

THE ROLE OF AGRICULTURE IN ECONOMIC DEVELOPMENT – A CASE STUDY FROM THE IVORY COAST AND CZECH REPUBLIC

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Abstract

Agriculture is a vital part of the economy in many parts of developed countries as well as in developing countries. Its importance varies with the resources bases and stages of a country. It also varies with world economic conditions and may be influenced by the political system and asset ownership patterns of the country. This paper describes the specific contributions of agriculture to economic development and factors influencing these contributions generally and in case of the Ivory Coast and Czech Republic.

Key words: contributions to agriculture of economic development, factors influencing the role of agriculture in economic development, environment, production, productivity, transfer, economic branches, resources.

INTRODUCTION

Agriculture is the oldest economic activity. It has developed along side the development of human society. During this period of development it has had continuously an irreplaceable role.

At present there are different opinions on the functions of agriculture. One of the approaches takes as the basis the utilization of natural resources. In this case agriculture is considered as a primary branch of the economy using and processing the primary resources existing on the Earth which are indispensable for people.

The result of introduction of new technological progress on scarce natural resources has achieved higher volumes of agricultural produce. Agricultural products are more and more processed into highly differentiated foodstuffs. This consequently has led to a decrease in the basic industry component of agriculture. In such circumstances foodstuffs are more important for people than agricultural products- the raw material for food.

In relationship to the surplus of foodstuffs it is gradually the meaning of basic industries and it is substituted by an accentuation of its other functions.

Some economic experts emphasizes the function of agriculture as employment for bulk of the labour force over other branches of economy.

The specific role of agriculture in the national economy is possible to show in two different cases: the Ivory Coast and Czech Republic

MATERIALS AND METHODS

The research was carried out by the use of the available reference that deals with the role of agriculture in economic development in general. Information came from secondary sources, especially from agricultural economics textbooks, and Food and Agriculture of the

United Nations (FAO) database, from the Ivory Coast and the Czech Republic.

The statistical method was used to illustrate data in appendices.

RESULTS AND DISCUSSION

Contributions of agriculture to economic development

According to Kuznets (1966), there are 4 ways of contributions to economic development:

1. Products

Agriculture provides food to feed all the workers in the secondary and tertiary sectors; it also provides raw materials which will be transformed by industry. A productive agriculture will provide cheap agricultural produce, and thus will reduce wage costs, which will make the build-up of capital into other sectors easier. Moreover, the fast growth of the agricultural production will have a determining effect on the growth of GDP, insofar as agriculture remains the dominant sector in the economy.

The most obvious and important contribution of agriculture is to meet the additional demand for food resulting from population growth and higher incomes, and to remedy nutritional deficiencies.

2. Market

According to Štůsek (2002), from the point of view of economic theory, market is a place where forces of supply and demand operate to determine the price and quantity of product.

The agricultural sector is the originator of demand for industrial goods and services. The prosperity of agriculture is still necessary to provide increasing outlets for industry. The increase in productivity must allow the improvement of the income of rural peasants and thus the increase in their consumption.

According to Abbott and Makeham (1979), the faster growing and more prosperous the agriculture of a

country, the more quickly it shifts from subsistence to monetised basis, and the more favourable are the conditions for industrialisation. This is a part of two-way development process between agriculture and the rest of the economy.

The growth of an urban market is the main stimulus to agricultural development. The availability of manufactured consumer goods then provides a strong incentive for farmers to increase production for the market. Manufacture of farm tools and implements, fertilisers, pesticides and other materials useful for production requisites serves both an incentive to agriculture and also contributes directly to its productivity.

According to Norton and Alwang (1993), the market demand contribution can be fostered in three ways. First, and most obvious, rising incomes in agriculture create a large potential market for domestically produced industrial goods. Second, investments in infrastructure in rural areas will help not only in the transportation of agricultural output to urban areas and for export, but also will facilitate the marketing of industrial output in rural areas. Finally, in order to exploit the market potential of rural areas, industry should be encouraged to produce the types of goods that rural consumers and producers want.

3. Foreign exchange earnings

Agricultural produce constitutes the main part of exports, in the first stages of development, and provides the foreign earnings necessary for importing machines and raw materials which industry needs. Agriculture also can save foreign earnings by producing foodstuffs rather than importing them.

According to Abbott and Makeham (1979), agriculture can also improve the balance of payments by savings on imports.

4. Factors of production

Agriculture provides labour for other sectors. Initially, because there is a surplus labour force with a low productivity, then thanks to the continuous improvement of agricultural productivity, labour becomes available for use in these sectors. The transfer of agricultural workers towards activities with a high productivity must have a favourable effect on economic growth.

In addition, agriculture also generates savings for the remainder of the economy. As it is the dominant sector, it is clear that the total savings will mainly come from agriculture, and will allow investments in other sectors. How will these savings will be transferred? It can be voluntarily if farmers' incomes are sufficient, and if the collection system allows it; which is not very probable. Generally, the mechanism will be about forced savings imposed by governments by various methods: taxes, authoritarian setting of prices to producers at low levels, and even confiscation of production. These various means make it possible to transfer farm surpluses towards the more dynamic sectors of the economy.

5. Rural welfare

According to Norton and Alwang (1993), agricultural development can have significant direct impacts on rural welfare.

If productivity is increased, farmers receive benefits both through increased home consumption and through the income generated from farm product sales.

If agricultural development programmes include asset redistribution in countries where asset ownership is highly skewed, poverty reductions can occur for reasons in addition to those associated with sectoral growth.

Finally, if agricultural growth stimulates non-farm growth and employment, landless labour can benefit from those employment opportunities.

Although in the very early stages of development, agriculture is not the only productive sector in rural areas, it is certainly the dominant sector. Even in developed countries, where agriculture's share of total rural economic activity is relatively small, rural welfare is closely linked to the fate of agriculture. In less-developed countries, a stagnant agriculture can lead to increased rural poverty, accelerated migration from rural to urban areas, and, in extreme cases, famine. Thus, since such a large proportion of the population is found in rural areas, the rural welfare contribution of agriculture is vital to national welfare.

Factors influencing the role of agriculture in economic development

According to Norton and Alwang (1993), the following factors influence the role of agriculture in economic development:

1. The influence of resource differences and stages of development

Countries with productive natural resource bases will usually benefit from programmes designed to stimulate the potential food contributions of agricultural development, at least in the early to middle stages of development.

While this situation is representative of many countries in the world, for example, certain countries in the Middle East have a natural advantage in oil and mineral production and often stress agriculture to a lesser degree.

Others, primarily small urban, natural-resource-poor countries, such as Hong Kong and Singapore, concentrate on industrial production.

The significance of agricultural productivity growth in freeing up labour for the industrial sector will be greatest in labour-scarce countries and during the early stages of development. The importance of the potential capital contribution of agriculture remains strong, particularly in the least-developed countries and in the large countries in Asia such as China, India, and Indonesia. As countries, particularly small countries move into the middle stage of development, agriculture's role in generating or saving foreign exchange often grows and becomes critical. Middle-income countries tend to experience substantial yearly increases in the demand for food resulting from the

effects of higher incomes accompanied by relatively high income elasticities of demand for those goods. If this demand is not met by domestic production, sizable increases in imports can result. Thus, the role of domestic producers in meeting these demands assumes greater importance.

The market contribution of agriculture is especially critical during the early and middle stages of development. A high proportion of the population is still employed in agriculture, and thus rural areas potentially provide the largest market. The expanding urban informal sector in many low-to middle-income countries produces goods and services that are primarily consumed domestically. High incomes in agriculture can potentially have large income and employment multipliers in this informal sector. If the informal sector has access to credit, new technologies, and improved infrastructure so that it can supply goods to meet increasing domestic rural demands, the possibility exists for agriculture to provide a major contribution to expanding the domestic market for goods and services from that sector.

The rural welfare contribution of agricultural development will be highest in the early stages of development when the agricultural sector contains a large proportion of the population. While the direct welfare contribution may decline as development proceeds, it remains relatively important even after a country achieves a very high level of development.

2. The influence of world economic conditions and domestic economic conditions

The interdependence of nations through capital and good markets mean that economic conditions abroad can have important effects on domestic economic growth and development. The cyclical nature of fluctuations in commodity prices and aggregate income levels in the developed world means that the role of agriculture in a developing country is influenced in a cyclical manner by events outside the domestic economy. These cyclical fluctuations have an especially important impact on agriculture's contribution to foreign exchange earnings. High variability in international prices means increased uncertainty related to foreign exchange availability, in turn affects the ability to import needed goods.

During the 1960s and 1970s, several developing countries expanded their exports to more-developed countries. Others took the opposite strategy. They adopted policies that led to over-valued exchange rates, borrowed heavily from private and public sources, and imported goods, all of which adversely affected parts of their agricultural sectors while inflationary pressures grew. In the early 1980s, worldwide recession and high interest rates, caused primarily by economic policies in more-developed countries, led to lower agricultural commodity prices and contributed to debt crises in less-developed countries.

The above series of events forced several less-developed countries to undertake drastic domestic

stabilisation policies to control inflation while attempting to generate trade surpluses to avoid defaulting on foreign loans. Exchange rates were devaluated and government expenditures reduced. Trade surpluses have been generated principally by reducing imports. These policies have in some cases had a high social cost in terms of increased unemployment, falling real wages, and greater income inequality. The implications for agriculture of these events are that agriculture's contributions to food production for domestic markets, to foreign exchange generation, and to market demand creation for non-farm consumer goods have become more important relative to its labour contribution. Currency devaluation in particular, since they raise the prices of imported goods, relative to domestically produced goods, have opened up opportunities for displacing imported foods without the need for protectionist policies. Scarce foreign exchange can then be reserved for capital goods, which are essential in many cases for the growth of the modern industrial sector. This expansion of domestic agricultural production means increased incomes in rural areas, which can increase domestic demand for goods from the non-farm sector as well.

3. The influence of alternative political systems and asset ownership patterns

The above-mentioned contributions of agriculture to economic development are relevant irrespective of the type of political system or the distribution of assets in the country. Nevertheless, the levels of these contributions and the mechanisms for extracting them are a function of the political system and asset ownership patterns.

Agricultural development can play similar roles in any market systems even though the functioning of the systems differs.

A variety of asset ownership patterns, particularly in land, is found in both market and non-market systems. This fact has important implications for production incentives, the distribution of benefits from agricultural development, and the contributions of agriculture to overall economic development.

When reforms take place in the ownership patterns of land and other fixed assets, the contributions of agriculture to development tend to change in both the short and the long runs. When land ownership becomes more equal, additional quantities of food are consumed in rural areas and agriculture's food and contribution to development of industry may be reduced in the short run. At the same time, this additional rural consumption directly increases rural welfare. In the long run, with adequate credit, marketing and other reforms, the surplus marketed to the non-farm sector often increases. Land reform often increases the domestic capital contribution of agriculture to development and eventually increases the market demand contribution.

Case study from the Ivory Coast and Czech Republic *The Ivory Coast*

Agriculture plays an important role in the economy of Ivory Coast. Agricultural exports relative to agricultural GDP (77.5%) between the years 1999 and 2001 show this significant part. Also some commodities like cocoa, coffee, oil palm, cotton, rubber, cashew nuts, bananas and pineapples generate some important revenues.

As far as agriculture value added concerned, annual percentage growth increases relatively. This measure could be more increased if productivity, competitiveness and trade flows are strengthened.

The share of labour force in agriculture from 1990 to 2001 is decreased. This fall may be due to the movement of workers from rural areas to urban areas, the movement of workers from agriculture to other branches of economy (industries and services) bearing in mind that they will enhance their revenues and improve their living standards. So, agriculture as an important branch of economy requires still some policies or measures to encourage rural population and then sustain economic growth. Among them access to adequate resources like access to land, to credit, to agricultural inputs, to research, extension and training, to education, to technology, to rural organizations and to services.

As a total of land use, a few areas are irrigated. Therefore, some projects should be designed and implemented in this field to increase soil fertility and yield production.

The Czech Republic

Economic meaning of the Czech agriculture is possible to consider as a specific one. The specificity of this branch consists above all in its recession from simple economic position on such by broad sense. It is given by many spheres of agriculture.

First of all, the function of ensuring people basic foodstuffs row materials. This is concerned especially about the production of grains, leguminous, oil crops, potatoes, vegetables and fruits of temperate climate. In animal husbandry it is concerned about the production of pig meat, beef, poultry meat, eggs and milk. But the quantity of these products decreases. The drop is given by all rank opportunities beginning by decreasing of arable land acreage, continuing by declination of some buying inputs in the production and in specific commodities by low demand.

The specific feature influencing the structure and range of production various products seems to be the entrance of the Czech Republic into the European Union and subsequent opening of the Czech market to European Union. It leads in context to the number of regulative provisions to the restriction of original regionalized structure of production. It is replaced step by step by the structure upon the market requirements. This sense does not go more to the Czech, but to European Union.

Market

The Czech agriculture should be supported by the subsidies which the task is to assist the Czech agriculture to balance this transition.

In relationship to the entire reduction of agricultural produce, also rough added value in terms of agricultural branch, forestry, hunting decreased from the year 1955. The loss moved from 4.6% up to 3% in the year 2004.

The share of agriculture export on the total export of Czech Republic is relatively low. It is possible to note that the traditional Czech agriculture export commodities are continuing to be successful. The export commodities above all such products like hop, barley, brewer malt, beer, wood, stock animals, etc.

From the all economy viewpoint, it is possible to observe some significant increase of labour productivity in agriculture which has been made by decreasing of permanent labour force in agriculture. In spite of total drop of production level in agriculture since the year 1995 productivity has increased almost in all products out of potatoes and eggs. Redundant workers out of agriculture were not effectively utilized in other branches of economy. This may be assumed by the high level of unemployment in the Czech Republic which makes an average 9% in 2005.

Buying tractors, some machines have no influence on the production of these means in the Czech Republic because they are imported mostly from abroad.

The meaning of agriculture in the Czech Republic for the national economy with regard to its position is possible to get view in derived spheres. In this course it deals with several specific areas:

- ecological trends in agriculture
- organic agriculture
- landscape maintaining
- increasing of tourist activities in agriculture

Each aspect from these areas is specific by its features which analyse the scope of this contribution.

CONCLUSIONS

Agriculture contributes food, labour and capital, foreign exchange earnings towards overall economic development. Agriculture development increases market demand for non-farm goods and services and provides direct improvement in rural welfare.

Differences in resource bases and stages of development, world and domestic economic conditions, the structure of the political and asset ownership patterns, each influence the role of agriculture in economic development.

Increasing the labour force in agriculture does not lead to an equivalent increase in production. This is documented by development indicators of production and by the number of permanent labour force in agriculture both in developed and developing countries.

In countries starting their economic development it is possible to observe the role of agriculture as being narrowly related to natural conditions. Human activity

derives from obtaining agricultural produce from nature. A minimum of inputs used in the production process leads on one hand to low yields, but on the other hand to the minimum disturbance of the relationship between agriculture and environment.

At present, the environmental function of agriculture in industrial developed countries has a significant meaning. It is possible to say that the introduction of technologies which on one hand increases agricultural output but on the other hand their negative by-products increase the level of pollution. In this sense it is necessary to employ the methods which will lead to sustainable agriculture, producing sufficient amount of foods and not disturbing the natural environment.

In economically developed countries it is possible to see the relationship to relative surpluses of foodstuffs the waste of considering agriculture like the primary branch and its meaning is substituted by the underlining of its other meaning.

A dynamic contribution to economic development from the agricultural sector and improvement in rural welfare depend upon the modernisation of agriculture through technological changes. A series of technological changes — mechanisation, the effective use of chemicals, the breeding of new plant and animal

varieties and others— will substantially increase the efficiency of agricultural processes and raise the rate of agricultural production.

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The Ivory Coast

Land use (1000 ha)

	1985	1990	1995	2001
Total area	32246	32246	32246	32246
Land area	31800	31800	31800	31800
Arable and permanent	5180 F	5930 F	7020 F	7500 F
Arable land	2380 F	2430 F	2920 F	3100 F
Permanent crops	2800 F	3500 F	4100 F	4400 F
Non arable and non permanent crops	26620 F	25870 F	24780 F	24300 F

Source: FAO Production Yearbook Vol.56-2002

Note: F- FAO estimate

Irrigated area (1000 ha)

1989-1991	1999	2000	2001
66 F	73 F	73 F	73 F

Source: FAO Production Yearbook Vol.56-2002

Note: F- FAO estimate

Population (in thousands)

Year	Total	Agricultural	Economically active population		
			Total	in agriculture	% in agriculture
1990	12582	7568	4890	2923	59.8
1995	14385	8384	5727	3125	54.6
2001	16349	9147	6689	3215	48.1

Source: FAO Production Yearbook Vol.56-2002

Note: F- FAO estimate

Commodity	Exports									
	1999		2000		2001		2002		2003	
	Quantity(Mt)	Value(1000\$)	Quantity(Mt)	Value(1000\$)	Quantity(Mt)	Value(1000\$)	Quantity(Mt)	Value(1000\$)	Quantity(Mt)	Value(1000\$)
Cocoa beans	1,113,177	1,284,817	1,131,476	844,830	1,025,954	1,006,452	1,004,283	1,766,575	947,858	1,733,079
Coffee green	106,115	141,562	308,057	243,893	215,483	101,521	144,276	72,516	118,35	77,728
Natural rubber	2,956	1,303	4,132	1,741	4,312	1,679	2,637	1,314	2,539	1,907
Oil of palm	97,985	64,863	72,191	35,484	74,535	35,816	65,022	35,545	78,2	52,396
Coconuts	11,1	11,021	0	0	7,259	4,271	8,193	6,825	2,915	2,165
Cotton lint	131,208	150,547	160,652	147,895	112,626	124,092	137,528	134,537	144,155	177,406
Cashew nuts	74,552	58,699	63,379	41,655	87,574	35,295	104,773	49,114	84,811	37,817
Bananas	241,58	76,723	243,032	68,47	255,582	70,202	256	74,012	242,446	87,708
Pineapples	201,787	54,549	187,836	47,083	195,236	45,201	173,829	43,534	173,518	49,822

Source: faostat.fao.org

Trade indicators (average 1999-2001)

Agricultural exports (million US\$)	Agricultural imports (million US\$)	Agricultural exports as share of total exports (%)	Agricultural imports as share of total imports(%)	Net food imports	Agricultural exports
				(1000 \$)	relative to agricultural GDP(%)
2027	617	49.1	15.1	-1163584	77.5

Economic indicators

2001	1990-2001	1990-2001	2001	2001	1990-2001	2001	1990-2001
GNP capita (current US\$)	GDP (annual % growth)	GDP per capita (annual % growth)	GDP per capita, PPP (current international \$)	Agriculture, value added (% of GDP)	Agriculture, value added (annual % growth)	Agriculture, value added per worker (constant US\$)	Agriculture, value added per worker (annual % growth)
640	2.3	- 0,8	1557	23.5	3.3	1085	2.2

Source: The state of food and agriculture, FAO 2003-2004

The Czech Republic

Land use (in thousands hectares) - 31.12.

Indicators	1995	1999	2000	2001	2002	2003
Land area, total	7887	7887	7887	7887	7887	7887
Agricultural land	4280	4282	4280	4277	4273	4269
<i>arable land</i>	3143	3096	3082	3075	3068	3062
<i>hop-gardens</i>	11	11	11	11	11	11
<i>vineyards</i>	16	15	16	16	16	17
<i>permanent grassland</i>	902	950	961	966	968	971
Non-agricultural land	3607	3605	3607	3610	3614	3618
<i>forest land</i>	2630	2634	2637	2639	2643	2644

Irrigation agriculture area (in thousands hectares)

In 1995 (24) and in 2001(24)

Population (in thousands)

	1995	2001
Total	10 331	10 257
<i>males</i>	5 020	4992
<i>females</i>	5311	5265
Agricultural population	989	815
Non agricultural population	9342	9442
Total economically active	5615	5747
<i>males</i>	2954	3032
<i>females</i>	2661	2714

Agricultural exports ((1000\$)

Commodity	2001	2002	2003
Wheat	17958	14405	78994
Four of wheat	8231	4289	4215
Bran of wheat	2984	3006	6197
Macaroni	5462	5752	6000
Germ of wheat	0	0	0
Brat	568	1193	1446
Pastry	39986	45848	61372
Rice, paddy	4	10	28
Rice, husked	273	350	155
Rice, broken	711	1782	3496
Bran of rice	10	51	13
Rice flour	4	0	0
Breakfast cereals	1	4	6
Barley	5831	6092	8168
Pot barley	920	1933	22614
Barley, pearled	152	1	0
Barley flour and grits	0	0	0
Malt of barley	65	0	0
Malt extracts	37901	48149	65296
Beer of barley	130	100	129
Maize	71767	81028	100180
Germ of maize	2242	4870	12711

Source: Statistical yearbook Ministry of Agriculture Czech Republic 2004

Agricultural production level

Indicator, year	Harvest(kg)				Production		
	Grain crops	Potatoes	Oleaginous crops ¹⁾	Sugar beet	Meat ²⁾ (kg of live weight)	Milk (litres)	Eggs (pcs)
Per hectare of agricultural land							
1995	1576	311	172	867	245	708	712
2001	1736,301	264,2131	252,1236	824,793	185	631	746
2002	1872	247	225	1049	216	737	501
2003	1587,765	186,0524	163	952,777	211	721	507
Per person engaged in agriculture							
1995	26051	5137	2842	14333	4050	11705	11767
2001	43067	6553	6254	20458	4594	15662	18493
2002	40211	5299	4830	22544	4630	16045	10761
2003	35733	4187	3659	21443	4748	16231	11403

¹⁾ Excluding flaxseed and hempseed

²⁾ Cattle, calves and pigs

Economic accounts for agriculture: indices

% 1998 = 100, from current prices

SUZ ¹⁾ EAA ¹⁾ Code	Indicator	1999	2000	2001	2002	2003
10	Crop output ²⁾	90,6	100,3	111,5	102,6	88,5
01	<i>cereals(incl. seeds)</i>	85,6	89,5	122,4	100,3	85,8
02	<i>industrial crops</i>	94,9	98,0	125,9	105,5	97,5
03	<i>forage plants</i>	86,8	98,2	75,7	86,1	61,5
04.1	<i>fresh vegetables</i>	127,7	157,8	148,2	103,0	92,7
05	<i>potatoes(incl. seeds)</i>	84,3	113,8	113,8	70,5	63,6
06	<i>fruits</i>	141,7	213,3	157,7	158,4	142,7
07	<i>grapes ³⁾</i>	112,3	135,9	132,2	158,6	198,0
13	Animal output	88,6	91,6	97,5	87,6	84,0
11.1	<i>cattle</i>	89,4	91,9	67,5	67,4	61,2
11.2	<i>pigs</i>	81,9	91,2	111,9	80,8	75,0
11.5	<i>poultry</i>	93,4	97,3	131,3	130,3	123,5
12.1	<i>milk</i>	94,4	94,4	89,7	93,6	91,8
12.2	<i>eggs</i>	79,0	92,6	93,3	70,9	77,4
14	Agricultural goods output (10+13)	89,6	95,7	104,2	94,7	86,2
15	Agricultural services output	82,7	49,4	54,7	50,0	75,7
16	Agricultural output (14+15)	89,4	95,0	103,3	94,0	86,0
17	Non-agricultural secondary activities(inseparable)	x	x	x	⁴⁾ 100	⁴⁾ 93,8
18	Output of agricultural industry (16 + 17)	89,4	95,0	103,3	96,0	87,9
19	Total intermediate consumption	91,7	96,6	101,5	100,2	90,8
19.01	<i>seeds and planting stocks</i>	86,0	75,0	98,4	165,3	158,7
19.02	<i>energy; lubricants</i>	79,8	83,1	72,2	54,7	55,1
19.03	<i>fertilisers and soil improvers</i>	79,2	98,5	131,0	116,2	97,7
19.04	<i>plant protection products, herbicides, insecticides and pesticides</i>	92,8	90,8	146,8	124,8	118,4
19.05	<i>veterinary expenses</i>	140,8	166,9	152,0	172,5	194,8
19.06	<i>feedingsuffs</i>	89,8	98,1	92,3	93,3	78,8
19.07	<i>maintenance of materials</i>	107,0	48,0	60,2	57,0	49,4
19.08	<i>maintenance of buildings</i>	97,5	1024,1	1114,2	1112,0	865,2
20	Gross value added at basic prices (18-19)	84,7	91,5	107,4	86,9	81,7
21	Fixed capital consumption	107,7	105,9	100,6	102,5	96,8
22	Net value added at basic prices (20-21)	73,3	84,4	110,7	79,2	79,2

¹⁾ Economic Accounts for Agriculture

²⁾ Incl. subsidies on products, excl. taxes on products;
Incl. non-agricultural secondary activities in 1999 to 2001

³⁾ For production of table wine

⁴⁾ 2002 = 100

Gross value added: by economic activity

Economic activity	1995		2000		2001		2002		2003	
	CZK mil	%	CZK mil	%	CZK mil	%	CZK mil	%	CZK mil	%
Total	1 372 939	100,00	1979481	100,00	2133313	100,00	2231731	100,00	2 356 059	
A Agriculture, hunting and forestry	63135	4,60	77109	3,90	78179	3,66	68073	3,05		2,8
B Fishing	679	0,05	602	0,03	590	0,03	669	0,03		0
C Mining and quarrying	31916	2,32	27809	1,40	30066	1,41	31130	1,39		1,3
CA Mining and quarrying of energy producing materials	29321	2,14	23162	1,17	25276	1,18	25751	1,15		
CB Mining and quarrying except energy producing materials	2595	0,19	4647	0,23	4790	0,22	5379	0,24		
D Manufacturing	318066	23,17	519224	26,23	531442	24,91	569891	25,54		26,2
DA Manufacture of food products; beverage and tobacco	47791	3,48	74132	3,75	61580	2,89	66610	2,98		
DB Manufacture of textiles and textile products	18205	1,33	25478	1,29	26053	1,22	29444	1,32		
DC Manufacture of leather and leather products	3547	0,26	3666	0,19	3845	0,18	2738	0,12		
DD Manufacture of wood and wood products	10213	0,74	16751	0,85	18487	0,87	21226	0,95		
DE Manufacture of pulp, paper and paper products; publishing and printing	15429	1,12	31450	1,59	30793	1,44	35961	1,61		
DF Manufacture of coke, refined petroleum products and nuclear fuel	10241	0,75	4099	0,21	8695	0,41	2299	0,10		
DG Manufacture of chemicals, chemical products and man-made fibres	20686	1,51	37676	1,90	36281	1,70	31829	1,43		
DH Manufacture of rubber and plastic products	6402	0,47	23181	1,17	20817	0,98	22987	1,03		
DI Manufacture of other non- plastic mineral products	22355	1,63	42362	2,14	35358	1,66	42619	1,91		
DJ Manufacture of basic metals and fabricated metal product	68923	5,02	76140	3,85	86407	4,05	89535	4,01		
DK Manufacture of machinery and equipment n.e.c.	37125	2,70	49636	2,51	55050	2,58	57793	2,59		
DL Manufacture of electrical and optical equipment	24869	1,81	56771	2,87	62929	2,95	63603	2,85		
DM Manufacture of transport equipment	18369	1,34	55724	2,82	61264	2,87	75228	3,37		
DN Manufacturing n.e.c.	13911	1,01	22158	1,12	23883	1,12	28019	1,26		
E Electricity, gas and water supply	73013	5,32	80544	4,07	85201	3,99	96240	4,31		4,1
F Construction	124300	9,05	134214	6,78	137535	6,45	148026			6,6
G Wholesale and retail trade; repair of motor vehicles, motorcycles and personal	155560	11,33	261324	13,20	274053	12,85	271072	12,15		11,7

and household goods										
H Hotels and restaurants	37537	2,73	42497	2,15	49386	2,31	49558	2,22		2,1
I Transport, storage and communication	142744	10,40	192721	9,74	224462	10,52	248163	11,12		10,8
J Financial intermediation	44465	3,24	50917	2,57	67567	3,17	78597	3,52		3,3
K Real estate, renting and business activities	174285	12,69	283649	14,33	321432	15,07	309831	13,88		14,6
L to Q Other	207239	15,09	308871	15,60	333400	15,63	360481	16,15		10,8
¹⁾ Use of FISIM is not allocated to industries										

Trade indicators (average 1999-2001)

Agricultural exports (million US\$)	Agricultural imports (million US\$)	Agricultural exports as share of total exports (%)	Agricultural imports as share of total imports(%)	Net food imports	Agricultural exports
				(1000 \$)	relative to agricultural GDP(%)
1242	1856	4.4	6.1	459 019	58.6

Economic indicators

2001	1990-2001	1990-2001	2001	2001	1990-2001	2001	1990-2001
GNP capita (current US\$)	GDP (annual % growth)	GDP per capita (annual % growth)	GDP per capita, PPP (current international \$)	Agriculture, value added (% of GDP)	Agriculture, value added (annual % growth)	Agriculture, value added per worker (constant US\$)	Agriculture, value added per worker (annual % growth)
5320	0.6	1.8	14495	4.2	7.7	6167	2.5

Source: The state of food and agriculture, FAO 2003-2004