### African Conference: Transformative Agenda for Official Statistics

### Libreville, Gabon November 2015

#### Session 1:

Coordination at and between the global, (sub-) regional and national statistical systems, communication, and advocacy

Mr. Pali Lehohla, Director General, Statistics South Africa

## Transformative Agenda for Statistics in Africa powered by NDPs, Agenda 2063 and SDGs

Pali Lehohla
Statistician-General South Africa
21 November 2015
Gabon



### Africa's Challenge

The heights by great men reached and kept were not attained by sudden flight, but they, while their companions slept, were toiling upward in the night

### Outline

Environment

Role of Statistics

Embracing the transformative agenda

Attendant risks

Conclusions



### **Environment:** Demanding data – Post 2015

development agenda



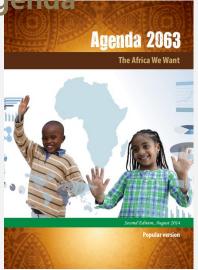


A world that counts

Premised on the notion of 'leave no one behind'

Transition from MDGs to SDGs means moving From 8 to 17 Goals, from 20 to 169 targets and

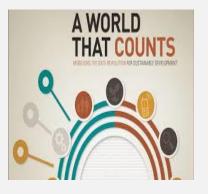
from 60 to a minimum of 302



#### Agenda 2063:

A forward looking continental framework

Agenda 2063 anchored on the AU vision of "a shared strategic framework for inclusive growth and sustainable development ' and based on 7 aspirations derived from consultations

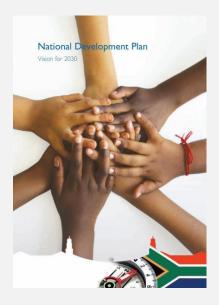


#### Agenda 2063:

Fostering and Promoting Innovation to fill data gaps

Mobilizing resources to overcome data inequalities between developing and developed countries

Enhancing leadership and coordination to ensure that data revolution achieves fulfilment of sustainable development goals



### National Development Plan

Indicators on progress in the implementation on the NDP at present done through:

MTSF(2014-2019) indicators Departmental indicators Provincial indicators

Implementation of NDP currently tracked through Programme of Action for Government (POA)

### **Environment:** Data thirsty Sustainable Development Goals





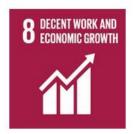
























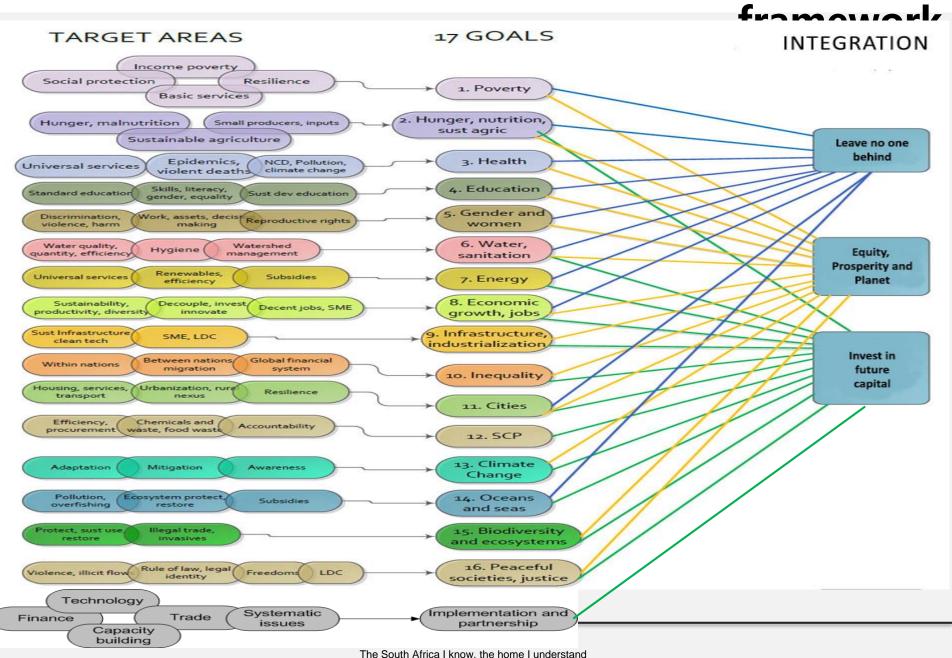








### SDG goals and targets in an integrated



### **Data thirsty Agenda 2063 aspirations**

<1

A prosperous Africa based on inclusive growth and sustainable development

<2

An integrated continent, politically united and based on the ideals of Pan-Africanism and the vision of Africa's Renaissance

**<** 3

An Africa of good governance, democracy, respect for human rights, justice and the rule of law

**<**4

A peaceful and secure Africa

**<** 5

An Africa with a strong cultural identity, common heritage, shared values and ethics

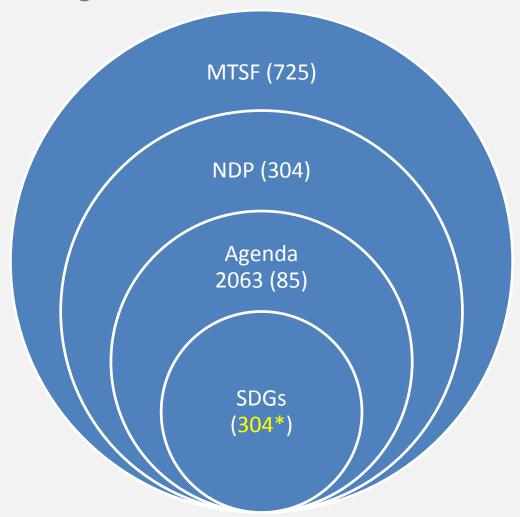
**<** 6

An Africa whose development is people-driven, relying on the potential of African people, especially its women and youth, and caring for children

**<**7

Africa as a strong, united and influential global player and partner

### **Environment:** Glocal data structures and the return of National Development Planning



#### **Number of indicators to track**

\* Preliminary number



### **Environment: Geo Politics**

Rise of right wing politics in Europe Germany, France, United Kingdom

<2

The rise of democratic movements in Africa:

Africa Union and Africa peer review

mechanisms stabilizing politics but an leasy return to demands for longer term limits of quasi religious movements that occupy swathes of land in the middle East and terror spreading into Europe

**<**4

The re-emergence of terrorism and cyber terrorism and uncertainty of right wing governments reaction

< 5

Rebalancing of military power and emergence of tensions in a multi polar military polity led by the US, Russia and China. The theatres are

Syria, Ukraine
The lumpen driven "voluntary" slave
movements from the South and middle
east into Europe

**<**7

Unease in Nigeria, flooding into Chad and Cameroun caused by quasi military-religious movements. Sustained unease in Mali



### **Environment: Geo Economics**

- Deepening Global Economic and Financial crisis
- Slowing growth in China and shift to domestic consumption led growth with attendant two child policy
- Dying mineral supercycle boom with major consequences for Africa and its growth narrative
- Major energy deficits in Africa

- Strong Nepad Infrastructure Plans for Africa The rail and road network, Rail stock the Millennium dam in Ethiopia, the Great Inga,
- Demographic dividend deficits that would scupper the African dream

General global discordance at the dawn of the SDGs

### **Environment: IT, Money and Statistics capturing the state**

<1

Emergent opportunistic coalitions of technology, money, facilitators, statistics and NGOs

<2

Culmination of formation of Global Forum for Data without official statisticians

**<** 3

Clumsy attempts by official statisticians to claim World Data Forum

**<**4

Poor and undefined governance mechanisms for open data

< 5

Unstrategic and insular tactics by official statisticians to cling to the power of numbers

**<** 6

Unguided possession of public data holdings by mobi technologists

**<**7

State capture through an unholy alliance of data technology and money and the destruction of the democracy project

### Leadership: The Statistics Systems and their Role

- Grasping the role of statistics and the leadership challenge
- Understanding that the Chief Statistician is the Chief Statistician is the Chief
- Political clarity of mission both at country and globally

**Communications Officer** 

Management excellence of resources

- Clarity of running complexity of a public good
- Competency and leading in subject matter

### Africa Embracing the transformative agenda

#### SDG INDICATORS

- Common Africa position on SDGs and indicators
- Common Africa Strategy based costing of SDG indicators
- A revised set of indicators discussed in Bangkok in October
- Inputs being consolidated
- Final list to be approved by UNSC in March next year

#### AGENDA 2063

- Proposed list of indicators to be discussed and finalised in Gabon
- Costing for sustainable data sources will be done
- Presentation of proposed indicators and costing document to African Ministers in January 2016
- Domestication of Agenda 2063

#### NDP/MTSF

- MTSF indicators and NDP
- DPME and Stats SA to work together on tracking indicators
- SDG/Agenda2063/ND P/MTSF indicators framework alignment in progress



### Africa Embracing the transformative agenda

### Census 2010 and 2020 Rounds

- ASSD is a successful driver of change
- Africa counts
   collectively and
   Census 2010 Round
   was the most
   successful
- SHaSA has mobilized and galvanized governance, peace and security and these indicators must guide data revolution

#### CRVS and GPS

- Africa trail blazed the leave no one behind agenda and established the APAI-CRVS agenda thereby bringing back to the UNSC civil registration and vital statistics. Asia and Latin America followed
- Africa innovated the Governance Peace and Security indicators and brought these back to UNSC

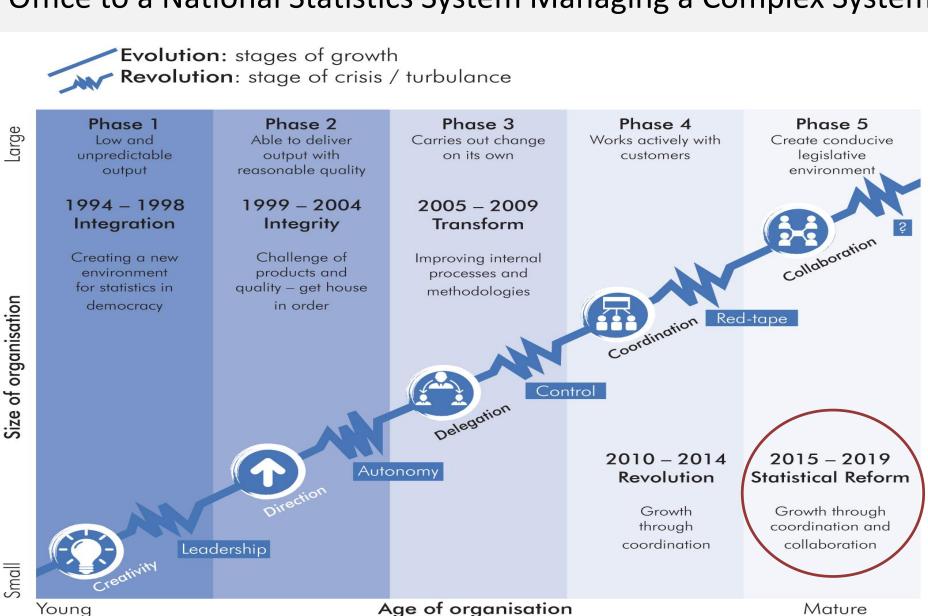
### Technology and Systems

- Africa introduced the construct of national statistics systems (NSS) and this is now a mainstream instrument with a position established at UNSD recently.
- Africa has embraced technology in their Censuses and Surveys: Cape Verde, Senegal, Cote d'Ivoire, South Africa, Namibia
- The Pan Africa model of statistical work works and needs to

be strengthened



### Embracing the transformative agenda: From a national Statistics Office to a National Statistics System Managing a Complex System



### Embracing the transformative Agenda: Mandate for Official Statistics

### Fundamental Principles of Official Statistics

(United Nations adopted 10 principles)

### African Charter on Statistics

(African Union adopted 6 principles)

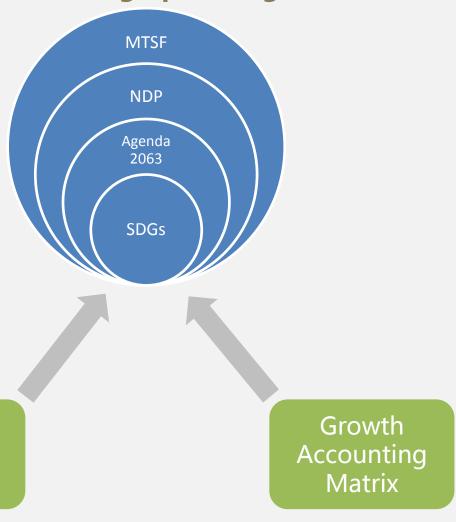
### Statistics Act (Act 6 of 1999)

(Based on principles of official statistics)

- 1. Statistical production
- 2. Statistical coordination



### Africa Embracing the transformative Agenda: Informing the indicators through planning tools



Social

Accounting

Matrix

### A platform for the future

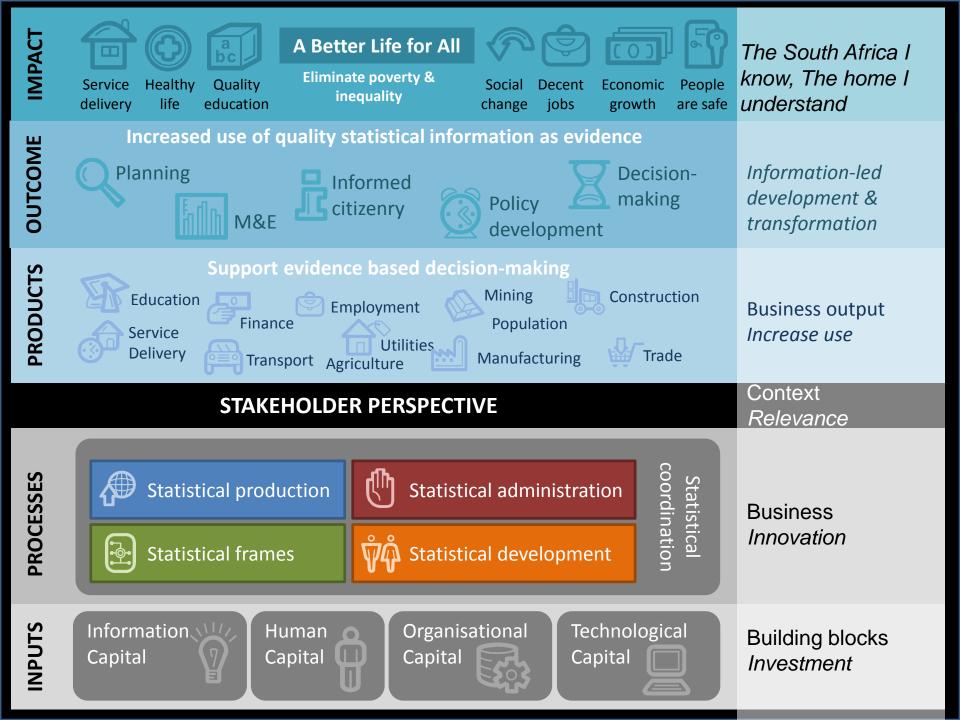
Put USE at the centre - Begin with the end in mind

Drive Legislative reform

Investment in growth & coordination

Transformation and Innovation





### Planning tools: Social Accounting Matrix

### What is a Social Accounting Matrix?

Provides a comprehensive picture of the economic transactions of an economy, including the interactions with the household sector



### What is a Social Accounting Matrix? It ensures that no one is left behind

- Integrates supply and use tables (SU-tables) and institutional sector accounts into a single matrix format
- It is a presentation of the 2008 System of National Accounts (2008 SNA) in a matrix format focusing on issues that are of special interest in a country
  - For example, an analysis of interrelationships between structural features of an economy and the distribution of income and expenditure among households groups

### What is a Social Accounting Matrix?

- Represents the link between two, often distinct, fields of statistics, namely, economic and social statistics
- Provides a framework that ensures consistency across a range of social statistics from different sources. Ensures consistency not only between social statistics in the matrix, but also between these social statistics and national accounts

### What does the SAM measure?

#### Main SAM matrix (examples):

- Trade and transport margins (27 products and services)
- Intermediate consumption (27 industries and 27 products and services)
- Household final consumption expenditure (4 population groups,
   12 percentile expenditure groups and 27 products and services)
- Imports and Exports (27 products and services)
- Total Output (27 industries and 27 products)

### What does the SAM measure?

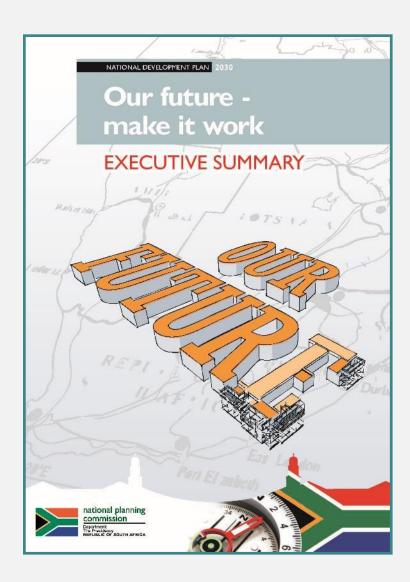
#### Main SAM matrix (examples):

- Generation of income (salaries and wages) (also from RoW)
   (27 industries, 4 population groups, 11 occupational groups, 4 skill levels)
- Property income (4 institutional sectors)
- Current taxes on income and wealth (4 institutional sectors)
- Net disposable income (4 population groups, 12 percentile expenditure groups)
- Net lending (by 10 financial institutions)



### What does the SAM do?

- Formal modelling, including feedbacks from non-monetary to monetary variables (National Treasury, Non-governmental organisations, researchers)
- Describe inequalities amongst household groups in SA society
- Pinpoint gaps in the available data sets and discrepancies in the survey concepts





Chapter 3: Economy and employmen

A responsive labour market
Improving labour market matching and
transitions

### Chapter 3: Economy and employmen

#### SAM matrix 3.2a – Generation of income

Disaggregation of generation of labour income (compensation of employees (salaries and wages) into:

- 27 industries
- 4 Population groups
- 11 Occupational groups
- 4 skill levels



### Chapter 3: Economy and employmen

#### **Extended SAM with Labour Accounts**

Adds 3 external matrices (the Labour Accounts) to the main SAM matrix:

- 1. Industry by highest level of education by population group and gender (number of employees)
- 2. Industry by area of study by population group and gender (number of employees)
- 3. Industry by highest level of education by population group and gender (R million) (salaries and wages)



### Chapter 9: Improving education, training and innovation

### Role of the post school sector

- Respond to skills needs of all sectors of society, including business, industry and the government
- Raise education and training levels to produce highly skilled professionals and technicians
- Double the number of graduate and post graduate scientist and increase the number of African and woman postgraduates, especially PhDs
- Produce 30 000 artisans per year by 2030



### Chapter 9: Improving education, training and innovation

#### **Extended SAM with Labour Accounts**

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### **Updating of the SAM**

- Most recent SAM reference year 2011
- Data source dependent:
  - Population Census: 2011
  - Income and Expenditure Survey: 2010/2011
- Compilation of the next SAM dependant on availability of a new Population Census/Community Survey data as well as a new Income and Expenditure Survey

### **SAM** products and services

		Products and services	Household final consumption expenditure (Population group by expenditure percentile group) (R'million)			
	CODE		A: P3	C:P3	I:P3	W:P3
1	P1100	Agriculture	11 047	2 123	496	4 718
	P2100	Coal	0	0	0	0
	P2300	Gold	0	0	0	0
	P2500	Other mining	0	0	0	0
	P301-6	Food	22 757	4 993	1 024	8 588
	P311-316	Textiles	8 066	1 430	534	3 531
	P317	Footwear	6 784	1 224	448	2 423
	P331-338	Petroleum	1 916	355	188	1 946
	P341-342	Other non-metallic mineral products	6 555	1 316	460	2 319
	P351-359	Basic iron/steel	598	112	56	341
	P36	Electrical machinery	960	193	79	477
	P371-376	Radio	4	1	0	4
GOODS	P381-387	Transport equipment	430	59	15	63
AND	P321-6,391-5	Other manufacturing	283	12	14	105
SERVICES	P4100	Electricity	870	139	5	69
	P4200	Water	267	104	23	141
	P5	Construction	0	0	0	0
	P6100	Trade	159	37	40	208
	P64	Hotels and restaurants	906	89	9	204
	P7100	Transport services	1 503	132	32	63
	P7500	Communications	3 492	386	157	692
	P81-83	Financial intermediation	2 879	483	214	691
	P84	Real estate	607	100	2	17
	P85-88	Business activities	309	54	37	335
	P91&94	General government	277	139	59	581
	P9300	Health and social work	1 057	370	148	1 649
	P92/5/6/9	Other activities/services	529	89	23	125
		Trade and transport margins	0	0	0	0
	D1	Direct purchases abroad by residents	0	0	0	0
	D2	Dir. purch. in domestic market by non-resid.	0	0	0	0
		Total use	72 003	13 940	4 063	29 291

# Planning tools: Growth Accounting Matrix

### What is GAF?

- A framework for the measurement of living standards by decomposing income per capita by its driving sources and their respective contributing factors
- Sources: total factor productivity, capital accumulation, demographic dividend, participation rate, and employment rate
- It is an analytical tool for analysing short to medium term developments in real incomes and the factors influencing them, thus also helping to assess what growth in potential output might look like
- It is empirically motivated and does not really on assumption theorising unless made to do so
- By design, it does not explain the underlying causes influencing incomes because it looks at the symptomatic factors associated with them



### What is GAF?

- Interest in the framework is motivated by two policy issues:
  - Comparison and benchmarking of economic growth performance as part of identifying the factors by which this performance can be improved, especially in achieving employment objectives;
  - The extent to which technological progress must be nurtured as a primary ingredient for economic growth, with the view to improving the understanding on the role of skills in the labour force, which impacts education and social protection objectives

## **GAF for South Africa by Stats SA**

- Stats SA has developed GAF for South Africa. Its key strength is its ability to probe economic growth performance and its drivers sub-nationally
- The Stats SA GAF illustrates how this growth and its drivers shape within and across provinces covering the last 20 years of SA's economic landscape, as well as looking ahead until 2019 as per the Medium-term Strategic Framework (MTSF)
- The Stats SA GAF is ongoing in nature, being updatable every year together with a 5-year outlook, as evidence from official and national statistics on incomes, production, population, prices, tax collection, poverty, employment, and skills becomes available
- The Stats SA GAF is designed to be flexible such that it can accommodate improvements to its formulation and its measurement, which is something which will strengthen and mature with time



## **GAF for South Africa by Stats SA**

- The Stats SA GAF gives strategic information on what policies could produce balanced economic growth, and how different factors can be paired for different growth scenarios according to their likelihood
- The Stats SA GAF decomposes the incomes per capita within and across provinces by their contributions from total productivity, capital accumulation, demographic development, work participation, and employment prospects, simultaneously with accounting for how these contributions are shaped by their respective drivers
- These drivers include the different dependency ratios from young to elderly, the changes in the make-up of employment between the working poor and the gainfully employed, the development of demographic forces as per the evolution of the labour force and those of working age, and the respective changes to capital generation brought by the trade-offs between labour productivity and the rates of return from capital

## **Decision-making with the SA GAF**

- The GAF is an analytical information tool that supports evidence-based decision-making by giving a birds-eye view of economic development sub-nationally at provincial level
- It is a tracking device for the monitoring of the employment, GDP growth, and terms of trade objectives of Chapter 3 of the NDP
- Likewise, it is a tracking device for the monitoring of the of MTSF 2014-2019 outcomes of decent employment through inclusive growth, and a capable workforce to support an inclusive growth path
- It is a strategic device for identifying and tracking the economic growth contributors for achieving the Agenda 2063 aspiration for inclusive growth and sustainable development
- It is a signalling device on the progress made on the Sustainable Development Goals of halving poverty (Target 1.2), growing the incomes of the poor at a rate higher than the National average (Target 10.1), and achieving (Target 10.1), i.e. productive employment for everyone in the labour force (Target 8.5)

## Final thoughts on GAF

- Growth accounting provides an informative framework for analysing economic developments in the short to medium term, thus helping with the assessment of potential output growth
- It allows the relative importance and contributions of the individual factors contributing to economic growth to be identified and summarised. The SA GAF does so sub-nationally
- The results from a growth accounting framework crucially depend on the availability of reliable official and national statistics needed for its construction
- Growth accounting does not explain the causes of economic growth, and as such should always be handled as a complement to conceptual approaches in economic planning that aim to understand what these causes are
- Nonetheless this does not subtract from the effective tracking, strategic, and signalling qualities of the framework, which ultimately can suggest the direction where the explanations might

## **ICP**



# Nominal Expenditures Per Capita in U.S. Dollars, ICP 2011

#### Selected African countries

NOMINAL EXPENDITURES PER CAPITA (US\$) Economy	Food and nonalcoholic beverages	Alcoholic beverages, tobacco, and narcotics	Clothing and footwear	Housing, water, electricity, gas, and other fuels	Furnishings, household equipment and maintenance	Health	Transport	Communication	Recreation and culture	Education	Restaurants and hotels	Miscel- laneous goods and services
(00)	(03)	(04)	(05)	(06)	(07)	(80)	(09)	(10)	(11)	(12)	(13)	(14)
São Tomé and Príncipe	941	78	68	163	58	68	169	22	25	67	22	32
Senegal	456	12	32	179	52	27	46	45	12	49	8	36
Seychelles	2,939	204	316	1,318	315	488	447	140	181	775	52	226
Sierra Leone	174	14	35	33	12	70	14	12	15	34	5	21
South Africa	964	239	235	741	333	602	703	140	222	581	113	619
Sudan <sup>b</sup>	601	8	52	170	75	15	95	19	27	38	26	30
Swaziland	1,399	27	171	412	325	195	238	40	130	257	19	49
Tanzania	233	2	24	25	15	12	14	0	4	17	0	7
Togo	230	12	26	41	24	34	30	12	7	36	43	57
Tunisia	711	103	223	456	197	228	462	114	106	256	307	202
Uganda	159	28	14	86	27	13	28	9	29	51	14	20
Zambia	498	7	54	102	13	44	12	22	6	53	2	42
Zimbabwe	370	22	36	42	19	18	50	1	14	47	4	33
Total (50)	429	39	76	146	70	83	108	32	35	107	34	96



# Purchasing Power Parities (U.S. Dollar = 1.00), ICP 2011

#### Selected African countries

PPPs (US\$ = 1.00) <sup>a</sup> Economy	Food and nonalcoholic beverages	Alcoholic beverages, tobacco, and narcotics	Clothing and footwear	Housing, water, electricity, gas, and other fuels	Furnishings, household equipment and maintenance	Health	Transport	Communication	Recreation and culture	Education	Restaurants and hotels	Miscella- neous goods and services
(00)	(03)	(04)	(05)	(06)	(07)	(08)	(09)	(10)	(11)	(12)	(13)	(14)
São Tomé and Príncipe	17,061.052	10,212.969	9,837.834	7,455.455	14,014.117	3,994.580	13,685.972	10,968.728	13,376.353	2,149.474	12,688.537	6,993.394
Senegal	404.663	266.125	208.121	177.926	282.251	126.884	371.307	295.559	278.748	88.128	337.755	200.000
Seychelles	11.970	16.058	8.474	4.449	10.917	3.122	12.145	7.362	8.671	2.223	21.400	7.254
Sierra Leone	3,310.580	1,580.447	1,178.052	905.604	2,156.711	706.823	2,833.988	2,697.819	1,922.111	599.129	2,161.433	1,376.626
South Africa	6.637	4.994	5.357	4.155	7.736	3.543	6.995	4.181	5.761	2.411	6.942	4.700
Sudan <sup>c</sup>	2.405	2.278	0.899	1.125	1.783	0.537	2.283	1.594	1.659	0.436	1.306	1.348
Swaziland	5.971	4.686	4.258	3.294	5.440	1.949	5.791	3.756	4.796	2.278	5.118	3.914
Tanzania	948.924	764.066	483.312	527.251	743.475	206.764	829.729	530.828	706.846	216.587	649.250	441.795
Togo	402.353	220.192	197.023	148.357	303.684	108.131	410.501	396.666	352.321	48.523	306.679	156.687
Tunisia	1.068	0.984	1.024	0.461	0.930	0.382	0.877	0.445	0.872	0.179	0.864	0.590
Uganda	1,419.160	1,165.303	948.693	793.013	1,309.352	455.930	1,617.989	1,011.713	1,133.831	269.971	1,129.419	745.005
Zambia	3,914.496	3,169.257	2,363.291	1,703.604	3,697.202	1,125.337	4,781.428	5,040.040	3,000.717	1,261.497	2,770.402	1,697.794
Zimbabwe	0.825	0.435	0.572	0.391	0.941	0.265	0.885	0.649	0.632	0.180	0.761	0.387



## **Expenditure based on PPPs, ICP 2011**

Selected African countries

GROSS DOMESTIC Product	Expenditure (US\$, billions)					
Economy	Based on PPPs	Based on XRs				
(00)	(01)	(02)				
São Tomé and Príncipe	0.5	0.2				
Senegal	28.6	14.3				
Seychelles	2.0	1.1				
Sierra Leone		2.9				
South Africa	011.1	401.8				
Sudan <sup>d</sup>		70.0				
Swaziland	7.6	4.1				
Tanzania	71.8	23.9				
Togo	Я 1	3.7				
Tunisia	109.3	46.0				
Uganda	55.1	18.2				
Zambia	42.5	20.8				
Zimbabwe	17 6	8.9				
Total (50)		1,870.4				

## **Impact on Society**

**National Agenda:** 

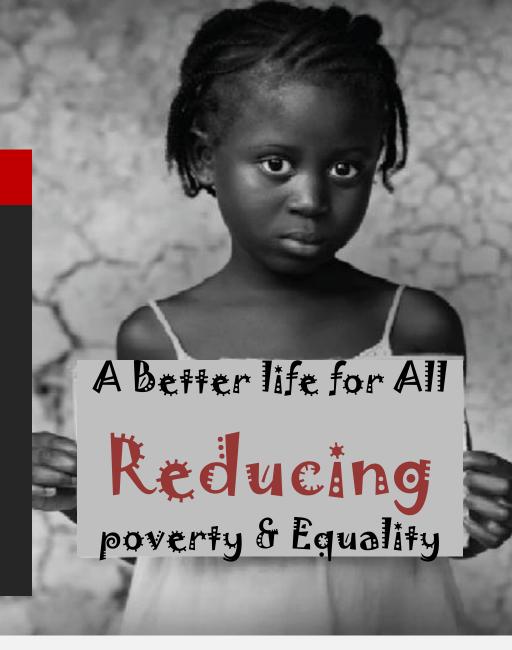
A better life for all

### Driving START

Statistics for Transparency, Accountability, Results and Transformation

Investment in growth & coordination

Possibilities





## Africa's Challenge

The heights by great men reached and kept were not attained by sudden flight, but they, while their companions slept, were toiling upward in the night