

B Algeria

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B.1 Introduction

This chapter describes the transformation of the Algerian Input Output Table (IOT) of 2015 to the GTAP format. The next section presents the source data. It follows a description of the reformatting steps. Finally we present the concordance between the original classification and GTAP sectors.

B.2 Source Data

The National Statistical Office reports an IOT with 19 sectors measured in millions of local currency. The table is in basic prices. Vectors for net taxes on products and net taxes on production are available. While there is a vector of import values and import duties, land values are not available.

B.3 Data processing

The original data does not fully satisfy the requirements of the GTAP data base described in Huff et al. 2000. Main adjustments to the data are as follows:

- Disaggregate forestry and fishing sectors out of agriculture.
- Split total use into import and domestic matrices and
- Construct the Product-Tax Matrix

The initial disaggregation assumes that the forestry sector represents 5% of overall aggregate agricultural sector. For the Fishing industry, it is assumed to be less than 1%. Further disaggregation of sectors relies on GTAP's representative table. The remaining adjustments are implemented using the GEMPACK programs documented in Horridge et al. 2008.⁹

The matrix of imports is estimated assuming the import share is uniform across users, except for exports as it would imply re-exports. Domestic flows are then obtained as residual given the initial data and the newly estimated matrix of imports.

The product-tax matrix is constructed for the newly developed domestic and import components. No taxes are levied on changes in stocks and lower taxes are levied on export and intermediate users.

⁹Programs and documentation available from: https://www.gtap.agecon.purdue.edu/resources/res_display.asp?RecordID=2850

B.4 Concordance between original sectors and GSEC3

The original data sectors were first aggregated and then mapped to the GTAP classification of 65 sectors (Table 8.4).

Table 8.4: Concordance between Original sectors and GTAPsectors

No.	Original I-O sectors	GTAP 65
1	Agriculture, forestry, fishing	GTAP1_14
2	Water and Energy	GTAP32,46_48
3	Hydrocarbons	GTAP15_17
4	Services and Trav. Pub. Oil tankers	GTAP15_17
5	Mines and quarries	GTAP18
6	ISMMEE (iron steel and casta iron and steel)	GTAP37_39
7	Construction materials	GTAP36
8	BTPH (Constructions and public works)	GTAP49
9	Chemistry, Plastics, Rubber	GTAP33_35
10	Agrifoods industries	GTAP19_26
11	Textiles, clothing, hosiery	GTAP27_28
12	Leather and Footwear	GTAP29
13	Wood, Paper and cork	GTAP30_31
14	Various industries	GTAP40_45
15	Transport and communications	GTAP52_56
16	Trade margins	GTAP50
17	Hotels cafe restaurants	GTAP51
18	Services provided to businesses	GTAP57_60
19	Services provided to households	GTAP61_65

B.5 Diagnostics

Before and after conversion, the data met all balance and sign conditions. There were large tax rates over 100% in the final consumption of chemical, rubber and plastics products.

References

- Horridge, Mark et al. (2008). *Exercises in Contributing I-O Tables to the GTAP Data Base*. Department of Agricultural Economics, Purdue University, West Lafayette, IN: Global Trade Analysis Project (GTAP). URL: https://www.gtap.agecon.purdue.edu/resources/res_display.asp?RecordID=2850.
- Huff, Karen et al. (2000). *Contributing Input-Output Tables to the GTAP Data Base*. GTAP Technical Paper 01. Department of Agricultural Economics, Purdue University, West Lafayette, IN: Global Trade Analysis Project (GTAP). URL: https://www.gtap.agecon.purdue.edu/resources/res_display.asp?RecordID=304.