

11.Q

Uganda

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11.Q.1 Introduction

This document describes the provision of Ugandan input-output table in the GTAP version 5 database. The procedures undertaken for the Ugandan I-O table follow the guidelines set out in Huff *et al.* (GTAP Technical Paper No. 01) as closely as possible.

11.Q.2 Source Data

The Ugandan source table is a 50-commodity I-O table. The base year for the table is 1992, although the input-output relationships are derived from a table with base year 1987. It is a commodity by commodity table, and was prepared by the Ugandan National Statistics Department (UNSD).

The structure of the source table is largely consistent with the GTAP framework. Intermediate and final demands are given for both domestic and imported goods, with separate final demand components for private and government demand, investment and exports. In addition, changes in stocks are included. Two factors can be identified: labor (as wages and salaries) and capital (as operating surplus).

11.Q.3 *Procedures Undertaken for GTAP 5*

In addition to mapping of sectors to correspond with the GTAP version 5 database (described in the next section), two data procedures were undertaken as part of a research project undertaken by CREDIT¹ and have been retained in the Ugandan data in GTAP version 5:

- Two accounts (“excess profits and “unspecified”) were removed. These accounts are both essentially statistical discrepancy terms, and are small in total (around 0.6% of GDP). Both accounts were added to the largest sector of the Ugandan economy, food crops, which is much larger than these accounts.
- Primary factor employment was re-calculated to include the returns to subsistence agriculture, self-employed labor and other non-wage labor in the labor employment data rather than as returns to capital. The values of non-wage labor returns were calculated using income data from the Ugandan general household survey.

11.Q.4 *Sectoral Mapping*

The problems encountered with the sectoral mapping relate largely to the fact that the types of products produced in Uganda do not correspond to the GTAP 5 commodities.

- Cash crops, particularly coffee, are of high importance to the Ugandan economy. These largely become part of the “other crops” sector in GTAP. Other GTAP agricultural commodities are included in one “food crops” sector in the source I-O table, which are then split across GTAP agricultural commodities according to data on relative sizes of production of these food crops.
- Processing of agricultural goods presents similar problems because GTAP does not take account of non-food cash crops. Coffee processing and tea processing are matched with the GTAP commodity “ofp other food processing”, and cotton ginning is matched to “tex textiles”.

A mapping of the 50 sectors in the Ugandan I-O table to a 35-sector aggregation of the 57 GTAP commodities is provided in appendix table 11.Q.A1.

¹ The Centre for Research in Economic Development and International Trade, School of Economics, University of Nottingham, United Kingdom.

11.Q.5 Other Problems

Problems that remain in the data for Uganda are largely related to the types of taxation identified in the source table. The only forms of taxation in this table are indirect taxes on production and import tariffs. Export taxes, consumption taxes and bilateral taxes exist in the GTAP data for Uganda only where they are estimated by GTAP staff from other sources.

Reference

Huff, Karen, Robert McDougall and Terrie Walmsley. 1999. Contributing Input -Output Tables to the GTAP Data Base, GTAP Technical Paper No. 1, Release 4.1, Center for Global Trade Analysis, Purdue University, August 1999.

Appendix

Table 11.Q.A1. Sectors in the Ugandan I-O table: Mapping to GSC2

GSC2 agg		GSC2		Ugandan I-O Sectors	
1	food	1	pdr	3	Food crops
		2	wht		
		3	gro		
		4	v_f		
		5	osd		
2	cash	6	c_b	1	Coffee
		7	pfb	2	Other Cash crops
		8	ocr		
3	live	9	ctl	4	Livestock
		10	oap		
		11	rmk		
		12	wol		
4	for	13	for	5	Forestry
5	fsh	14	fsh	6	Fishing
6	mine	15	col	7	Mining & Quarrying
		16	oil		
		17	gas		
		18	omn		
7	meat	19	cmt	8	Meat, fish & veg.
		20	omt		
		21	vol		
8	mil	22	mil	9	Dairy
9	pcr	23	pcr	11	Grain milling etc
10	sgr	24	sgr	13	Sugar & Jaggery
11	ofood	25	ofd	10	Coffee processing
				12	Tea processing
				14	Oth food prod
12	b_t	26	b_t	15	Beverages
				16	Tobacco
13	tex	27	tex	17	Cotton Ginning
				18	Textiles
14	wap	28	wap	19	Wearing Apparel
15	lea	29	lea	20	Leather & footwear
16	lum	30	lum	21	Sawm. & wood prod
17	ppp	31	ppp	22	Paper prod
				23	Printing & publ.
18	p_c	32	p_c	24	Chemicals
19	crp	33	crp	25	Rubber & plast.prod

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Table 11.Q.A1. Sectors in the Ugandan I-O table: Mapping to GSC2 (continued)

GSC2 agg		GSC2		Ugandan I-O Sectors	
20	nmm	34	nmm	26	Non-met.mineral prod
21	metals	35	i_s	27	Metal & metal prod
		36	nfm		
		37	fmp		
22	machinery	38	mvh	28	Machinery & equip.
		39	otn		
		40	ele		
		41	ome		
23	omf	42	omf	29	Furniture & misc.
24	elgas	43	ely	31	Electricity (& gas)
		44	gdt		
25	wtr	45	wtr	32	Water
26	cns	46	cns	33	Construction
27	trade	47	trd	30	MV repairs/service
				34	Motor Vehicle trade
				35	Wholesale trade
				36	Retail trade
				37	Hotels & restau.
28	trans	48	otp	38	Rail
		49	wtp	39	Road
29	atp	50	atp	40	Air
30	cmn	51	cmn	42	Post & Telecom
31	finance	52	ofi	43	Financial Services
		53	isr		
32	obs	54	obs	41	Sup.Serv.(& oth.ser.)
				46	Oth. Business Ser.
33	ros	55	ros	50	Other Services
34	osg	56	osg	47	Gov. Adm. & Defence
				48	Education
				49	Health
35	dwe	57	dwe	44	Real Estate & Rents
				45	Ownership of Dwell.