

AP Paraguay

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AP.1 Introduction

This document summarizes the procedures performed to achieve the Supply and Use Table of Paraguay with base year 2014 for the Global Trade Analysis Project (GTAP). This matrix uses supply and use matrices prepared by the Central Bank of Paraguay (BCP) official provider of the national accounts of the country and the unpublished Social Accounting Matrix (SAM) of the Ministry of Finance (MH), institution responsible for policy National economic

Input-product tables can be defined as an integrated set of matrices, which show the balance between the supply and use of goods and services (products). These matrices provide a detailed analysis of the production process and the use of the goods and services that are produced in a country (or region) or that are imported from the rest of the world, and of the income generated in the production by the various economic activities. (Caribbean, 2005).

A Social Accounting Matrix or SAM for its acronym in English, is a square matrix that records all transactions of an economy in a specific year. (Cicowiez & Galeano, 2019)

The document is divided into seven sections. This being the first, in the second the data sources used will be specified, the third will describe the disaggregation processes and the division of industries, the fourth detail the process for the elaboration of the traditional matrix, the fifth describe the adaptation to the GTAP unified format, the sixth section specifies the treatment given to net exports and the last section contains the matrix structure with the corresponding mapping and examples.

AP.2 Data Source

The main source of data was the System of National Accounts of Paraguay that contains the series 2008 - 2017, this is published by the Central Bank of Paraguay (BCP). The offer-use table is designed in the form of Products by activities. For this reason, it was disaggregated to obtain Product by Product. Other sources published by the BCP that gave a great contribution were the Results of the change of base year (CAB) and Statistical Annex of the same series. For the disaggregation of the industry to products, the SAM carried out by the Ministry of Finance was used. In the tax part, the 2014 Product Tax Collection table prepared by the institution was used.

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In addition, for the UF and UP matrices, the import matrix of the Economic Financial Information System Unit was used. These documents are internal to the Ministry of Finance of Paraguay.

Finally, for specific cases in which no disaggregated and updated sources were found, the product structure of the National Economic Census of 2010 was used, which used the International Standard Industrial Classifier, version 4 (ISIC 4).

AP.3 Disaggregation of products and their divisions

First, the new GTAP database structure was used, which is a matrix of 65 * 65, that is, 65 Products for 65 Products (65 * 65) and on the other hand, the National Accounts of Paraguay have a structure of 52 products per 33 activities for this reason, it was necessary to resort to the disaggregation of activities into products.

To disaggregate the activities into products, we proceeded as follows: - The SAM built by the Ministry of Finance was used - Then, if the disaggregation not covered some activities, we used the structure of the publication of the National Economic Census of the 2010 to do that. - Finally, there was few activities without disaggregated data, to split those, linear adjustments were made.

The disaggregated activities were:

— Farming

- Cotton in branch
- Sugarcane
- Other crops
- Soy
- Rice
- Wheat
- Other cereals
- Fruits and other agricultural products

— Livestock

- Cattle 61%
- Other types of livestock 8%
- Raw milk 16%
- Animal material for textile use 16%

— Mining

- Coal and lignite extraction, do not have great importance, and therefore its contribution to production is infinitesimal
 - Extraction of crude oil, together with the extraction of Natural Gas represent 1% which is distributed equally between both sectors
 - Extraction of metallic minerals and other mining activities, represents 99% of the total Mining.
- Meat production
 - Beef 71%
 - Other meat products 29%
- Textiles and clothing (proportional)
 - Textiles
 - Garments
- Chemical products
 - Fuels and lubricants 32%
 - Chemical products 28%
 - Pharmaceutical and toilet products 22%
 - Plastic, rubber and other products 17%
- Common metals
 - Products of common iron and steel 49%
 - Products of other non-ferrous metals 51%
- Machinery and equipment
 - Electronic, computer and optical products 44%
 - Products of machinery and equipment n. and. c. 7%
 - Electronic equipment products 49%
- Other manufacturing industries
 - Products for vehicle engines, trailers and semi trailers 25%
 - Equipment products for other vehicles 26%
 - Other manufactured products 49%
- Electricity and water
 - Production, collection and distribution of electric energy, represents 98% of the total

- Collection, treatment and distribution of Water, represents 2% of the total Electricity and water
- Commerce
 - Gas products and distribution of gaseous fuels, this product is not very relevant in our economy
 - Trade and repair of motor vehicles and motorcycles, represents the total value.
- Transport
 - Land and pipe transport accounts for 17%
 - River transport, represents 61%
 - Air Transport, represents only 1%
 - Storage and support activities for transport accounts for 21% of total transport
- Financial intermediation (proportional)
 - Financial services
 - Insurance services
- Government services
 - Health 31%
 - Education 32%
 - Other government services 36%

The agreement of the intermediate input matrix requires that the intermediate demand be equal to the intermediate consumption, which could be done without the support of some instruments due to the equilibrium that comes from the sources of information, in this case the SAM and the Supply and Used Tables (SUT).

AP.4 Construction of the traditional Input-Product matrix.

The construction of the traditional I-O matrix links several arrays and tables from different sources, and this section details each of them. Table 1 shows the general structure that it must possess.

Source: Exercises in Contributing I-O Tables to the GTAP Data Base, Mark Horridge, Robert McDougall, Badri Narayanan and Terrie L. Walmsley, September 2008

In the construction of the Paraguayan matrix, all data are expressed in millions of current dollars. Considering the average exchange rate for 2014 (1 USD = 4,462 guaranies).

First, we proceeded to build the matrix of intermediate demand broken down product by product (65 * 65) as shown in table 3, after the necessary equality, the matrices of total supply and total demand must be added, of which the totals. They must be the same again.

Figure 8.24: Table 1: Illustrative structure of a matrix Input Product (I-O)

	USES							
INPUTS	Commodity 1	Commodity 2	Commodity 3	Household	Government	Investment	Exports	Total = Sales
Commodity 1	N11	N12	N13	C1	G1	I1	X1	$\Sigma_i N1i +$ $C1+G1+I1$ $+ X1$
Commodity 2	N21	N22	N23	C2	G2	I2	X2	$\Sigma_i N2i +$ $C2+G2+I2$ $+ X2$
Commodity 3	N31	N32	N33	C3	G3	I3	X3	$\Sigma_i N3i +$ $C3+G3+I3$ $+ X3$
Value- added (e.g., land, labor, capital)	V1	V2	V3	0	0	0	0	
Total = Costs	$\Sigma_i N1i + V1$	$\Sigma_i N2i + V2$	$\Sigma_i N3i + V3$					

Abbreviations: Capital letters: INtermediate demand, Value-added, Exports, Investment, Consumption, Government, and Household Consumption.

For the total supply are taken into account:

- Gross Production Value: This is available by products in national accounts, in the sector of integrated economic accounts.
- Imports: This was extracted from the supply-use table of the results of the change of base year (CBY), of the supply and use account sector. OBS: The CIF / FOB adjustment must be taken into account for imports.
- Distribution Margins: This was extracted from the supply-use table of the results of the change of base year (CBY), of the supply and use account sector. OBS: This column gives zero.
- Product Taxes: It was extracted from the Product Tax Collection table of Ministry of Finance (MH). OBS: It is the sum of VAT, ISC and Customs Law.

For total demand, the data was extracted from the supply-use table of the results of the change of base year (CBY), of the supply and use account sector. The following accounts are taken into account:

- Final Consumption

- Capital Formation (Investment)
- Variation of existences
- Export (for net exports look at section six)

The last table to be integrated is the value added and the other taxes, the accounts are:

- Remuneration: It was extracted from the system of national accounts, from the sector of supply and use accounts.
- Other Taxes: This is available by products in the national accounts, in the sector of integrated economic accounts.
- Mixed Income: It was extracted from the system of national accounts, from the sector of supply and use accounts.
- Operating Surplus: This was extracted from the Gross Domestic Product by type of income, this is available in the system of national accounts, of the sector of supply and use accounts.
- Gross Added Value: It was extracted from the results of the change of base year (CBY), of the supply and use account sector. It is also obtained by adding the four previous accounts.
- Gross Production: is the sum of intermediate consumption and gross value added.

It should be taken into account that Gross Production Value = Gross Production.

AP.5 Symmetric Table of Input-Product in GTAP Format.

The new unified format was introduced for version 5 of the GTAP database. This is made up of 4 main components: two matrices UF and UP and two vectors MF and OP.

The first matrix in Table 2 is UF. It refers to a matrix of use values before taxes on basic products with 65 sectors. The rows of the matrix refer to inputs in production, including national products, imported products, land, labor and capital. The columns refer to the uses of the products, including intermediate use, public and private consumption, investment, changes in stocks and exports.

The second matrix is UP and refers to a matrix of post-tax use values. Product taxes represent a combination of value added taxes (VAT) and consumption taxes (ISC), for example, taxes on the consumption of beer or tobacco.

UF and UP differ because UF refers to the values before the tax on basic products, while UP is the values after the tax on basic products.

After the two matrices we have the two vectors OP and MF. OP refers to a vector of outflows, including indirect taxes. According to GTAP, indirect taxes are non-product related taxes paid by companies. Examples include payroll taxes, property taxes, motor vehicle taxes, and business licenses. MF refers to a vector of imports, import with excluded import duties.

To obtain the domestic or national matrix, the import matrix, prepared by the USIEF, is subtracted from the total intermediate demand matrix. In other words, the total Intermediate Demand = Domestic Intermediate Demand + Imported Intermediate Demand.

For the disaggregation of final consumption, we proceeded to apply the distribution observed in GDP on the expenditure side, published in the CAB, where it is established that public consumption is equivalent to 15% (Health, Education, Other government services) and private consumption to 85% of final consumption.

Figure 8.25: Table 2: Input-Product Table in GTAP format

GTAP Data Bases: GTAP I-O Table Format

No Tax UF				WithTax UP			
production				production			
domestic	Value of domestic commodities by source and use (intermediate)	Final		domestic	Value of domestic commodities by source and use (intermediate)	Final	
imported	Value of imported commodities by source and use (intermediate)	Final	- Import duties MF	imported	Value of imported commodities by source and use (intermediate)	Final	
primary	Value added			primary	Value added		
					+ Indirect taxes		
					OP		

The traditional version can be adapted to the unified format by adding the import matrix, which was prepared by the Financial Economic Information System Unit of the Ministry of Finance of Paraguay. This matrix constructs a structure combining data from the activity economy of Enterprises (ISIC V4) with the import of products (HS), then, both, the activity and products transform to CPC and finally in GTAP sector, maintains total amount of the imports made.

In addition, for the MF and OP vectors, it was necessary to disaggregate the table of Collection of Product Taxes for 2014. For the disaggregation of these taxes, the parameters set forth are respected. Import duties were used for MF, while Indirect taxes (IVA and ISC) were used for the OP. For added value, firstly, it must be taken into account that Remuneration = Labor and

Something extremely important is the balance that must be achieved, which consists in the fact that the domestic Final Demand (Total Sales) must be equal to the value of OP (Total Cost) as can be seen in the following table.

Bases de datos GTAP: Verificación de saldo

AP.6 Net Exports

With the data of the estimated re-exports, classified by products and by-product, these products are harmonized with the 65 products of the GTAP and subtract the values of exports, component of the final demand and of the import matrix.

AP.7 Illustrations

Figure 8.27: Table 3: Disaggregation of Industries or Activities in Products, page 1

N°	Industries	N°	Products
1	Farming	1	Cotton on branch
		2	Sugar cane
		3	Other crops
		4	Soybean
		5	Rice
		6	Wheat
		7	Other cereals
		8	Fruits and other agricultural products
2	Livestock	9	Cattle
		10	Other types of livestock
		11	Raw milk
		12	Animal material for textile use
3	Forest	13	Forest products
4	Fishing	14	Fishing products
5	Mining	15	Coal and lignite extraction
		16	Crude Oil Extraction
		17	Natural Gas Extraction
		18	Extraction of metallic minerals and other mining activities
6	Meat production	19	Beef
		20	Other meat products
7	Oil processing	21	Vegetable oils and fats
8	Dairy production	22	Dairy products
9	Milling and Bakery Production	23	Milling and Bakery Products
10	Sugar production	24	Sugar and sugar products
11	Other food production	25	Other food products
12	Beverage and tobacco production	26	Beverages and tobacco
13	Production of textiles and clothing	27	Textile
		28	Clothing
14	Leather and footwear production	29	Leather and leather products
15	Wood Industry	30	Wood and wood products
16	Paper production and paper products	31	Paper and paper products
17	Chemical products	32	Fuels and lubricants
		33	Chemical products
		34	Pharmaceutical and toilet products
		35	Plastic, rubber and other products

Figure 8.28: Page 2 of Table 3: Disaggregation of Industries or Activities in Products

18	Non-metallic minerals	36	Non-metallic mineral products
19	Common metals	37	Common iron and steel products
		38	Products of other non-ferrous metals
20	Metal products	39	Metal products
21	Machinery and equipment	40	Electronic, computer and optical products.
		41	Machinery and equipment products
		42	Electronic equipment products
22	Other manufacturing industries	43	Products for vehicle engines, trailers and semi trailers
		44	Equipment products for other vehicles
		45	Other manufactured products
23	Electricity and water	46	Production, collection and distribution of electric energy
		47	Water collection, treatment and distribution
24	Building	48	Building
25	Commerce	49	Gas products and distribution of gaseous fuels
		50	Trade and repair of motor vehicles and motorcycles
26	Transport	51	Land and pipeline transport
		52	River transport
		53	Air Transport
		54	Storage and transport support activities
27	Telecommunications	55	Telecommunications
28	Financial intermediation	56	Financial services
		57	Insurance services
29	Real estate services	58	Real estate services
30	Business Services	59	Business Services
31	Restaurants and hotels	60	Restaurant and hotel services
32	Home Services	61	Home Services
33	Government services	62	Health
		63	Education
		64	Other government services
		65	n.a.

Figure 8.29: Table 4: GTAP Concordance Tables, page 1

1) GSC3 Sectors Defined by Reference to the CPC v.2.1			
Number	Code	Code	Description
1	pdr	113	Rice
2	wht	111	Wheat
3	gro	112	Maize (corn)
		114	Sorghum
		115	Barley
		116	Rye
		117	Oats
		118	Millet
		119	Other cereals
4	v_f	12	Vegetables
		13	Fruit and nuts
		15	Edible roots and tubers with high starch or inulin content
		17	Pulses (dried leguminous vegetables)
5	osd	14	Oil seeds and oleaginous fruit
6	c_b	18	Sugar crops
7	pfb	192	Fibre crops
8	ocr	16	Stimulant, spice and aromatic crops
		191	Forage products
		193	Plants and parts of plants used primarily in perfumery, in pharmacy, or for insecticidal, fungicidal or similar purposes
		194	Beet seeds (excluding sugar beet seeds) and seeds of forage plants
		195	Natural rubber in primary forms or in plates, sheets or strip
		196	Living plants; cut flowers and flower buds; flower seeds
		197	Unmanufactured tobacco
		199	Other raw vegetable materials nec
9	ctf	211	Bovine animals, live
		212	Other ruminants
		213	Horses and other equines
		2411	Bovine semen
10	oap	214	Swine / pigs
		215	Poultry
		219	Other live animals
		23	Eggs of hens or other birds in shell, fresh
		2419	Semen, n.e.c
		291	Natural honey
		292	Snails, fresh, chilled, frozen, dried, salted or in brine, except sea snails
		293	Edible products of animal origin n.e.c.
		295	Hides, skins and furskins, raw
		296	Insect waxes and spermaceti, whether or not refined or coloured
11	rmk	22	Raw milk
12	wol	294	Raw animal materials used in textiles
13	frs	3	Forestry and logging products

Figure 8.30: Page 2 of Table 4: GTAP Concordance Tables

19	cmt	21111	Meat of cattle, fresh or chilled
		21112	Meat of buffalo, fresh or chilled
		21115	Meat of sheep, fresh or chilled
		21116	Meat of goat, fresh or chilled
		21117	Meat of camels and camelids, fresh or chilled
		21118	Meat of horses and other equines, fresh or chilled
		21119	Other meat of mammals, fresh or chilled
		2113	Meat of mammals, frozen
		2115	Edible offal of mammals, fresh, chilled or frozen
20	omt	21113	Meat of pigs, fresh or chilled
		21114	Meat of rabbits and hares, fresh or chilled
		2112	Meat of poultry, fresh or chilled
		2114	Meat of poultry, frozen
		2116	Edible offal of poultry, fresh, chilled or frozen
		2117	Other meat and edible offal, fresh, chilled or frozen
		2118	Preserves and preparations of meat, meat offal or blood
		2119	Flours, meals and pellets of meat or meat offal, inedible; greaves
21	vol	215	Animal fats
		216	Vegetable oils
		217	Margarine and similar preparations
		218	Cotton linters
		219	Oil-cake and other residues resulting from the extraction of vegetable fats or oils; flours and meals of oil seeds or oleaginous fruits, except those of mustard; vegetable waxes, except triglycerides; degreas; residues resulting from the treatment of fatty substances or animal or vegetable waxes
22	mil	22	Dairy products
23	pcr	2316	Rice, semi- or wholly milled, or husked
24	sgr	235	Sugar and molasses
25	ofd	212	Prepared and preserved fish, crustaceans, molluscs and other aquatic invertebrates
		213	Prepared and preserved vegetables, pulses and potatoes
		214	Prepared and preserved fruits and nuts
		2311	Wheat and meslin flour
		2312	Other cereal flours
		2313	Groats, meal and pellets of wheat and other cereals
		2314	Other cereal grain products (including corn flakes)
		2317	Other vegetable flours and meals
		2318	Mixes and doughs for the preparation of bakers' wares
		232	Starches and starch products; sugars and sugar syrups n.e.c.
		233	Preparations used in animal feeding; lucerne (alfalfa) meal and pellets
		234	Bakery products
		236	Cocoa, chocolate and sugar confectionery
		237	Macaroni, noodles, couscous and similar farinaceous products
		239	Food products n.e.c.
26	b_t	24	Beverages
		25	Tobacco products

Figure 8.31: Page 3 of Table 4: GTAP Concordance Tables

2) GSC3 Sectors Defined by Reference to the ISIC, Rev.4			
Number	Code	Code	Description
14	fsh	3	Fishing and aquaculture
		17	Hunting, trapping and related service activities
15	coa	5	Mining of coal and lignite
16	oil	61	Extraction of crude petroleum
		091(part)	Support activities for petroleum and natural gas extraction (petroleum part)
17	gas	62	Extraction of natural gas
		091(part)	Support activities for petroleum and natural gas extraction (natural gas part)
18	oxt	7	Mining of metal ores
		8	Other mining and quarrying
		99	Support activities for other mining and quarrying
27	tex	13	Manufacture of textiles
28	wap	14	Manufacture of wearing apparel
29	lea	15	Manufacture of leather and related products
30	lum	16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
31	ppp	17	Manufacture of paper and paper products
		18	Printing and reproduction of record media
32	p_c	19	Manufacture of coke and refined petroleum products
33	chm	20	Manufacture of chemicals and chemical products
34	bph	21	Manufacture of pharmaceuticals, medicinal chemical and botanical products
35	rpp	22	Manufacture of rubber and plastics products
36	nmm	23	Manufacture of other non-metallic mineral products
37	i_s	241	Manufacture of basic iron and steel
		2431	Casting of iron and steel
38	nfm	242	Manufacture of basic precious and other non-ferrous metals
		2432	Casting of non-ferrous metals
39	fmp	25	Manufacture of fabricated metal products, except machinery and equipment
40	ele	26	Manufacture of computer, electronic and optical products
41	eeq	27	Manufacture of electrical equipment
42	ome	28	Manufacture of machinery and equipment n.e.c.
43	mvh	29	Manufacture of motor vehicles, trailers and semi-trailers
44	otn	30	Manufacture of other transport equipment
45	omf	31	Manufacture of furniture
		32	Other manufacturing
		33	Repair and installation of machinery and equipment
46	ely	351	Production, collection and distribution of electricity
		353	Steam and hot water supply
47	gdt	352	Manufacture of gas; distribution of gaseous fuels through mains
48	wtr	36	Collection, purification and distribution of water, water collection, treatment and supply
		37	Sewerage
		38	Waste collection, treatment and disposal activities; materials recovery
		39	Remediation activities and other waste management services

Figure 8.32: Page 4 of Table 4: GTAP Concordance Tables

49	cns	41	Construction of buildings
		42	Civil engineering
		43	Specialized construction activities
50	trd	45	Wholesale and retail trade and repair of motor vehicles and motorcycles
		46	Wholesale trade, except of motor vehicles and motorcycles
		47	Retail trade, except of motor vehicles and motorcycles
51	afs	55	Accommodation
		56	Food and beverage service activities
52	otp	49	Land transport and transport via pipelines
53	wtp	50	Water transport
54	atp	51	Air transport
55	whs	52	Warehousing and support activities for transportation
56	cmn	53	Postal and courier activities
		58	Publishing activities
		59	Motion picture, video and television programme production, sound recording and music publishing activities
		60	Programming and broadcasting activities
		61	Telecommunications
		62	Computer programming, consultancy and related activities
		63	Information service activities
57	ofi	64	Financial service activities, except insurance and pension funding
		661	Activities auxiliary to financial service activities, except insurance and pension funding
		663	Fund management activities
58	ins	65	Insurance, reinsurance and pension funding, except compulsory social security
		662	Activities auxiliary to insurance and pension funding
59	rsa	68	Real estate activities
60	obs	M, N	Professional, scientific and technical activities and Administrative and support service activities
61	ros	R, S, T	Arts, entertainment and recreation; Other service activities; Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use
62	osg	84	Public administration and defence; compulsory social security
		99	Activities of extraterritorial organizations and bodies
63	edu	85	Education
64	hht	Q	Human health and social work activities
65	dwe	n.a.	n.a.

Table 5: Example of elaboration of intermediate demand of farming

→ The production and intermediate consumption accounts according to economic activity and products, which is obtained from the results of the change of base year, are used to assemble the table of intermediate consumption of product by activity.

Products \ Activity	Farming
Cotton on branch	0
Sugar cane	45
Other crops	3
Soybean	58
Rice	4
Corn	11
Wheat	11
Other cereals	1
Cassava and other tubers	22
Fruits and other agricultural products	16

→ Then the activity is broken down into the same products in order to have a product by product table. The GTAP classification is also adopted.

Nº	Product Classification / Activity Classification	FARMING							
		Cotton on branch	Sugar cane	Other crops	Soybean	Rice	Wheat	Other cereals	Fruits and other agricultural products
1	Cotton on branch								
2	Sugar cane								
3	Other crops								
4	Soybean								
5	Rice								
6	Wheat								
7	Other cereals								
8	Fruits and other agricultural products								

→ The product by product disaggregation begins, according to the structure of the products extracted from the SAM, CEN, etc. Ex .: SOJA is in SAM.

Nº	Product Classification / Activity Classification	FARMING							
		Cotton on branch	Sugar cane	Other crops	Soy	Rice	Wheat	Other cereals	Fruits and other agricultural products
1	Cotton on branch	0	-	-	0	-	-	-	-
2	Sugar cane	-	17	-	27	-	-	-	-
3	Other crops	-	-	1	2	-	-	-	-
4	Soybean	-	-	-	36	-	-	23	-
5	Rice	-	-	-	2	1	-	-	-
6	Wheat	-	-	-	7	-	4	-	-
7	Other cereals	-	-	-	1	-	-	0	-
8	Fruits and other agricultural products	-	-	-	30	-	-	-	19

→ As the total value of each industry is known, a linear division is made between products that do not have a product structure.

N°	Product Classification / Activity Classification	FARMING							Fruits and other agricultural products
		Cotton on branch	Sugar cane	Other crops	Soybean	Rice	Wheat	Other cereals	
1	Cotton on branch	0	-	-	0	-	-	-	-
2	Sugarcane	-	17	-	27	-	-	-	-
3	Other crops	-	-	1	2	-	-	-	-
4	Soybean	-	-	-	36	-	-	23	-
5	Rice	-	-	-	2	1	-	-	-
6	Wheat	-	-	-	7	-	4	-	-
7	Other cereals	-	-	-	1	-	-	0	-
8	Fruits and other agricultural products	-	-	-	30	-	-	-	19
9	Cattle	-	-	-	-	-	-	-	-
10	Other types of livestock	-	-	-	-	-	-	-	-
11	Raw milk	-	-	-	-	-	-	-	-
12	Animal material for textile use	-	-	-	-	-	-	-	-
13	Forest products	-	-	-	-	-	-	-	-
14	Fishing products	-	-	-	-	-	-	-	-
15	Coal and lignite extraction	-	-	-	-	-	-	-	-
16	Crude Oil Extraction	-	-	-	-	-	-	-	-
17	Natural Gas Extraction	-	-	-	-	-	-	-	-
18	Extraction of metallic minerals and other mining activities	-	-	-	-	-	-	-	-
19	Beef	-	-	-	-	-	-	-	-
20	Other meat products	-	-	-	-	-	-	-	-
21	Vegetable oils and fats	-	-	-	-	-	-	-	-
22	Dairy products	-	-	-	-	-	-	-	-
23	Milling and Bakery Products	-	-	-	-	-	-	-	-
24	Sugar and sugar products	-	-	-	-	-	-	-	-
25	Other food products	-	-	-	-	-	-	-	-
26	Beverages and tobacco	-	-	-	-	-	-	-	-
27	Textile	-	-	-	-	-	-	-	-
28	Clothing	-	-	-	-	-	-	-	-
29	Leather and leather products	-	-	-	-	-	-	-	-
30	Wood and wood products	4	4	4	54	4	4	4	11
31	Paper and paper products	4	4	4	50	4	4	4	11
32	Fuels and lubricants	6	6	6	79	6	6	6	17
33	Chemical products	28	28	28	392	28	28	28	83
34	Pharmaceutical and toilet products	-	-	-	-	-	-	-	-
35	Plastic, rubber and other products	-	-	-	-	-	-	-	-
36	Non-metallic mineral products	-	-	-	-	-	-	-	-
37	Common Iron and steel products	0	0	0	5	0	0	0	1
38	Products of other non-ferrous metals	0	0	0	5	0	0	0	1
39	Metal products	-	-	-	-	-	-	-	-
40	Electronic, computer and optical products.	-	-	-	-	-	-	-	-
41	Machinery and equipment products	-	-	-	-	-	-	-	-
42	Electronic equipment products	-	-	-	-	-	-	-	-
43	Products for vehicle engines, trailers and semi trailers	-	-	-	-	-	-	-	-
44	Equipment products for other vehicles	-	-	-	-	-	-	-	-
45	Other manufactured products	9	9	9	124	9	9	9	26
46	Production, collection and distribution of electric energy	0	0	0	2	0	0	0	1
47	Water collection, treatment and distribution	0	0	0	0	0	0	0	0
48	Building	-	-	-	-	-	-	-	-
49	Gas products and distribution of gaseous fuels	-	-	-	-	-	-	-	-
50	Trade and repair of motor vehicles and motorcycles	-	-	-	-	-	-	-	-
51	Land and pipeline transport	3	3	3	37	3	3	3	8
52	River transport	9	9	9	132	9	9	9	28
53	Air Transport	0	0	0	2	0	0	0	0
54	Storage and transport support activities	3	3	3	45	3	3	3	10
55	Telecommunications	-	-	-	-	-	-	-	-
56	Financial services	6	6	6	80	6	6	6	17
57	Insurance services	6	6	6	80	6	6	6	17
58	Real estate services	16	16	16	227	16	16	16	48
59	Business Services	8	8	8	108	8	8	8	23
60	Restaurant and hotel services	-	-	-	-	-	-	-	-
61	Home Services	-	-	-	-	-	-	-	-
62	Health	-	-	-	-	-	-	-	-
63	Education	-	-	-	-	-	-	-	-
64	Other government services	-	-	-	-	-	-	-	-
65	n.a.	-	-	-	-	-	-	-	-
INTERMEDIATE CONSUMPTION		449.067	526.205	454.286	6.809.297	454.730	467.477	551.221	1.430.748

→ All data is subsequently verified.

N°	Product Classification / Activity Classification	FARMING								TOTAL
		Cotton on branch	Sugar cane	Other crops	Soybean	Rice	Wheat	Other cereals	Fruits and other agricultural products	
1	Cotton on branch	0	-	-	0	-	-	-	-	0
2	Sugar cane	-	17	-	27	-	-	-	-	45
3	Other crops	-	-	1	2	-	-	-	-	3
4	Soybean	-	-	-	36	-	-	23	-	58
5	Rice	-	-	-	2	1	-	-	-	4
6	Wheat	-	-	-	7	-	4	-	-	11
7	Other cereals	-	-	-	1	-	-	0	-	1
8	Fruits and other agricultural products	-	-	-	30	-	-	-	19	49
9	Cattle	-	-	-	-	-	-	-	-	-
10	Other types of livestock	-	-	-	-	-	-	-	-	-
11	Raw milk	-	-	-	-	-	-	-	-	-
12	Animal material for textile use	-	-	-	-	-	-	-	-	-
13	Forest products	-	-	-	-	-	-	-	-	-
14	Fishing products	-	-	-	-	-	-	-	-	-
15	Coal and lignite extraction	-	-	-	-	-	-	-	-	-
16	Crude Oil Extraction	-	-	-	-	-	-	-	-	-
17	Natural Gas Extraction	-	-	-	-	-	-	-	-	-
18	Extraction of metallic minerals and other mining activities	-	-	-	-	-	-	-	-	-
19	Beef	-	-	-	-	-	-	-	-	-
20	Other meat products	-	-	-	-	-	-	-	-	-
21	Vegetable oils and fats	-	-	-	-	-	-	-	-	-
22	Dairy products	-	-	-	-	-	-	-	-	-
23	Milling and Bakery Products	-	-	-	-	-	-	-	-	-
24	Sugar and sugar products	-	-	-	-	-	-	-	-	-
25	Other food products	-	-	-	-	-	-	-	-	-
26	Beverages and tobacco	-	-	-	-	-	-	-	-	-
27	Textile	-	-	-	-	-	-	-	-	-
28	Clothing	-	-	-	-	-	-	-	-	-
29	Leather and leather products	-	-	-	-	-	-	-	-	-
30	Wood and wood products	4	4	4	54	4	4	4	11	88
31	Paper and paper products	4	4	4	50	4	4	4	11	82
32	Fuels and lubricants	6	6	6	79	6	6	6	17	129
33	Chemical products	28	28	28	392	28	28	28	83	641
34	Pharmaceutical and toilet products	-	-	-	-	-	-	-	-	-
35	Plastic, rubber and other products	-	-	-	-	-	-	-	-	-
36	Non-metallic mineral products	-	-	-	-	-	-	-	-	-
37	Common iron and steel products	0	0	0	5	0	0	0	1	8
38	Products of other non-ferrous metals	0	0	0	5	0	0	0	1	8
39	Metal products	-	-	-	-	-	-	-	-	-
40	Electronic, computer and optical products.	-	-	-	-	-	-	-	-	-
41	Machinery and equipment products	-	-	-	-	-	-	-	-	-
42	Electronic equipment products	-	-	-	-	-	-	-	-	-
43	Products for vehicle engines, trailers and semi trailers	-	-	-	-	-	-	-	-	-
44	Equipment products for other vehicles	-	-	-	-	-	-	-	-	-
45	Other manufactured products	9	9	9	124	9	9	9	26	203
46	Production, collection and distribution of electric energy	0	0	0	2	0	0	0	1	4
47	Water collection, treatment and distribution	0	0	0	0	0	0	0	0	0
48	Building	-	-	-	-	-	-	-	-	-
49	Gas products and distribution of gaseous fuels	-	-	-	-	-	-	-	-	-
50	Trade and repair of motor vehicles and motorcycles	-	-	-	-	-	-	-	-	-
51	Land and pipeline transport	3	3	3	37	3	3	3	8	60
52	River transport	9	9	9	132	9	9	9	28	216
53	Air Transport	0	0	0	2	0	0	0	0	4
54	Storage and transport support activities	3	3	3	45	3	3	3	10	74
55	Telecommunications	-	-	-	-	-	-	-	-	-
56	Financial services	6	6	6	80	6	6	6	17	131
57	Insurance services	6	6	6	80	6	6	6	17	131
58	Real estate services	16	16	16	227	16	16	16	48	372
59	Business Services	8	8	8	108	8	8	8	23	177
60	Restaurant and hotel services	-	-	-	-	-	-	-	-	-
61	Home Services	-	-	-	-	-	-	-	-	-
62	Health	-	-	-	-	-	-	-	-	-
63	Education	-	-	-	-	-	-	-	-	-
64	Other government services	-	-	-	-	-	-	-	-	-
65	n.a.	-	-	-	-	-	-	-	-	-
INTERMEDIATE CONSUMPTION		449.067	526.205	454.286	6.809.297	454.730	467.477	551.221	1.430.748	11.143.030

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