

Employment in green and conventional sectors in Zambia: an I-O analysis

Topic: Development of Input-Output Benchmark Accounts

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The paper describes the compilation process and structural characteristics of the most recent IOT for Zambia and explores the effects of sectoral policies on employment in conventional and environmental (green) sectors using IOT analysis.

ILO assisted the Zambian Central Statistical Office producing a Supply and Use table (SUT) and Input-Output Table (IOT) for the year 2010 following international statistical standards.

The 2010 SUT and IOT were published in October 2017 and provide the most recent and consistent data set for sectoral analysis for the Zambian economy. The SUT consists of 123 products and 24 industries identified following the Central Product Classification (CPC 2.1), International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4, and the on the recommendations of the 2008 System of National Accounts (UN, 2008 SNA) and the 2008 Eurostat Manual on Supply, Use and Input- Output Tables. The tables include environmental sectors identified following the SEEA and EGSS guidelines. The selection of products and environmental sectors was based on availability of data and their importance to the economy.

The SUT was transformed into a product by product and industry by industry IOTs following a best practice compilation process: (i) the compilation of the supply table at basic prices, including a transformation into purchasers' prices, use table at purchasers' prices, and balancing of supply and use, (ii) the compilation of the use-side valuation tables in order to transform the product data into a homogeneous valuation at basic prices. The balanced SUTs at purchasers' prices are used as a starting point. The valuation tables consist of six types of matrices: trade and transport margin matrices, matrices on product taxes (non-deductible VAT, customs, and excise taxes) and subsidies, (iii) the estimation of the imports and domestic output use matrices, (iv) the transformation of the SUT at basic prices into a product by product IOT by using Almon procedure, (v) the transformation of the SUT at basic prices into an industry by industry IOT using the 'fixed product sales structure' assumption.

The specific challenges, pros and cons of the two alternative transformations for the Zambian case are discussed.

The SUT and IOT tables are then paired with an estimation of labour employment by sector and occupation using the 2008 and 2012 labour force survey data.

The paper presents some scenario analysis based on policies drawn from the current Zambian National Development Plan (7NDP). The results for alternative policies, the effects on green sectors and their role on production and employment outcomes are discussed using the two alternative IOTs.

References

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