



# Morocco

## Annex

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Last updated 06 November 2023 using IFs 7.84

## Annex

Chart 38: 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

#### Project Data file

The data series within IFs comes from a range of well-known sources such as the World Bank, the International Monetary Fund (IMF), World Health Organization (WHO) and various United Nations (UN) bodies like the Food and Agricultural Organization (FAO) and United Nations Population Fund (UNPF), etc. These organisations collect and standardise data which is essential for cross-country comparisons. This project uses an additional project data file with updated key data series sourced from Moroccan authorities.

IFs Data series	Updated years	Source used for update
GDP growth rate, exogenous target (percent) (gdprext)	2017 -100; 2018 3.1485; 2019 2.60794; 2019 2.60794; 2020 -6.29326; 2021 7.37273; 2022 1.1; 20213 3; 2024 3.2	Updated growth rates for 2017 to 2022 including IMF forecast to 2024
Labor force size	2020-2022	
Population of young people (<15) as	2018-2021	

percent of total		
Total fertility rate: children per woman	2019-2021	
Infant Mortality Rate from IHME GBD project. Summation of mortality categories: 0-6 Days; 7-28 Days; 29-365 Days	2018-2021	
Education, Primary, completion rate (graduation ratio), gross, Female	2018-2021	
Education, Primary, completion rate (graduation ratio), gross, Male	2018-2021	
Education, Primary, completion rate (graduation ratio), gross, total	2018-2021	
Education, Secondary, Lower, Gross Enrollment Rate All Programs, Female	2019	
Education, Secondary, Lower, Gross Enrollment Rate All Programs, Male	2019	
Education, Secondary, Lower, Gross Enrollment Rate, Total	2019	
Education, Secondary, Upper, Gross Enrollment Rate All Programs, Female	2017-2019	
Education, Secondary, Upper, Gross Enrollment Rate All Programs, Male	2017-2019	
Education, Secondary, Upper, Gross Enrollment Rate All Programs, Total	2017-2019	
Level of corruption, 10 to 0, Transparency Intl (10 most transparent)	2012-2022	

Economic freedom level on scale of 1 to 10 (most free)	2018-2020	
Value added in manufacturing as percent of GDP	2021	
Value added in agriculture as percent of GDP	2021	
Value added in industry as percent of GDP	2021	
Value added in services as percent of GDP	2021	
Number of households	2015-2019	
Size of informal sector % GDP	2019	Central Bank of Morocco
Size of informal labour force % of total		Central Bank of Morocco
Irrigated land	2019	
Labor participation rate (male &female )	2019	

## Scenarios

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

Name	Description	Adjustments within IFs 7.84	Remarks
<b>Current Path</b>			
gdprext	GDP growth rate,	2017 -100; 2018 3.1485;	Updated growth rates for

	exogenous target (percent)	2019 2.60794; 2019 2.60794; 2020 -6.29326; 2021 7.37273; 2022 1.1; 2013 3; 2024 3.2	2017 to 2022 including IMF forecast to 2024
<b>Governance scenario</b>			
democm	Democracy	To 1.4	
econfreem	Economic freedom	To 1.12	
gemm	Gender empowerment	To 1.15	
govcorruptm	Government corruption	To 1.12	
goveffectm	Government effectiveness (quality)	To 1.15	
govregqualm	Government regulatory quality	To 1.15	
sfintlwaradd	State failure/internal war probability	To -0.4	
<b>Demographics and Health scenario</b>			
contrusm	Contraception use multiplier	To 1.1	
watsafem (Total)	Percentage of people with access to a safe water source	To 1.05	
malmortatiom	Maternal mortality ratio multiplier	To 0.78	
hlmortcdchldm	Communicable disease mortality multiplier for children under-five	To 0.78	
hlmortm (Respiratory)	Mortality multiplier	To 0.95	

hlmortm (diabetes)	Mortality multiplier	To 0.9	
hlmortm (CardioVasc)	Mortality multiplier	To 0.9	
hlmortm (MaligNeoPl)	Mortality multiplier	To 0.95	
<b>Education scenario</b>			
edseclorvocadd	Lower secondary, vocational share, additive factor, decimal rate	To 4	
edsecuprvocadd	Upper secondary, vocational share, additive factor, decimal rate	To 5	
edterscienshradd	Tertiary, Sci-Eng share of graduates, additive factor, decimal rate	To 5	
edprigndreqintn	Primary gender parity time for intake, years	To 10	
edseclowrtranm	Lower secondary transition rate multiplier	To 1.1	
edseclowrgndreqtran	Lower secondary gender parity time for transition, years	To 10	
edsecuprtranm	Upper secondary transition rate multiplier	To 1.1	
edsecupprgndreqtran	Upper secondary gender parity time for transition, years	To 10	
edseclowrgram	Lower, secondary, graduation rate, multiplier	To 1.15	

edsecupprgram	Upper secondary, graduation rate, multiplier (total)	To 1.15	
edterintm	Tertiary, intake rate, multiplier, total	To 1.15	
edtergndreqint	Tertiary, gender parity time for intake, years	To 10	
edtergradm	Tertiary, graduation rate multiplier	To 1.2	
edqualpriallm	Quality, multiplier on primary (total)	To 1.2	
edqualsecallm	Quality, multiplier on secondary (total)	To 1.2	
<b>Agriculture scenario</b>			
ylm	Yields multiplier	To 1.2	
landirareaactualm	Multiplier on land actually irrigated	To 1.1	
landirareaequipm	Multiplier on land equipped for irrigation	To 1.05	
aglossprodm	Loss rate of agricultural production (crop)	To 0.85	
aglosstransm	Loss rate of agriculture as moves from producer to consumer multiplier	To 0.85	
clpcm	Per capita calorie demand multiplier	To 1.1	Proxy to reduce exports and imports
waterwithdrawalm	Groundwater withdrawal (cubic km)	To 1.03	

Manufacturing scenario			
govhtrnwelm (unskilled)	Government to household welfare transfers	To 1.2	
govbusregindm	Government regulation of business index multiplier	To 0.85	
isdsm	Investment in manufacturing sector	To 1.1	
randdexpm	Increase research development activities (total)	To 1.2	
labparm	total labour participation rate	To 1.05 (male) To 1.15 (female)	
Large Infrastructure and Leapfrogging scenario			
gdsm (InfrasOther)	Government expenditures by destination multiplier	To 1.25	
qem - Q (OthRenew)	Capital cost to output ratio in energy	To 0.8	
qem - Q (Hydro)	Capital cost to output ratio in energy	To 0.8	
enpm (OthRenew)	Energy production multiplier for other renewables	To 1.2	
enpm (Hydro)	Energy production multiplier for hydro	To 1.1	
infraelectranlossm	Electricity transmission loss multiplier	To 0.85	
ictmobilcostm	ICT, mobile, multiplier on	To 0.8	



	cost of adding a subscriber		
ictbroadcostm	ICT broadband multiplier on cost of adding a connection	To 0.8	
ictbroadm	ICT broadband multiplier	To 1.5	
Infraroadpavedpcntm	Paved road	To 1.1	
gdpinformshrm	Informal sector	To 0.95	
ictintnetm	Multiplier on internet use	To 1.2	
labinformshrm	Informal labour share multiplier	To 0.98	
<b>AfCFTA scenario</b>			
mfpadd	Multifactor productivity growth additive factor	To 0.008	
XSM	Export multiplier – Manufacturing	To 1.2	
XSM	Export multiplier – Agriculture	To 1.22	
XSM	Export multiplier – Services	To 1.2	
XSM	Export multiplier – ICT	To 1.2	
XSM	Export multiplier – Materials	To 1.1	
xshift	Export shift as a result of promotion of exports (Manufactures) ratio	To 0.008	
mtariffaxrm (Agriculture)	Import tariff tax multiplier	To 0.1 (Agriculture)	

	by country and sector: Agriculture		
mtariffaxrm (Materials)	Import tariff tax multiplier by country and sector: Materials	To 0.01 (Materials)	
mtariffaxrm (Energy)	Import tariff tax multiplier by country and sector: Energy	To 0 (Energy)	
<b>Financial Flows scenario</b>			
xworkremitinm	Worker remittances multiplier (positive numbers are receipts)	To 1.08	
aidrecm	Aid (foreign) receipts multiplier	To 1.1	
xfdistockm	Foreign direct investment, stocks of investment from abroad, multiplier	To 1.1	
xfdistoutm	Foreign direct investment, stocks of outward investment, multiplier	To 0.8	
xportfoliom	Portfolio investment, stocks of investment from abroad, multiplier	To 2	
<b>Combined Agenda 2063 scenario</b>			
Combination of all the above			

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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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