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# The Evolution and Future of Social Security in Africa: An Actuarial Perspective

Presented by Members of the Actuarial Society of South Africa Social Security Committee

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Natalie van Zyl

# Outline

## Introduction

## African Highlights

## General Framework of Discussion/Presentation

- Benefits Covered
- International and African Experience
- Current African Challenges
- Actuarial Involvement in Africa

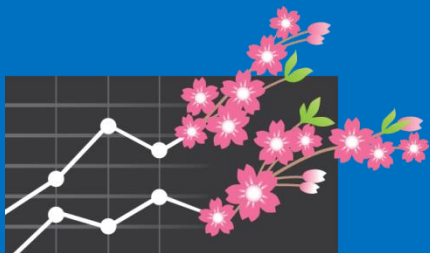
## Areas Covered

- Retirement Benefits
- Healthcare
- Unemployment Benefits
- Broader Social Security Nets
- Survivor Benefits
- Family Benefits
- Education
- Work Injury Benefits
- Disability Benefits
- Motor Vehicle Accident Benefits
- Gender Inequality
- Child/Orphan Grants

## Actuarial Perspective and Contribution



# Africa



# Introduction

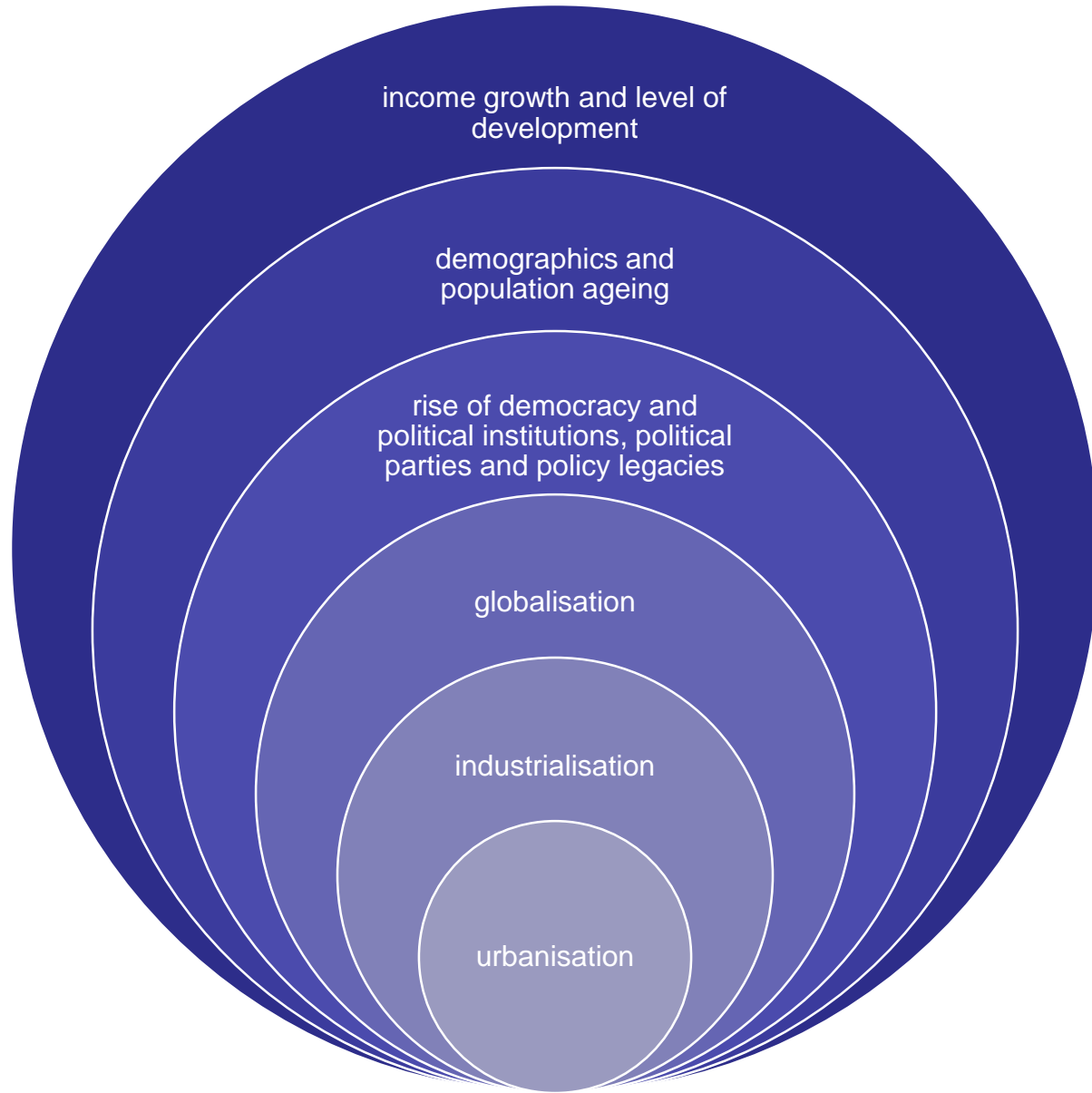
- Aim: Provide a high level summary of Social Security developments within the African context
- Role of Social Security in correcting several historical social ills.
- Marked increase in empowerment programs and grants for women and the youth.
- Actuarial Involvement: Assessing and ensuring sustainability of Social Security benefits

old age	unemployment	sickness
invalidity	work injury	maternity
loss of main income earner	education	vulnerable children
healthcare	gender related benefits	motor vehicle accident benefits



# Introduction

The main factors considered driving forces behind Social Security spending patterns are as follows:



# Introduction

- Brief economic and demographic features of Africa as follows:
  - Expected growth in GDP in 2014 for Sub-Saharan African countries was 5.9% compared to 2.1% for developed countries;
  - 11 of the 20 fastest growing economies in the world are in Africa;
  - 13 African countries were expected to grow at a rate higher than 7% in 2013;
  - Average gross debt to GDP ratio for Sub-Saharan African countries of 36% as opposed to 109% for developed countries;
  - Countries with the 10 youngest populations are all in Africa;
  - 41% of the African population are under the age of 15;
  - Africa is expected to have the world's largest working population in 30 years.

Bhawan, McKay, Patel



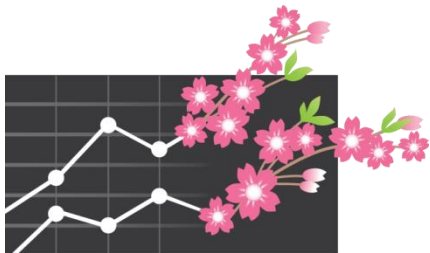
# Introduction

World's Ten fastest GDP growth rates - 2001 to 2010

Country	GDP Growth Rate
Angola *	11.1%
China	10.5%
Myanmar	10.3%
Nigeria *	8.9%
Ethiopia *	8.4%
Kazakhstan	8.2%
Chad *	7.9%
Mozambique *	7.9%
Cambodia	7.7%
Rwanda *	7.6%

\* African country

Sources - The Economist



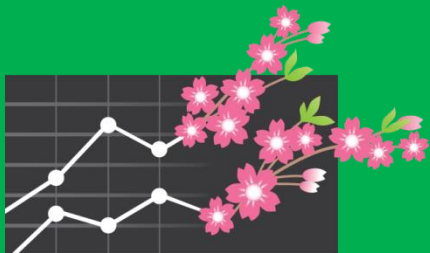
- 16% of the world's population but 2.4% of the world's GDP.
- Proportion of people living below poverty line in Sub-Saharan Africa reduced from 51% in 1981 to 47% in 2008.
- China reduced the proportion living below the poverty line from 84% in 1981 to 13% in 2008.

World's Ten fastest projected GDP growth rates - 2011 to 2015

Country	GDP Growth Rate
China	9.5%
India	8.2%
Ethiopia *	8.1%
Mozambique *	7.7%
Tanzania *	7.2%
Vietnam	7.2%
Congo *	7.0%
Ghana *	7.0%
Zambia *	6.9%
Nigeria *	6.8%

Social Security strategies need to factor in the economic and demographic developments.

# Pensions





# Retirement

## Provision objectives

Smooth consumption from working life into retirement

Protect against poverty in old age

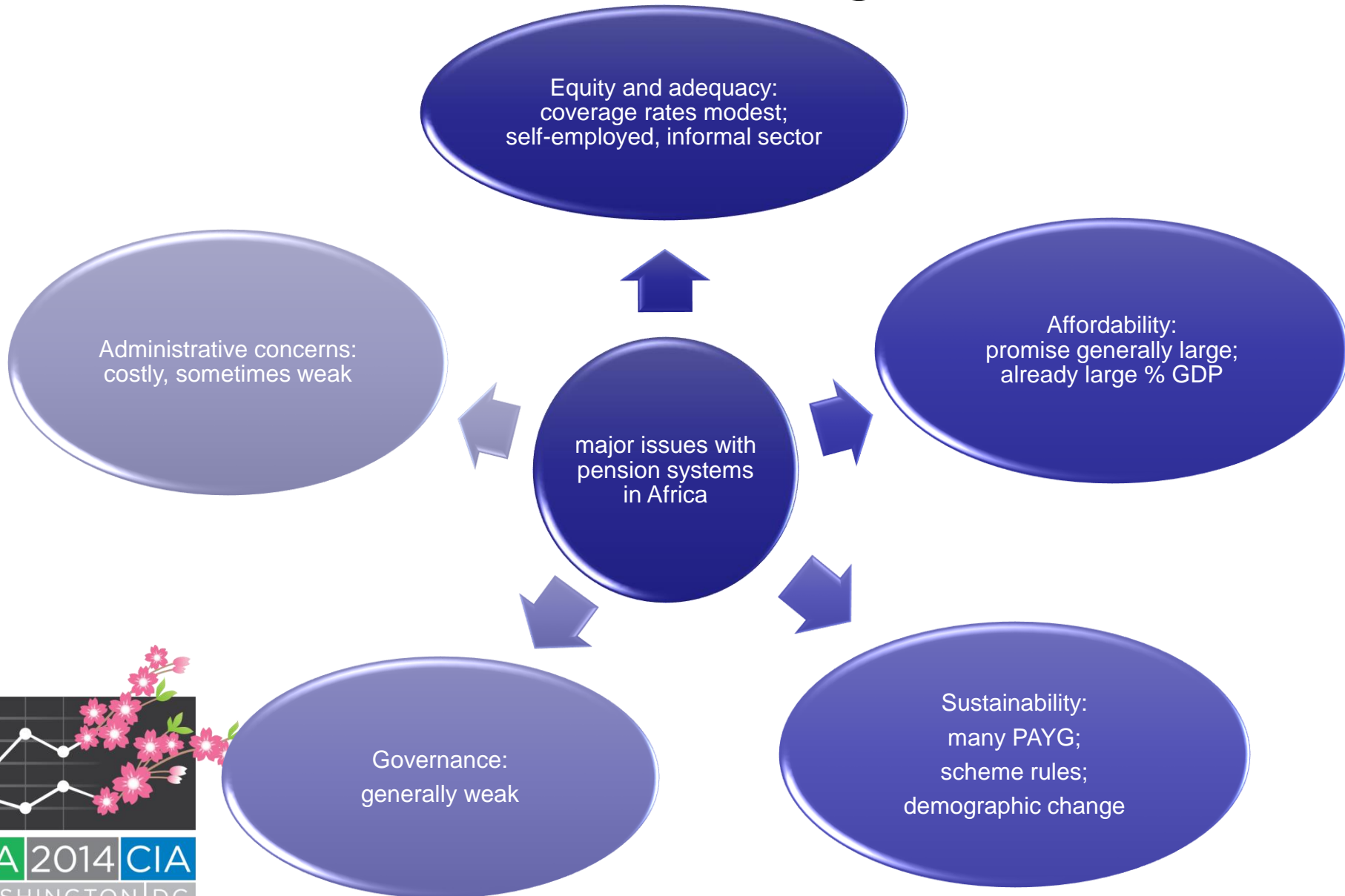


# International Experience

Region	Number of countries	Type (may be multiple)		
		Mandatory DC, replacement target = % lifetime earnings	Mandatory DC, independent investment management	Non-Contributory, state financed
World	193	78%	17%	42%
Sub-Saharan Africa	46	72%	4%	17%
Middle East and North Africa	20	90%	5%	10%



# Major Challenges



# Potential Intervention Areas

Intervention	Comments	Address
Create safety net	<ul style="list-style-type: none"> <li>• Simple, small, universal</li> <li>• Fiscally viable and sustainable</li> </ul>	Equity
Improve coverage rates	<ul style="list-style-type: none"> <li>• Private and informal sectors</li> <li>• Self-employed</li> </ul>	Adequacy
Rethink earning-related protection	<ul style="list-style-type: none"> <li>• Realign benefits and contribution rates</li> </ul>	Affordability
Recognise / fund a portion of liabilities explicitly	<ul style="list-style-type: none"> <li>• Depends on financial viability</li> </ul>	Sustainability
Protect benefits	<ul style="list-style-type: none"> <li>• Improve governance and accountability</li> <li>• Diversify provision sources</li> <li>• Legally recognise benefits</li> </ul>	Governance



# Reform Types

Type	African example	Potential issue(s) addressed
Parametric <ul style="list-style-type: none"> <li>• Retain existing structure</li> <li>• Change: Contribution parameters Benefit parameters and / or Eligibility conditions</li> </ul>	Kenya	Sustainability Affordability Adequacy Equity Predictability
Non-financial (unfunded) DC <ul style="list-style-type: none"> <li>• Link between benefits &amp; contributions</li> </ul>	Egypt (terminated)	Sustainability Equity
Full/part prefunding	Nigeria	Sustainability
Incorporating behavioural economics <ul style="list-style-type: none"> <li>• Nudge into better decisions</li> </ul>	Rwanda	Adequacy
(Partial) individual contribution match by state		Adequacy

## Other possibilities:

- Limit transaction costs
- Expand sources of provision
- Improve access
- Mandate participation
- Create a single UIF and retirement account



# Intervention Pre-requisites

Aligned to goals of retirement system

Conducive macro and fiscal environment

Credible government commitment

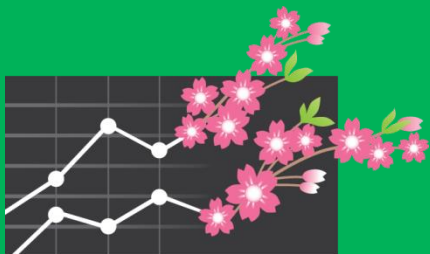
Local buy-in and leadership

Supporting structures in place

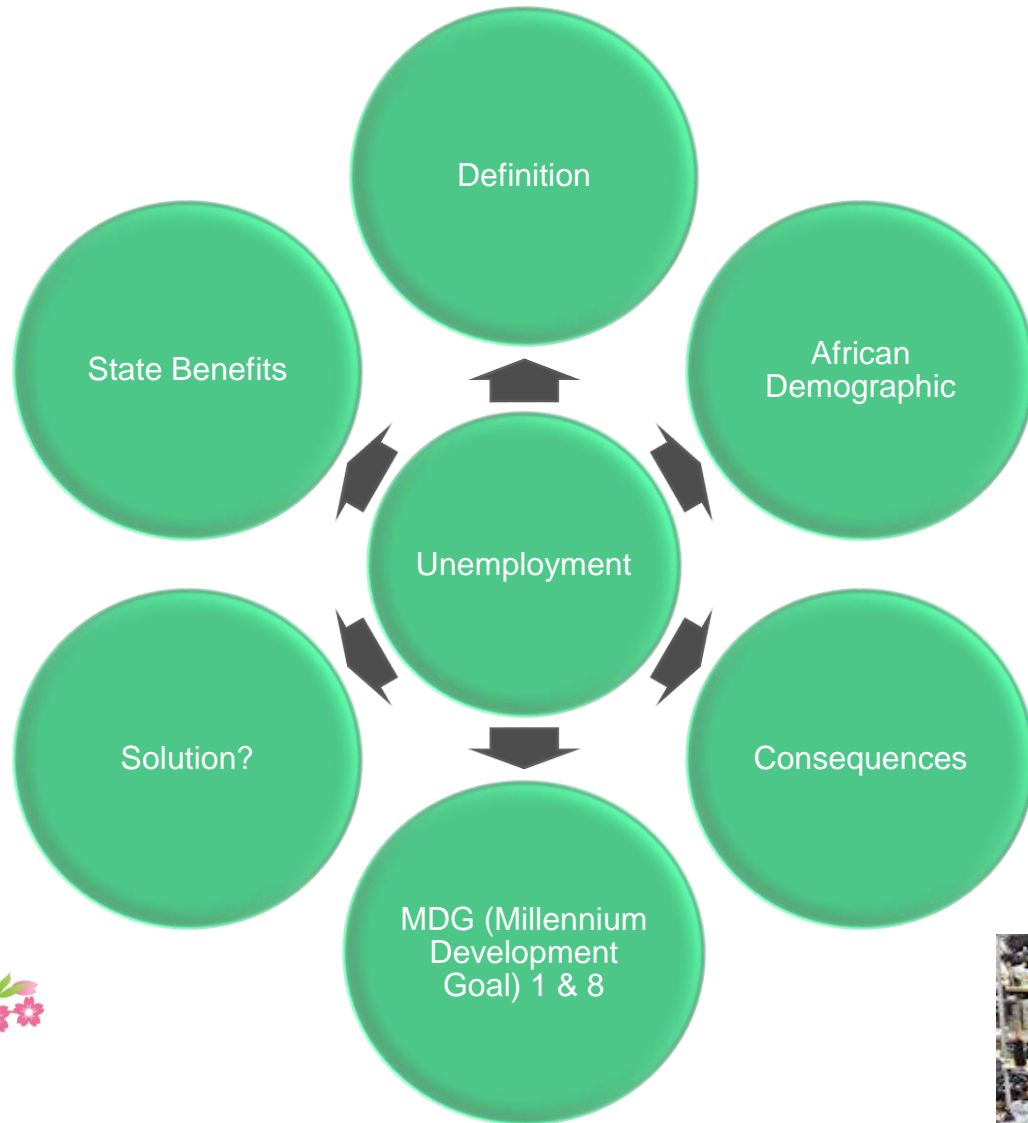
- Adequate regulation and supervision
- Effective Operating Systems



# Unemployment

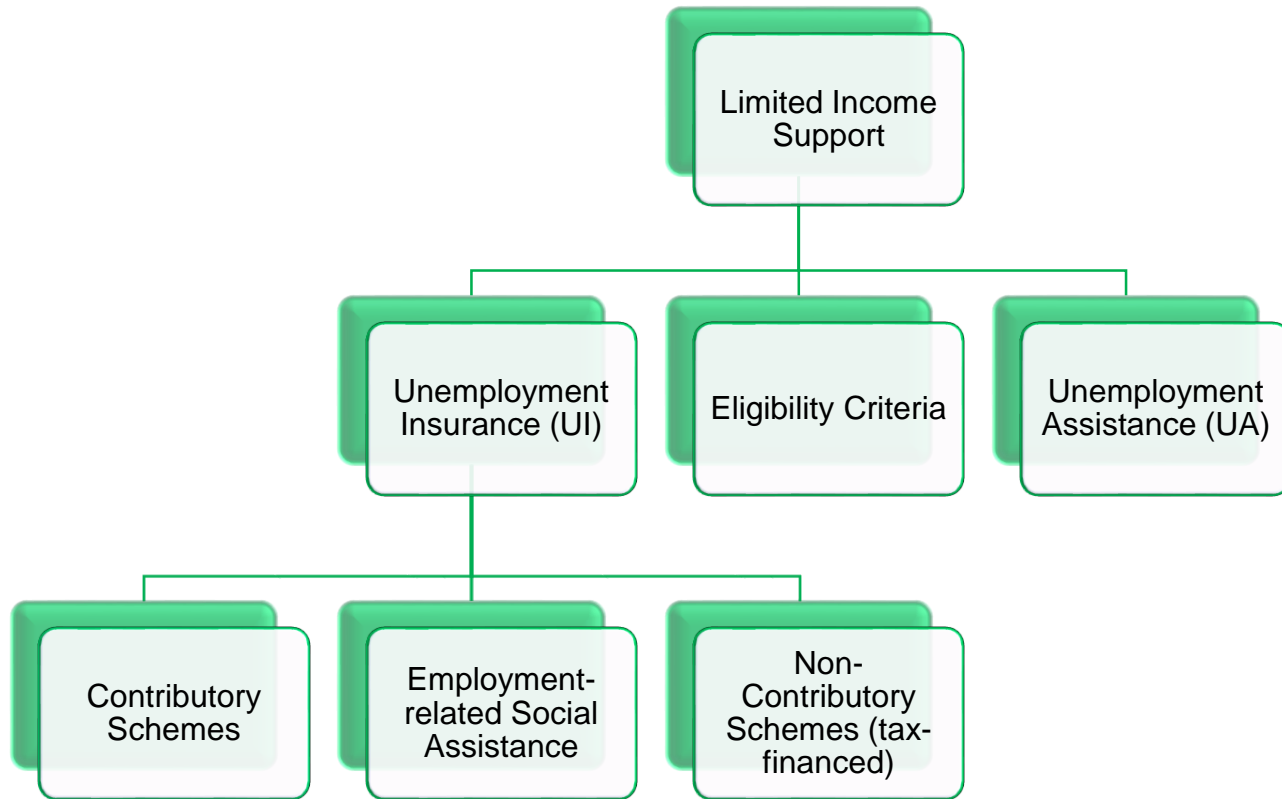


# Introduction





# Benefits Covered



# African & International Experience

AFRICA

Limited  
Published  
Documents

Challenges

Demographic  
Differences

Hidden  
Employment

Reemployment  
Incentives

Severance  
Payments

INTERNATIONAL

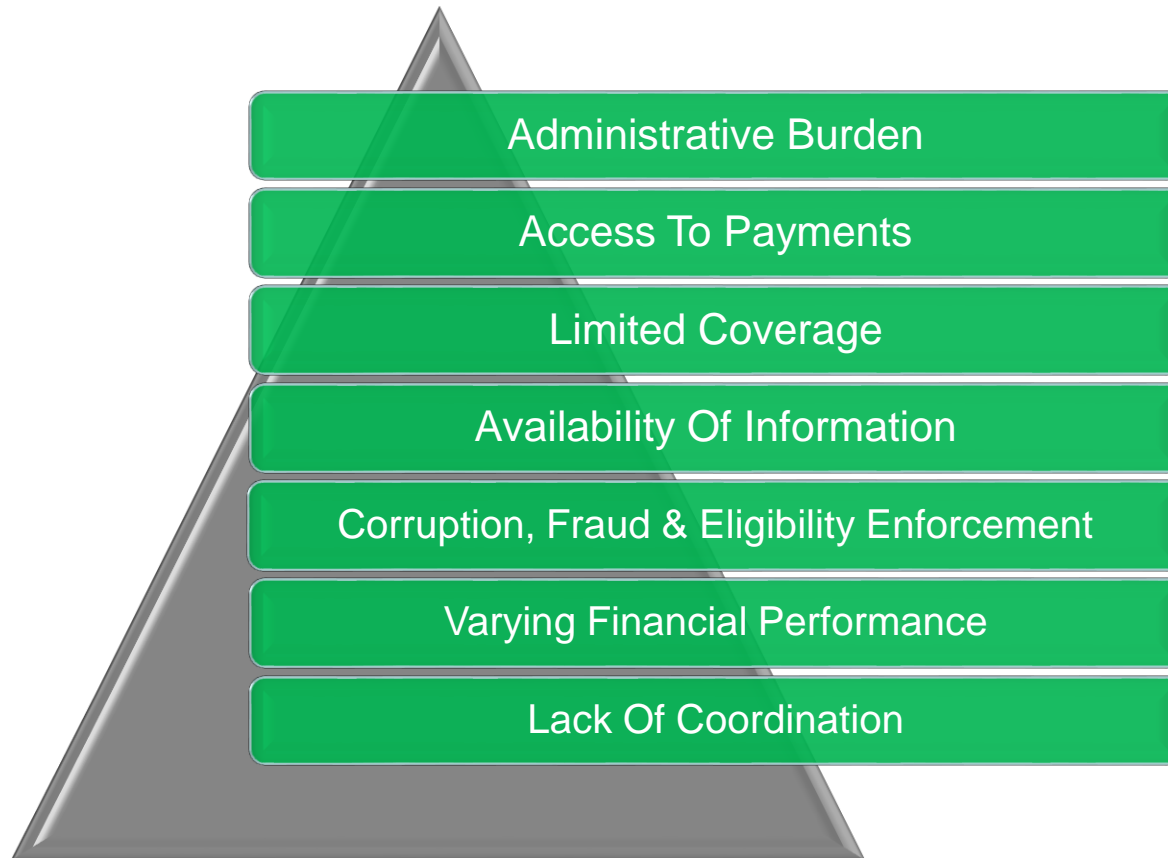
Hiring  
Subsidies

Compulsory  
Enrolment in  
formal  
employment

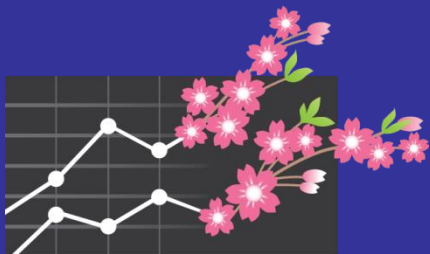
Continuous  
Evaluation



# Current African Challenges



# Health



ICA 2014 CIA  
WASHINGTON DC

# Healthcare

*“access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost”*



# Healthcare

## Goal 4: Reduce child mortality rates

Target 4A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

## Goal 5: Improve maternal health

Target 5A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio

Target 5B: Achieve, by 2015, universal access to reproductive health

## Goal 6: Combat HIV/AIDS, malaria, and other diseases

Target 6A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

Target 6B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it

Target 6C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases



# Health Insurance Models and Funding Models

## **Beveridge Model:**

Great Britain  
Spain  
Scandinavia  
New Zealand  
Hong Kong  
Cuba

## **NHI Model:**

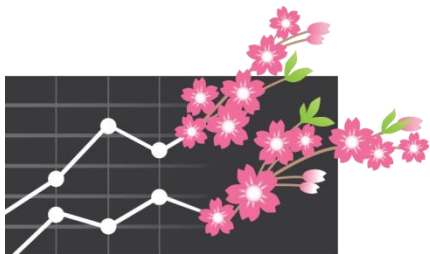
Canada  
Taiwan  
South Korea

## **Bismarck Model:**

Germany  
Switzerland  
France  
Belgium  
Netherlands  
Japan  
Latin America

## **Out-of-Pocket Model:**

Rural regions of:  
Africa  
India  
China  
South America



# African Challenges in Healthcare

- Healthcare is inequitable and inaccessible to a large proportion of the population
  - Quadruple burden of disease
  - Shortage of healthcare professionals
  - Lack of adequate infrastructure
- Poor technology – both medical technology and IT
- High unemployment rates – low level of funding
  - Poor education
  - Poor living conditions
  - Cultural diversity
  - Political/Civil unrest
  - Geographical density
  - Crime and corruption





# Broader Social Security



# Broader Social Security Nets

Survivor Benefits

Family Benefits

Work Injury Benefits

Disability Benefits

Motor Vehicle Accident  
Benefits

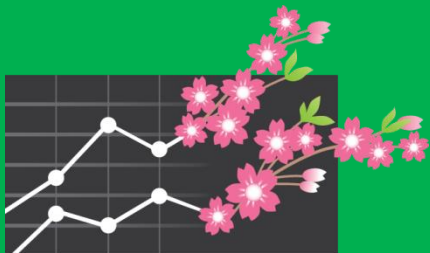
Gender Inequality

Child/Orphan Grants

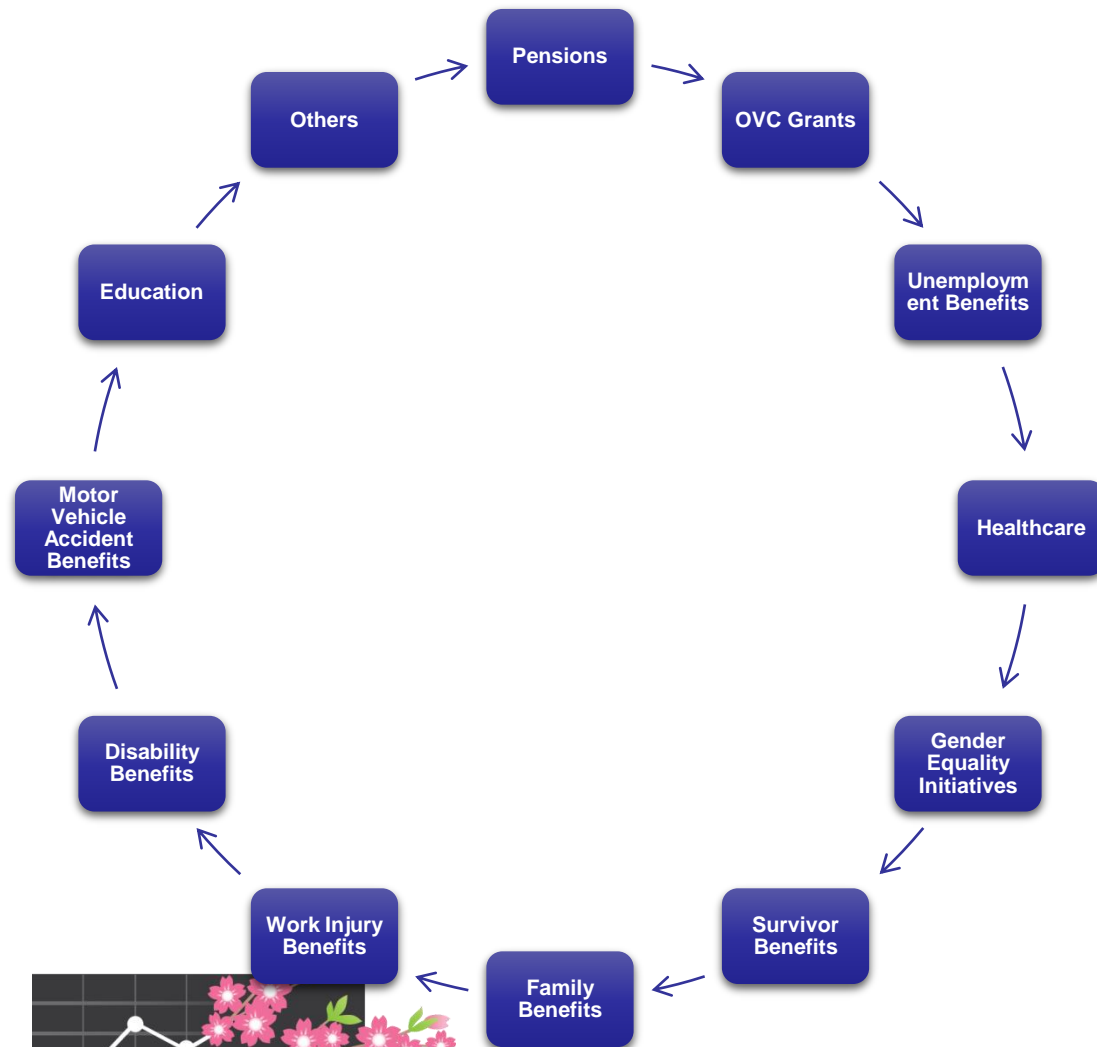
Education



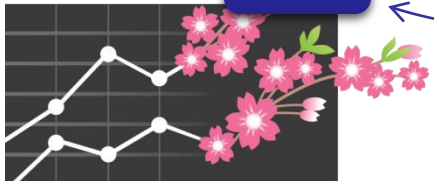
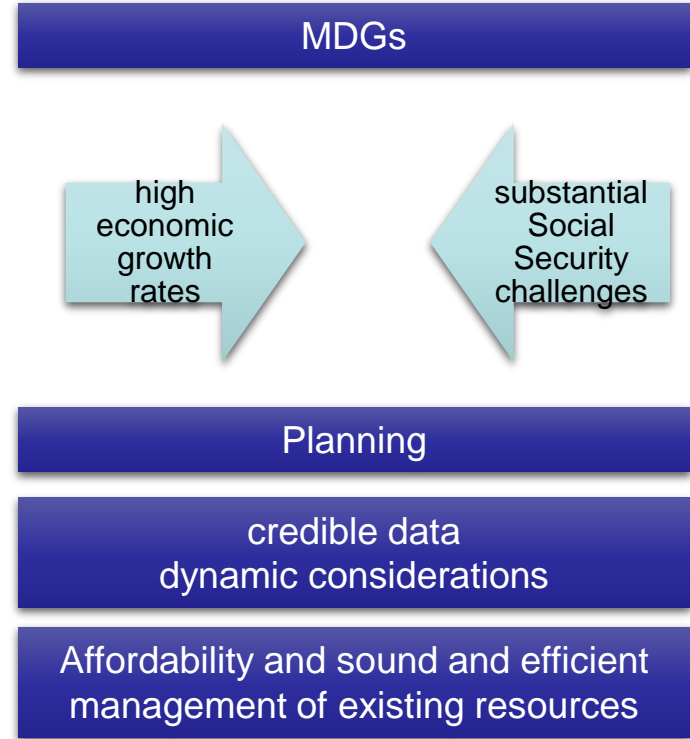
# Conclusion



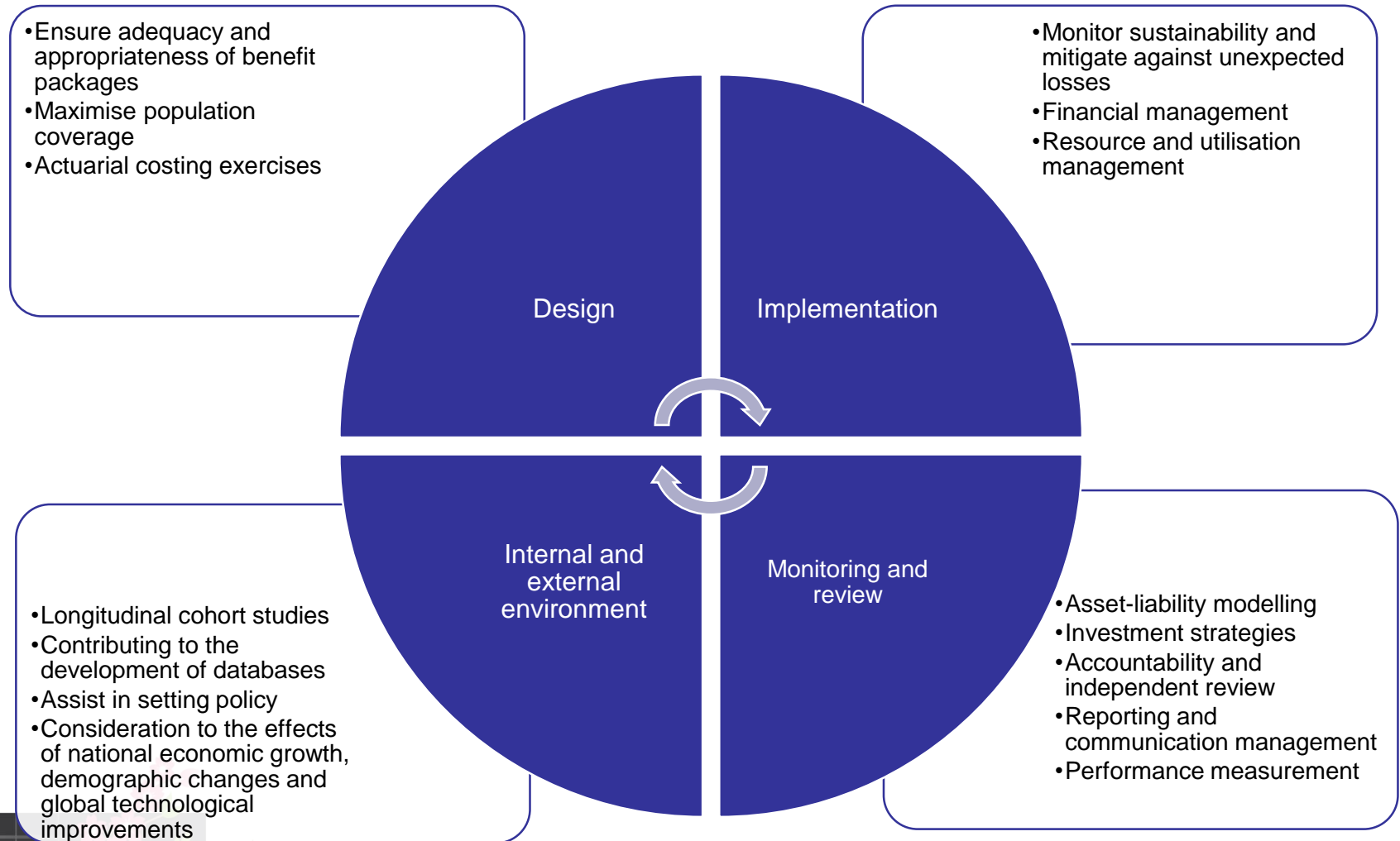
# Social Security in Africa



Actuaries



# General Actuarial Contribution



# Questions



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