



# Tanzania

## Annex

Jakkie Cilliers

Last updated 13 December 2023 using IFs v8.10

## Annex

### Project Data File

This report used IFs version 7.84. All interventions start in 2024, interpolate to 2033 and then are maintained at that level unless indicated otherwise.

#### LIST OF INTERVENTIONS WITHIN IFs

All interventions start in 2024 and interpolate to 2033 after which they are maintained at that level, unless indicated otherwise.

Name	Description	Country or Group	Adjustments within IFs 8.10	Remarks
Current Path adjustments				
govexpm	Government expenditure multiplier	Tanzania	To 1.128 in 2028, interpolate to 1 over 20 years	To pay for Rufiji hydroelectric scheme

infraelecgenapm	Electricity generation capacity per person, multiplier	Tanzania	Interpolate from 1 to 1.63 from 2028 to 2030 (3 years) then to 1 from 2031 to 2034 (3 years)	
enpadd	Energy production additive factor (Hydro), BBOE	Tanzania	Interpolate to 1.35 from 2027 to 2030 (3 years) then to 0 by 2040 (20 years)	Tanzania hydro Current Path already caters for some of this. 2 100 MW approx 0.18144 BBOE
enpadd	Energy production additive factor (Gas), BBOE	Tanzania	Interpolate to 0.03 in 2029 to 2033 (3 years), maintain to 2039, change to 0.01 in 2040, maintain	
RESOR	Reserves of fossil fuels (known and exploitable)(gas)	Tanzania	3.24 in 2019	To correct value in IFs
<b>Demographics and Health scenario</b>				
contrusm	Contraception use multiplier	Tanzania	To 1.36	Tanzania 12th out of 24 low-middle in Africa in 2023. No change on 2043 CP forecast

watsafem (UnImproved)	Pop with access to unimproved water	Tanzania	To 0.7	Tanzania 4th highest out of 24 low-middle in Africa in 2023. Drops to 3rd highest by 2043 on CP.
watsafem (Piped)	Per cent of people with access to piped water	Tanzania	To 1.05	Tanzania 17th highest out of 24 low-middle in Africa in 2023, Drops to 19th by 2043 on CP.
sanitationm (OtherUnimproved)	Per cent of population with access to other unimproved sanitation, multiplier	Tanzania	To 0.7	Tanzania 4th highest out of 24 low-middle in Africa in 2023. No change on CP by 2043.
sanitation (Improved)	Per cent of population with access to improved sanitation	Tanzania	To 0.7	Tanzania 19th highest out of 24 low-middle in Africa in 2023. On CP improves to 18th
matmortratio	Maternal mortality ratio multiplier	Tanzania	To 0.78	Tanzania 15th highest out of 24 low-middle in Africa in 2023. On CP drops to 16th by 2043.
hlmortcdchldm	Communicable disease mortality multiplier for children under-five	Tanzania	To 0.78	Tanzania 9th highest out of 24 low-middle in Africa in 2023, no ranking change to 2043
hlmortm (AIDS)	Mortality multiplier	Tanzania	To 0.5	Tanzania 12th highest out of 24

				low-middle in Africa in 2023. On CP drops to 13th by 2043.
hlmortm (malaria)	Mortality multiplier	Tanzania	To 0.5	Tanzania 9th out of 24 low-middle in 2023 in Africa. No ranking change to 2043.
<b>Education scenario</b>				
edseclorvocadd	Lower secondary, vocational share, additive factor, decimal rate	Tanzania	To 4 (male and female)	
edsecupprvocadd	Upper secondary, vocational share, additive factor, decimal rate	Tanzania	To 5 (male) To 7 (female)	
edtersciencshradd	Tertiary, Sci-Eng share of graduates, additive factor, decimal rate	Tanzania	To 5	
edpriintnm	Primary net intake rate multiplier (total)	Tanzania	To 1.03	

edprisum	Primary, survival rate, multiplier (total)	Tanzania	To 1.2 (male) to 1.12 (female)	
edseclowrtranm	Lower secondary transition rate multiplier	Tanzania	To 1.1 (male and female)	
edsecuprtranm	Upper secondary transition rate multiplier	Tanzania	To 1.1 (male) To 1.2 (female)	
edseclowrgram	Lower, secondary, graduation rate, multiplier	Tanzania	To 1.23 (male) To 1.21 (female)	

edsecupprgram	Upper secondary, graduation rate, multiplier (total)	Tanzania	To 1.22 (male and female)	
edterintm	Tertiary, intake rate, multiplier, total	Tanzania	To 1.2 (female) To 1.25 (male)	
edtergradm	Tertiary, graduation rate multiplier	Tanzania	To 1.5 (male) To 1.3 (female)	
jedqualpriallm	Quality, multiplier on primary (total)	Tanzania	To 1.2 (female) To 1.22 (male)	

edqualsecallm	Quality, multiplier on secondary (total)	Tanzania	To 1.2 (male and female)	
<b>Agriculture scenario</b>				
ylm	Yields multiplier	Tanzania	To 1.4	Tanzania 18th highest out of 24 low-middle in 2023. Improves to 16th by 2043 on CP forecast.
landirareaactualm	Multiplier on land actually irrigated	Tanzania	To 1.15 between 2022 and 2031	
landirareaequipm	Multiplier on land equipped for irrigation	Tanzania	To 1.15	
aglossprodm	Loss rate of agricultural production (crop)	Tanzania	To 0.85	Tanzania 3rd highest out of 24 low-middle in 2023. Drops to 5th highest by 2043 on CP forecast.
aglossstransm	Loss rate of agriculture as moves	Tanzania	To 0.85	



	from producer to consumer multiplier			
clpcm	Per capita calorie demand multiplier	Tanzania	To 1.05 between 2022 and 2031	
forestm	Increase forest protection	Tanzania	To 1.01	
waterwithdrawalm	Groundwater withdrawal (cubic km)	Tanzania	To 1.05	
infraroudraitrgtval	Road access target, fixed value percent	Tanzania	Interpolate from 90 to 95	
infraroundraitgyr	Road access target, years to reach	Tanzania	To 40	
<b>Manufacturing scenario</b>				
govhtrnwelm	Government to	Tanzania	To 1.3	

(unskilled)	household welfare transfers			
govbusregindm	Government regulation of business index multiplier?	Tanzania	To 0.85	Could use
isdm	Investment in manufacturing sector	Tanzania	To 1.03 between 2022 and 2031	
labparm	Total labour participation rate (male & female), female more aggressive	Tanzania	To 1.03 (male and female)	
<b>Large Infrastructure/Leapfrogging scenario</b>				
infraelecaccm (urban)	Electricity access multiplier urban	Tanzania	To 1.032	

infraelecaccm (rural)	Electricity access multiplier rural	Tanzania	To 1.2	
ictbroadmobilm	ICT mobile broadband multiplier	Tanzania	To 3	
ictbroadcostm	ICT broadband multiplier on cost of adding a connection	Tanzania	To 0.8	
ictbroadm	ICT broadband multiplier	Tanzania	To 1.5	
Infraroadpavedpcntm	Paved road	Tanzania	To 1.1	
gdpinformshrm	Informal sector	Tanzania	To 0.89	

AfCFTA scenario				
mfpadd	Multifactor productivity growth additive factor	Africa	To 0.007	Calculations or adjustments were based on annual average growth rates for the period 2010–2018, using the Penn World Tables data – TFP at current PPPs (USA=1)
XSM	Export multiplier – Manufacturing	Tanzania	To 1.22	
XSM	Export multiplier – Agriculture	Tanzania	To 1.22	
XSM	Export multiplier – Services	Tanzania	To 1.2	

XSM	Export multiplier – ICT	Tanzania	To 1.1	
XSM	Export multiplier – Materials	Tanzania	To 1.1	
XSM	Export multiplier – Energy	Tanzania	To 1.05	
xshift	Export shift as a result of promotion of exports (Manufactures) ratio	Tanzania	To 0.008	<p>In the <a href="#">World Bank policy research paper</a> , export promotion agencies for developing countries will have an elasticity of 8%.</p> <p>In the <a href="#">World Economy paper</a>, each additional export promotion agency increases exports by 6–10%.</p>

mtariffaxrm	<p>Import tariff tax multiplier by country and sector:</p> <p>Agriculture</p> <p>Materials</p> <p>Energy, Service, and ICT sector</p> <p>Manufacturing sector</p>	Tanzania	<p>To 0.1 (Agriculture)</p> <p>To 0 (Energy)</p> <p>To 0.001 (Materials)</p> <p>To 0.05 (Manufacturing)</p> <p>To 0 (Services)</p> <p>To 0 (ICT)</p>	<p>Under the AfCFTA, agriculture products are under sensitive products, have a fixed 10% tariff.</p> <p>(See for example, <a href="#">tralac</a>, <a href="#">African Continental Free Trade Agreement</a>.)</p> <p>Non-sensitive products have a 100% tariff reduction under the AfCFTA.</p> <p>Only a few products are under the 3% of the excluded products, for example, corrugated flat-rolled steel.</p> <p>Few manufactured products are under sensitive and excluded products.</p>
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Financial Flows scenario				
xworkremitinm	Worker remittances multiplier (positive numbers are receipts)	Tanzania	To 1.08	
aidrecm	Aid (foreign) receipts multiplier	Tanzania	To 1.1	We need to increase the provision of aid from OECD countries and FDI outflows from there and China.
xfdistockm	Foreign direct investment, stocks of investment from abroad, multiplier	Tanzania	To 1.1	
xfdistoutm	Foreign direct investment, stocks of outward investment, multiplier	Tanzania	To 0.8	

xportfoliom	Portfolio investment, stocks of investment from abroad, multiplier	Tanzania	To 2	
<b>Governance scenario</b>				
democm	Democracy	Tanzania	Interpolate from 0.9 to 1.02 between 2020 and 2031	
econfreem	Economic freedom	Tanzania	To 1.12	
gemm	Gender empowerment	Tanzania	To 1.2	
govcorruptm	Government corruption	Tanzania	To 1.1 between 2022 and 2033	
goveffecttm	Government effectiveness	Tanzania	To 1.15	



	(quality)			
govregqualm	government regulatory quality	Tanzania	To 1.15	
	State failure through instability (abrupt regime transition) event occurrence	Tanzania	To .05	
	State failure through instability (abrupt regime transition) magnitude	Tanzania	To .1	
sfintlwaradd	State failure/internal war probability	Tanzania	To -0.4	
sfintwarmagm	State failure through instability – magnitude	Tanzania	To 0.8	

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Project Data file

Data series	Years adjusted/ new data	Remarks
xxx	xxx	

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## About the authors

Dr Jakkie Cilliers is the ISS's founder and former executive director of the ISS. He currently serves as chair of the ISS Board of Trustees and head of the African Futures and Innovation (AFI) programme at the Pretoria office of the ISS. His 2017 best-seller *Fate of the Nation* addresses South Africa's futures from political, economic and social perspectives. His three most recent books, *Africa First! Igniting a Growth Revolution* (March 2020), *The Future of Africa: Challenges and Opportunities* (April 2021), and *Africa Tomorrow: Pathways to Prosperity* (June 2022) take a rigorous look at the continent as a whole.

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