Financial Architecture for a Green and Climate-Resilient Africa

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MAY 2023

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Outline

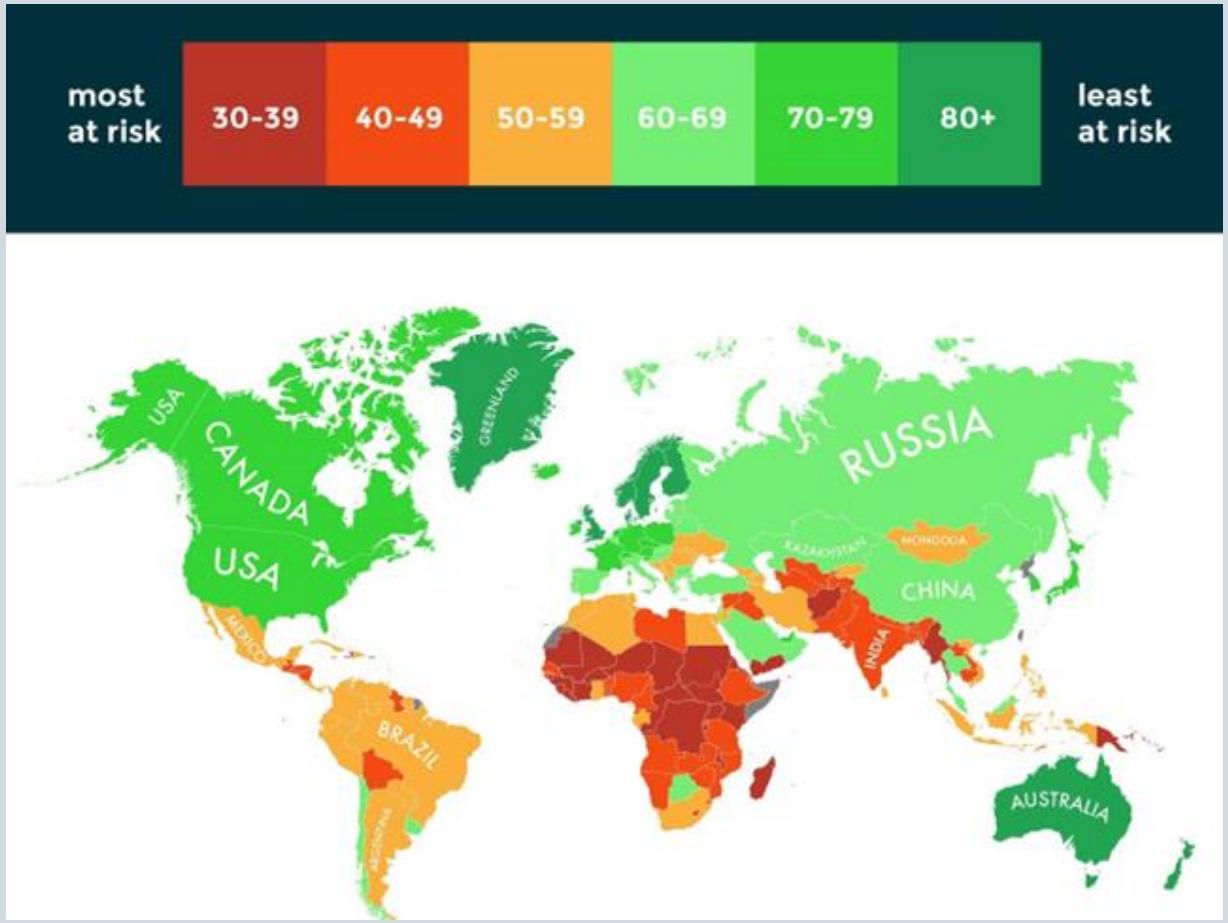
- Key Effects of Climate Change
- Macroeconomic Impacts of Climate Change
- Sectoral Impacts of Climate Change
- Microeconomic Impacts of Climate Change
- Financial Architecture Reform and Services
- Architecture for Green and Climate Deal Flow
- Financial and Policy Ecosystem Architecture

Effects of climate change

- Hotter temperatures
- More severe storms
- Increased drought
- Rise in hunger
- Poverty and displacement

Source: UN

Countries most at risk from climate change



source: TheEcoExperts, 2022

Macroeconomic Impacts

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Lost and lowered economic growth and activity

Lost fiscal strength and space, Lower revenue, higher expenditure and compromised debt sustainability

Food and transport inflation due to extreme weather events, eroded foreign reserves which weigh on exchange rates

"Africa's historical and current carbon emission share is below 3% of global emissions, but the burden of climate change on economies and livelihoods across the continent is disproportionately high- a climate injustice."

African Development Bank 2022

Impacts to Economic Growth and Welfare

- The combined macroeconomic effects of climate change could **lower the continent's GDP** by up to 3 percent by 2050.
- Rising temperatures and changes in rainfall are affecting economic activity more in sub-Saharan Africa than elsewhere.
- Climate change has **reduced economic output and growth** in Africa more than other regions in the world.
- The African Development Bank estimates that **loss and damage costs** due to climate change in Africa is between $289.2 billion to $440.5 billion.
- Global warming has **increased economic inequality** between temperate regions in the northern Hemisphere and Africa.

Fiscal Impacts

Revenue

- Changing rainfall patterns (dry gets driers, wet gets wetter)
- Interferes with **agricultural production--** almost entirely rain-fed, and about 25% of GDP.
- Lower **revenue generation** from lowered sector activity.
- Interference with **export receipts** and forex earnings
- Exacerbation of already high current account deficits particularly for non-resource intensive economies which rely on these exports.
- Hydropower revenues in driest climate scenarios could be 7% to 58% lower in key water basins.

Expenditure

- African countries already spending between 2-9% of budgets in unplanned allocations to respond to extreme weather events.
- 2005-2020: Flood-induced damage in Africa estimated at over USD 4.4 billion
- 8 of the 20 countries with the highest expected annual damages to road and rail assets, relative to the country's GDP due to climate change, in Africa.
- Increased **disease burden** and health-related expenditure

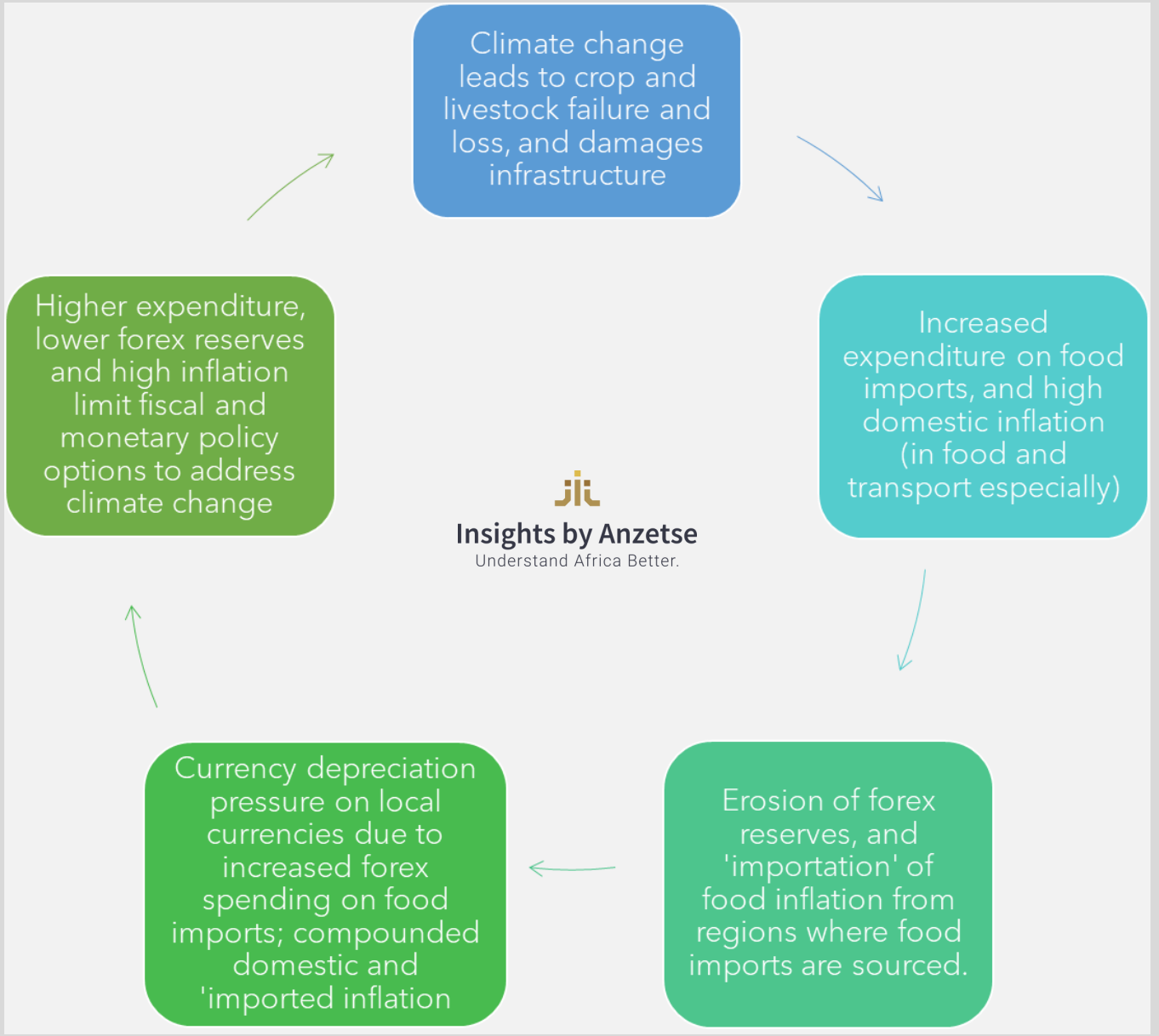
Debt

- Climate-related damage to infrastructure interferes with the multiplier effects of infrastructure investment
- Compromises the **productive potential of debt**, putting millions of dollars at risk for which African governments are still liable.
- Climate change interferes with **revenue generation** and thus repayment capabilities in both local currency and USD.
- **Increased climate-induced expenditure** directs funds to those costs rather than meeting debt obligations.

Monetary Policy Impacts

- Damage to transport infrastructure raises the cost of transportation as infrastructure is damaged or made impassable-- these costs are passed on to consumers, placing upward pressure on inflation.
- Climate change interferes with domestic food production in Africa informs the region' heavy reliant on food imports which exacerbate the CAD and erodes foreign reserves.
- Exposes African governments to inflation spurred by weather shocks in regions where imports are produced.
- This also weighs on exchange rates.

The fiscal and monetary policy impacts of climate change effects



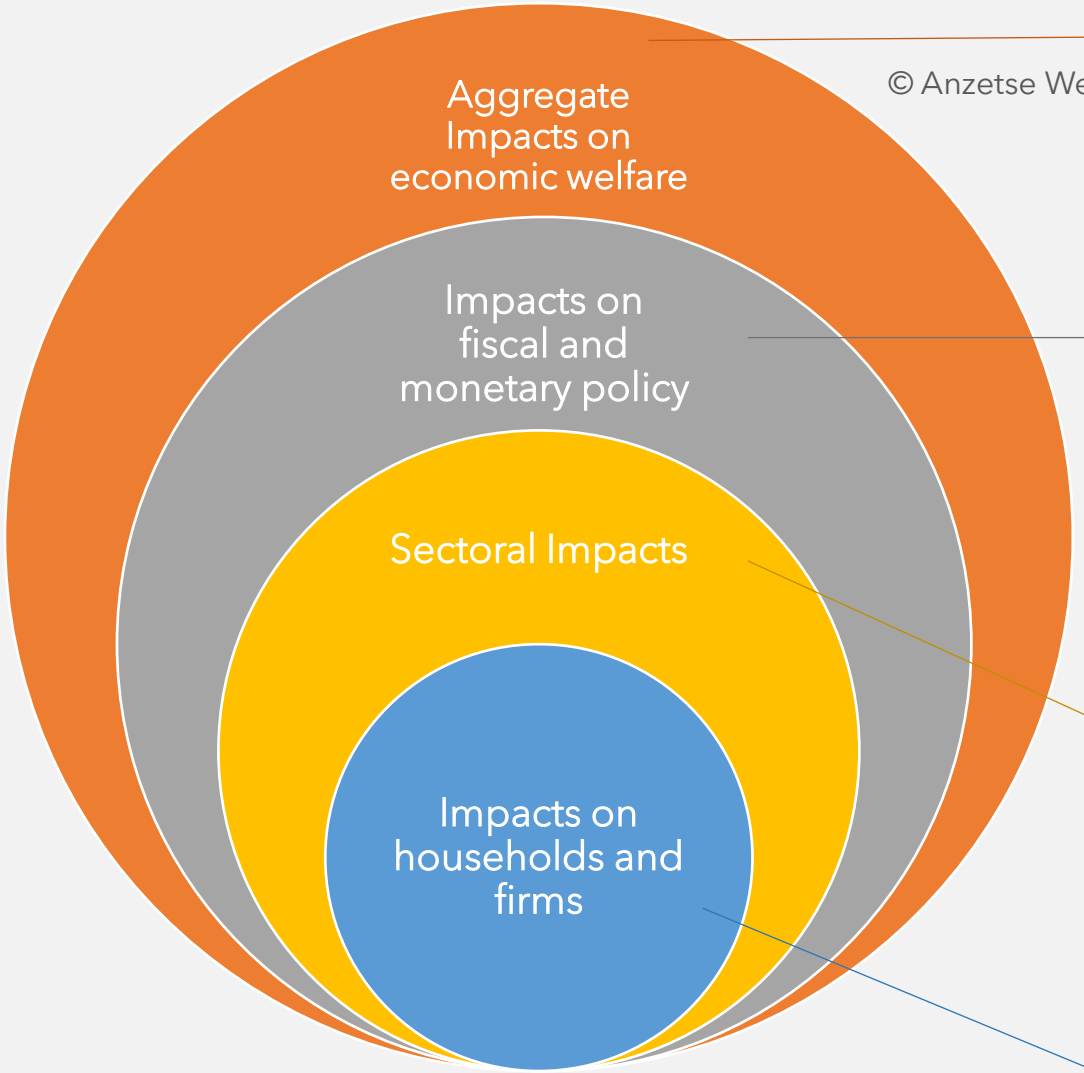
Sectoral Impacts

- **Agriculture**: Constitutes almost a quarter of the continent's GDP, 52-66% of Africans rely on the sector is a key source of livelihood; Africa will lose up to 16 percent of GDP due to **malnutrition** alone by 2050.
- **Water**: 1 in3 Africans face water insecurity; 400 million African lack access to basic drinking water—erratic rainfall exacerbates this
- **Tourism**: Natural-asset dependent and accounts for about 8.5% of Africa's GDP; **wildlife tourism** contributed 1/3 of tourism revenue, supporting 8.8 million jobs (2018); rainfall variability, extreme heat and drought lower animal mobility and alter wildlife migrations, affecting tourist visits.
- **Health:** Increased **disease burden** due to the expansion of malaria-prone areas; increases in diarrhoeal diseases, cardio-respiratory issue, and the severe mental health effects caused by extreme weather events.

Microeconomic Impacts

- **Involuntary displacement**, and damage to homes, property and sources of livelihood.
- 2020: 1.2 million Africans were **displaced** by floods and tropical storms
- **Business disruptions** from climate impacts have implications for deepening poverty.
- **Conflict**: Climate change increases the likelihood of conflict; a 1°C higher temperature is associated with a greater risk of conflict in Africa of about 11 percent,
- Climate-induced food insecurity and inflation, **lower spending power**
- **Lowered household income resilience** as livelihood and firm activity are hit particularly in sectors vulnerable to climate change such as agriculture.

Layered economic effects of climate change on Africa



- Loss and damage costs due to climate change.
- Lowered gross domestic product (GDP)
- Reduced economic output and growth.
- Increased economic inequality between temperate regions in the northern Hemisphere and Africa.

- Lost fiscal strength and space: Lost revenue growth, negative impacts on productive debt, lower exports, etc.
- Increases in planned and unplanned expenditure to address climate-related disasters and chronic climate change effects.
- Monetary policy: Upward pressure on food and transport inflation due to extreme weather events and eroded foreign reserves which weighs on exchange rates.

- Lower agricultural production
- Increased food insecurity
- Increased water scarcity
- Lower tourism receipts
- Increased disease burden

- Involuntary displacement, and damage to homes, property and sources of livelihood due to extreme weather events
- Climate-inducted conflict
- Disruption in firm activity
- Increased household expenditure on basic food items
- Lower income earning from firm activity in key sectors

Africans should not be subjected to a triple injustice of:

- Shouldering the impacts of climate change on economic resilience
- Bearing the fiscal and monetary policy effects of climate change that limit their ability to respond to the crisis
- Being penalised by the market should debt relief be required

Reform macroeconomic policy and architecture

Create a Fair Global Financial Environment

Foster Fiscal Resilience to Climate Change

Integrate a Climate-Lens in DSA

Assess Climate Resilience of key Public Investments finance by Debt

Foster Monetary Policy Resilience to Climate Change

Integrate African Climate Priorities into Debt Relief and Restructuring

Sector Interventions and New Financial Architecture

- Prioritise investment into **Climate-Smart and Resilient Infrastructure**
- Determine **Priority Sector** Assessment and Interventions
- Build **Green Project Pipelines** to Secure Sector Resilience and Performance:
- **Green Recovery Bonds**: Creditors swap old debt for sustainability-linked bonds that are enhanced by a guarantee facility.

Source: Debt Relief for a Green and Inclusive Recovery, 2023

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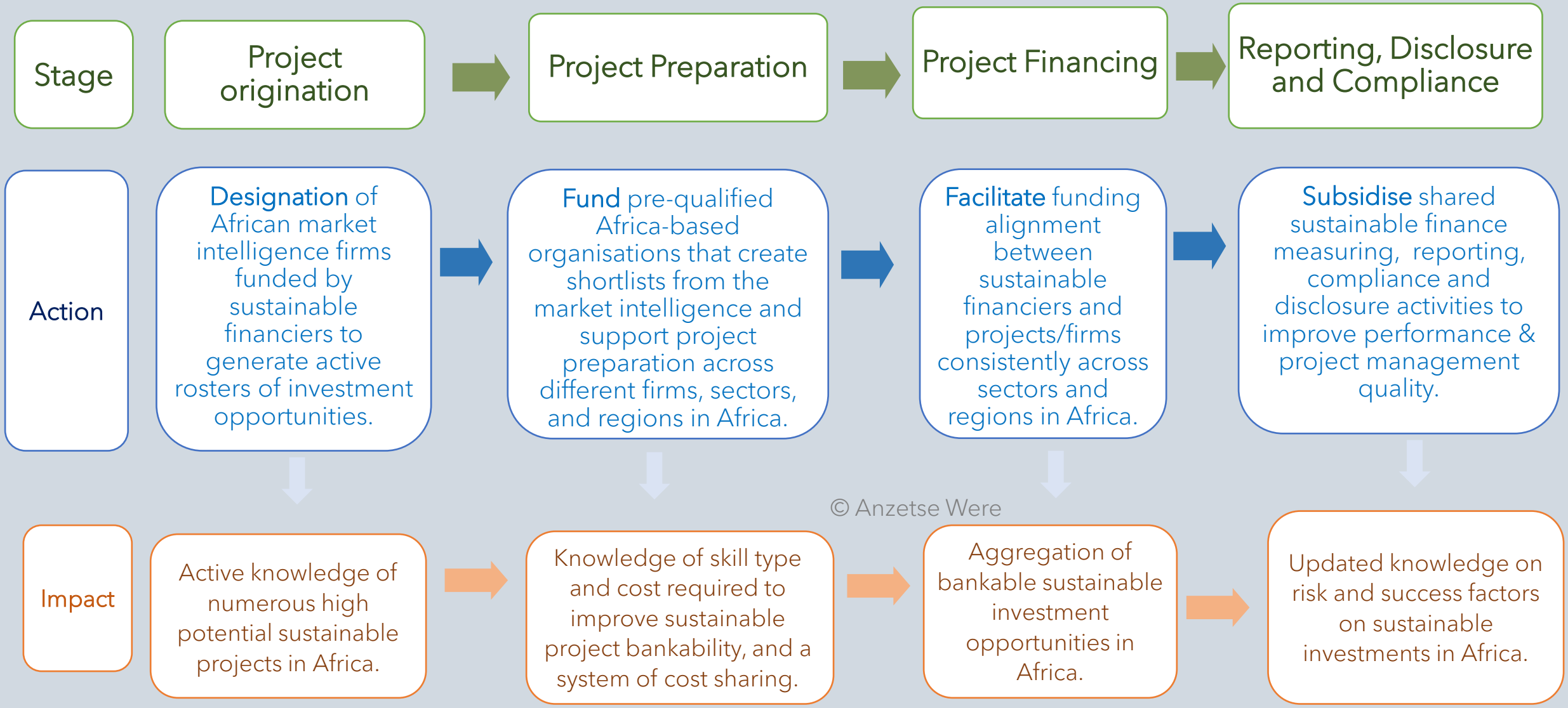
Architecture for Green and Climate Deal Flow



Source: Were, A., How to develop a green project pipeline in Africa, BII, 2022

Services to support households and firms

- **Climate Data** to track populations affected by climate change and extreme weather events
- **Climate responsive services** to mitigate these effects such as **cash transfers** based on their climate vulnerability **profiles.**
- **Climate Disaster Relief Services** – Dedicate inter-government climate disaster relief services and coordination to increase preparedness and responsiveness to support households and firms affected by climate disasters.

Finance and Policy Ecosystem Architecture

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Government Roles: Access, Efficiency and Stability

- Government Policy Coordination
- Green-related Legislation, Law and Reform
- Green Financial and Fiscal Incentives
- Government Green Finance and Sector Technical Capacity Building and Upskilling

Enablers

- Awareness Raising: Supply and Demand Side
- Green Finance and Sector Specific Data Infrastructure
- Deepen Local Green Financiers, Capital Markets and Institutions

Scaling and Retaining Green Finance

- Institutions for Green Project Origination and Preparation
- Green Finance Professional Service Providers (Green Verifiers, Legal Services, Standards/ Accreditors, Monitoring & Reporting, Green Finance Data collection & analysis etc)
- Blended Finance at Institution and Transaction level

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