and fees collected (tax/fee collection in 1994 increased 3.7 times compared to 1991).

Taxes and fees have become the main source of national revenue and state budget (making up more than 90% of the revenue). In import and export, the control over tax policy plays a vital role in maintaining the traditional market, encouraging the opening of new markets, protecting domestic products and stimulating the expansion of commodities that have comparative advantages to other regional countries. In addition to the Law on Export and Import Tax approved by the National Assembly and experiences in import and export control over the previous years, on 28 February 1994, the Prime Minister (PM) enacted Decision 78/TTg (Prime Minister) to provide guidance for the control of import and export activities. This is a legal document for the central and local authorities to study and work out policies and management measures to control import-export activities to maximize exports and strictly control imports. On 26 July 1994 the Ministry of Finance issued Decision 624/TC-TCT listing the items to be managed by the State and taxes to be enforced for the imported commodities, revising the floor price for exported commodities and ceiling prices for imported commodities, changing the tax rates and added charges applied to commodities that apply to specific periods of the year. Since then these annual legal basics have constantly been in effect. However, since 1995 these legal basics are often enacted at the end of the previous year by government and ministries to help enterprises invest in their production, arrange the organizational structure and operational network, research markets, and sign contracts so as to achieve high efficiency in trading. On 28 July1995, Vietnam officially became a member of ASEAN and on 18 December 1995 the Government issued Decision 91/CP (Government) on the list of commodities to carry out Common Effective Preferential Tax (CEPT) of ASEAN countries in 1996. On 27 December 1995, the Prime Minister issued Decision 96/CP and 97/CP guiding the implementation of the Law on Revenue Tax, Law on Consumption Tax and the guide to the amendment to these two laws. On 22 May 1997, Chairman Le Duc Anh signed the Law of Value Added Tax and the Law on Business Income Tax. These two laws will take effect on 1 January 1999.

One important issue in the reform program of the import and export tax and fee system is to rearrange the structure of taxes suitable for each type of tax and fee and for international practices, expand the scope of collection, stipulate the tax rates rationally in order to encourage enterprises and the population to further intensify investment and apply advanced technology. This will lead to application of a one-level tax charged on revenue obtained by both enterprises that have domestic investment and those that have foreign investment. The tax and tariff system should be reformed in accordance with the specific conditions of Vietnam, especially when Vietnam becomes a member of ASEAN, APEC, and WTO.

The import and export tax should be continuously altered to protect to some extent domestic produced commodities, encourage the production of processed export commodities and reduce the export of raw materials. The taxmen and tax agencies mainly provide guidance and inspect the tax collection. There is also a need to set up a unit, which in collaboration with the state legal agencies, guarantees strict implementation of the tax law.

#### 2.5.4 Commodity policy and the regulation of import and export in 1997

The prime Minister's Decision 28/TTg (Prime Minister) dated 13 January 1997 on commodity policy and the regulation of imports and exports set forth the following articles:

- Article I, which approves the list of commodity items for circulation in 1997 with appendices for: (i) the list of goods and commodities that are not allowed for import and export; (ii) the list of import and export commodities that have to be controlled in quantity; (iii) the list of goods and commodities according to the management regulations; and (iv) the list of goods and commodities affecting the balance of national economy.
- Article II, which approves the quota for import and export and the mechanism of control over the items to be managed in quantity in 1997, i.e. textiles and rice exports. Textile and garment items for export follow the agreement signed between Vietnam and EU, Canada, Norway and Turkey. The allocation of export quota must be provided according to the provisions of the Inter-Ministerial Circulation of the Ministry of Trade and Ministry of Industry, number 13-TTLB/TM-CN dated 19 September 1996.
  On exported rice, the Ministry of Trade will guarantee the export of 2.5 million tons of rice. Rice export quota shall be decided according to the different periods: the first period is from the beginning of the year to September 1997. The quota is approximately 2 million tons. The remaining amount will be decided by the Ministry of Trade (MOT) and Ministry of Agriculture and Rural Development (MARD) depending on the real status of the crop harvest. The organization of exports is now based on the Regulation declared in 1996. The readjustment to this Regulation will be decided by the PM in form of a specific decision.
- Article III regulates the major import items that impact on the national economy balances, i.e. oil and petrol and fertilizer. The MOT is responsible for importing around 6.5 million tons of oil and petrol (excluding the raw quantity imported for reexporting). The import quota is declared at the beginning of the year and passed to the key state import enterprises, in which the General Company for Fuel Import is given 60% of the quota. Any changes to the petrol and oil import regarding the amount imported shall be submitted to the PM through the Ministry of Planning and Investment (MPI) for the consideration and further decision. The Government Pricing Committee collaborates with the concerned ministries and branches to follow up the situation of the oil market and to consult with the PM to adjust the floor price if necessary in order to help stabilize the oil-petrol price in market.
  - The Ministry of Trade is charged with supervising fertilizer imports based on the following principles. It guarantees the import of around 1.5 million tons of urea and other chemical fertilizers requested by MARD. After reaching an agreement with the Ministry of Industry (MOI) on the existing amount of fertilizer in the whole country, MARD is responsible for informing MOT of the amount need to be imported for each crop or region. This provides a basis for MOT's supervision. The General Company for Agricultural Input Supply and the General Company for Cereal Import, Export in MARD are authorized to import 50% of the demand of urea and other chemical fertilizer including a quantity for reserve as decided by the PM. These two companies are responsible for importing the required amount without passing on the quota to other enterprises. These two companies have to inform MARD and MOT of any problem arising from the import for resettlement. The remaining import of urea and other chemical fertilizer (50%) is allocated to other import companies based on their actual financial and import organizational capacities. These companies should have imported the same input items in 1996. MOT will announce the list of these enterprises at the beginning of the year. The Vietnam State Bank directs commercial banks, as necessary, to guarantee the late payment of import enterprises following strict procedures for foreign borrowing and payment.
- Article IV states that construction materials such as cement, clinker, sugar, steel, iron, glass, and paper should be mainly produced in the country. For these commodities,

MPI is authorized to hold discussions with the line Ministries to balance production plans in the country and specify any additional amount to be imported. Based on this, MOT, MPI and the concerned production units design the principles for controlling the import. When market prices fluctuate, the Governmental Pricing Committee will chair discussions with the concerned Ministries and Branches for an agreement and submit this to the PM to take immediate action to stabilize the market, readjust taxes and financial/credit measures and the use of reserves.

- Article V concerns importing consumer goods. To protect the domestic production and to effectively utilize foreign currency sources requires limiting import of items that are unnecessary or unsuitable for the current level of living standard of the population or that are adequately produced in the country. MPI, MOT and the concerned production agencies will identify the list of limited-imported commodities. MOF then timely regulates the import-export tax as well as minimizes the issuing of import licenses. The State Bank of Vietnam, the General Department of Custom (GDC), MOT and MOF are particularly requested to carry out various tasks. They should reduce as a as possible the import level of consumer goods that apply the type of late payment, inspect and strictly control shops that sell foreign consumer goods especially items such as soft drinks, beer, alcohol and cosmetic. The MOF should regularly collaborate with GDC in inspecting and readjusting the tax rates and tax levels to avoid loss to the state budget. The MOT directs market management bodies to inspect and monitor the selling prices as applied by selling agents (including Vietnam-Foreign Joint Ventures) for items imported into Vietnam. This helps in making recommendations to MOF for regulating the taxes associated with the consignors and the importers.
- Article VI concerns the import of vehicles, two-wheel motorbikes and auto spare-parts. For trucks, buses and other machinery equipment the Decree of 29 May 1995 specifies the real need of vehicles for 1996. MPI chaired the discussion with Ministry of Transport and Communication (MOTC) and MOT to quantify the import. This provides the basis for MOT to supervise the import. An import of around 3,000 units is planned for vehicles with less than 12 seats and for two wheel motorbikes, 350,000 units.

There is no limit on the import of spare-parts used in assembling for export.

For spare-parts to be assembled for the domestic demand, there are no limits on the number of vehicles to be assembled following the CKD2 standard (including welding, electro-static painting in Vietnam) and two wheel motorbikes to be installed following the IKD standard. MPI supervises and encourages the assembling factories to speed up the installation of vehicles and motorbikes following the investment law and economic-technical justification. For motorbikes installed by inland factories, MOI (Ministry of Industry) will inspect the status of performance according to the Decision 5397/KTTH dated 30 September 1994 issued by the PM and make specific recommendations to the PM in February 1997. If these factories are permitted to continue their installation, the number of imported motorbikes shall be calculated in complete sets and be decided by MOT.

• Article VII states that the import of complete sets of machines, equipment using the state budget, the import of technology, machinery spare-parts, the import of second-hand machines and vehicles, and the import of commodities to be managed by the respective sector shall be implemented following current regulations of the PM and the concerned ministries and branches. The MOT is responsible for review of regulations and documents issued by the concerned ministries and branches that are related to monitoring import and export activities so as to guarantee agreeable management among themselves without causing any trouble to the firms and enterprises. If conflicts

- arise, the MOT will negotiate with the concerned ministries and branches or report to the PM for resettlement.
- Article VIII authorizes the Minister of MOT to discuss with the concerned ministries to reach agreement on various policies in order to quickly increase export. Business enterprises in different forms in various economic sectors and with licenses for direct import and export are encouraged to export the items listed in the registration licenses, except items controlled by specific regulations. The MOT set up a fund that supports direct export by producers of some major commodities. The fund will be voluntarily contributed to by the members of the Export Association, and will expand the forms of commodity insurance in business and production sectors. The MOT advises on designing the rules for establishment and operation of a Client Association that aims to protect the rights of producers and business persons and the rights of business enterprises operating in different economic sectors. This association will provide conditions and capacity for its membership to collaborate in export activities and replace the existing export brokers.
- Article IX authorizes the MPI to negotiate an agreement with MOT, MF, State Bank
  of Vietnam and General Department of Customs (GDC) on design of inter-sector
  regulations, to ensure the financial capacity of enterprises relating to the key
  commodity items so as to effectively regulate export activities following the model set
  up in 1997.
- **Article X** assigns GDC to discuss with MOT concerning imports of non-trade commodities to be effective from March 1997.
- Article XI gives GDC responsibility to submit to MOT, General Office of Statistics (GOS), MPI, MOF, VNSB and Governmental Office every 10 days the data recording export and import quantities. These statistics on imports should be reached by agreement among GDC, MOT, MPI and VNSB before they are officially announced by GOS.
- Article XII makes the Minister of MOT in collaboration with the concerned ministries
  and branches responsible for issuing specific guidance for the implementation of this
  Decision.
- Article XIII states that this Decision will take the effect from 1 January 1997 to 31
  March 1998. During the supervising process, MOT will follow up and generalize the
  comments from ministries, branches and local authorities and report to the Prime
  Minister the proposed policies to regulate the provisions if necessary.
- Article XIV makes Ministers from different Ministries, the Heads of concerned bodies, Heads of institutions under the Governmental Office, the Chairmen of Provincial People's Committees and cities responsible for implementing this Decision.

## 3. The Impact of Commercial Expansion on the Development of Agriculture

#### 3.1 Achievements recorded in the commercial expansion program

In the program of economic reform, Vietnam has been carrying out various policies including the policy for trade expansion in order to speed up the growth rate of the national economy, as was discussed in the previous chapter. It is these policies that have provided strong impacts on agriculture production and created many remarkable successes.

Table 3.1 GDP of the agricultural sector (billion VND at current prices).

	1991	1992	1993	1994	1995	1996
Total agriculture	31,058	37,573	40,796	48,865	63,219	70,334
Agriculture	27,061	32,573	34,737	41,838	53,713	59,892
Forestry	1,75	1,815	2,052	2,205	2,842	3,050
Aquaculture	2,272	3,125	4,007	4,762	6,664	7,392

Source: Statistical Yearbook 1996.

Table 3.2 GDP structure in the agricultural sector (%).

	1991	1992	1993	1994	1995	1996
Total agriculture	100.00	100.00	100.00	100.00	100.00	100.00
Agriculture	87.13	86.83	85.15	85.62	84.96	85.15
Forestry	5.55	4.84	5.03	4.64	4.50	4.34
Aquaculture	7.32	8.33	9.82	9.74	10.54	10.51

Source: Statistical Yearbook 1996.

The agricultural sector (crop farming and livestock) occupies more than 85% of the GDP of 3 sub-sectors (agriculture, forestry and aquaculture). The sector accounts for 23% of the national GDP. Over the years, Vietnam's agriculture has been comprehensively developed, particularly in the crop farming and livestock sector. The development of agriculture helps create sufficient of commodities for home consumption and for export. This development also partially promotes the expansion of markets and exports of the country. The share in national exports by the agriculture sector is increasing.

Table 3.3 Total export value by sector (US\$ million).

	1990	1991	1992	1993	1994	1995	1996
National export	2,404.0	2,087.1	2,580.7	2,985.2	4,054.3	5,448.9	7,255.8
Mineral/heavy industry	616.9	697.1	954.8	1,014.0	1,167.6	1,377.7	n.a.
Light industry/handycraft	635.8	300.1	349.5	526.5	938.2	1,549.8	n.a.
Agriculture	783.2	628.0	827.6	919.7	1,280.2	1,745.8	2,200.0
Annual growth rate %		-19.82	31.78	11.13	39.20	36.37	26.02
Forestry	126.5	175.5	140.8	97.5	111.6	153.9	n.a.
Fishery/aquaculture	239.1	285.4	307.7	427.2	556.3	621.4	n.a.
Others	2.4	1.0	0.3	0.2	0.3	0.3	n.a.

Source: Statistical Yearbook 1996.

## 3.2 Production of some major products under the commercial expansion program

Before 1981, Vietnam imported 0.5 million tons of rice annually to meet the demand of domestic consumption. Vietnam then started to export coffee, rubber, groundnut, tea, vegetables and fruits to Eastern Europe and the former Soviet Union. Since embarking on the economic reform program, many positive factors have helped to promote agricultural development. Vietnam is also committed to expanding domestic and international markets.

After satisfying the needs of the country, a portion of the food is exported to other countries. The food for export is now increasing, improved in quality and diversified in items. This is indicated through some of the following commodities.

#### 3.2.1 Rice

The cropped land in Vietnam is expanding. In 1980, the country had only 8,251 thousand hectares but now the area has increased to 10,911.40 thousand hectares (1996), of which the land under food crops is 8,217.60 hectares. The paddy land is estimated at 7,020.7 thousand hectares and the yield increased from 3.19 tons/hectare in 1990 to approximately 3.7 tons/hectare in 1997. The rice output reached 11.65 million tons in 1990 and increased to 27.6 million tons in 1997. Each year, Vietnam produces one more million ton of paddy. Table 3.4 indicates the constant growth of rice exports.

Year	Quantity (million tons)
1990	1.624
1991	1.033
1992	1.953
1993	1.722
1994	1.983
1995	2.100
1996	3.040
1997	3.550

Table 3.4 Rice exports from Vietnam 1990-1997.

As the second biggest rice exporter in the world, Vietnam's rice export is a huge source of foreign currency for the country. In 1996, the rice export value was up to US\$ 850 million ranking second among the important export commodities, just after oil. In the early 1990s, rice for export only included the surplus amount produced in the self-sufficient mechanism with a low quality. There was a lack of markets for rice export. Investment was not made to upgrade the processing technology and the export price was thus much lower than Thailand's price by approximately US\$ 100/ton. After a short period of time studying the world rice market, progress were made by the country. Together with the advanced technologies introduced into production, high quality rice was also imported meeting the demand of the customers. Vietnam rice exporters began to secure permanent clients. The gap in rice price was only US\$ 20-30/ton compared with Thailand. The data show clear progress in rice export and this opens up a new prospect for Vietnam rice exporters.

#### 3.2.2 Coffee

Vietnam's climate is favorable for developing coffee. The crop is mainly planted in the Central Highland, Southeast region and on the Central part of the country. The area of coffee plantations has expanded over the years. In 1991, coffee was planted on 100,000 ha. By 1997, the area had increased to 240,000 ha. The fresh coffee yield is recorded at more than 2.2 ton/ha.

The production of dry coffee is 360,000 tons, of which 10,000 tons are for domestic consumption.

Table 3.5 The export prices of rice for 1989-1997 (US\$).

	1989	1990	1991	1992	1993	1994	1995	1996	1997
Price per ton (US\$)	204.0	187.8	227.7	219.7	220.4	204.5	272.3	284.8	242.1
Total value of export	289.7	305.0	235.0	429.1	379.5	405.5	550.5	865.8	n.a.
(US\$ million)									

Source: Statistical Yearbook 1996.

Table 3.6 Coffee export.

	1990	1993	1994	1995	1996	1997
Export volume ('000 tons)	90	130	179	210	283	404
Export value (US\$ million)	n.a.	150	200	519	550	n.a.
Export price (US\$/ton)	1,032	741	1,197	2,633	1,818	1,265

Source: Statistical Yearbook 1996.

In the period of 1990-1997, the coffee export volume increased by 4.5 times. This shows rapid progress in exporting coffee. The quality of Vietnam coffee is considered high by customers in the world market. At present, the country is exporting coffee to more than 20 countries and has become the second biggest exporter in Asia and the sixth biggest exporter in the world.

The international coffee price has constantly decreased since the late 1980s and early 1990s since the supply exceeds the demand. The price of US\$ 1,200 ton in 1985 dropped to just US\$ 680-800 in 1992. Many countries began to reduce their coffee area. In Brazil, because of the damage caused by fog in 1994, the world coffee output declined sharply. The World Coffee Association after that passed a treaty to promote coffee storage and to reduce the export. The world coffee price again soared up from US\$ 1,000 per ton in 1993 to more than US\$ 4,000/ton in 1994 and US\$ 2,500-3,000/ton in 1995. By the end of 1995, world coffee production was again restored. The coffee in storage began to be redistributed through selling-out, and because of the huge quantity to be sold, the coffee price was reduced to present level of US\$ 1,300 - 1,500 per ton. The price of Vietnam coffee was also affected.

#### **3.2.3** Rubber

Rubber was planted in Vietnam almost 100 years ago and can be developed in the Southeast and the Central Highland of the country. Rubber is also planted in the North of Vietnam. In 1991, the area was only 89,885 ha and now it has expanded to 303,000 ha. The dry latex output reached 146,000 tons with the yield of 8 tons per hectare. Around 15-20% of the rubber produced is consumed in the Vietnam market. The remaining is for export.

Table 3.7 Rubber exports 1990-1997.

	-							
Year	1990	1991	1992	1993	1994	1995	1996	1997
Quantity ('000 tons)	75.9	62.9	81.9	96.7	135.5	138.1	194.0	197.0

Vietnam has exported rubber dry latex and processed rubber wood to SNG (Union of Independent Governments, i.e. some countries of the former Soviet Union), Eastern Europe, Taiwan, China and some other countries. The price of rubber latex is US\$ 800-900/ton. The world demand for dry latex is expected to increase to around 7.5 million tons per year. However, such demand is presently satisfied by only 5.9 million tons. FAO estimates that in the year 2000, the rubber price will be around US\$1,000/ton. Rubber in Vietnam is planted not only

#### Chapter 3

for export but also for environment protection and for providing jobs for people. The area under rubber is expected to increase in the coming years.

#### 3.2.4 Tea

Tea can be developed in many areas of the country and is concentrated in the Northern Mountain and midland areas, in provinces like Lam Dong and Gia Lai (Central Highland). Although greater area is potentially available, the crop is still planted on only a limited area.

Table 3.8 Tea area and production.

	1980	1990	1991	1992	1993	1994	1995	1996
Area ('000 ha)	49.9	60.0	60.0	62.9	63.4	67.3	66.7	74.7
Production ('000 ton dry bud)	21.0	32.2	33.1	36.2	37.7	42.0	40.2	46.8

In the recent years, tea area and its productivity have slowly increased. During 1980 - 1996, the tea area increased by 60% and the output increased by 122%. Vietnam has a relatively big market for tea consumption. Vietnam also has a traditional market for tea export: the former Soviet Union. The current export reaches 15-18 thousand tons of dry bud per year. In Vietnam, tea is processed mainly with equipment imported from the former Soviet Union (60%). The remaining quantity is processed in the traditional way and this reduces the product quality such that it can not meet the demand of the market. In general, the tea sector has developed slowly.

Vietnam has expanded its tea exports to Iraq, Russia, Britain, Algeria, and Poland. Recently, Vietnamese tea was also exported to Japan, Taiwan, Hong Kong, Egypt, France, America, Belgium and Libya. However, the exported quantity only accounts for a small proportion in the world export market because of the poor quality. The unit price is lower than the world price. In 1994, the price of Vietnam tea was US\$ 1,250 per ton (dry bud) compared with the world price of US\$ 1,800 per ton. The tea price in 1995 was US\$ 1,314 per ton, while the world price was US\$ 1,430 per ton. For 1997, Vietnam plans to export 24-25 thousand tons of dry tea at a price of US\$ 1,400-1,500 per ton.

#### 3.2.5 Cashew nut

Cashew nut can be planted on poor land and has strong resistance to drought as seen in areas of the Southeast region and provinces in Southern Central. Over the last 10 years, cashew nut has been listed as a high economic value crop. In 1980, the country planted 30,000 hectares of cashew nut. The area was later expanded to 250 thousand hectares in 1996 with a total output of 122.07 thousand tons of nuts. The export value reached US\$ 120 million in 1996, ranking fourth in the list of the country's exported farm products.

Table 3.9 Export volume of cashew nut ('000 tons).

1990	1991	1992	1993	1994	1995
27.4	30.7	51.7	47.7	81.3	99.0

#### 3.2.6 Groundnut

Groundnut is a short-term crop and has become an important export crop in Vietnam. Groundnut can be planted in most of the regions of the country, but for high quality groundnut, areas such as Northern Central and Bac Giang province are the most suitable places for planting.

Table 3.10 Area, yield, and production of groundnut.

	1990	1991	1992	1993	1994	1995	1996	1997
Area ('000 ha)	201.4	210.9	217.3	217.2	248.2	259.9	262.7	n.a.
Yield (ton/ha)	1.06	1.11	1.04	1.19	1.19	1.28	1.36	n.a.
Production ('000 t)	213.1	234.8	226.7	259.3	294.4	334.4	357.7	n.a.
Export ('000 t)	70.7	78.9	62.8	105.4	119.2	111.0	127	84

Groundnut has largely been planted on sandy soils and marginal areas with two crops a year. However, in most of the localities only one groundnut crop is grown in rotation with other crops. In Vietnam, there are two regions where groundnut can be planted for export: the north of the former 4th zone and the Northern Midland (Bac Giang, Vinh Phu and Thai Nguyen provinces). Groundnut in these regions has larger seeds and a thin shell and thus meets the requirements for export. In the Central Highland and Southeast region, groundnut is generally well developed but mostly for domestic consumption due to lower quality. Beside the traditional market (UIG: former Soviet Union), groundnut is also exported to other countries. The export price of groundnut is usually unstable. Shelled groundnut of grade I sells for US\$ 800-1,200/ton while unshelled groundnut costs around US\$ 680-800/ton. In the peak year, the groundnut export reached US\$ 900 million, ranking fourth among agricultural commodity exports.

#### 3.2.7 Fruits and vegetables

Vietnam has favorable conditions to develop the production of vegetables and fruit trees, which is now satisfying the increasing and critical demand of Vietnamese people. A large quantity of fruits and vegetables has also been exported.

The annual production of fruits and vegetables is estimated at 2.6 million and 3.5 million tons, respectively. However, only 1,500 tons of vegetables and 6,000 tons of fruits are exported.

In 1995, the vegetable area was 328 thousand ha, and its production reached to 4.1 million tons. The area has been quickly expanded. On average, during 1991-1995 the area under vegetables annually increased by 5.1%. The annual average yield of vegetables was recorded at 1.26 tons per ha. The annual compound growth rate of vegetable production was 6.6% in the same period.

The area for fruit trees has also expanded. In 1991, 272 thousand ha of fruit trees were planted. In 1995, the figure jumped to 346.4 thousand ha and in 1997 to 370 thousand ha. The major fruit trees include litchi, longan, banana, plum and apricot in the North; mango, pineapple, banana, oranges, mandarin, longan in the South; and dragon fruit, pineapple, and oranges in the Central region.

In 1994, fruit output reached to 2.6 million tons, in 1995 2.7 million tons and in 1997, 3.2 million tons. As these products are difficult to store, they are basically consumed in the country. Only a small quantity is for export. Before 1990, Vietnamese fruits and vegetables were mainly exported to the former Soviet Union, accounting for 98%. The remaining 2% was exported to other countries. In 1995, only 22% of fruits and vegetables was exported to Russia and 78% to other countries.

During 1994-1996, fruit and vegetable export prices did not fluctuate sharply (except straw mushroom and spices). Canned fruits and vegetables were exported at a FOB price of US\$ 830/ton in 1994. In 1995, the price was up to US\$ 870/ton and in 1996 it was US\$ 856/ton. The dried and salted fruits exported to Russia fetched US\$ 1,200-1,300/ton. The following are export prices of some of the fruit items are given in Table 3.11.

Table 3.11 Export prices (US \$/ton) of some vegetables and fruits.

Year	Straw Mushroom	Salted Cucumber	Spices
1994	1,000	424	1,746
1995	875	570	1,809
1996	940	588	2,654

In Vietnam, the conditions of land, climate and human resources are very favorable for the development of fruit trees and vegetables. However, the production still requires a sustainable market and a modern processing industry.

#### 3.2.8 Livestock and meat production

Apart from the rapid growth of cultivation, livestock husbandry in Vietnam has also improved significantly to satisfy the increasing domestic demand for meat, eggs, milk, etc., and to increase the income of farmers as well as to motivate crop production. The major animals being raised in the country are buffalo, cattle, pigs, horses, goats and poultry of different kinds. The value of livestock husbandry accounts for about 27% of gross agricultural production (GAP) over the last few years. The current consumption of meat per capita is approximately 9.6 kg, of which 70 to 80% is pork.

In 1997 for the whole country, there were 17.8 million pigs, 3.8 million cattle (including 23 thousand cows), 2.99 million buffaloes and about 160 million poultry with a total liveweight of 1.52 million tons (from which 1.2 million tons belongs to pigs). Since 1990, the average growth rate of pig production in terms of head and live-weight has been recorded at 5.7% and 5.9%, respectively.

Meat in Vietnam is produced mainly for domestic consumption with rather low prices of about VND 9-11 thousand per kilogram due to the consumers' low income. Consequently, Vietnamese pig production is regarded as a low-profit or loss-making business. Obviously, if animal husbandry relies only on domestic demand, it cannot quickly develop as required because of limited purchasing power of the population and a supply surplus over the demand which reduces the price and makes production unprofitable.

It is, therefore, very important to establish export-oriented livestock production in the country. However, the export market of meat for Vietnam is still limited to only certain countries such as Russia, Hong Kong and Singapore. The amount of meat exported tends to decrease from 25 thousand tons in 1991 to 6 thousand tons in 1995 and even to 5 thousand tons in 1997. Moreover, the export prices for meat are not high enough to encourage domestic producers. For instance, export prices for pork meat, according to the different categories, are about US\$ 1,500 - 1,900 per ton.

In general, the pork export for the country has faced a number of difficulties and challenges:

- Export markets for Vietnamese pork tend to be quite small and unstable;
- The quality of meat produced in Vietnam is still low, and fails to meet the requirements of foreign consumers. There is a high proportion of fat, low proportion of lean in meat and few processed products from livestock meats;
- The high costs of meat production, marketing, distribution and processing may result in less profitable or loss-making meat production for export;
- The present level of processing technology is still backward;
- Vietnam has not yet joined the International Agreement on Animal Health.

# 3.3 Export performance of agricultural products in Vietnam

After nearly ten years of renovation of market mechanisms, Vietnam has gained farreaching achievements in socio-economic development. Especially in agriculture, Vietnam has transformed its highly subsistent agriculture into a more commercialized agricultural production satisfying basic domestic needs as well as export of agricultural products and obtaining an important position in the regional and the world market (such as rice, coffee, tea and rubber). However, it is necessary to note that in order to effectively promote an export-oriented economy, including agriculture, imports should also be increased so as to satisfy the necessary requirements of domestic production and consumption, to strengthen the relationship with outside communities and accelerate the process of the country's integration into regional and international markets. Only by doing so we can quickly develop our economy.

Table 3.12 Some major indicators of export and import in Vietnam (US\$ million).

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Total value of export	1,652.8	2,555.9	5,156.4	4,425.2	5121.4	6,909.2	9,880.1	1,3604	1,8400	2,0050
and import										
Export	338.6	698.5	2,404.0	2,087.1	2580.7	2,985.2	4,054.3	5,448.9	7,255.8	8,850
Import	1,314.2	1,857.4	2,752.4	2,338.1	2540.7	3,924.0	5,825.8	8,155.4	1,1144	1,1200
Export-import balance	-975.6	-1,158.9	-348.4	-251.0	40.0	-938.8	-1,771.5	-2,706.5	-3,888.2	-2,356
Agricultural exports	n.a.	247.0	783.2	628.0	827.6	919.7	1,280.2	1,745.8	2,200.0	2,400
Exports of agriculture,	n.a.	n.a.	1,148.8	1,088.9	1276.1	1,444.4	1,948.1	2,521.1	2951	3,240
forestry and fishery										
Agricultural imports	n.a.	n.a.	114.3	138.0	146.1	205.8	239.7	399.5	n.a.	n.a.
food (rice, maize,	n.a.	n.a.	46.1	62.2	53.9	53.5	69.3	110.4	n.a.	n.a.
cassava and sweet										
potato)										
Foodstuff	n.a.	n.a.	68.2	75.8	86.2	152.3	170.4	289.1	n.a.	n.a.
Non-agricultural	n.a.	n.a.	1,255.1	998.2	1304.6	1,540.7	2,106.1	2,927.8	n.a.	n.a.
export										

Source: General Statistical Office.

Vietnam's total foreign trade turnover has grown at a rapidly increasing rate during the period. (Table 3.13). Over ten years (1980-1990) under the old centrally planned system, the export value of Vietnam increased 3.12 times. However, during the period of 1997-1990 the total value of trade increased big, 3.89 times. The year 1990 marked a phenomenal change in Vietnam's export and its value increased 7.09 times compared to that of 1980. From 1990 to 1993, the growth rate of the export was almost unchanged, which could be explained by the collapse of Vietnam's traditional markets in the former Soviet Union and Eastern Europe. Owing to the new policies implemented by the government towards a more opened economy and trade deregulation and diversification, Vietnam's export developed considerably during 1994-1997.

Table 3.13 Growth indices of Vietnam's trade (base year = 1).

	1990/1980	1997/1990	1997/1980
Total foreign trade	3.12	3.89	12.13
Exports	7.09	3.68	26.10
Imports	2.09	4.07	8.52

Source: General Statistical Office.

With regard to the import, its total value increased 2.09 times in 1990 as compared to 1980, 8.5 times in 1997 as compared to 1990, and 4.07 times in 1995 as compared to 1980.

Export of agricultural products (excluding fishery and forestry) has grown rapidly in recent years. The export of 1990 compared to that of 1985 increased 3.15 times, and a 9.71

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times increase in the export was seen in 1997 compared to 1985. From 1994 up to the present Vietnam has attained its highest growth in agricultural export, with an annual average rate of increase of about 27.5%. However, it should be noted that in recent years the export of agricultural products tended to have a declining rate due to the difficulty of growth, in relative terms, for a larger scale of trade. Moreover, during recent years there was a serious fluctuation in the world prices of agricultural products that negatively affected Vietnam' export sector. Regarding the proportion in total export value, agriculture appeared to remain as the most important sector contributing to the national export.

Table 3.14 The share of agriculture, forestry and fishery in the national total value of export (%).

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture forestry and fishery	56.7	65.0	63.4	56.5	52.3	46.0	52.2	49.4	48.4	48.0	51.0	40.7	36.6
Agriculture alone	35.4	35.6	30.1	32.1	30.8	35.6	30.1	32.1	30.8	31.6	32.0	30.3	27.1

Source: Statistical Yearbook 1996.

Despite being under the strong influence of a wide range of various factors, the extended agriculture (including forestry and fishery) has been and still remains the most important sector contributing to the gross value of national exports with its average share of more than 50%. Among them agricultural products account for more than 30% of total value of national export. In recent years (1995, 1996 and 1997) the exports of major export agricultural commodities such as rice, coffee, rubber, groundnut, cashew nut, and tea have grown significantly in terms of quantity and quality. At the same time, the export prices for these products were unstable and tended to go down. Because of poor experience and low managerial skill in trade activities, the export turnover of the country is still increasing to some extent but at a decreasing rate. In addition, during recent years Vietnam has adopted a strategy of promoting joint ventures with foreign partners. As a result, the number of enterprises/companies with foreign investment soared during the years. In 1996 these firms produced for export more than US\$ 786 million, accounting for about 10.83% of the national total export value, and in 1997 these figures were US\$ 1,500 million and 16.95%, respectively. Thus the agricultural sector is still developing and has a promising future.

## 3.4 Imports

Commodity imports are, perhaps, indispensable for most countries including Vietnam, where they serve as an important additional source to meet the requirements of economic and social life of the people, especially when the domestic supply is short. Moreover, Vietnam has undergone rapid economic development at a very high growth rate of GDP at 9-10% annual increase, which is considered a high indicator compared to that of other countries in the region. In terms of gross product, Vietnam's industry increased at 13.5-14% annually, while the service sector annually increased at 9-10%, and agriculture by about at 4-4.5%. To satisfy the demand of domestic production, it is important to promote and expand import activities.

The rapid increase of Vietnam's imports during recent years resulted in a significantly growing deficit of trade balance. However, some years experienced decreases of trade deficits. In 1992, the trade deficit was about US\$ 40 million, lower than that of 1985 by 48.18%. In the period from 1993 to 1997, the ratio of trade deficit over total export was rather high. The highest ratio was seen as 53.59% in 1996, and the lowest one was 26.55% in 1997.

Table 3.15 Trade balance and ratio, 1980-1997.

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Value of import (US\$ million)	1,314	1,857	2,752	2,338	2,541	3,924	5,826	8,155	11,144	11,200
Trade deficit (US\$ million)	976	1,159	348	257	40	939	1,772	2,706	3,888	2,350
Ratio of trade deficit over total	281	166	14.5	12.0	-1.5	31.5	31.6	49.7	53.6	2,6.6
export (%)										-

Source: Statistical Yearbook 1996.

Vietnam's trade balance, therefore, has faced quite a lot of difficulties. This trade deficit was mainly due to the increasing import of manufactured production inputs as well as consumer goods. However, the amount of imported agricultural products from other countries appeared to be relatively small amongst other imported commodities.

Table 3.16 Proportion of agro-imports.

	1990	1991	1992	1993	1994	1995
Import of agro-products (food	114.3	138.0	140.1	205.8	239.7	399.5
and foodstuff) (million \$)						
Ratio of imported agro-products	4.15	5.90	5.51	5.24	4.11	4.90
over total imports (%)						
Ratio of imported agro-products	4.75	6.61	5.43	6.90	5.91	7.33
over total agro-exports (%)						

From this situation, it can be concluded that the higher growth rate of imports over that of exports induced the growing trade deficit in the country during recent years. The share of this deficit in the total value of exports was high. The non-agricultural products account for about 93-95% of total import, which reflects the fact that Vietnam's agriculture has its relative advantages.

# 3.5 Construction of infrastructure

To support the successful adoption of a new economic mechanism towards developing a market-oriented economy, the construction of infrastructure is considered as the most essential developmental measure. In recent years Vietnam has invested to a great extent in infrastructure related to all almost aspects: industry, transportation, harbors, airports, electricity, irrigation, telecommunication, etc.

Table 3.17 State capital investment outlays by sector (VND billions at price of 1989).

Sector	1990	1991	1992	1993	1994	1995
Total	2,145.8	2,383.0	3,333.2	5,898.4	5,729.8	5,559.8
Industry	812.0	1,029.0	1,604.7	3,243.8	2,130.0	1,700.2
Construction	12.2	18.5	25.1	20.4	106.2	133.1
Agriculture	324.7	325.6	370.0	425.2	437.2	536.7
Forestry	42.3	47.3	52.1	97.4	99.6	105.0
Transportation	352.0	398.2	620.5	665.3	837.4	1,035.5
Post service	77.2	91.4	119.7	644.2	443.1	770.1
Trade	60.0	58.7	21.7	65.1	148.6	123.5
Others	465.4	414.3	519.4	737.0	1,527.7	1,155.7

Vietnam has indeed been transforming its subsistence agricultural economy into a more market-oriented one during the last decade. During this transition the government has paid great attention to construction and upgrading of infrastructure.

During the last three years a great amount of the state budget was invested in this area: in 1993 VND 5898.4 billion (or 16.03% of GDP) was spent for infrastructure. In 1995 the

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investment was 5,559.8 billion dong or about 11.61% of GDP. The funds invested in infrastructure increased 2.59 time between 1990 and 1997. It is important to note that investment has focused on the most critical areas: industry, agriculture, transportation, postal service and telecommunication, trade and construction. These are the sectors that strongly affect the current economic transformation in Vietnam and facilitate commercialization

Table 3.18 Structure of state investment for major sectors (%).

Sector	1990	1991	1992	1993	1994	1995
Total	100.00	100.0	100.0	100.0	100.0	100.0
Industry	37.84	43.18	48.14	54.99	37.17	30.58
Construction	0.57	0.78	0.75	0.35	1.85	2.39
Agriculture	15.13	13.66	11.10	7.21	7.63	9.65
Forestry	1.97	1.98	1.56	1.65	1.74	1.89
Transportation	16.40	16.71	18.62	11.28	14.61	18.62
Post service	3.60	3.84	3.59	10.92	7.73	13.85
Trade	2.80	2.46	0.65	1.10	2.59	2.22
Others	21.69	17.39	15.58	12.49	26.66	20.79

Source: Statistical Yearbook 1996.

There are 16 most important sectors to be provided with state capital investment. Among these industry accounted for 54.98% of the total state investment in 1993. The lowest level of the total state investment allocated to the industry was 30.58% in 1997. The transportation sector, which consists of roads, waterways, railway networks, harbors, stations, airports as well as equipment reached its highest proportion of 18.62% in 1977, and the lowest of 11.28% in total investment in 1993. In recent years, the post service and telecommunications gained special attention from the government, and the state investment assigned to it amounted to 13.85% in 1997. The lowest proportion of investment to the post service and telecommunications was 7.73% in 1994. For the agriculture, its highest proportion in total state investment was about 9.65% in 1997, and its lowest was in 1993 (7.21%). The trade and construction sectors, each account for around 2% of total state investment outlays. The rest had smaller shares in the structure of state investment.

Table 3.19 Capital investment for construction and equipment.

Sector	Total	Construction and Assembling	Machinery and Equipment	Other
Industry:				
billion dong (1995 price)	7,022.20	3,331.50	2,185.40	1,505.30
percentage	100.00	47.44	31.12	21.44
Agriculture:				
billion dong (1995 price)	2,216.50	1,924.70	42.80	249.00
percentage	100.00	86.84	1.93	11.23
Transport:				
billion dong (1995 price)	4,276.70	3,418.70	57.20	800.80
percentage	100.00	79.94	1.34	18.72
Trading sector:				
billion dong (1995 price)	510.00	350.1	148.90	11.00
Domestic trade	492.90	338.81	144.00	10.10
International trade	17.10	11.3	4.92	0.90
percentage	100.00	68.63	29.20	2.17

Source: Statistical Yearbook 1996.

The promotion of trade activities has accelerated the construction of infrastructure and therefore facilitates production. On the other hand, the development of production creates favorable conditions for expansion of trade activities. The state investment outlays have

concentrated mainly on construction and assembling and machinery and equipment so as to enhance the production capacity.

A large proportion of state investments was allocated to construction and assembly work and machinery and equipment. In particular, in agriculture and transport activities this proportion accounts for 80% of the state investment. In the transport sector in 1995 90% of the state outlay was spent on construction of roads and upgrading the national highways No 1 and No 5.

## 3.6 Income increase for people

Under the new policies of reconstruction the economy has been liberalized and developed at relatively high speed. Products of different types were freely circulated within the domestic market and outside the country. Because of these new favorable conditions, many large-scale specialized zones for commodity production have been established such as coffee in the Central Highland (most coffee is produced in Dak Lak and Lam Dong provinces), tea in the Northern Mountain and Midland, rice in the Mekong River Delta and the Red River Delta, rubber in the Southeast region, etc.

Owing to the development of commodity production, the average per capita income in the regions has also increased considerably.

, , ,		,			
Region	1994	1995	1996	1995/94	1996/95
National average	168.11	206.10	226.70	122.60	110.00
1. North Mountain and Midland	132.36	160.65	173.76	121.37	108.16
2. Red River Delta	163.34	201.18	223.30	123.17	111.00
3. North Central Coast	133.00	160.21	174.05	120.46	108.64
4. South Central Coast	144.72	176.03	194.66	121.63	110.58
<ol><li>Central Highlands</li></ol>	197.15	241.14	265.60	122.31	11014
6. Southeast Region	275.34	338.91	378.05	123.09	111.55
7. Mekong River Delta	181.65	221.96	242.31	122.19	109.17

Table 3.20 Monthly average per capita income (in VND thousand) by region.

The data from the whole country and by socio-ecological regions presented in Table 3.20 demonstrate the fact that during the course of economic renovation different groups of people in the country has been better off. In 1995 compared with 1994 per capita income increased by 22%, and in 1996 compared with 1995 the average increase of per capita income was about 10%. In regions specialized in cultivation of rice, coffee, rubber and cashew nut there is a great number of better-off households earning income of hundred of million dong per year. The income of these households tends to be ten times or higher than that of the poor ones.

# 3.7 Conclusions concerning the recent liberalization of production and trade in Vietnam

As already mentioned, under the renovation mechanism, the restrictions on trade within the country were abolished (since 1988), and production for export was promoted enormously. Vietnam has indeed gradually been integrated into the world community. It joined ASEAN recently and is preparing to participate in APEC and WTO in the coming years. This is an essential change for the development of Vietnam. However, the country has faced various constraints and challenges in its renovation process. Vietnam has to speed up the growth rate and diversify economic activities so as to produce more commodities with increasing quality to improve its international competitiveness. At the same time it has to fundamentally improve the technological capacity for further development of the economy.

The policies of economic renovation implemented by the government of Vietnam have played a vital role in developing the national economy during the last decade. The country has reached a phenomenal economic growth rate of 13.5-14.0% per year. Agriculture has also increased annually by 4.0-4.5%. From self-sufficiency, agriculture has been transformed into a more commercialized and market-oriented one.

During the period of transition Vietnam's economic structure also changed considerably, from the traditional structure of "agriculture-services-industry" (40.5-35.7-23.8% in 1991) to a new more advanced pattern "services-industry-agriculture (42.6-31.7-25.7% in 1996). Consequently, new driving forces have been formed to develop the economy.

The new policies and laws for economic liberalization in Vietnam have speeded up export-import activities, facilitating integration into world markets. Agriculture has also made progress and many large-scale zones for specialized production of agricultural products have emerged since the start of renovation. The exports of some agricultural products of Vietnam have indeed occupied an important position in the region as well as in the international market, such as rice of the Mekong River Delta, coffee of the Central Highlands, and rubber and cashew nut of the Southeast region. The total export performance of the entire country has increased relatively quickly: 7.19 times in 1998 compared with 1990. In the period 1993-1997 agricultural production recorded some spectacular growth rates, with the highest level of 39% and the lowest of 9%. It is important to note that from a chronic food importer with annual import of 0.5 million tons to cover the food shortage in the country, now Vietnam has not only sufficient food for the domestic demand but also a surplus for export. In 1997 Vietnam became the world's second largest rice exporter with 3.6 million tons of rice, the fourth-largest coffee exporter, etc. Today Vietnam has established trade relationships with all continents and exports its products to 16 countries of Asia, 20 countries of Europe, 2 countries of Africa and 2 countries of the Australian continent and Pacific Ocean as well as imports goods from 15 countries of Asia, 23 countries of Europe, 3 countries of Africa, 2 countries of Australian continent and Pacific Ocean, and from various international organizations.

With regard to the export of agricultural products Vietnam has concentrated not only on traditional markets such as the former Soviet Union and Eastern Europe but also on almost 40 countries of all continents around the world.

The expansion of commercial production and trade liberalization based on encouraging development of a multi-sector economy has brought into full play producers' resources such as land, labor, capital, working skills, adoption of advanced technologies and information to produce greater amounts of products with better quality for export. The agricultural export, therefore, has increased steadily at an annual average growth rate of 22% during the period of 1993-1997 (excluding forestry and fishery). In 1997, per capita export performance reached US\$ 110. The life of farmers has, thus, improved considerably and their level of income also increased by 10-20% in the last three years. In addition, for the majority of the population in the specialized production zones, life has obviously improved in terms of food supply, clothing, shelter, communication and education.

To accelerate export-import activities and develop the domestic markets, Vietnam has focused on basic construction of major strategic economic branches to expand production, enhance product quality and mobilize untapped potential. Vietnam's investment has concentrated on the development of industry, agriculture, transport, post services and telecommunication and trade and construction, etc. In less than ten years the face of rural and urban communities has changed quickly. The infrastructure has been constructed and upgraded including the road network, harbors (Hai Phong, Sai Gon, Da Nang, Vung Tau, Nha Trang, Cai Lan, and Dung Quat) and airports as well as the railway system. In particular, the telecommunication system in Vietnam has almost reached an international standard with an average of two telephones per 100 families. These great successes are attributed to the

reciprocal effect between production promotion and infrastructure development, which mutually facilitate each other.

In Vietnam, trading business as a profession has improved significantly in terms of managerial, operational, and organizational capacity. To some extent, the legacy of the former centrally-planned economy has constrained Vietnam's commerce to adapt to new circumstances of the market-based mechanism. Nonetheless, in the process of trade liberalization all the commercial institutions have to operate according to market mechanisms, participate in competition and take all responsibility for their behavior and resulting outcomes. Today, apart from SOE (state owned enterprises), there are many other private firms and public limited companies in Vietnam.

Table 3.21 Retail sales of general trade (market share by sector).

Sector	19	080	19	85	19	90	19	95
	VND	%	VND	%	VND	%	VND	%
	billion		billion		billion		billion	
Total	2.40	100.0	65.1	100.0	19,031	100.0	121,160	100.0
SOE	0.70	29.2	26.5	40.7	5,789	30.4	27,367	22.6
Collective	0.20	8.3	8.4	12.9	519	2.7	1,060	0.9
Private	1.50	62.5	30.2	46.4	12,723	66.9	92,733	76.5

Source: Statistical Yearbook 1996.

Since 1985, the state has played a key role in trading activities, especially in importexport and wholesale trade. It has occupied the dominant position. The delivery of goods to the ultimate consumer has mainly been carried out by the private sector. To survive and develop in more competitive markets, traders' management capacity and marketing skills have been improved.

#### 3.8 Difficulties and constraints

Vietnam has enjoyed phenomenal success in the past decade of renovation. However, there are various difficulties and constraints that it has to overcome so as to sustain economic development in the coming years.

The material and technological bases for economic branches are generally quite weak, particularly in isolated/remote and mountainous areas where the potential for expanding agricultural production is still underexploited. Development of the infrastructure, electricity, transport system, clean water supply, and communication in these areas requires a huge amount of resources which the country can not satisfy so far.

Processing and storage technologies of agricultural products and warehouses have not met the requirements to increase the quality of products for export. At present the majority of agricultural products has been exported as raw materials with low quality, which hardly satisfies the requirements of foreign buyers and consequently these products have relatively low selling prices. The adoption of advanced technologies into the production (new crop varieties and animal breeds with high yield and high quality), and the technologies for enhancing product quality should be studied and adopted in production.

To participate effective in international organizations such as ASEAN, APEC, WTO and other organizations, Vietnam must not only develop production itself in terms of reducing production costs, enhancing product quality so as to secure its competitiveness, but also improve the managerial capacity of commodity producers to run the business healthily. The system of organization for production, product assembling, processing and marketing has many weaknesses that need to be gradually addressed. Production and trade should be more

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liberalized, and policies which create more incentives for all economic sectors to be involved in exports should also be designed.

Vietnam has little experience and skill in exploring new markets for its products as well as in effectively exploiting its domestic markets. The investment for this task in a systematic manner is still slight in terms of human resources (skills, knowledge), equipment, information facilities, etc.

The government should prudently develop its policy and legal framework to facilitate the implementation and improvement of foreign investments, joint ventures, financial and credit services, tariff system, etc. in order to have appropriate conditions to participate in free trade.

# 4. The Potential to Increase Production and Expand International Trade

# 4.1 The potential for production of farm products

Vietnam still has great potential for production of farm products. Land resources are available for development of cultivation of both annual and perennial crops. The labor force is sufficient and the climatic conditions are favorable to intensify farming and increase the crop plantations. At present, investment has been made to improve the infrastructure bases that serve production and the expansion of trade. Vietnam has participated in and is participating in the activities of some regional and world commercial organizations such as AFTA, APEC, and WTO. With the present resources, capacities and achievements, the Vietnamese government's policies for the period of 1998 - 2000 and 2010 are as follows:

- Promote production of commodities to meet the demand of domestic consumption and export; improve the economic efficiency in commodity production with a view to strengthening the competitive capacity in world markets and raise economic efficiency in exports.
- Highly develop processing industries; strengthen construction of infrastructure bases in order to actively support the improvement of product quality.
- Foster the application of advanced technologies to create more high quality products to meet the requirement of the markets.
- Gradually construct and improve a network of policies, the legislation system to facilitate commercial expansion such as increasing the export volume, foreign investment, encouraging the economic components/sectors to participate in trading and export activities. The improvement is also required for the policies of finance, taxation (including import, export taxes), banking and the state budget support.

In agricultural production, from now to the year 2000 and 2010, the strategy is to further develop agriculture on the basis of sustainable ecology, diversified production, an integration of agriculture, forestry and processing industries so as to speed up the industrialization and modernization program, quickly increase the quantity and quality of farm products to meet the demand of the domestic consumption and export with a high economic efficiency and improve the life of population and contribute to rural development. Starting from these strategies, MARD has worked out its own goals and major indicators for the period 1998 - 2000 - 2010 (Table 4.1).

The objectives are:

- Guarantee national food security.
- Increase commercial production in the agricultural sector from the present rate of 25% to 30% in the year 2000 and 40% in 2010.
- Increase the export value of farm products from US\$ 2.4 billion to US\$ 4.0 billion in the year 2000 and US\$ 9 10 billion by 2010, making the export value per capita increase from US\$ 41 to US \$60 by the year 2000 and US\$ 140 in 2010.
- Further strengthen the role and position of Vietnamese agriculture in the region and worldwide.

Table 4.1 Some major indicators of production and export of farm products.

	19	98	20	00	2010	)
	Total	Export	Total	Export	Total	Export
1. Agric. growth rate (%)	4.5-4.7		4.5-4.7		4.0-4.5	
2. Major products:						
Food in rice equivalent (million tons)	31.0	3.5-4.0	32.0	4.0	38.0-40.0	4.0
Meat (liveweight) ('000 tons)	1,700	50	2000	200	4,000	1,000
Coffee seed (tons)	380-400	360-370	400-450	380-400	500-550	450-500
Rubber dry latex (tons)	180-190	160	200-220	180	350-380	300
Tea dry bud (tons)	50	30-35	70	40-45	150-180	125-150
Vegetables (tons)	5,000	50	6,000	100	10,000	1,000
Fruits (tons)	4,000	100	5,000	300	10,000	1,000
Sugar (tons)	600		1,000		1,500-1,600	
Cashew nut (tons)	40	35	50	40	120	100
Oil plants						
Coconut (tons)	1,200	250	1,500	300	2,000	400
Groundnut (tons)	350	250	400	300	500	400
3. Export value (US\$ billion)		2.7-2.8		4.0		9-10

# 4.2 The major solutions to meet the objectives

#### 4.2.1 Food crops

To fulfill the plan of exporting 3 - 4 million tons of rice per year in the years to come, Vietnam needs to take the following steps:

- Intensify of the existing area of paddy, invest in expanding the cultivated land through land exclamation and increase of cropping intensity in the areas that are still rich in resources; build up the rice production areas for export, which are estimated at 1.3 million ha in the Mekong River Delta and 300,000 ha in the Red River Delta; produce every year around 13-14 million tons of high quality rice, of which 7 8 million tons is for export.
- Develop and multiply high quality varieties to meet the demand of production.
- Build up the maize production areas in the Red River Delta, the Northern Mountain
  and the Midland, the Mekong River Delta, the Southeast region, the Central Highland
  with a total area of 1 million ha, which is estimated to return a production of 5-6
  million tons of commercial maize.
- Invest in processing and storage to upgrade existing warehouses, and the milling and polishing network in service to export.
- Invest in construction of product drying units in the Mekong River Delta and other areas where a large amount of rice can be produced.
- Expand the markets and the number of market partners, strengthen the sustainability and stability of the markets focusing on those of ASEAN, the Middle East, Latin America, Russia, Europe, and Japan. At present, Vietnam rice is exported to more than 80 countries in the world.
- Complete the rice import, export mechanism following commercial liberalization and suitable steps; strengthen and enhance the capacity of different economic sectors that would invest in this field of activity.
- Strengthen capital investment in order to carry out the above-mentioned measures with cost estimated at US\$ 800 million and export value at 1-1.2 billion US\$/year.
- For other crops as well as the livestock sector, the principles are also to increase output
  and quality of products, expand the markets, and improve the processing technologies
  in order to raise the export efficiency.

#### 4.2.2 Coffee

To expand the coffee area to 400,000 ha by the year 2005 with the production of 500,000 tons of seed, of which 450 - 480 thousand tons would be for export to return an export value of US\$ 1 billion, the following measures should be worked out:

- Put into plantation the existing 250,000 ha of Robusta coffee in Tay Nguyen (Central Highland) and the Southeast region; replant 100,000 ha of Arabica coffee in some of the provinces in the Northern Mountain and the Central Zone to ensure the proper ratio of 2 Robusta coffee: 1 Arabica in order to increase the export value.
- Intensify investment in processing technology: drying, pre-processing, storage, and refinery. In 1998 1999, the priorities are to invest in constructing processing units, packaging, grading of coffee for export; constructing coffee processing factories to process coffee and high quality coffee products; diversify the product items for domestic consumption and export.
- Promote the marketing of products, maintain business ties with the traditional market in Europe; strengthen the newly-established markets in America, the Middle East and expand the markets to China and Japan.
- Increase the capital investment for coffee production and processing, which is estimated at 390 400 million US\$ in the years to come.

#### 4.2.3 Rubber

To achieve a constant output of 350-380 thousand tons per year and 350-380 tons of dry latex for export with a total export value of 350-450 million US\$, the rubber sector should:

- Intensify the existing land area for rubber plantation with yield estimated at 1-1.2 tons of dry latex/ha. Efficiently implement the World Bank projects on coffee development and the rubber management and exploitation techniques applied to the rubber areas in the Southeast region.
- Expand the existing rubber area; replant every year 30,000 ha with the focus on developing small rubber households in which the state would provide financial and technical support. From 1998, the project (Phase I) to develop 60,000 ha of rubber under the World Bank loan program and the French Development Fund will be implemented in the Central Highland, Central Coastal Area, and the Southeast region so that the area under rubber will be 700,000 ha by the year 2010.
- Invest in developing the rubber and rubber wood processing industry in order to increase the processing capacity from 100,000 tons to more than 300,000 tons/year. Try to achieve a level at 50% of products to be finished products by the year 2010.
- The fund to be invested in the rubber sector is estimated at 600 million US\$ for sustainable development of 700,000 ha.

#### 4.2.4 Tea

In Vietnam, resources still remain huge for developing the tea crop. To achieve the targets for the year 2010: tea area of 100,000 - 120,000 ha; tea output in dry bud of 150,000 - 180,000 tons, of which 120,000 - 150,000 tons is for export; export value of approximately 300 million US\$ or a 6-7 times increase, the tea industry should:

- Enhance intensification on tea plantation areas in existence; upgrade the poor tea plantations and create high productivity of clean tea.
- Replace the old and degenerated tea plantations by planting new high-yielding varieties introduced from Japan, and Taiwan; develop planting of Shall and Tuyet (Snow) tea on highland area of more than 1000m above sea level.
- Renovate and replace the old processing facilities; establish joint ventures with foreign counterparts to import more modern processing facilities.

- Upgrade and perfect the existing organizational and management system of the tea industry with a view to streamlining the activities from production to processing and export; actively look for more markets both at home and overseas.
- The investment fund is estimated at US\$ 340 million, of which 40-50% is in the form of international loans, 30-35% obtained through joint ventures established with foreign partners and 5-10% from the state budget.

#### 4.2.5 Cashew nut

Cashew nut is a crop that has high export value. To fulfill the plan of increasing planting area to 400,000 ha, production to 400,000 tons seed per year, and export value to US\$ 400 million by the year 2000 and US\$ 600 million by 2010, the following measures should be implemented:

- Through a comprehensive survey to be conducted in the cashew nut production area, design a plan to expand the area for planting.
- Select and introduce high quality varieties into production.
- Stimulate intensive farming through the extension services.
- Develop the processing industry to produce cashew nut-related products such as cake, candy, and animal feed; strengthen the competitive capacity in the markets.
- Guarantee that all products produced by farmers are marketed at harvesting time.
- The investment fund is estimated at 100 million US\$.

#### 4.2.6 Groundnut

Groundnut is an annual crop that can widely be planted on different soil types. By the year 2000, Vietnam will attempt to raise the groundnut growing area to 250,000 ha with a total output of 350,000 tons, of which around 250,000 tons are for export with a value of US\$ 75-80 million. By the year 2010, the objective is an output of 500,000 tons in which 400,000 tons are for export with an export value of US\$ 120 million per year. The measures that should be implemented include:

- Select and introduce into production better quality varieties to satisfy the client demand.
- Increase groundnut productivity.
- Strengthen and expand the markets.

#### 4.3 Concluding remarks

The implementation of economic renovation policies to transform a previous bureaucratic centralized economy to a more market-oriented approach managed by the state has created great incentives for farmers to improve the performance of agriculture in Vietnam.

The liberalization of domestic and foreign trade in accordance with the recognition of farmer households as autonomous economic units has further stimulated the supply of agricultural products for domestic demand and export.

Moreover the continuous improvement of renovation policies along with the substantial increase in investment in agricultural production has strongly affected the diversification of agriculture.

Vietnam has joined ASEAN and is preparing for participation in WTO. This will facilitate greater trade liberalization and consequently improve commercial agriculture in the country.

This study on trade liberalization, therefore, is indeed very useful to give some grounds for making policy proposals in order to fully exploit the potential of agriculture and overcome

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the constraints and accelerate more efficient agricultural trade and integration into regional and world markets.

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# Appendix

(Source: General Statistic Office, Vietnam)

Appendix Table 1 Gross domestic product by kind of economic activity (billion dongs at current prices).

	1991	1992	1993	1994	1995	1996
Total	76,707	110,535	136,571	170,258	222,840	258,609
Sector: Agriculture, Forestry,	31,058	37,513	40,796	48,865	63,219	70,334
Fishery						
Agriculture	27,061	32,573	34,737	41,838	53,713	59,892
Forestry	1,725	1,815	2,052	2,265	2,842	3,050
Fishery	2,272	3,125	4,007	4,762	6,664	7,392
Sector: Industry and Construction	18,252	30,135	39,472	50,481	66,804	79,501
Industry	15,193	23,956	29,371	37,535	50,912	61,409
Construction	3,059	6,179	10,101	12,946	15,892	18,092
Sector: Service	27,397	42,887	56,303	70,912	92,817	108,774
Transport, postal service and	2,860	4,662	6,036	6,924	8,747	10,634
telecommunication						
Trade	9,742	15,281	17,549	23,072	29,198	33,974
Finance, banking and insurance	1,108	1,567	2,318	3,450	5,314	6,127
State management, science	6,807	9,718	14,402	18,270	22,770	27,694
education, health, sport						
Housing, tourism, hotel, repairs of	6,880	11,659	15,998	19,196	26,788	30,345
personal consumer goods						

Appendix Table 2 Structure of gross domestic product by kind of economic activity (% at current prices).

	1991	1992	1993	1994	1995	1996
Total	100.0	100.0	100.0	100.0	100.0	100.0
Sector: Agriculture, Forestry, Fishery	40.5	33.9	29.9	28.7	28.4	27.2
Agriculture	35.3	29.5	25.5	24.6	24.1	23.2
Forestry	2.2	1.6	1.5	1.3	1.3	1.2
Fishery	3.0	2.8	2.9	2.8	3.0	2.8
Sector: Industry and Construction	23.8	27.3	28.9	29.6	29.9	30.7
Industry	19.8	21.7	21.5	22.0	22.8	23.7
Construction	4.0	5.6	7.4	7.6	7.1	7.0
Sector: Service	35.7	38.8	41.2	41.7	41.7	42.1
Transport, postal service and tele-communication	3.7	4.2	4.4	4.1	3.9	4.1
Trade	12.7	13.8	12.9	13.6	13.2	13.2
Finance, banking and insurance	1.4	1.4	1.7	2.0	2.4	2.4
State management, science education, health, sport	8.9	8.8	10.5	10.7	10.2	10.7
Housing, tourism, hotel, repairs of personal consumer goods	9.0	10.6	11.7	11.3	12.0	11.7

Appendix Table 3 Gross domestic product by kind of economic activity (billion dongs at constant prices of 1989).

	1991	1992	1993	1994	1995	1996
Total	31,286	33,991	36,735	39,982	43,797	47,888
Sector: Agriculture, Forestry, Fishery	12,264	13,132	13,634	14,169	14,892	15,551
Agriculture	10,288	11,074	11,574	12,063	12,643	13,238
Forestry	1,022	1,074	1,049	1,060	1,106	1,119
Fishery	954	984	1,011	1,046	1,143	1,194
Sector: Industry and Construction	11,794	12,617	13,777	15,182	16,792	18,476
Industry	6,042	6,921	7,766	8,771	9,998	11,448
Construction	1,186	1,317	1,558	1,860	2,115	2,413
Sector: Service	11,794	12,617	13,777	15,182	16,792	18,476
Transport, postal service and tele- communication	792	842	897	960	1,066	1,183
Trade	3,654	3,877	4,109	4,478	4,981	5,559
Finance, banking and insurance	448	496	578	710	906	961
State management, science education,	2,841	3,040	3,322	3,760	4,144	4,537
health, sport						
Housing, tourism, hotel, repairs of personal consumer goods	4,059	4,362	4,871	5,274	5,695	6,236

Appendix Table 4 Index of the gross domestic product by kind of economic activity (% at constant prices of 1989; previous year = 100).

	1991	1992	1993	1994	1995	1996
Total	106.0	108.6	108.1	108.8	109.5	109.3
Sector: Agriculture, Forestry, Fishery	102.2	107.1	103.8	103.9	105.1	104.4
Agriculture	101.7	107.6	104.5	104.2	104.8	104.7
Forestry	99.4	105.1	97.7	101.0	104.3	101.2
Fishery	110.7	103.1	102.7	103.5	109.3	104.5
Sector: Industry and Construction	109.0	114.0	113.1	114.0	113.9	114.4
Industry	109.9	114.6	112.1	112.9	114.0	114.5
Construction	105.2	111.0	118.3	119.4	113.7	114.1
Sector: Service	108.3	107.0	109.2	110.2	110.6	110.0
Transport, postal service and tele- communication	106.4	106.3	106.5	107.0	111.0	111.0
Trade	104.8	106.1	106.0	109.0	111.2	111.6
Finance, banking and insurance	118.2	110.7	116.5	122.8	127.6	106.1
State management, science education,	106.2	107.0	109.3	113.2	110.2	109.5
health, sport						
Housing, tourism, hotel, repairs of	112.4	107.5	111.7	108.3	108.0	109.5
personal consumer goods						

Appendix Table 5 Gross output of cultivation (at constant prices of 1989, 1994).

	Total	Food	Vegetables and Beans	Industrial Crops	Fruit Crops
At constant pric	e of 1989		Billion	dongs	
1985	9,389.7	6,238.2	621.0	1,377.6	837.1
1986	9,716.2	6,307.1	708.4	1,448.9	937.5
1987	9,508.4	6,053.1	720.2	1,527.5	926.7
1988	10,158.6	6,737.1	702.6	1,567.3	838.0
1989	10,940.3	7.402.3	756.7	1,544.9	903.1
1990	11,099.5	7,395.7	756.8	1,612.5	1,007.1
1991	11,511.7	7,541.9	755.5	1,913.3	966.8
1992	12,331.2	8,280.9	772.2	1,903.4	1,004.0
1993	13,185.7	8,747.2	823.6	2,158.2	1,064.0
1994	13,800.9	8,999.0	855.7	2,472.6	1,080.4
1995	14,785.6	9,430.6	941.5	2,907.5	1,109.5
				Index (pr	revious year = 1
1986	103.5	101.1	114.1	105.2	112.0
1987	97.9	96.0	101.7	105.4	98.9
1988	106.8	111.3	97.6	102.6	90.4
1989	107.7	109.9	107.7	98.6	107.8
1990	101.5	99.9	100.0	104.4	111.5
1991	103.7	102.0	99.8	118.6	96.0
1992	107.1	109.8	102.2	99.5	103.9
1993	106.9	105.6	106.7	113.4	106.0
1994	104.7	102.9	103.9	114.6	101.5
1995	107.1	104.8	110.0	117.6	102.7
Est. 1996	105.2	106.0	102.1	105.4	102.2

Appendix Table 6 Gross output of animal husbandry (at constant prices of 1989).

	Total	Livestock	Poultry	Non-Meat Product
At constant	price of 1989		Billion dongs	
1985	2,551.8	1,577.6	512.9	321.0
1986	2,824.3	1,784.7	528.6	359.7
1987	3,064.9	1,956.2	529.0	415.8
1988	2,925.6	1,832.2	555.6	381.1
1989	3,129.1	1,982.9	595.6	390.8
1990	3,223.9	2,027.0	615.3	418.4
1991	3,227.3	2,000.2	617.7	448.0
1992	3,641.6	2,261.2	691.2	518.1
1993	3,847.0	2,418.1	707.2	542.1
1994	4,055.3	2,613.5	713.4	544.9
1995	4,237.3	2,712.2	736.1	605.1
		Index (Pre	vious year = 100)	(%)
1986	110.7	113.1	103.1	112.1
1987	108.5	109.6	100.1	115.6
1988	95.5	93.7	105.0	917.0
1989	107.0	108.2	107.2	102.5
1990	103.0	102.2	103.3	107.1
1991	100.1	98.7	100.4	107.1
1992	112.8	113.1	111.9	115.7
1993	105.6	106.9	102.3	104.6
1994	105.4	108.1	100.9	100.5
Est.1996	105.3	105.1	105.1	107.8

Appendix Table 7 Sown area of crops ('000 ha).

			Annual Crops			Perennial Crops	
		Total	(	Of which	Total	Of which	
	Total		Foods	Industrial crops		Multi-year industrial crops	Fruit crops
1980	8,251.0	7,772.8	7,049.3	371.7	478.2	256.0	185.6
1981	8,316.2	7,769.5	6,984.2	415.5	546.7	260.2	245.6
1982	8,388.8	7,818.7	6,968.1	467.5	570.0	288.3	236.3
1983	8,282.3	7,671.8	6,775.2	523.0	610.5	333.5	224.2
1984	8,498.2	7,816.3	6,817.3	571.9	681.9	403.5	237.7
1985	8,556.8	7,840.3	6,833.6	600.7	716.5	477.6	217.7
1986	8,606.1	7,846.3	6,812.3	601.0	760.1	498.9	261.2
1987	8,641.7	7,789.0	6,709.9	637.6	852.7	574.7	278.0
1987	8,883.5	7,999.4	6,967.8	601.0	884.1	611.9	272.2
1989	8,978.2	8,071.3	7,089.6	543.7	906.8	625.1	281.7
1990	9,040.0	8,101.5	7,110.9	542.0	938.5	657.3	281.2
1991	9,409.7	8,475.1	7,448.0	578.7	934.6	662.7	271.9
1992	9,752.0	8,755.2	7,707.4	584.4	996.8	697.8	260.9
1993	9,978.7	8,894.0	7,796.7	598.9	1,085.7	778.5	296.0
1994	10,381.4	9,000.6	7,809.0	655.8	1,171.9	851.7	320.2
1995	10,496.9	9,224.4	7,971.9	717.3	1,272.5	902.5	346.4

# Appendix Table 8 Exports and imports by commodity group (million US\$).

	1990	1991	1992	1993	1994	1995
Exports	2,404.0	2,087.1	2,580.7	2,985.2	4,054.3	5,448.9
By type of management						
Central	1,700.4	1,326.8	1,574.9	1,716.2	1,945.8	2,531.2
Local	703.6	760.3	1,005.8	1,269.0	1,947.4	2,477.6
FDI					161.1	440.1
By commodity group						
Heavy industrial products and	616.9	697.1	954.8	1,014.0	1,167.6	1,377.7
minerals						
Light industrial product and handicraft	635.8	300.1	349.5	526.5	938.2	1,549.8
goods						
Agricultural products	783.2	628.0	827.6	919.7	1,280.2	1,745.8
Forest products	126.5	175.5	140.8	975	111.6	153.9
Aquatic products	239.1	285.4	307.7	427.2	556.3	621.4
Others	2.4	1.0	0.3	0.2	0.3	0.3
Import	2,752.4	2,338.1	2,540.8	3,924.0	5,825.8	8,155.4
By type of management						
Central	2,194.6	1,639.5	1,515.8	2,316.7	3,111.0	3,475.4
Local	557.8	698.6	1,025.0	1,607.3	2,114.3	3,211.9
FDI					600.5	1,468.1

Appendix Table 9 Export value by country of destination (million US\$).

	1990	1991	1992	1993	1994	1995
Total	240.4	2,087.1	2,580.7	2,985.2	4,054.3	5,448.9
1. Asia	1,040.7	1,605.6	1,902.7	2,167.5	2,919.4	3,944.7
South East Asia	348.6	524.4	57.6	642.8	892.9	1,112.1
Cambodia	9.1	6.3	6.4	96.2	77.3	94.6
Indonesia	14.6	16.5	10.9	22.9	35.3	53.8
Lao	16.0	3.6	16.0	14.4	20.9	20.6
Malaysia	5.0	14.5	68.4	55.8	64.8	110.5
Philippines	57.0	0.7	1.0	1.6	3.6	41.5
Singapore	194.5	42.5	401.7	380.3	593.5	689.8
Thailand	52.3	57.7	71.5	71.8	97.6	101.3
Other Asian Countries	692.1	1,081.2	1,326.7	1,524.7	2,026.6	2,832.6
India	20.3	5.5	19.4	18.9	14.1	10.4
Korea	0.6	0.3	0.1	0.03	0.03	0.2
Taiwan	28.7	58.3	67.3	141.9	220.0	439.4
Hong Kong	243.2	223.3	201.7	16.9	196.8	256.7
Iraq	4.0	0.7	14.2	12.5	21.8	25.7
Mongolia	0.6	0.1			0.7	1.4
Korea Rep.	26.7	51.3	93.5	99.4	86.4	235.3
Japan	340.3	719.3	833.9	936.9	1,179.3	1,461.0
China	7.8	19.3	95.6	135.8	295.7	361.9
2. Europe	1,215.1	355.9	374.6	409.1	562.2	983.0
Albania	4.0		0.2			
Poland	10.6	4.2	6.1	9.7	10.4	16.6
Bulgaria	20.2	3.1	1.2	3.3	4.3	2.0
Hungary	16.6	5.0	6.2	8.7	12.3	20.9
USSR	919.7	214.5				
Russia			104.8	135.4	90.2	80.8
Belarusia			0.1	0.4	0.4	0.08
Ukraine			0.8	0.9	4.3	6.5
Czechoslovakia	48.8	4.2	2.1	2.9	2.0	7.7
United Kingdom	1.9	2.4	27.5	23	55.7	74.6
Austria	0.9	5.9	10.7	10	7.5	9.3
Belgium	0.2	0.1	6.4	11.8	15.1	34.6
Germany	41.4	6.7	34.4	50.1	115.2	218.0
Netherlands	64	16.12	20.1	28.1	60.6	79.7
Italy	3.4	3.8	7.2	8.1	20.4	57.1
Yugoslavia	2.0	2.3	0.4		0.1	
Norway	0.02	0.01	0.7	0.1	1.4	2.1
France	115.7	83.1	132.3	95.0	116.8	169.1
Sweden	1.3	1.2	1.2	3.7	2.4	4.7
Switzerland	3.5	0.8	5.7	10.6	28.3	61.8
3. America	15.7	5.3	26.2	41.7	139.8	238.3
Cuba	11.5	4.7	18.7	31.6	30.9	44.8
Canada	3.5	0.4	2.6	5.9	5.8	17.8
USA	0.01	0.01	0.1	0.1	94.9	169.7
4. Africa	4.2	13.3	24.4	11.3	19.9	38.1
Algeria	4.1	13.3	10.0	6.1	10.6	11.1
Libya	7.1	13.3	13.0	0.1	9.0	16.7
5. Oceania	7.7	5.2	21.5	54.9	49.8	56.9
Australia	7.7	5.2	21.3	54.7	46.0	55.3
New Zealand	/./	3.4	∠1.4	J <b>4.</b> /	3.7	1.4

Appendix Table 10 Main export goods.

Item	Unit	1990	1991	1992	1993	1994	1995
Petroleum crude	Thous. tons	2, 617	3,917	5, 446	6,153	6,949	7,652
Coal	Thous. tons	788.5	1,173	1,623	1,432	2,068	2,821
Chromium	Ton	1,986	2,030	1,489	9,783	11,527	25,962
Tin	Ton	1,808	3,440	4,537	2,969	3,182	3,283
Cement	Thous. tons	9.6	16.2	22.7	35.8	11.4	3.7
Shoes and sandals	Mill. USD			5.2	68.0	122.1	296.4
Garments	Mill. USD	214.7	116.8	190.2	238.8	475.6	765.5
Textile fabrics	Mill. m	10.2	6.5	12.4	7.8	11.2	31.5
Rattan and bamboo products	Mill. USD	44.0	10.8	14.8	21.6	17.7	26.9
Fine art products	Mill. USD	23.9	6.8	14.3	20.5	20.7	18.7
Embroidery products	Mill. USD	50.9	10.5	4.6	22.1	18.2	20.4
Woolen carpet	Thous. m <sup>2</sup>	163.5	158	160	284	216	69
Jute carpet	Thous. m <sup>2</sup>	4,246	1,198	135	253	224	112
Rice	Thous. tons	1,624	1,033	1,946	1,722	1,983	1,988
Shelled groundnut	Thous. tons	70.7	78.9	62.8	105.4	119.2	111
Coffee	Thous. tons	89.6	93.5	116.2	122.7	176.4	248.1
Rubber	Thous. tons	75.9	62.9	81.9	96.7	135.5	138.1
Cashew nut	Thous. tons	24.7	30.7	51.7	47.7	81.3	99.0
Vegetable and fruit, fresh and	Mill. USD	52.3	33.2	32.3	23.6	20.8	56.1
prep.							
Pepper	Thous. tons	9.0	16.3	22.3	14.9	16.0	17.9
Tea	Thous. tons	16.1	8.0	13.0	21.2	23.5	18.8
Processed meat	Thous. tons	16.2	25.0	12.1	19.7	12.6	6.4
Pharmaceutical material	Mill. USD	2.5	4.3	3.9	7.4	3.5	1.8
Round wood	Thous. m <sup>3</sup>	124.0	240.0	117	23.2	27.3	
Floor wood	Thous. m <sup>3</sup>	43	36	18.5	40.7	4.3	4.0
Sawlogs	Thous. m <sup>3</sup>	28	504	259	284	7.8	
Cinnamon	Tons	2,097	2,885	2,075	2,537	2,622	6,356
Anise flower	Tons	690	415	607	462	377	754
Marine products	Mill. USD	239.1	285.4	307.7	427.2	551.2	621.4
Frozen fish	Thous. tons	4.4	10.1	17.4	14.7	15.7	26.2
Frozen cuttlefish	Thous. tons	3.7	6.6	6.3	11.2	14.6	14.3
Frozen shrimps	Thous. tons	37.6	41.6	39.7	42.0	53.9	44.8

Appendix Table 11 Import value by country of origin (million US\$).

	1990	1991	1992	1993	1994	199
Γotal	2,752.4	2,338.1	2,540.8	3 924	5,825.8	8,155.
. Asia	1,009.4	1,418.7	1,662.7	2,719.5	3,911.0	6,318.
South East	539.8	811.1	953.4	1,318.5	1,689.6	2,377.
Cambodia	7.7	5.2	6.7	7.6	17.7	23.
Indonesia	9.8	49.4	39.8	84.5	116.3	190.
Lao	3.9	3.3	7.7	41.9	102.9	84.
Malaysia	0.8	6.2	35.9	24.8	66.1	190.
Philippines	3.6	40.6	0.5	1.9	15.0	24.
Singapore	497.0	722.2	821.6	1,058.3	1,145.9	1,425
Thailand	17.0	14.2	41.2	99.5	225.7	439.
Other Asian Countries	469.6	607.6	709.3	1,401.0	2,221.3	3,940
India	4.3	24.0	9.0	8.1	28.2	61
Korea People's Rep.	1.5	1.1	2.1	4.5	13.9	19.
Taiwan	41.0	59.3	72.7	217.9	396.1	901.
Hong Kong	196.9	194.8	142.9	145.4	318.6	418
Mongolia	0.8	194.0	142.9	0.04	310.0	410.
		152.1	211.2		720.5	1 252
Korea Rep.	53.1 169.0	152.1	211.2	481.5	720.5	1,253
Japan		157.7	239.4	452.3	585.7	915
China	4.6	18.4	31.8	85.5	144.2	329
. Europe	1,604.4	714.2	420.1	690.9	1,019.6	1,088
Albania	2.8	2.6	0.7	4.5.0	22.0	
Poland	20.6	8.4	6.7	15.2	23.8	21
Bulgaria	6.2	1.0		0.006	0.1	4
Hungary	54.3	13.6	3.2	4.7	7.8	19
USSR	1,210.6	358.1				
Russian			100.1	144.3	288.7	144
Mordova				1.1		
Ukraine			0.18	22.2	26.1	5
Czechoslovakia	28.8	18.9	4.3	4.7	3.1	4
United Kingdom	0.5	9.0	3.7	11.4	1.7 19.3	3 50
Austria	1.6	2.5	3.9	13.6	5.4	15
Belgium	2.2	6.8	5.0	8.1	9.3	21
C		0.8		6.1		21
East Germany Germany (W)	97.9 20.7	101.2	40.6	72.0	149.1	175
			40.6			
Netherlands	2.7	8.4	16.2	25.8	25.1	36
Italy	4.5	1.2	6.0	34.8	34.2	53
Yugoslavia		0.4	0.7	400	262	
Norway	0.1	0.03		10.0	26.3	1
Finland	0.02	10.0	5.5	5.3	3.8	11
France	123.0	147.9	159.9	267.4	239.6	276
Sweden	13.3	14.2	12.8	18.5	18.6	22
Switzerland	13.0	5.0	39.5	13.4	26.3	74
. America	11.8	10.7	24.8	29.7	73.1	169
Cuba	6.9	3.5	8.8	4.5	0.6	1
Canada	4.3	5.8	14.0	18.7	26.7	24
USA	0.6	1.1	2.0	3.8	44.3	130.
Africa	2.4	2.2	5.2	0.01	2.8	22.
Egypt		2.2				14.
West Africa			4.9		0.6	
Zimbabwe	2.4					
. Australia and Oceania	10.7	11.0	19.8	32.9	69.3	103.
Australia	10.7	9.6	15.8	30.3	63.9	100.
New Zealand		1.4	4.0	2.7	5.4	3.
5. UNO	24.0	36.5	22.9	30.9	22.6	21.
7. NES	89.7	144.8	385.3	420.1	727.3	430.

Appendix Table 12 Main goods imported.

Appendix

Items								
Motor car         Piece         2,042         599         3 201         6 869         7 380         7,752           Iron, steel         Thous. tons         324.3         113.0         343.0         686.3         754.0         1,116.2           Petroleum products refined         Thous. tons         2,860.8         2,572.5         3,142.0         4,094.7         4,531.4         5,003.2           Gasoline         Thous. tons         680.3         554.3         642.1         909.8         1,052.0         1,043.5           Diesel oil         Thous. tons         1,248.4         1,133.5         1,188.0         2,002.9         2,193.2         2,271.0           Mazout         Thous. tons         568.4         608.0         670.9         804.0         808.5         867.5           Kerosene         Thous. tons         228.9         178.9         160.9         209.2         285.1         314.7           Lubricating oil         Thous. tons         28.7         27.3         82.0         59.1         42.5         91.6           Chem. fertilizers         Thous. tons         28.6         1,079.7         423.8         1,250.0         1,542.9         1,356.2           Of which: Urea         Thous. tons	Items	Unit	1990	1991	1992	1993	1994	1995
Iron, steel   Thous. tons   324.3   113.0   343.0   686.3   754.0   1,116.2     Petroleum products refined   Thous. tons   2,860.8   2,572.5   3,142.0   4,094.7   4,531.4   5,003.2     Gasoline   Thous. tons   680.3   554.3   642.1   909.8   1,052.0   1,043.5     Diesel oil   Thous. tons   1,248.4   1,133.5   1,188.0   2,002.9   2,193.2   2,271.0     Mazout   Thous. tons   568.4   608.0   670.9   804.0   808.5   867.5     Kerosene   Thous. tons   228.9   178.9   160.9   209.2   285.1   314.7     Lubricating oil   Thous. tons   228.7   27.3   82.0   59.1   42.5   91.6     Chem. fertilizers   Thous. tons   2,085.2   2,662.6   2,420.0   3,018.4   4,134.0   3,885.9     Of which: Urea   Thous. tons   785.6   1,079.7   423.8   1,250.0   1,542.9   1,356.2     Potassium fertilizers   Thous. tons   36.8   1.0   34.7   9.8   67.9   107.0     Insecticides   Mill. USD   9.0   22.5   24.1   22.4   58.9   100.4     NAOH   Thous. tons   4.5   3.7   2.3   3.3   3.9   12.7     Asphalt   Thous. tons   35.8   27.6   32.0   73.5   70.5   101.9     Plastic in primary form   Thous. tons   20.6   35.6   79.6   138.9   223.7   223.1     Cotton   Thous. tons   58.8   32.5   8.3   16.4   19.9   68.2     Textile yarn   Thous. tons   17.2   19.1   25.0   35.3   64.9   93.8     Malt   Thous. tons   1.3   8.4   6.9   29.6   33.3   83.7     Auxiliary material for   Mill. USD   68.8   17.7   55.0   96.2   152.3   304.6     Sewing   Cement   Thous. tons   221.0   7   43.4   134.4   571.9   1,284.9     Clinker   Thous. tons   12.3   5.1   176.3   749.5   959.3	Motor truck	Piece	3,726	808.0	281.0	956.0	8 413	12,223
Petroleum products refined         Thous. tons         2,860.8         2,572.5         3,142.0         4,094.7         4,531.4         5,003.2           Gasoline         Thous. tons         680.3         554.3         642.1         909.8         1,052.0         1,043.5           Diesel oil         Thous. tons         1,248.4         1,133.5         1,188.0         2,002.9         2,193.2         2,271.0           Mazout         Thous. tons         568.4         608.0         670.9         804.0         808.5         867.5           Kerosene         Thous. tons         228.9         178.9         160.9         209.2         285.1         314.7           Chem. fertilizers         Thous. tons         2,085.2         2,662.6         2,420.0         3,018.4         4,134.0         3,885.9           Of which: Urea         Thous. tons         785.6         1,079.7         423.8         1,250.0         1,542.9         1,356.2           Potassium fertilizers         Thous. tons         36.8         1.0         34.7         9.8         67.9         107.0           Insecticides         Mill. USD         9.0         22.5         24.1         22.4         58.9         100.4           NaOH         Thous. ton	Motor car	Piece	2,042	599	3 201	6 869	7 380	7,752
Gasoline         Thous. tons         680.3         554.3         642.1         909.8         1,052.0         1,043.5           Diesel oil         Thous. tons         1,248.4         1,133.5         1,188.0         2,002.9         2,193.2         2,271.0           Mazout         Thous. tons         568.4         608.0         670.9         804.0         808.5         867.5           Kerosene         Thous. tons         228.9         178.9         160.9         209.2         285.1         314.7           Lubricating oil         Thous. tons         28.7         27.3         82.0         59.1         42.5         91.6           Chem. fertilizers         Thous. tons         2,085.2         2,662.6         2,420.0         3,018.4         4,134.0         3,885.9           Of which: Urea         Thous. tons         785.6         1,079.7         423.8         1,250.0         1,542.9         1,356.2           Potassium fertilizers         Thous. tons         36.8         1.0         34.7         9.8         67.9         107.0           Insecticides         Mill. USD         9.0         22.5         24.1         22.4         58.9         100.4           NaOH         Thous. tons         35.8	Iron, steel	Thous. tons	324.3	113.0	343.0	686.3	754.0	1,116.2
Diesel oil         Thous. tons         1,248.4         1,133.5         1,188.0         2,002.9         2,193.2         2,271.0           Mazout         Thous. tons         568.4         608.0         670.9         804.0         808.5         867.5           Kerosene         Thous. tons         228.9         178.9         160.9         209.2         285.1         314.7           Lubricating oil         Thous. tons         28.7         27.3         82.0         59.1         42.5         91.6           Chem. fertilizers         Thous. tons         2,085.2         2,662.6         2,420.0         3,018.4         4,134.0         3,885.9           Of which: Urea         Thous. tons         785.6         1,079.7         423.8         1,250.0         1,542.9         1,356.2           Potassium fertilizers         Thous. tons         36.8         1.0         34.7         9.8         67.9         107.0           Insecticides         Mill. USD         9.0         22.5         24.1         22.4         58.9         100.4           NaOH         Thous. tons         35.8         27.6         32.0         73.5         70.5         101.9           Plastic in primary form         Thous. tons         20.6	Petroleum products refined	Thous. tons	2,860.8	2,572.5	3,142.0	4,094.7	4,531.4	5,003.2
Mazout         Thous. tons         568.4         608.0         670.9         804.0         808.5         867.5           Kerosene         Thous. tons         228.9         178.9         160.9         209.2         285.1         314.7           Lubricating oil         Thous. tons         28.7         27.3         82.0         59.1         42.5         91.6           Chem. fertilizers         Thous. tons         2,085.2         2,662.6         2,420.0         3,018.4         4,134.0         3,885.9           Of which: Urea         Thous. tons         785.6         1,079.7         423.8         1,250.0         1,542.9         1,356.2           Potassium fertilizers         Thous. tons         36.8         1.0         34.7         9.8         67.9         107.0           Insecticides         Mill. USD         9.0         22.5         24.1         22.4         58.9         100.4           NaOH         Thous. tons         4.5         3.7         2.3         3.3         3.9         12.7           Asphalt         Thous. tons         35.8         27.6         32.0         73.5         70.5         101.9           Plastic in primary form         Thous. tons         58.8         32.5 <td>Gasoline</td> <td>Thous. tons</td> <td>680.3</td> <td>554.3</td> <td>642.1</td> <td>909.8</td> <td>1,052.0</td> <td>1,043.5</td>	Gasoline	Thous. tons	680.3	554.3	642.1	909.8	1,052.0	1,043.5
Kerosene         Thous. tons         228.9         178.9         160.9         209.2         285.1         314.7           Lubricating oil         Thous. tons         28.7         27.3         82.0         59.1         42.5         91.6           Chem. fertilizers         Thous. tons         2,085.2         2,662.6         2,420.0         3,018.4         4,134.0         3,885.9           Of which: Urea         Thous. tons         785.6         1,079.7         423.8         1,250.0         1,542.9         1,356.2           Potassium fertilizers         Thous. tons         36.8         1.0         34.7         9.8         67.9         107.0           Insecticides         Mill. USD         9.0         22.5         24.1         22.4         58.9         100.4           NaOH         Thous. tons         4.5         3.7         2.3         3.3         3.9         12.7           Asphalt         Thous. tons         35.8         27.6         32.0         73.5         70.5         101.9           Plastic in primary form         Thous. tons         20.6         35.6         79.6         138.9         223.7         223.1           Cotton         Thous. tons         17.2         19.1	Diesel oil	Thous. tons	1,248.4	1,133.5	1,188.0	2,002.9	2,193.2	2,271.0
Lubricating oil         Thous. tons         28.7         27.3         82.0         59.1         42.5         91.6           Chem. fertilizers         Thous. tons         2,085.2         2,662.6         2,420.0         3,018.4         4,134.0         3,885.9           Of which: Urea         Thous. tons         785.6         1,079.7         423.8         1,250.0         1,542.9         1,356.2           Potassium fertilizers         Thous. tons         36.8         1.0         34.7         9.8         67.9         107.0           Insecticides         Mill. USD         9.0         22.5         24.1         22.4         58.9         100.4           NaOH         Thous. tons         4.5         3.7         2.3         3.3         3.9         12.7           Asphalt         Thous. tons         35.8         27.6         32.0         73.5         70.5         101.9           Plastic in primary form         Thous. tons         20.6         35.6         79.6         138.9         223.7         223.1           Cotton         Thous. tons         58.8         32.5         8.3         16.4         19.9         68.2           Textile yarn         Thous. tons         13.3         8.4	Mazout	Thous. tons	568.4	608.0	670.9	804.0	808.5	867.5
Chem. fertilizers         Thous. tons         2, 085.2         2, 662.6         2,420.0         3,018.4         4,134.0         3,885.9           Of which: Urea         Thous. tons         785.6         1,079.7         423.8         1,250.0         1,542.9         1,356.2           Potassium fertilizers         Thous. tons         36.8         1.0         34.7         9.8         67.9         107.0           Insecticides         Mill. USD         9.0         22.5         24.1         22.4         58.9         100.4           NaOH         Thous. tons         4.5         3.7         2.3         3.3         3.9         12.7           Asphalt         Thous. tons         35.8         27.6         32.0         73.5         70.5         101.9           Plastic in primary form         Thous. tons         20.6         35.6         79.6         138.9         223.7         223.1           Cotton         Thous. tons         58.8         32.5         8.3         16.4         19.9         68.2           Textile yarn         Thous. tons         11.3         8.4         6.9         29.6         33.3         83.7           Auxiliary material for cigarettes         Auxiliary material for Mill. USD         <	Kerosene	Thous. tons	228.9	178.9	160.9	209.2	285.1	314.7
Of which: Urea         Thous. tons         785.6         1,079.7         423.8         1,250.0         1,542.9         1,356.2           Potassium fertilizers         Thous. tons         36.8         1.0         34.7         9.8         67.9         107.0           Insecticides         Mill. USD         9.0         22.5         24.1         22.4         58.9         100.4           NaOH         Thous. tons         4.5         3.7         2.3         3.3         3.9         12.7           Asphalt         Thous. tons         35.8         27.6         32.0         73.5         70.5         101.9           Plastic in primary form         Thous. tons         20.6         35.6         79.6         138.9         223.7         223.1           Cotton         Thous. tons         58.8         32.5         8.3         16.4         19.9         68.2           Textile yarn         Thous. tons         17.2         19.1         25.0         35.3         64.9         93.8           Malt         Thous. tons         1.3         8.4         6.9         29.6         33.3         83.7           Auxiliary material for cigarettes         Mill. USD         68.8         17.7         55.0	Lubricating oil	Thous. tons	28.7	27.3	82.0	59.1	42.5	91.6
Potassium fertilizers         Thous. tons         36.8         1.0         34.7         9.8         67.9         107.0           Insecticides         Mill. USD         9.0         22.5         24.1         22.4         58.9         100.4           NaOH         Thous. tons         4.5         3.7         2.3         3.3         3.9         12.7           Asphalt         Thous. tons         35.8         27.6         32.0         73.5         70.5         101.9           Plastic in primary form         Thous. tons         20.6         35.6         79.6         138.9         223.7         223.1           Cotton         Thous. tons         58.8         32.5         8.3         16.4         19.9         68.2           Textile yarn         Thous. tons         17.2         19.1         25.0         35.3         64.9         93.8           Malt         Thous. tons         1.3         8.4         6.9         29.6         33.3         83.7           Auxiliary material for cigarettes         Auxiliary material for Mill. USD         68.8         17.7         55.0         96.2         152.3         304.6           sewing         Cement         Thous. tons         221.0         7 <td>Chem. fertilizers</td> <td>Thous. tons</td> <td>2, 085.2</td> <td>2,662.6</td> <td>2,420.0</td> <td>3,018.4</td> <td>4,134.0</td> <td>3,885.9</td>	Chem. fertilizers	Thous. tons	2, 085.2	2,662.6	2,420.0	3,018.4	4,134.0	3,885.9
Insecticides         Mill. USD         9.0         22.5         24.1         22.4         58.9         100.4           NaOH         Thous. tons         4.5         3.7         2.3         3.3         3.9         12.7           Asphalt         Thous. tons         35.8         27.6         32.0         73.5         70.5         101.9           Plastic in primary form         Thous. tons         20.6         35.6         79.6         138.9         223.7         223.1           Cotton         Thous. tons         58.8         32.5         8.3         16.4         19.9         68.2           Textile yarn         Thous. tons         17.2         19.1         25.0         35.3         64.9         93.8           Malt         Thous. tons         1.3         8.4         6.9         29.6         33.3         83.7           Auxiliary material for cigarettes         Auxiliary material for Mill. USD         68.8         17.7         55.0         96.2         152.3         304.6           sewing         Cement         Thous. tons         221.0         7         43.4         134.4         571.9         1,284.9           Clinker         Thous. tons         221.0         7	Of which: Urea	Thous. tons	785.6	1,079.7	423.8	1,250.0	1,542.9	1,356.2
NaOH         Thous. tons         4.5         3.7         2.3         3.3         3.9         12.7           Asphalt         Thous. tons         35.8         27.6         32.0         73.5         70.5         101.9           Plastic in primary form         Thous. tons         20.6         35.6         79.6         138.9         223.7         223.1           Cotton         Thous. tons         58.8         32.5         8.3         16.4         19.9         68.2           Textile yarn         Thous. tons         17.2         19.1         25.0         35.3         64.9         93.8           Malt         Thous. tons         1.3         8.4         6.9         29.6         33.3         83.7           Auxiliary material for cigarettes         Will. USD         7.2         39.6         53.3         59.0         79.0         97.0           Auxiliary material for sewing         Mill. USD         68.8         17.7         55.0         96.2         152.3         304.6           Sewing         Thous. tons         221.0         7         43.4         134.4         571.9         1,284.9           Clinker         Thous. tons         12.3         5.1         176.3         74	Potassium fertilizers	Thous. tons	36.8	1.0	34.7	9.8	67.9	107.0
Asphalt         Thous. tons         35.8         27.6         32.0         73.5         70.5         101.9           Plastic in primary form         Thous. tons         20.6         35.6         79.6         138.9         223.7         223.1           Cotton         Thous. tons         58.8         32.5         8.3         16.4         19.9         68.2           Textile yarn         Thous. tons         17.2         19.1         25.0         35.3         64.9         93.8           Malt         Thous. tons         1.3         8.4         6.9         29.6         33.3         83.7           Auxiliary material for cigarettes         Will. USD         7.2         39.6         53.3         59.0         79.0         97.0           Auxiliary material for sewing         Mill. USD         68.8         17.7         55.0         96.2         152.3         304.6           Sewing         Thous. tons         221.0         7         43.4         134.4         571.9         1,284.9           Clinker         Thous. tons         12.3         5.1         176.3         749.5         959.3	Insecticides	Mill. USD	9.0	22.5	24.1	22.4	58.9	100.4
Plastic in primary form         Thous. tons         20.6         35.6         79.6         138.9         223.7         223.1           Cotton         Thous. tons         58.8         32.5         8.3         16.4         19.9         68.2           Textile yarn         Thous. tons         17.2         19.1         25.0         35.3         64.9         93.8           Malt         Thous. tons         1.3         8.4         6.9         29.6         33.3         83.7           Auxiliary material for cigarettes         Will. USD         7.2         39.6         53.3         59.0         79.0         97.0           Auxiliary material for sewing         Mill. USD         68.8         17.7         55.0         96.2         152.3         304.6           Sewing         Thous. tons         221.0         7         43.4         134.4         571.9         1,284.9           Clinker         Thous. tons         12.3         5.1         176.3         749.5         959.3	NaOH	Thous. tons	4.5	3.7	2.3	3.3	3.9	12.7
Cotton         Thous. tons         58.8         32.5         8.3         16.4         19.9         68.2           Textile yarn         Thous. tons         17.2         19.1         25.0         35.3         64.9         93.8           Malt         Thous. tons         1.3         8.4         6.9         29.6         33.3         83.7           Auxiliary material for cigarettes         Will. USD         7.2         39.6         53.3         59.0         79.0         97.0           Auxiliary material for sewing         Mill. USD         68.8         17.7         55.0         96.2         152.3         304.6           Sewing         Cement         Thous. tons         221.0         7         43.4         134.4         571.9         1,284.9           Clinker         Thous. tons         12.3         5.1         176.3         749.5         959.3	Asphalt	Thous. tons	35.8	27.6	32.0	73.5	70.5	101.9
Textile yarn         Thous. tons         17.2         19.1         25.0         35.3         64.9         93.8           Malt         Thous. tons         1.3         8.4         6.9         29.6         33.3         83.7           Auxiliary material for cigarettes         Will. USD         7.2         39.6         53.3         59.0         79.0         97.0           Auxiliary material for sewing         Mill. USD         68.8         17.7         55.0         96.2         152.3         304.6           Sewing         Cement         Thous. tons         221.0         7         43.4         134.4         571.9         1,284.9           Clinker         Thous. tons         12.3         5.1         176.3         749.5         959.3	Plastic in primary form	Thous. tons	20.6	35.6	79.6	138.9	223.7	223.1
Malt         Thous. tons         1.3         8.4         6.9         29.6         33.3         83.7           Auxiliary material for cigarettes         Will. USD         7.2         39.6         53.3         59.0         79.0         97.0           Auxiliary material for sewing         Mill. USD         68.8         17.7         55.0         96.2         152.3         304.6           Sewing         Cement         Thous. tons         221.0         7         43.4         134.4         571.9         1,284.9           Clinker         Thous. tons         12.3         5.1         176.3         749.5         959.3	Cotton	Thous. tons	58.8	32.5	8.3	16.4	19.9	68.2
Auxiliary material for cigarettes         Mill. USD         7.2         39.6         53.3         59.0         79.0         97.0           Auxiliary material for sewing         Mill. USD         68.8         17.7         55.0         96.2         152.3         304.6           Sewing         Cement         Thous. tons         221.0         7         43.4         134.4         571.9         1,284.9           Clinker         Thous. tons         12.3         5.1         176.3         749.5         959.3	Textile yarn	Thous. tons	17.2	19.1	25.0	35.3	64.9	93.8
cigarettes         Auxiliary material for sewing         Mill. USD         68.8         17.7         55.0         96.2         152.3         304.6           Sewing         Cement         Thous. tons         221.0         7         43.4         134.4         571.9         1,284.9           Clinker         Thous. tons         12.3         5.1         176.3         749.5         959.3	Malt	Thous. tons	1.3	8.4	6.9	29.6	33.3	83.7
Auxiliary material for sewing     Mill. USD     68.8     17.7     55.0     96.2     152.3     304.6       Cement     Thous. tons     221.0     7     43.4     134.4     571.9     1,284.9       Clinker     Thous. tons     12.3     5.1     176.3     749.5     959.3	Auxiliary material for	Mill. USD	7.2	39.6	53.3	59.0	79.0	97.0
sewing       Cement     Thous. tons     221.0     7     43.4     134.4     571.9     1,284.9       Clinker     Thous. tons     12.3     5.1     176.3     749.5     959.3	cigarettes							
Cement         Thous. tons         221.0         7         43.4         134.4         571.9         1,284.9           Clinker         Thous. tons         12.3         5.1         176.3         749.5         959.3	Auxiliary material for	Mill. USD	68.8	17.7	55.0	96.2	152.3	304.6
Clinker Thous. tons 12.3 5.1 176.3 749.5 959.3	sewing							
	Cement	Thous. tons	221.0	7	43.4	134.4	571.9	1,284.9
Wheat flows These tens 141.2 107.0 104.0 250.0 260.1 254.2	Clinker	Thous. tons		12.3	5.1	176.3	749.5	959.3
wheat flour 1 flous, tons 141.2 197.0 194.0 250.9 260.1 254.2	Wheat flour	Thous. tons	141.2	197.0	194.0	250.9	260.1	254.2
Sodium glutamate Thous. tons 24.5 30.0 42.8 56.2 43.6 21.9	Sodium glutamate	Thous. tons	24.5	30.0	42.8	56.2	43.6	21.9
Milk Thous. tons 2.8 7.5 8.6 15.2 39.5 58.7	Milk	Thous. tons	2.8	7.5	8.6	15.2	39.5	58.7
Medication Mill. USD 35.7 29.5 61.0 86.0 121.1 69.1	Medication	Mill. USD	35.7	29.5	61.0	86.0	121.1	69.1
Textile fabrics Mill. m 30.7 19.8 28.1 27.5 54.1 71.7	Textile fabrics	Mill. m	30.7	19.8	28.1	27.5	54.1	71.7
Television receiver Thous. pieces 172.3 142.0 224.9 368.3 390.4 484.2	Television receiver	Thous. pieces	172.3	142.0	224.9	368.3	390.4	484.2
Radio Thous. pieces 44.4 27.7 38.8 66.9 30.4 45.5	Radio	Thous. pieces	44.4	27.7	38.8	66.9	30.4	45.5
Motorcycles Thous. pieces 36.4 55.2 374.0 283.6 458.5	Motorcycles	Thous. pieces	36.4		55.2	374.0	283.6	458.5
Sugar         Thous. tons         23.8         15.9         11.3         44.3         124.4         145.5	Sugar	Thous. tons	23.8	15.9	11.3	44.3	124.4	145.5

Appendix Table 13 Index of export and import prices (previous year = 100).

	1991	1992	1993	1994	1995	1996
Index of export price						
General	101.7	96.5	98.5	105.9	113.1	103.5
Consumer goods	99.9	99.9	96.0	104.8	111.3	102.6
Food and foodstuff	100.6	99.6	95.7	106.6	119.2	103.2
Non-food and non-foodstuff	97.7	100.9	96.8	99.8	100.0	101.1
Mean of production	103.2	93.9	100.4	107.0	112.1	104.2
Fuel, raw material	103.2	93.9	100.4	107.0	112.1	104.9
Machinery, equipment, accessory				100.0	100.0	101.5
Index of import price						
General	101.7	94.8	100.4	103.2	107.3	104.8
Consumer goods	100.7	98.4	99.5	101.5	106.5	102.5
Food and foodstuff	101.1	97.1	100.7	102.9	116.5	102.8
Non-food and non-foodstuff	100.5	99.3	98.6	100.7	100.0	102.3
Means of production	101.9	94.1	100.6	103.8	107.7	106.4
Food and foodstuff	101.8	93.3	100.6	103.8	107.7	106.4
Non-food and non-foodstuff	102.3	100.3	100.8	101.9	106.1	104.3

# Appendix Table 14 Coffee yield by geographic zone (quintal/ha).

No.	Zone				Growth Rate (%)			
		1991	1992	1993	1994	1995	1995/91	1995/94
	Whole country	13.7	14.6	16.6	18.1	21.8	159	120
1	North moutain and Middle	-	-	-	-	-	-	-
2	Red river delta	-	-	-	-	-	-	-
3	Central coast of Northland	5.5	5.2	5.0	5.4	6.9	126	130
4	Central coast of Southland	16.7	16.7	18.8	3.1	13.7	82	440
5	Central Highland	11.3	10.6	13.8	17.8	23.3	206	130
6	North-east of Southland	12.9	14.5	17.8	13.8	19.4	150	140
7	Mekong river delta							

# Appendix Table 15 $\,$ Dry coffee production by geographic zone ('000 ton).

No.	Zone			Year		Growth Rate (%)		
		1991	1992	1993	1994	1995	1995/91	1995/94
	Whole country	100	119	130.1	180.5	218.1	218	120
1	North moutain and middle	-	-	-	-	-		
2	Red river delta	-	-	-	-	-		
3	Central coast of Northland	0.66	0.7	0.7	0.96	1.3	197	140
4	Central coast of Southland	0.5	0.5	0.6	0.06	0.28	56	50
5	Central highland	50.5	60.97	85.75	142	180.3	357	130
6	South-East of Southland	28.3	29.46	27.85	22.45	34.95	124	160
7	Mekong river delta	-	-	-	-	-		

# Appendix Table 16 Harvested coffee area by geographic zone (ha).

No.	Zone				Growth Rate (%)			
		1991	1992	1993	1994	1995	1995/91	1995/94
	Whole country	73,154	81,791	82,134	99,886	99,000	137	100
1	North moutain	-	-	-	-		-	
2	Red river delta	-	-	-	-		_	
3	Central coast of Northland	1,205	1,335	1,389	1,791	1,887	7 157	110
4	Central coast of Southland	300	300	320	196	205	68	110
5	Central highland	44,535	57,337	62,219	79,803	77,338	3 174	100
6	South-East of Southland	21,958	20,310	15,639	16,312	18,036	82	110
7	Mekong river delta	-	-	-	-		-	

Appendix Table 17 Paddy Sown area by geographic zone ('000 ha).

No.	Zone			Year			Growth Rate (%)	
		1991	1992	1993	1994	1995	1995/91	1995/94
	Whole country	6,302.7	6,475.4	6,559.4	6,598.6	6,765.6	107	103
	North	2,509.5	2,522.1	2,519.4	2,506.9	2,532.0	100	101
1	North moutain and highland	820.5	810.4	811.8	799.8	807.7	98	101
2	Red river delta	1,013.8	1,024.7	1,033.5	1,026.8	1,042.1	103	102
3	Central coast of Northland	675.2	687.0	674.1	680.3	682.2	101	100
	South	3,793.2	3,953.3	4,040.0	4,091.7	4,233.6	112	104
4	Central coast of Southland	511.2	522.2	525.2	518.9	518.0	101	100
5	Central highland	170.0	179.5	186.6	181.9	173.2	102	95
6	South-East of Southland	305.0	326.9	335.1	353.0	351.8	115	100
7	Mekong river delta	2,807.0	2,924.7	2,993.1	3,037.9	3,190.6	114	105

# Appendix Table 18 Yield of paddy by geographic zone (quintal/ha).

No.	Zone			Year			Growth Rate (%)	
		1991	1992	1993	1994	1995	1995/91	1995/94
	Whole country	31.1	33.3	34.8	35.6	36.9	119	104
	North	24.9	31.2	35.6	32.8	35.6	143	109
1	North moutain and highland	19.6	22.6	26.7	26.9	27.9	142	104
2	Red river delta	29.3	40.0	46.8	40.1	44.4	151	111
3	Central coast of Northland	24.2	25.8	27.1	28.1	31.4	130	112
	South	35.2	34.6	34.3	37.4	37.7	107	101
4	Central coast of Southland	34.2	30.2	28.0	34.5	33.8	99	98
5	Central highland	25.3	23.9	23.7	24.7	24.8	98	100
6	South- East of Southland	27.3	22.7	26.3	26.3	26.6	97	101
7	Mekong river delta	36.8	37.4	36.9	39.9	40.2	109	101

#### Appendix Table 19 Paddy production by geographic region by year ('000 tons).

No.	Zone			Year			Growth Rate (%)	
		1991	1992	1993	1994	1995	1995/91	1995/94
	Whole country	19,621.9	21,590.3	22,836.5	23,528.2	24,963.7	127	106
	North	6,257.5	7,885.1	8,973.2	8,242.4	9,017.7	144	109
1	North moutain and	1,584.0	2,013.5	2,299.9	2,206.9	2,253.8	142	102
	highland							
2	Red river delta	3,038.3	4,101.6	4,843.3	4,121.4	4,623.1	140	112
3	Central coast of	1,635.2	1,770.0	1,830.0	1,914.1	2,140.8	131	112
	Northland							
	South	13,364.4	13,705.2	13,863.3	15,285.8	15,946.0	119	104
4	Central coast of	1,749.2	1,583.1	1,472.0	1,787.9	1,749.4	100	98
	Southland							
5	Central highland	431.7	429,7	443.5	448.7	429.5	99	96
6	South-East of	832.6	744.5	881.4	928.3	935.4	112	101
	Southland							
7	Mekong river delta	10,350.9	10,947.9	11,066.4	12,120.9	12,831.7	124	106

Appendix Table 20 Tea harvested area by geographic zone (ha).

No.	Zone			Year			Growth F	Growth Rate (%)		
		1991	1992	1993	1994	1995	1995/91	1995/94		
	Whole country	45,755	50,043	49,241	51,748	53,031	116	103		
	North	33,658	37,194	36,921	37,651	38,184	113	101		
1	North moutain and	27,414	32,219	31,930	32,181	32,486	118	101		
	Highland									
2	Red river delta	2,849	1,452	1,616	1,597	1,781	63	112		
3	Central coast of	3,395	3,523	3,375	4,097	3,917	115	96		
	Northland									
	South	12,097	12,849	12,320	14,092	14,847	123	105		
4	Central coast of	873	1,114	1,146	1,144	1,165	133	102		
	Southland									
5	Central highland	11,192	11,703	11,142	12,887	13,621	122	106		
6	South-East of	32	32	32	61	61	190	100		
	Southland									
7	Meong river delta	-	-	-	-	-	-	-		

#### Appendix Table 21 Tea production by geographic zone (tons).

No.	Zone		Year					Rate (%)
		1991	1992	1993	1994	1995	1995/91	1995/94
	Whole country	148,193	162,968	169,755	189,190	180,902	122	96
	North	102,865	113,035	114,905	127,577	121,283	118	95
1	North moutain and highland	84,637	96,946	98,590	108,028	100,216	118	93
2	Red river delta	9,390	6,064	6,863	7,254	7,034	75	97
3	Central coast of Northland	8,838	10,025	9,452	12,295	14,033	159	114
	South	45,918	49,933	54,850	61,613	59,619	130	97
4	Central coast of Southland	1,629	2,302	2,180	2,339	2,413	148	103
5	Central highland	44,065	47,506	52,550	59,186	57,120	130	97
6	South-East of South	24	125	120	88	86	358	98
7	Mekong river delta	-	-	-	-	-	-	

# Appendix Table 22 Tea yield by geographic zone (quintal/ha).

No.	Zone			Year			Growth I	Rate (%)
		1991	1992	1993	1994	1995	1995/91	1995/94
	Whole country	32.4	32.6	34.5	36.6	34.1	105	93
	North	30.6	30.4	31.1	33.9	31.8	104	94
1	North moutain and highland	30.9	30.1	30.9	33.6	30.9	100	92
2	Red river delta	33.0	41.8	42.9	45.4	39.5	120	87
3	Central coast of Northland	26.0	28.5	28.0	30.0	35.8	138	119
	South	38.0	38.9	44.5	43.7	40.2	106	92
4	Central coast of Southland	18.7	20.7	19.0	20.5	20.7	111	101
5	Central highland	39.4	40.6	47.2	46.0	42.0	106	91
6	South-East of South	7.5	39.1	37.5	14.4	14.1	188	98
7	Mekong river delta	-	-	-	-	-	-	-

Appendix Table 23 Rubber harvested area by geographic zone (ha).

No.	Zone			Year			Growth Rate (%)		
		1991	1992	1993	1994	1995	1995/91	1995/94	
	Whole country	89,885	87,312	123,801	137,642	146,885	163	107	
1	North moutain and								
	Highland								
2	Red river delta								
3	Cenral coast of	3,587	3,442	3,490	4,548	5,365	149	118	
	Northland								
4	Central coast of	58	180	232	558	390	672	70	
	Southland								
5	Central highland	5,543	7,090	11,455	13,852	16,574	299	120	
6	South-East of	81,196	87,666	108,609	119,064	124,536	153	105	
	Southland								
7	Mekong river delta	-	-	-	-	-	-	-	

# Appendix Table 24 Dry latex yield by geographic zone (ton).

No.	Zone		Year					Growth Rate (%)		
		1991	1992	1993	1994	1995	1995/91	1995/94		
	Whole coutry	64,563	66,081	96,880	128,771	122,748	190	95		
1	North moutain and									
	Highland									
2	Red river delta									
3	Central coast of	3,280	3,367	3,092	4,091	4,752	145	116		
	Northland									
4	Central coast of	60	120	185	400	256	427	64		
	Southland									
5	Central highland	4,920	4,829	12,710	15,957	10,022	204	63		
6	South-East of	56,302	58,655	80,838	108,320	109,715	195	101		
	Southland									
7	Mekong river delta	-	-	-	-	-	-			

# Appendix Table 25 Dry latex yield by geographic zone (quintal/ha).

No.	Zone			Year			Growth Rate (%)		
		1991	1992	1993	1994	1995	1995/91	1995/94	
	Whole country	7.2	7.6	7.8	10.4	8.4	117	81	
1	North moutain and								
	Highland								
2	Red river delta								
3	Central coast of	9.1	9.8	8.9	9.0	8.9	98	99	
	Northland								
4	central coast of	10.3	6.7	8.0	7.2	0.5	5	70	
	Southland								
5	central highland	8.9	6.8	11.1	11.5	6.1	62	53	
6	South-East of	6.9	6.7	7.4	9.1	8.8	127	97	
	Southland								
7	Mekong river delta	-	-	_	_	-	_	_	

Appendix Table 26 Groundnut area by geographic zone ('000 ha).

No.	Zone			Year			Growth F	Growth Rate (%)		
		1991	1992	1993	1994	1995	1995/91	1995/94		
	Whole country	210.9	217.3	217.2	248.2	259.9	123	105		
	North	94.6	102.2	104.6	118.6	123.3	130	104		
1	North moutain and	30.4	34.2	36.0	40.4	41.6	137	103		
	highland									
2	Red river delta	19.1	17.5	17.5	20.7	17.7	93	86		
3	Central coast of	45.1	50.5	51.1	57.5	64.0	142	111		
	Rorthland									
	South	116,3	115,1	112,6	129,6	136,6	117	105		
4	Central coast of	22.0	22.4	21.9	25.2	32.2	146	128		
	Southland									
5	Central highland	19.6	20.2	19.5	20.7	23.5	120	114		
6	South-East of	60.0	60.3	58.6	67.9	65.9	110	97		
	Southland									
7	Mekong river delta	14.7	12.2	12.6	15.8	15.0	102	95		

Appendix Table 27 Groundnut yield by geographic zone (quintal/ha).

No.	Zone			Year			Growth I	Rate (%)
		1991	1992	1993	1994	1995	1995/91	1995/94
	Whole country	11.1	10.4	11.9	11.9	12.8	115	108
	North	9.5	7.4	10.1	9.1	10.9	115	120
1	North moutain and highland	7.5	7.9	9.1	9.2	9.5	127	103
2	Red river delta	10.3	9.0	12.5	10.5	13	126	124
3	Central coast of Northland	10.6	6.4	10.0	8.5	11.3	107	133
	South	12.4	13.1	13.5	14.4	14.5	117	101
4	Central coast of Southland	8.4	6.9	8.5	9.5	9.7	115	102
5	Central highland	8.9	9.5	9.5	9.8	10.3	116	105
6	South -East of southland	13.9	15.6	15.8	17.0	17.5	126	103
7	Mekong river delta	16.6	17.9	18.0	17.2	18.0	108	105

Appendix Table 28 Groundnut production by geographic zone ('000 tons).

No.	Zone			Year			Growth F	Rate (%)
		1991	1992	1993	1994	1995	1995/91	1995/94
	Whole country	234.8	226.7	259.3	294.2	334.4	142	114
	North	90.6	75.5	106.2	107.5	135.7	150	126
1	North moutain and highland	22.8	27.2	32.7	37.2	39.9	175	107
2	Red river delta	19.8	15.8	22.2	21.7	23.2	117	107
3	Central coast of Northland	48.0	32.5	53.1	48.6	72.6	151	149
	South	144.2	151.2	153.1	186.7	198.7	138	106
4	Central coast of Southland	18.6	15.6	18.9	23.8	31.4	169	132
5	Central highland	17.6	19.3	18.6	20.3	24.3	138	120
6	South- East of Southland	83.5	94.3	92.8	115.4	116.0	139	101
7	Mekong river delta	24.5	22.0	22.8	27.2	27.0	110	99

# Appendix Table 29 Cherry nut harvested area by geographic zone (ha).

No.	Zone	Year				Growth Rate (%)		
		1991	1992	1993	1994	1995	1995/91	1995/94
	Whole country		32,009	69,089	87,957	92,512		105
	South		32,009	69,089	87,957	95,212		105
1	Central coast of		1,512	12,265	11,940	11,417		96
	Southland							
2	Central highland		25	2,072	2,524	4,882		193
3	South-East of		30,472	54,752	73,493	75,793		103
	Southland							
4	Mekong river delta		-	-	-	420		

# Appendix Table 30 Cherry nut production by geographic zone (tons).

No.	Zone		Year					Growth Rate (%)	
		1991	1992	1993	1994	1995	1995/91	1995/94	
	Whole country		23,730	46,550	51,885	50,676		98	
	South		23,730	46,550	51,885	50,676		98	
1	Central coast of		252	4,965	4,646	5,255		113	
	Southland								
2	Central highland		-	1,651	2,074	3,934		190	
3	South-East of		23,478	39,934	45,165	41,067		91	
	Southland								
4	Mekong river delta		-	-	-	420			

Appendix Table 31 Cheery nut yield by geographic zone (quintal/ha).

No.	Zone			Growth Rate (%)				
		1991	1992	1993	1994	1995	1995/91	1995/94
	Whole country		7.4	6.7	5.9	5.5		93
	North		7.4	6.7	5.9	5.5		93
1	Central coast of		1.7	4.1	3.9	4.6		118
	Southland							
2	Central highland			8.0	8.2	8.1		99
3	South East of		7.7	7.3	6.2	5.4		87
	Southland							
4	Mekong river delta					10		

# Appendix Table 32 Sown area, yield, production of other crops.

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
1. Maize											
Sown area	397.3	400.9	405.6	510.5	509.4	431.8	447.6	478.0	496.5	534.7	556.8
Yield	14.70	14.2	13.8	16.0	16.5	15.5	15.0	15.6	17.7	21.4	21.3
Production	587.1	569.8	561.0	814.8	837.9	671.0	672.9	747.9	882.2	1,143.9	1,184.2
2. Sweet potatoes											
Sown area	320.0	329.0	332.2	336.2	327.3	321.1	356.2	404.9	387.1	343.8	304.6
Yield	55.5	59.5	66.2	56.6	58.3	60.1	60.0	64.6	62.1	55.4	55.3
Production	1,777.7	1,958.7	2,202.3	1,901.8	1,909.2	1,929.0	2,137.3	2,593.0	2,404.8	1,905.8	1,685.8
3. Cassava											
Sown area	335.0	314.2	298.8	317.7	248.6	256.8	273.2	283.8	278.0	279.4	277.5
Yield	87.7	96.1	96.1	89.4	90.8	88.6	89.8	90.4	88.1	84.4	79.7
Production	2,939.8	2882.6	2,738.4	2,839.3	2,585.4	2,275.8	2,454.9	2,567.9	2,450.0	2,358.3	2,211.5

# Appendix Table 33 Sown area, yield production of main annual industrial crops.

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
1. Cotton											
Sown area ('000 ha)	13.8	12.9	13.2	12.2	9.2	7.9	16.1	19.2	11.5	13.2	14.6
Yield (quintal ha)	3.2	3.6	3.2	3.4	3.5	4.0	5.1	6.6	4.4	6.6	7.1
Production ('000 tons)	4.4	4.6	4.3	4.2	3.3	3.1	8.3	12.8	5.2	8.7	10.3
2. Jute											
Sown area ('000 ha)	22.0	26.1	32.0	17.1	5.7	11.7	10.5	11.6	14.4	6.6	4.2
Yield (quintal ha)	21.4	20.9	17.9	21.5	22.0	20.3	24.0	22.0	16.2	19.4	22.7
Production ('000 tons)	47.1	54.6	57.5	36.9	34.3	23.8	25.3	25.7	23.4	12.8	9.5
3. Rush											
Sown area ('000 ha)	15.3	17.0	17.0	17.5	14.4	11.4	9.4	11.0	9.9	10.9	9.0
Yield (quintal ha)	60.5	57.4	61.3	47.9	55.5	55.4	57.5	70.2	63.9	63.1	64.9
Production ('000 tons)	92.8	97.5	104.2	83.7	81.2	63.3	54.4	77.2	69.5	69.1	58.6
4. Mulbury											
Sown area ('000 ha)	6.9	6.8	6.7	5.8	6.6	12.3	13.9	20.2	26.7	24.1	21.8
Yield (quintal ha)	81.3	84.1	80.0	79.4	86.7	81.6	74.4	70.5	71.6	70.3	68.4
Production ('000 tons)	35.8	56.9	54.0	45.7	569	100.2	103.5	142.8	191.3	169.3	148.9
<ol><li>Sugar cane</li></ol>											
Sown area ('000 ha)	143.2	125.2	136.9	142.1	131.3	130.6	143.7	146.5	143.2	166.6	217.5
Yield (quintal ha)	388.3	396.5	396.6	401.3	406.9	413.3	426.6	439.4	425.6	453.3	452.6
Production ('000 tons)	4,559.7	4,964.6	5,470.3	5,700.4	5,344.6	5,397.6	6,130.9	6,437.0	6,083.2	7,750.1	9,843.3
6. Soybean											
Sown area ('000 ha)	102.0	106.5	118.1	103.0	100.2	110.0	101.1	37.3	120.1	132.0	118.2
Yield (quintal ha)	7.8	8.0	8.1	8.3	8.1	7.9	7.9	8.2	8.7	9.4	11.5
Production ('000 tons)	79.1	84.7	95.8	85.3	82.0	86.6	80.0	80.0	105.7	124.5	135.2
7. Tobacco											
Sown area ('000 ha)	42.4	36.2	38.8	39.5	28.0	26.5	37.7	31.4	23.5	24.5	27.0
Yield (quintal ha)	9.0	9.2	8.3	9.0	8.5	8.2	10.7	8.6	8.6	8.9	10.0
Production ('000 tons)	38.2	33.4	33.4	35.5	23.9	21.8	36.2	27.3	20.3	21.7	27.0

Appendix Table 34 Sown area, yield, and production of vegetable and fruit crops.

* *		, ·	, 1		0						
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
1.Vegetable											
Sown area	224.0	239.1	243.5	242.8	252.0	261.0	268.5	279.3	293.3	304.5	328.2
('000 ha)											
Yield	116.3	122.9	123.7	119.9	125.0	123.5	119.6	118.3	118.8	124.6	126.2
(quintal ha)											
Production	2,605.2	2,938.1	3,014.2	2,909.1	3,152.3	3,224.9	3,213.7	3,304.9	3,484.9	3,793.8	4,145.6
('000 tons)											
2. Beans											
Sown area	145.0	161.3	166.2	158.4	167.4	165.0	156.7	165.6	182.1	190.4	187.5
('000 ha)											
Yield (quintal	5.6	5.9	5.7	6.0	6.0	5.7	6.0	5.5	5.8	6.4	6.8
ha)											
Production	82.3	95.3	96.2	95.0	102.0	94.2	94.0	92.7	105.4	121.7	126.7
('000 tons)	202.5	255.4	2712	260.4	255.5		271.0	2 (0 0	2010	210.4	246.40
3. Sown area of	202.5	257.4	274.2	268.4	277.7	277.1	271.9	260.9	296.0	319.4	346.40
fruit crops ('000											
ha)											
4. Orange	1 272 0	1 421 2	1 416 4	1 445 4	1 412 2	1 445 0	2 110 0	2.552.0	1 152 5	5 5 4 2 2	5.051.6
Sown area ('000 ha)	1,272.0	1,421.2	1,416.4	1,445.4	1,413.2	1,445.8	2,119.8	2,552.9	4,453.5	5,543.3	5,951.6
Yield	7.807	7.882	7.271	7.137	7.147	82.2	78.2	82.7	88.4	89.5	105.0
(quintal ha)	7.807	7.002	7.2/1	7.137	/.14/	02.2	70.2	62.7	00.4	69.3	103.0
Production	0.020.2	11 202 4	10.208.0	10 216 2	10 000 8	11 022 8	12 100 4	16 011 1	249,699.2	28 561 4	27 040 5
('000 tons)	9,930.2	11,202.4	10,296.0	10,510.5	10,099.6	11,923.0	12,109.4	10.011.1	249,099.2	20,301.4	37,940.3
5. Banana											
Sown area						8,827.7	8,917.3	9,005.1	9,421.3	9,1848	9,175.0
('000 ha)						0,027.7	0,717.5	,,005.1	,,121.5	>,1010	,,175.0
Yield						151.9	152.7	160.8	163.4	160.4	159.1
(quintal ha)											
Production						122,137,4	128,576.5	136,550,4	139,773.9	137,508.1	128.223.1
('000 tons)						,	.,	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. ,	-,
6. Pineapple											
Sown area	3,313.3	3,167.2	3,549.2	3,504.3	3,895.8	3,887.6	3,810.7	3,469.0	2,921.7	2,921.3	2,403.7
('000 ha)											
Yield	109.6	118.4	113.7	120.0	117.7	120.3	121.9	91.7	95.2	93.2	76.8
(quintal ha)											
Production	36,304.5	37,493.5	40,364.2	42,045.8	45,849.7	46,785.1	42,021.5	26,421.6	25,747.0	23,502.5	18,475.3
('000 tons)											
7. Mango											
Sown area						16,37.1	1,510.1	1,468.6	1,769.1	2,006.7	2,109.6
('000 ha)											
Yield						126.3	105.7	84.6	81.5	88.8	93.2
(quintal ha)											
Production						17,302.3	13,994.6	11,210.2	11,916.4	13,550.4	15,254.6
('000 tons)											