

Science, Technology and Innovation Policy and Strategy - Kenya

The background of the slide features the Kenyan national flag, which consists of three horizontal stripes of black, white, and green, with red borders on the sides. In the center of the flag is a traditional Maasai shield with a spears, and a traditional Maasai spears are positioned vertically behind the shield.

***Vision:** A country that harnesses research, technology, and innovation for national prosperity and global competitiveness.*

***Mission:** To improve quality of life of Kenyans through integration of research, science, technology and innovations in all production systems of the economy.*

**Presented at the UNESCO East Africa Region Workshop on Science,
Technology and Innovation Policy Review
Mombasa, Kenya 29th March to 4th April 2009**

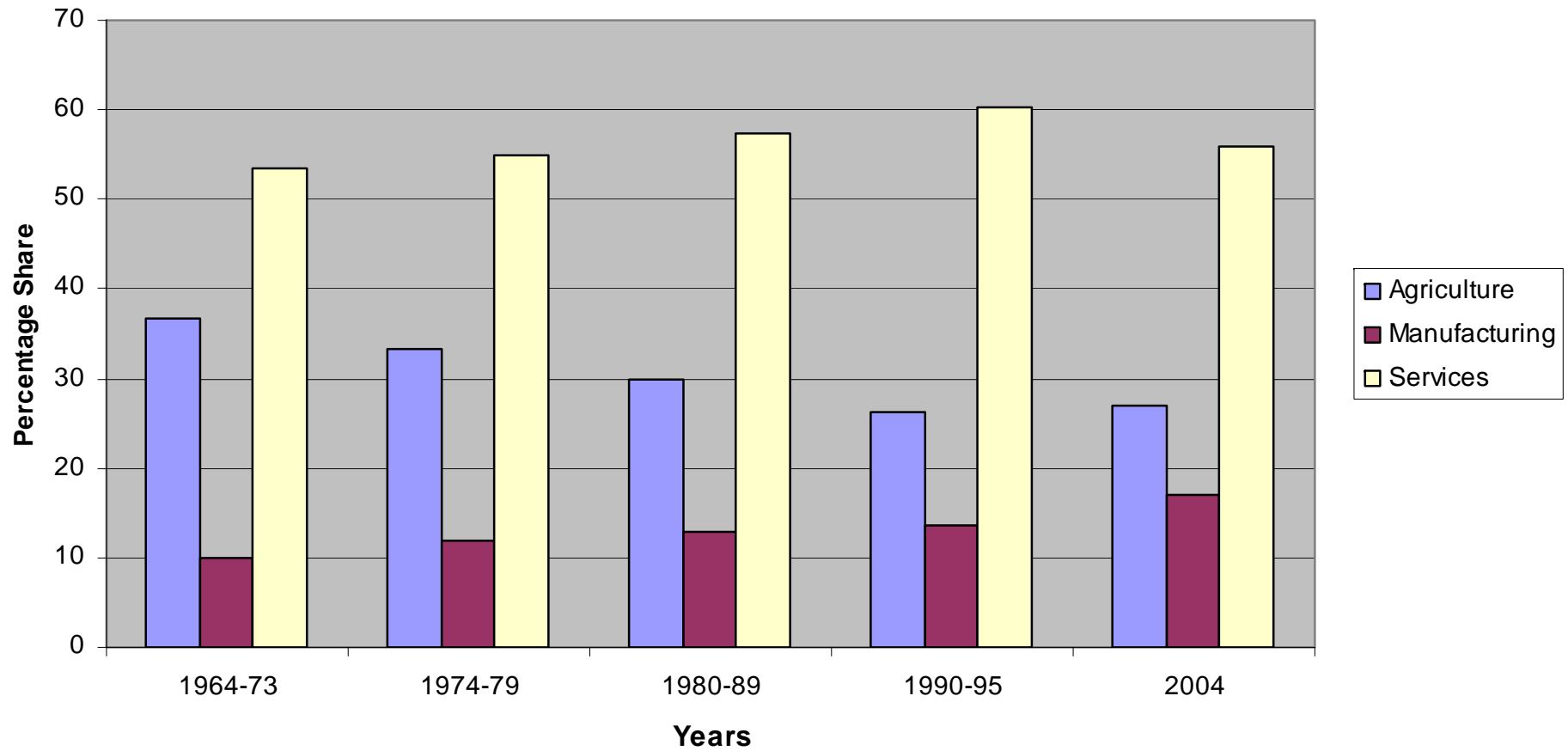
Background to ST&I Policy and Strategy

- Kenya enacted the Science and Technology Act in 1977
- The Government of Kenya launched Kenya Vision 2030 initiative as a long term development strategy for the country that recognizes ST&I as the foundation to achieve economic, political and social advancement .
- ST&I Policy and Strategy underscores the mainstreaming and application of science, technology and innovation in all sectors of the economy.

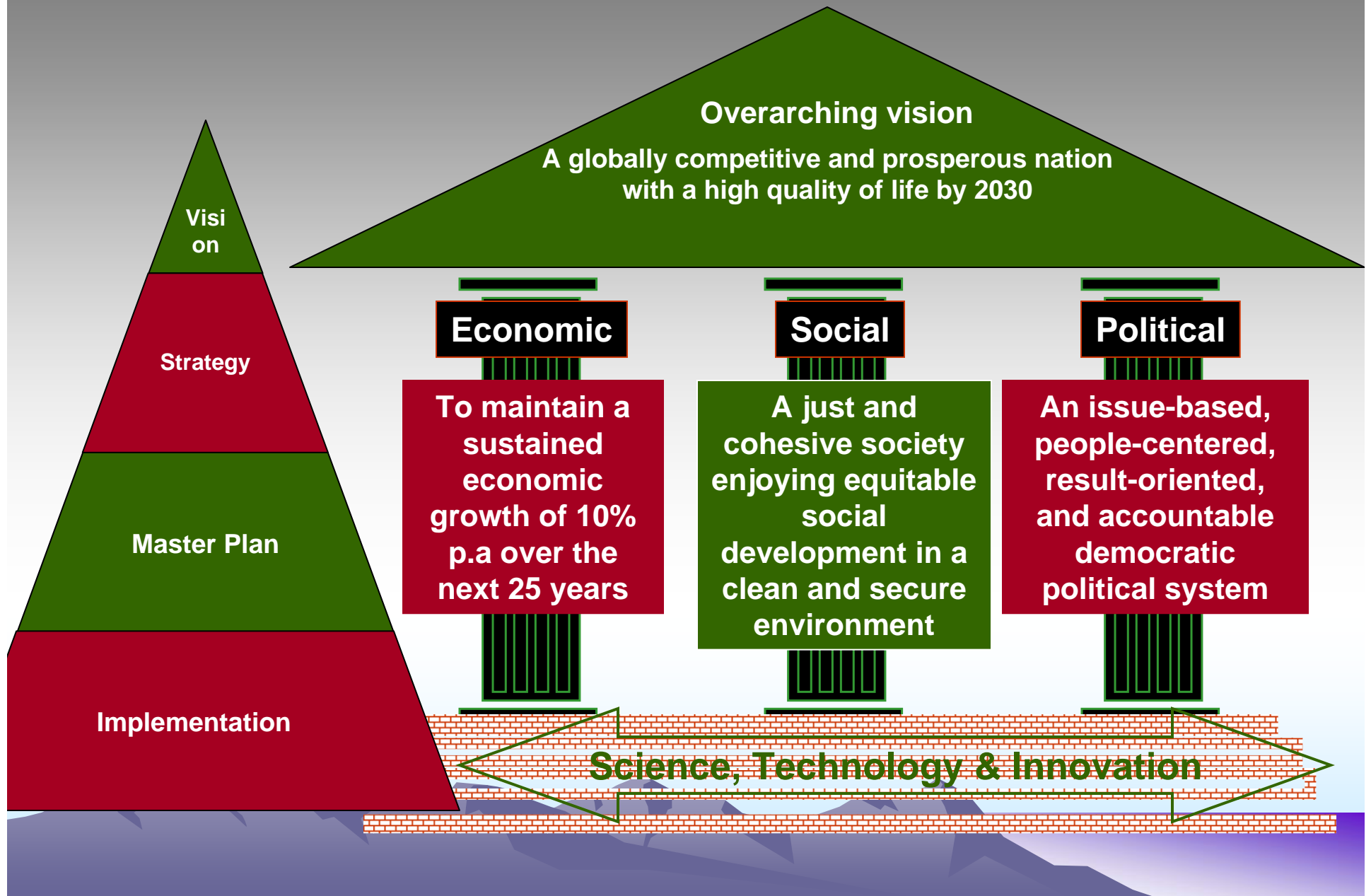


Composition of the Economy over time

Sectoral Shares in Real GDP - 1964 - 2005



ST&I IN KENYA VISION 2030



The ST&I Policy Pillars

Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC) 2003-2007;
Focused on economic recovery

Vision 2030; Focus on economic growth path

- GDP growth 7% by Dec 2007; efficiency gains of reforms and the Vision growth sectors
- **Economy:** productivity growth and that the economy is progressively transformed into a knowledge based one
- **Social:** education, health, population, housing, water, security
- **Political:** issue-based politics, enforcing rule of law, electoral process

A Great Opportunity to Rally Kenyans Behind a Common Vision

Need for Great push as the Country emerged from economic decline

Changing Dynamics @ Regional & International Levels, which affects our competitiveness

Increasing Democratic Space



Push to move beyond ERS to Sustained Social & Economic Development





Vision for 2030

A nation that harnesses science, technology and innovation to foster global competitiveness for wealth creation, national prosperity and a high quality of life for its people



Enhance the application of ST&I in the national priority sectors for optimal benefits for Kenya's socio-economic development



National Priority Sectors for ST&I Policy Interventions

Agriculture and rural development: **value addition-agro processing, agricultural research with special reference to bio-technology and drought management, biotic and abiotic stresses management**

Industry and Entrepreneurship: **diversification and upgrading of production capacity, research-industry links**

Human Resource Development : **adequate and competent core human resource**

Physical Infrastructure: **focused infrastructure dev't for growth**

Energy: **efficient, adequate, affordable and diversity**

Environment & Natural Resource: **management, clean production conservation, waste management & recycle**

Sectors cont'd

Health and Life Sciences: a health system of international standards through ST&I in Quality service and standards improvement, research in multi—sectoral health issues and exploiting indigenous knowledge

Information Communication Technology (ICT): robust ICT and infrastructure; support local ICT industry growth, foundation for improved service delivery



Strategic Policy Issues and Strategies

Governance Framework: Create a coherent and focused legal, Institutional and regulatory framework to support the development of effective and sustainable ST&I

Generation and Management of IPRs: Judiciously enforce IPR regimes to provide impetus for the generation, protection and utilization of intellectual property by all categories of inventors and innovators

Technology Development, Transfer and Diffusion: Support search, acquisition, development and application of modern and traditional knowledge and the utilization of the ensuing technologies in the formal and informal sectors of the economy

Human Resource Development: Provide an enabling environment for building a critical mass of human resource, to harness and effectively participate in the application of ST&I



Education and Training: Promote appropriate science, engineering and technology (SET) skills, creativity and learning by discovery at all levels of education and training

ST&I Infrastructure: Create an environment for the strengthening of supportive physical and ICT infrastructure for science, technology and innovation

Collaborations and Partnerships: Promote regional and international cooperation and collaboration, close and productive interaction between private and public Institutions in existing and emerging issues in ST&I.

Indigenous Resources and Traditional knowledge (IRTK): Exploit the full potential of science, technology and innovation to protect, preserve, evaluate, update, add value to, and utilize the extensive indigenous resources and traditional knowledge available in the formal and informal sectors of the economy

Environment and Natural Resources Management: Explore alternative technologies to conserve and manage Kenya's natural resources; forecasting, early warning, prevention, mitigation of manmade and natural emergencies and hazards

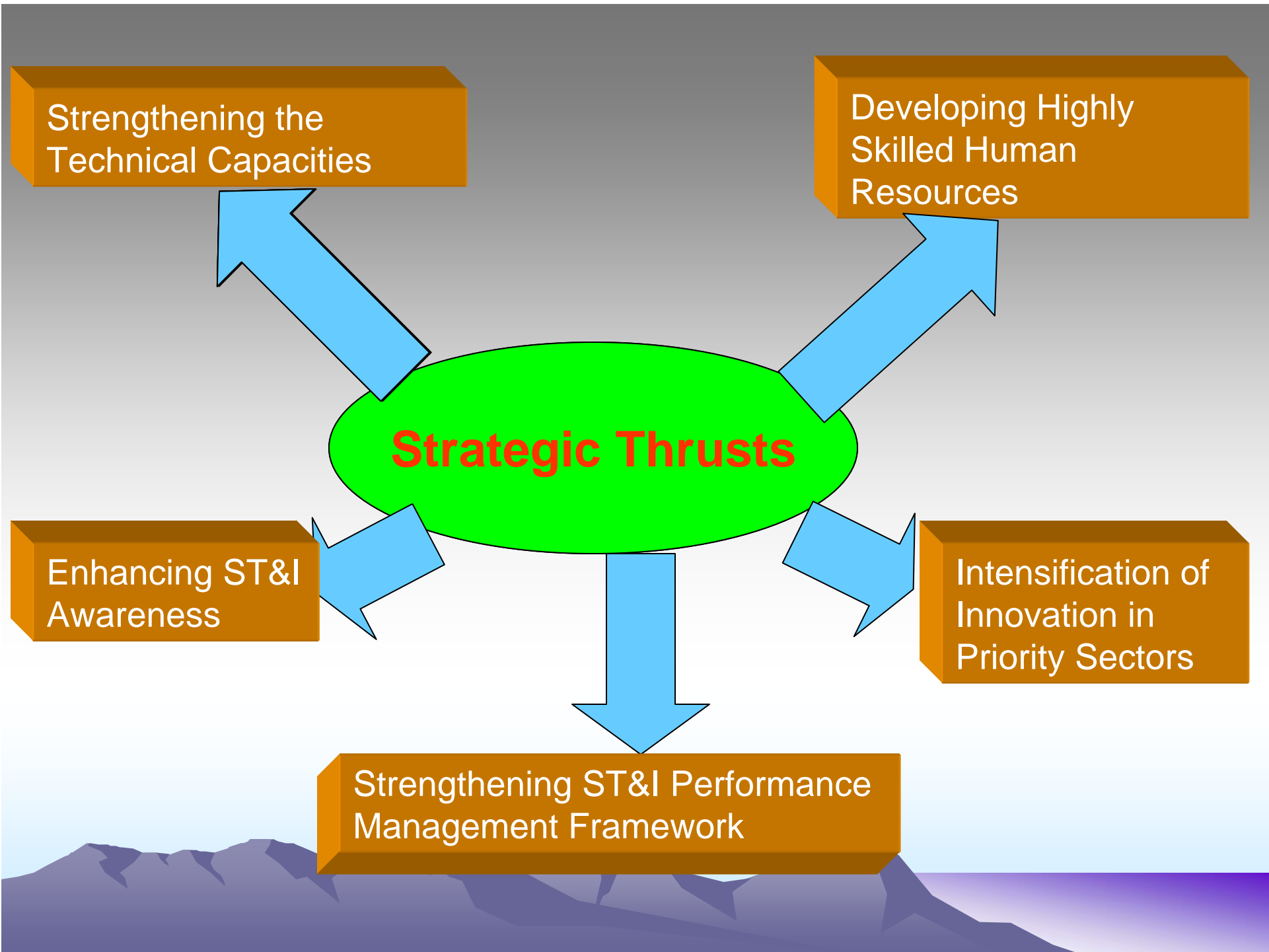


Public Communication and Advocacy: Elevate national profile of national ST&I; promote public acceptance of and support for national ST&I; link scientific community and consumers of ST&I knowledge, products and services

Funding Measures and Mechanisms: Secure adequate funding streams for ST&I

Performance Management Framework: Develop a comprehensive performance management framework for ST&I Policy





Developing Highly Skilled Human Resources

- Restructuring and re-engineering education system to industry demands; immediate for University education
- Assess skills requirements for the Vision
- ST&I Human Resources Development
- Commercialization & Technopreneurship Skills



Strengthening the Technical Capacities and Capabilities

- Policy environment for ST&I and quality HE to thrive
- Efficiency in management and production for productivity & competitiveness
- Create new HEST&I institutions
- Re-engineer ST&I and Higher education Institutions
- HEST&I Infrastructure & Equipment
- Capacity to develop new & absorb emerging technologies



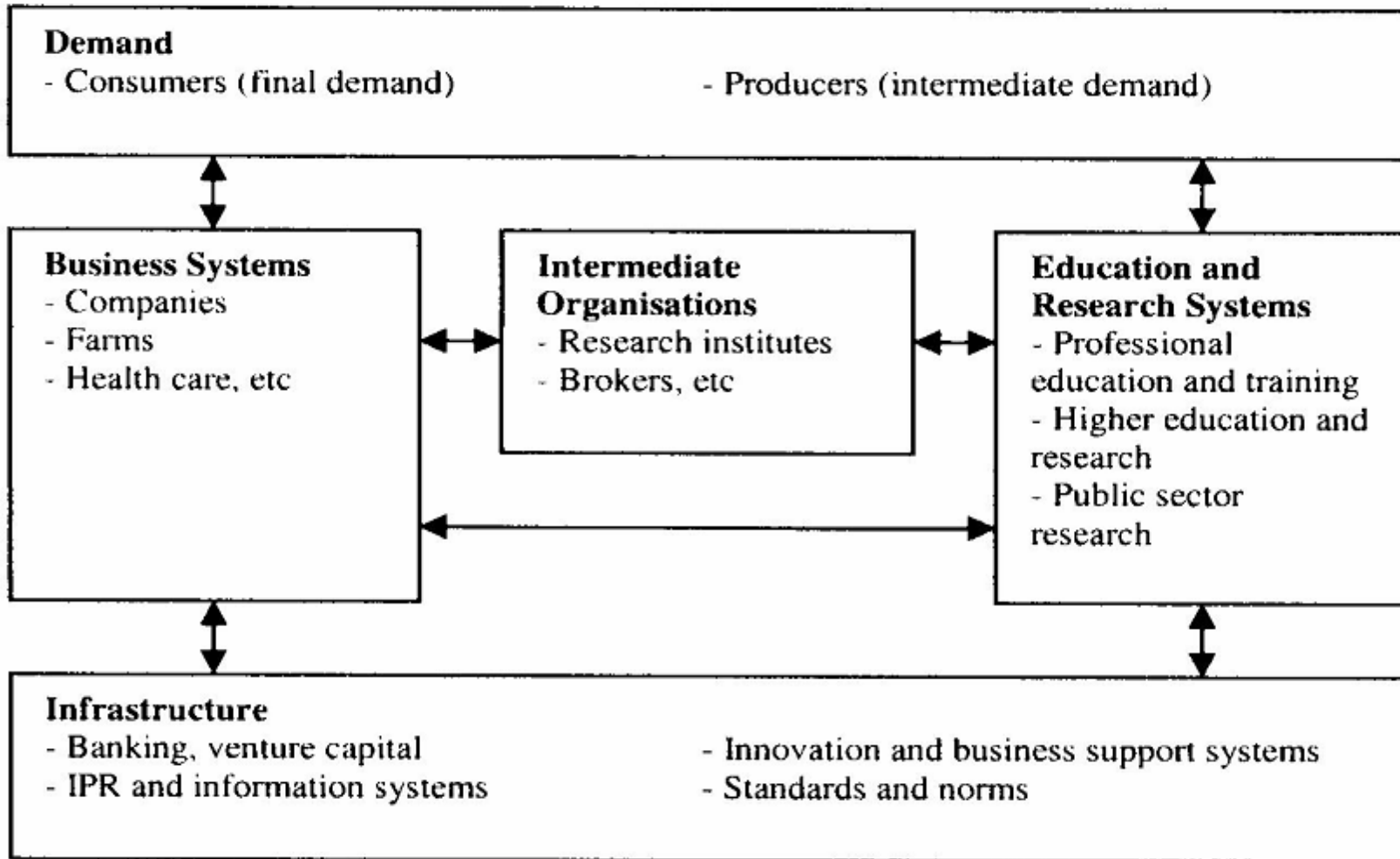
Intensification of Innovation in Priority Sectors

- Kenya National Innovation System (chart below)
- ST&I Funding
- Collaboration & Partnerships(public, private, universities)
- Research Coordination
- Intellectual Property Rights
- Map, develop and intensify Indigenous Resources & Knowledge
- Innovation deepening
- Quality Assurance, Standards & benchmarking

National Innovation System: Components

Framework Conditions

- Financial environment
- Taxation and incentives
- Propensity to innovation and entrepreneurship
- Trust
- Mobility
- Education, literacy



Enhancing ST&I and HE Awareness

- Public Communication & Advocacy:
 - Policy makers (public sector technocrats and parliamentarians)
 - Industry
 - Financial sector
 - Community end users



Strengthening ST&I Performance Management Framework

- Performance Management Framework:

an assessment and evaluation mechanism to tell us whether HEST&I is making an impact on achievement of the Vision or not



Way Forward

- 2nd National Conference for validation planned for April 2009
- Present the Policy document to Cabinet before June 2009
- A draft Science, Technology and Innovation Bill ready for presentation to National Conference (to be presented to Cabinet together with policy)
- The ST&I Act repeals the S&T Act 1977 and creates: National Commission for Science, Technology and Innovation (NCST&I); Kenya National Research Fund (KENREF) and Kenya National Innovation Agency (KENIA)
- A Research, Technology and Innovation MTEF Budgetary Sector created in 2008/09F.Y

Thank You.....

Asante Sana

