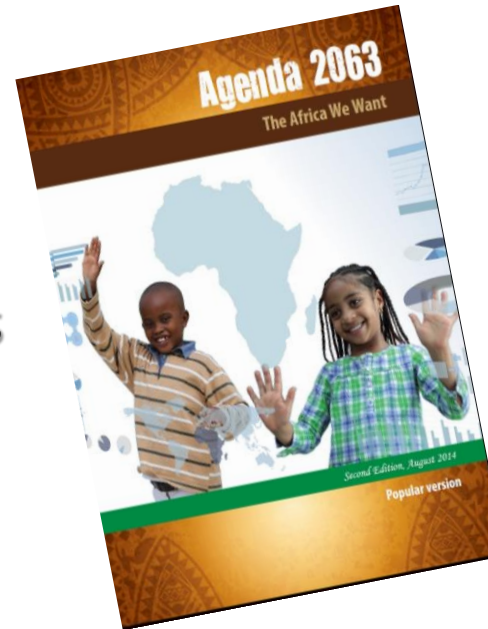


The AUDA-NEPAD – CSIR – SU Partnership on STI
auda-nepad.coe-sti@nepad.org martinb@nepad.org

Background and Scope

- ✓ Guided by the Continent's Economic Growth and Inclusive Development Priority Ambitions – Agenda 2063



- ✓ AUDA-NEPAD Strategic Priorities

Economic integration

Human capital and institutions

Sustainable energy

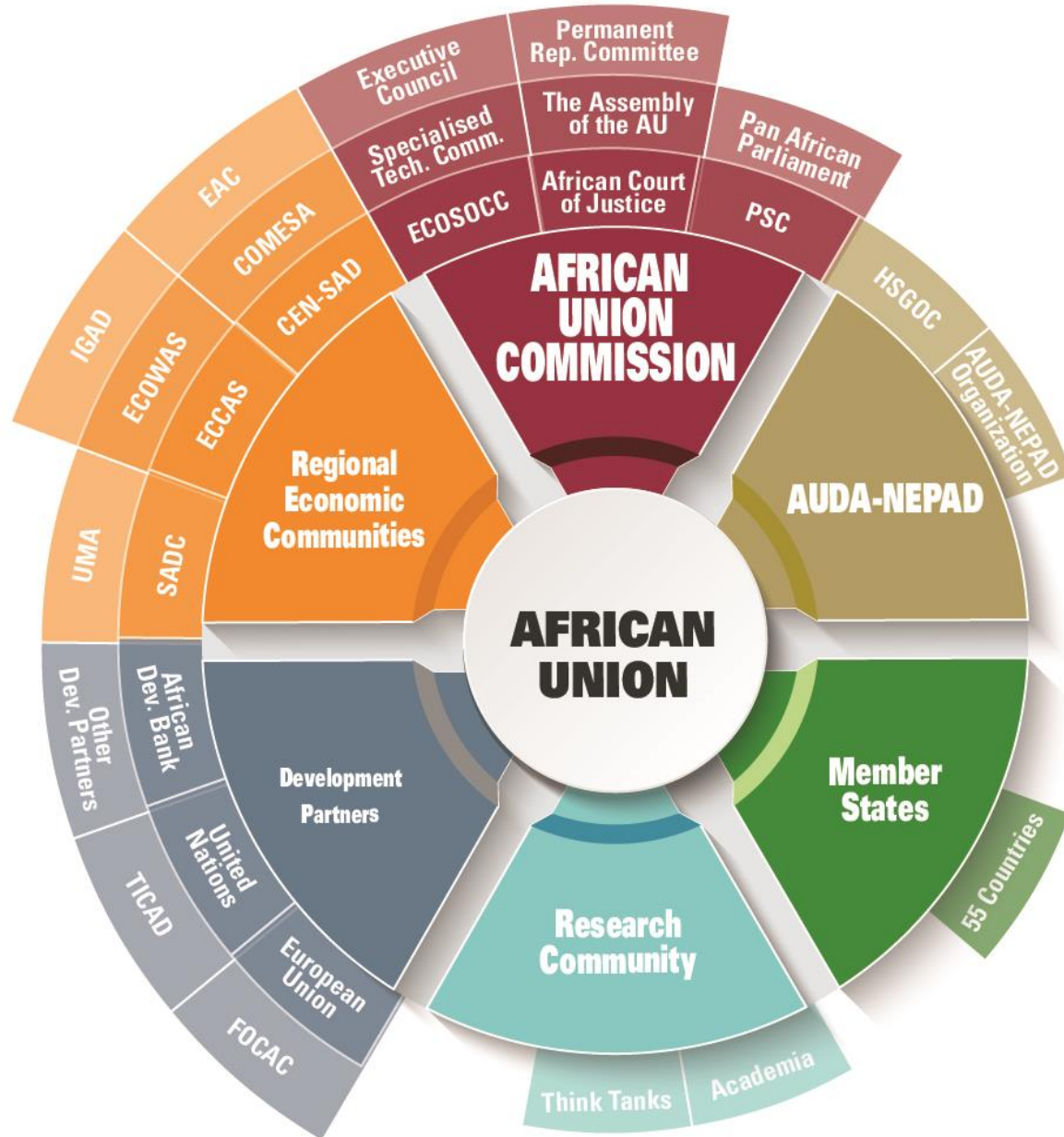
Climate Resilience, Environment and Natural Resources Management

Food systems and empowerment of rural communities

Science, Technology and Innovation



STAKEHOLDER SCENTRIC



IMPACT & EFFECTIVENESS

- 01** **STAKEHOLDER ORIENTATION** 
- 02** **SOLUTION MINDSET** 
- 03** **ADVICE ORIENTATION** 
- 04** **STAKEHOLDER INTERFACE** 
- 05** **BUSINESS PROCESSES** 
- 06** **ORGANIZATIONAL LINKAGES AND METRICS** 

MEMBER STATES PRIORITIES

HEALTH ~ 74%

- Reducing maternal, neo-natal and under 5 mortality rates
- Reducing the incidence of malaria
- ◆ Reducing new HIV infections
- ★ Reducing the incidence of TB
- ▲ Prevalence of underweight among children
- ⌘ Curbing child labour, child marriage and human trafficking
- ✚ Reducing gender-based discrimination and violence
- Increasing access to safe drinking water to the population

INDUSTRIALISATION ~ 52%

- Increasing Agriculture production and productivity
- Increase Manufacturing value added as % of GDP

EDUCATION ~ 55%

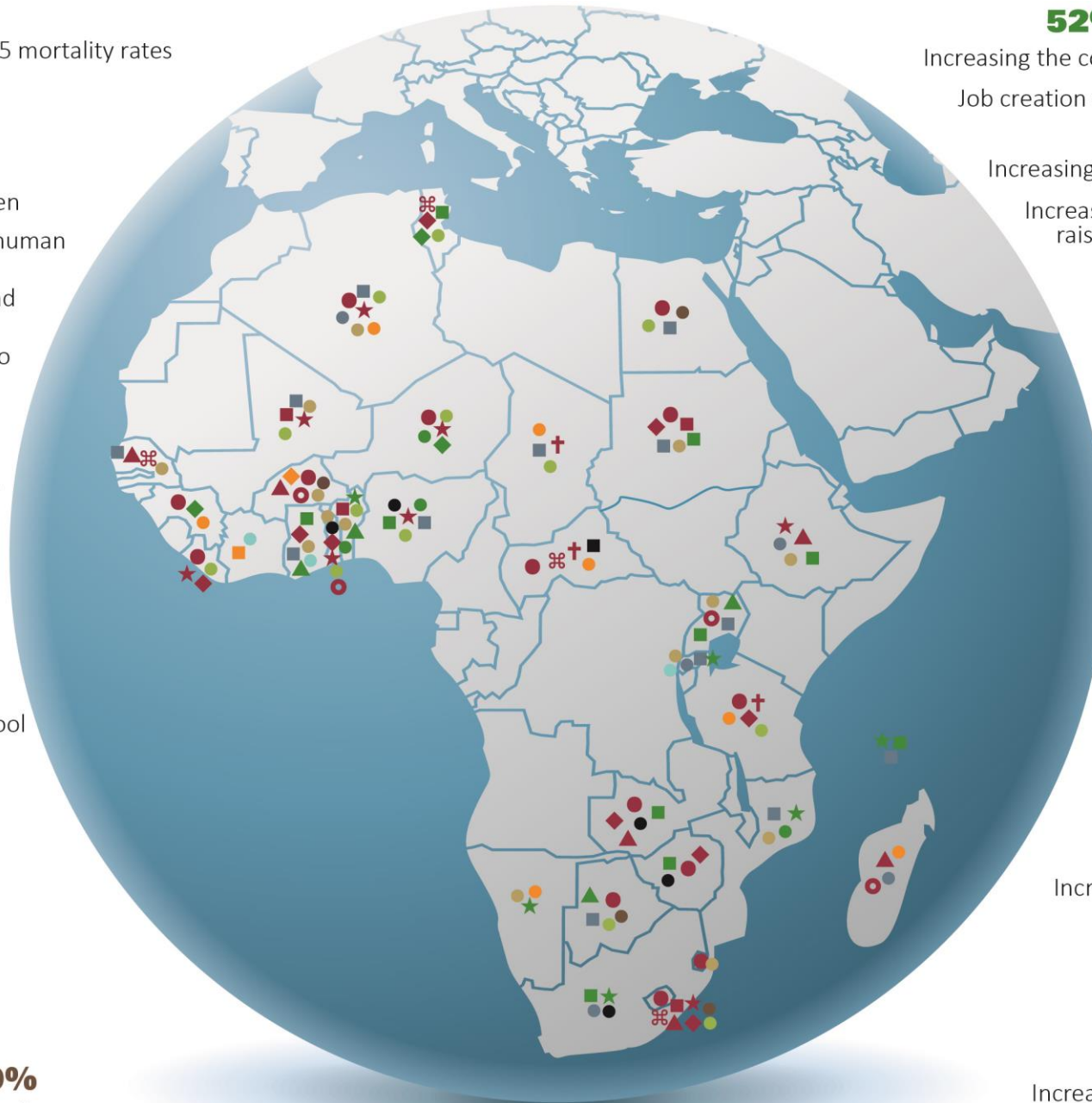
- Increasing pre-school and secondary school enrolment rates

DATA, MONITORING & EVALUATION ~ 42%

- Strengthening the statistics, monitoring and evaluation systems

SCIENCE, TECHNOLOGY AND INNOVATION ~ 10%

- Promoting Science, Technology and Innovation



52% ~ ECONOMIC INTEGRATION

- Increasing the contribution of the fisheries sector to the GDP
- Job creation and reducing unemployment rates especially among youth
- ◆ Increasing the contribution of total tax revenue to GDP
- ★ Increasing the proportion of resources mobilisation raised through innovative financing mechanisms in the national budget
- ▲ Increase in the contribution of Tourism to the national GDP

3% ~ TECHNOLOGY AND DIGITIZATION

- Increasing access to the internet

29% ~ GOVERNANCE

- Strengthening institutions and leadership for enhanced service delivery
- Measures that will enhance the general public's confidence in elections
- ◆ Strengthening anti-corruption and accountability measures

19% ~ INFRASTRUCTURE

- Increasing electricity generation and distribution
- Increasing infrastructure connectivity

10% ~ TERRESTRIAL AND INLAND WATER

- Increasing the percentage of terrestrial and inland water areas preserved

NEPAD Agency Proposed Delivery Model

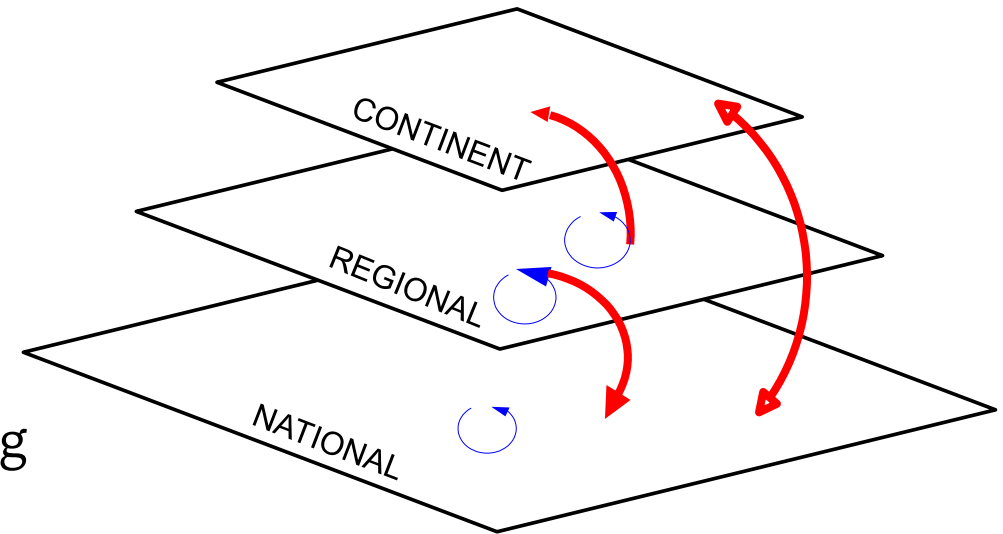
a) Guiding Principles of the Delivery Model

- Action is country-level (in partnership)
- Integral component of capacity strengthening (The MEANS just as important as the OUTCOMES)
- Multi-partner and multi-sectoral implementation arrangements
- RECs – key and strategic partner
- Integrated catalytic financing
- Connecting and bringing CONTINENTAL AND REGIONAL VALUE to bear on NATIONAL ACTION
- Connecting to and leveraging GLOBAL value

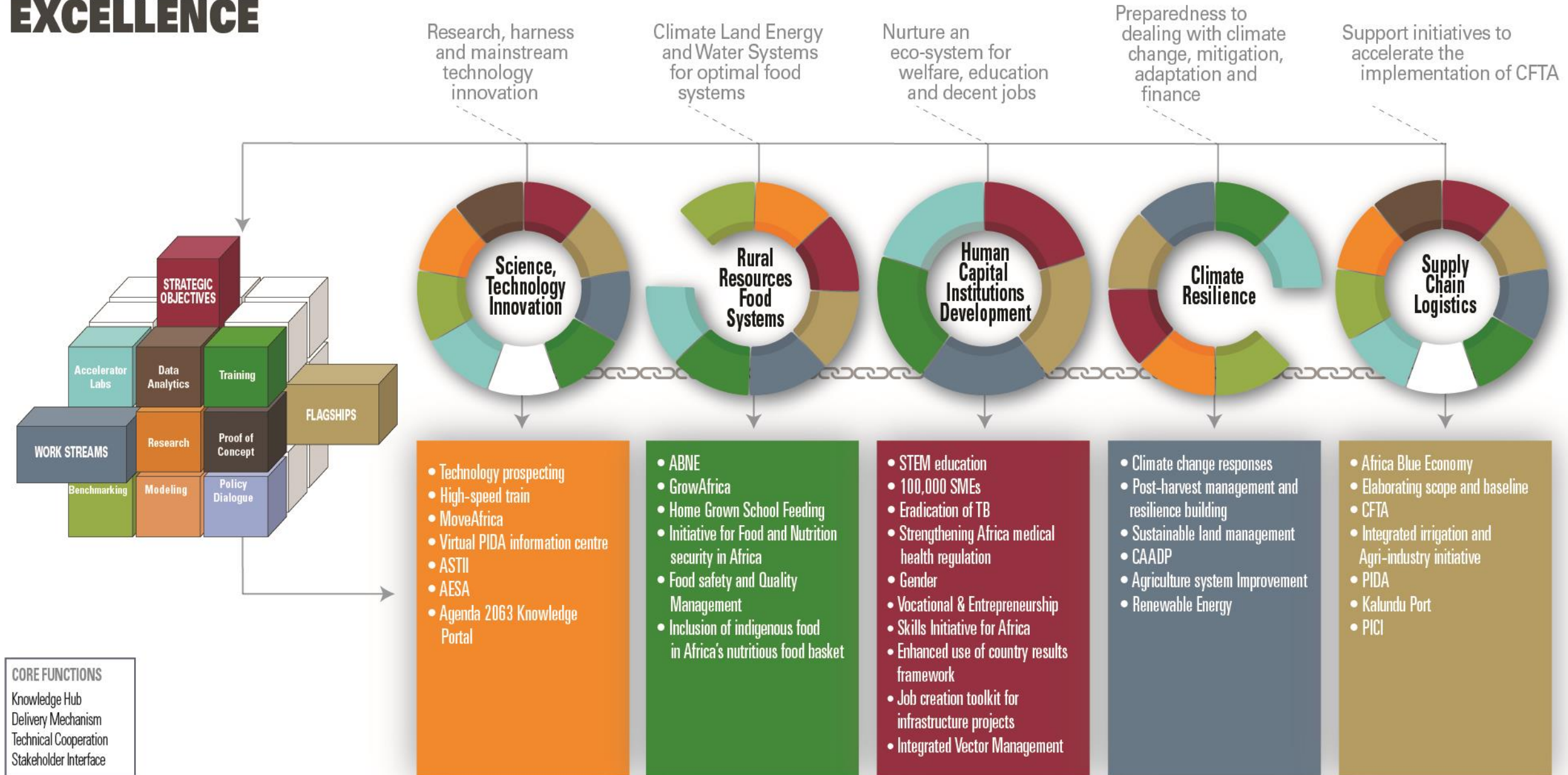
b) Implementation of Delivery Model

Delivering at three levels:

- Continental (facilitation, coordination, expert support, knowledge management, research)
- Regional (harmonisation, deployment of technical and financial support)
- National (technical and financial support, strengthening national capacities)



CENTRES OF EXCELLENCE



The Centres of Excellence provide the platform to accelerate programme delivery

AUDA-NEPAD Centres of Excellence Programmatic focus & Inter-dependences

Rural Resources and Food Systems

- Rural-Urban Transitions
- African Agriculture as an Industry (as source for national wealth and jobs/entrepreneurship)
- Food systems, Food safety and Food Security
- Biotechnology and natural ecosystems
- Land use and Land policy
- Water security
- Marine Ecosystems and Blue Economies

Human Capital and Institutional Development

- Education and Skills development; Employability and Entrepreneurship
- Capable Institutions and Organisational development; e-Govt
- Decent livelihoods: Social Protection; Inclusive Access to livelihood needs: Health, Education, Housing; Energy; Water; Communication; etc...
- Gender development and youth empowerment
- Culture, Arts and Sports

Energy – Climate Resilience

- Renewable energy
- Green economies
- Environmental disaster risk preparedness and management
- Integrated bio-diversity ecosystems
- Integrated climate, land-use, energy and water systems (CLEWS) within a defined socio-economic context
- Marine ecosystems' resilience

Supply Chain & Logistics Support

- Trade and markets; Standards, Supply chain management: AfCFTA implementation readiness
- Africa Industrial Productivity and Competitiveness (manufacturing & Tradeable Services)
- Enterprise Development – focus on MSMEs
- Development Economics and Policies – Development financing; Jobs, Poverty and Inequality
- Infrastructural development, Technologies and Institutions
- Leveraging Regional and Global Value Chains

Issue/Problem identification; Problem-to-Solutions links;

Science Technology and Innovation

- Data and Knowledge as a Development resource
- ST&I in pursuit of Agenda 2063 (industrial and economic growth and human wellbeing goals)
- Technology Transfer (south-south/south-north)
- Technology-Innovation commercialisation
- Global ST&I megatrends – focus on:
 - 4th IR (AI, digitalisation, robotics, etc...)
 - Biotechnology/Agricultural biotechnology
 - Waste management
 - Biodiversity & Atmospheric Physics
 - Space technologies, maritime and sub-maritime exploration & Pharmaceutical
- Integrated and responsive Public-Private capabilities in driving ST&I

Data, knowledge, Science, best practices, programme/project incubation & proof of concepts; Commercialisation; At scale Application

Data, knowledge, Science, best practices, programme/project incubation & proof of concepts; Commercialisation; At scale Application

Issue/Problem identification; Problem-to-Solutions links;

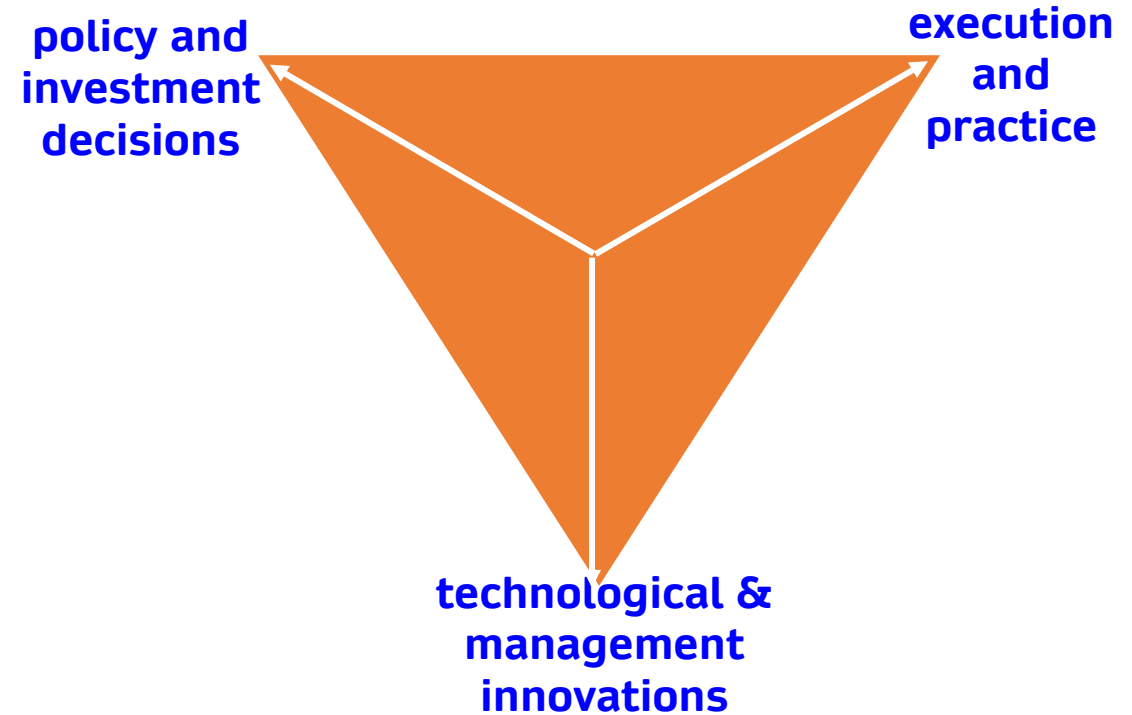
The Partnership: AUDA-NEPAD - CSIR - Stellenbosch University

The AUDA-NEPAD CoE – STI Partnership

- ✓ Leverage blended R&D, Policy Practice & Execution capability to augment superior economic performance – Improved livelihoods
- ✓ support to accelerated implementation of Agenda 2063 (as domesticated in NDPs)
- ✓ Bringing into Africa's development terrain, world-class technological and management innovations

Identifying innovations - solutions to specific Agenda 2063 related development priorities

catalyse the commercialisation and scaling-up of these innovations across the continent depending on needs



Leveraging each other's Capabilities to deliver shared value in support of Agenda 2063 goals

- ✓ Research, development and diffusion of transformative technologies
- ✓ R&D of technological Innovations for industrial development and economic growth
- ✓ Home Grown Science & knowledge/narrative to development planning & execution

CSIR

- ✓ Political Mandate and legitimacy
- ✓ Broker-Mobilise Govt authority & Action
- ✓ Broker: Public-Private-CSO blended Development Action – vertical/horizontal linkages
- ✓ Foster trans-national solutions (national-regional-Continent)

AUDA-NEPAD CoE on ST&I

- ✓ Conduct collaborative and interdisciplinary research that address the grand challenges of society
- ✓ Conduct need driven research connected to human capital development (expertise)
- ✓ Entrepreneurial culture that advances innovation

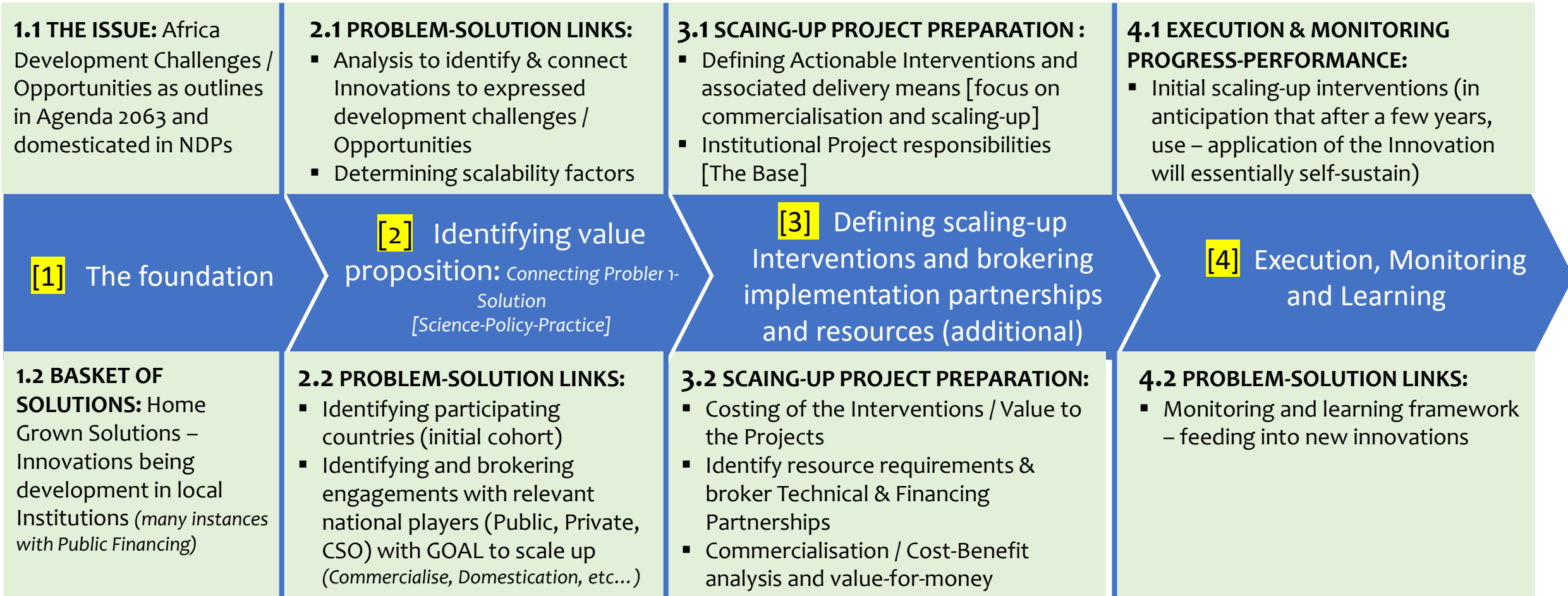
Stellenbosch U

The AUDA-NEPAD CoE – STI Partnership

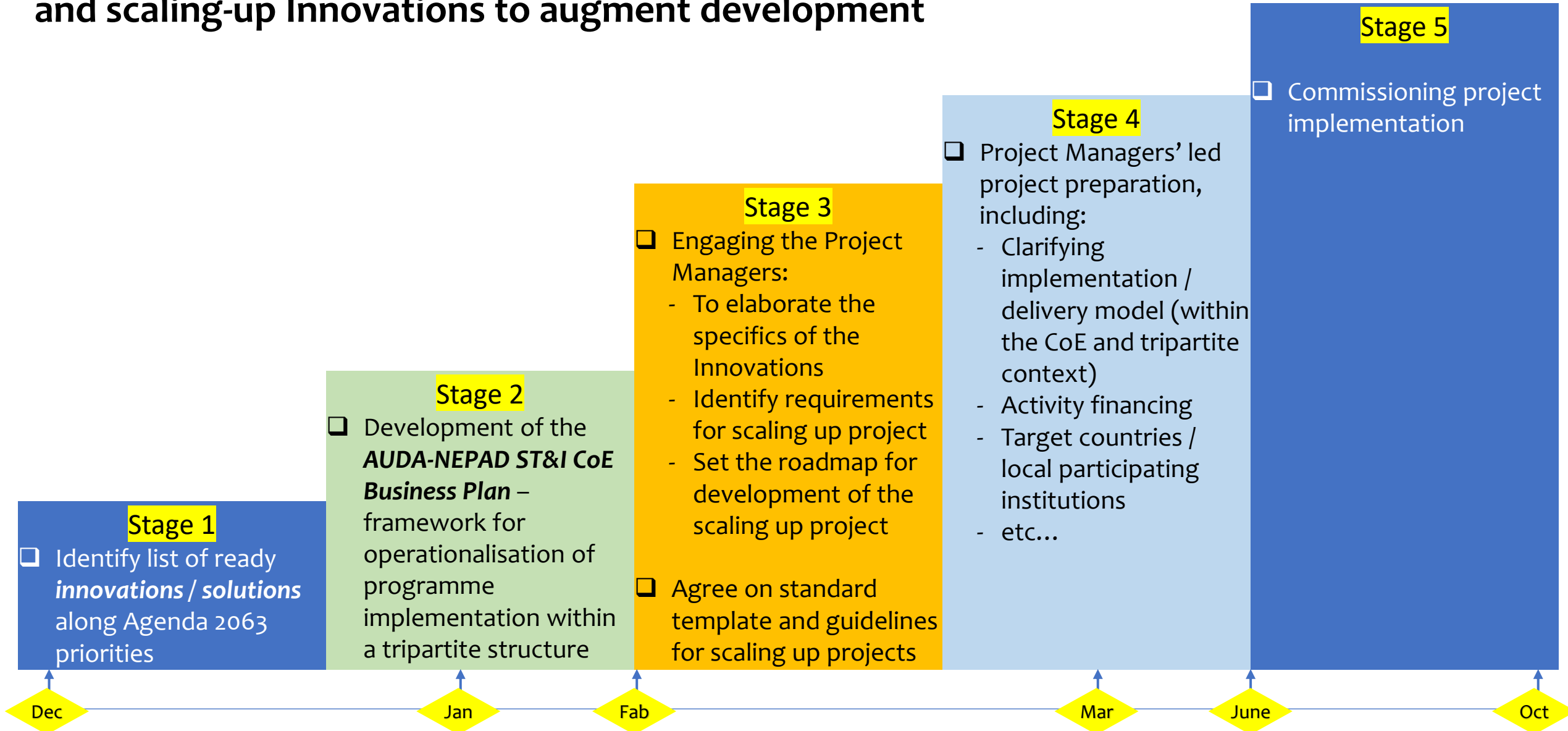
... Catalysing accelerated Agenda 2063 Implementation through delivering:

- ✓ Science and Evidence
- ✓ Problem-solving Technological and Management Innovations
- ✓ Strategic information & Data for Informed policy and Investment decisions

Business Model



Operationalisation joint Projects on commercialisation and scaling-up Innovations to augment development



Where do we stand now and where to

The Partnership has so far generated:

1. The AUDA-NEPAD CoE STI Business Plan

- ✓ *CoE Purpose and Rationale*
- ✓ *Scope of work and delivery model*
- ✓ *Operational plan and related resources*

2. Initial catalogue of Innovations ready to go for scaling out

- ✓ *Reflect the leveraging of local Africa capability in STI*
- ✓ *Technological and management innovations - solutions*
- ✓ *Direct response to Agenda 2063 development challenges / opportunities*

3. Set-up within a globally renowned R&D Ecosystem

- ✓ *African Union Regional Office with continental reach*
- ✓ *Physical location in Stellenbosch*
- ✓ *Leveraging top class expertise and Partnerships*

The Innovations catalogue

Development Issue addressed	Number of Innovations	Examples
Category 1: Industrialisation and Wealth creation		
<input type="checkbox"/> Agro-Industry – Competitive Productivity; Viable; Environment; etc..	9	<ul style="list-style-type: none"> ▪ Aquaculture – Disease – Husbandry management [CSIR – SU]
<input type="checkbox"/> Industrial Products and Tools for enhanced performance (productivity; viable; resource efficient)	6	<ul style="list-style-type: none"> ▪ Post-Harvest Virtual Prototyping Platform [SU]
Category 2: Shared Prosperity and Transformed Livelihoods		
<input type="checkbox"/> Improved Standards of living – access to livelihood needs (Clean water; Healthcare; energy; etc...)	7	<ul style="list-style-type: none"> ▪ Bio-energy Alternative Sweeteners [SU] ▪ Diagnostic and surveillance systems to manage disease outbreaks [CSIR]
<input type="checkbox"/> Communication and Access to social-services (public service delivery; social service infrastructure; etc...)	2	<ul style="list-style-type: none"> ▪ Modular clinic [CSIR]
Category 3: Human Capital Development and Transformed Institutions		
<input type="checkbox"/> Training and skills development – Tools, guidelines, Training-learning facilities, etc...	3	<ul style="list-style-type: none"> ▪ Text-to-speech (TTS) technology [CSIR]
<input type="checkbox"/> Institutional effectiveness, efficiency and accountability, Governance	2	<ul style="list-style-type: none"> ▪ Safe and efficient ports [CSIR]
Category 4: Natural Resources management and Environmental Resilience		
<input type="checkbox"/> Sustainable natural resource management (mitigating pollution and GHG; etc..)	2	<ul style="list-style-type: none"> ▪ BioEnergy-Ethanol Processing [SU]
<input type="checkbox"/> Climate resilience (adaptation–mitigation measures; etc..)	2	<ul style="list-style-type: none"> ▪ Renewable Energy: PV Health Monitoring [SU]

Thank you
for your attention