

***EXZELLENT.**

**Policy Forums on STI – A Tool for National, Regional
and Global Networking , Conference on
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Professor Emeritus Dr. Karl Wohlmuth

University of Bremen

**Director, Research Group on African
Development Perspectives, IWIM**

Three Questions on STI Policy Forums

Three Questions:

1. How to initiate Policy Forums on STI in Tunisia as a tool for national, regional and global networking?
2. How to manage Policy Forums on STI - the Case of Tunisia?
3. How can such Policy Forums on STI support Reindustrialization in Tunisia?

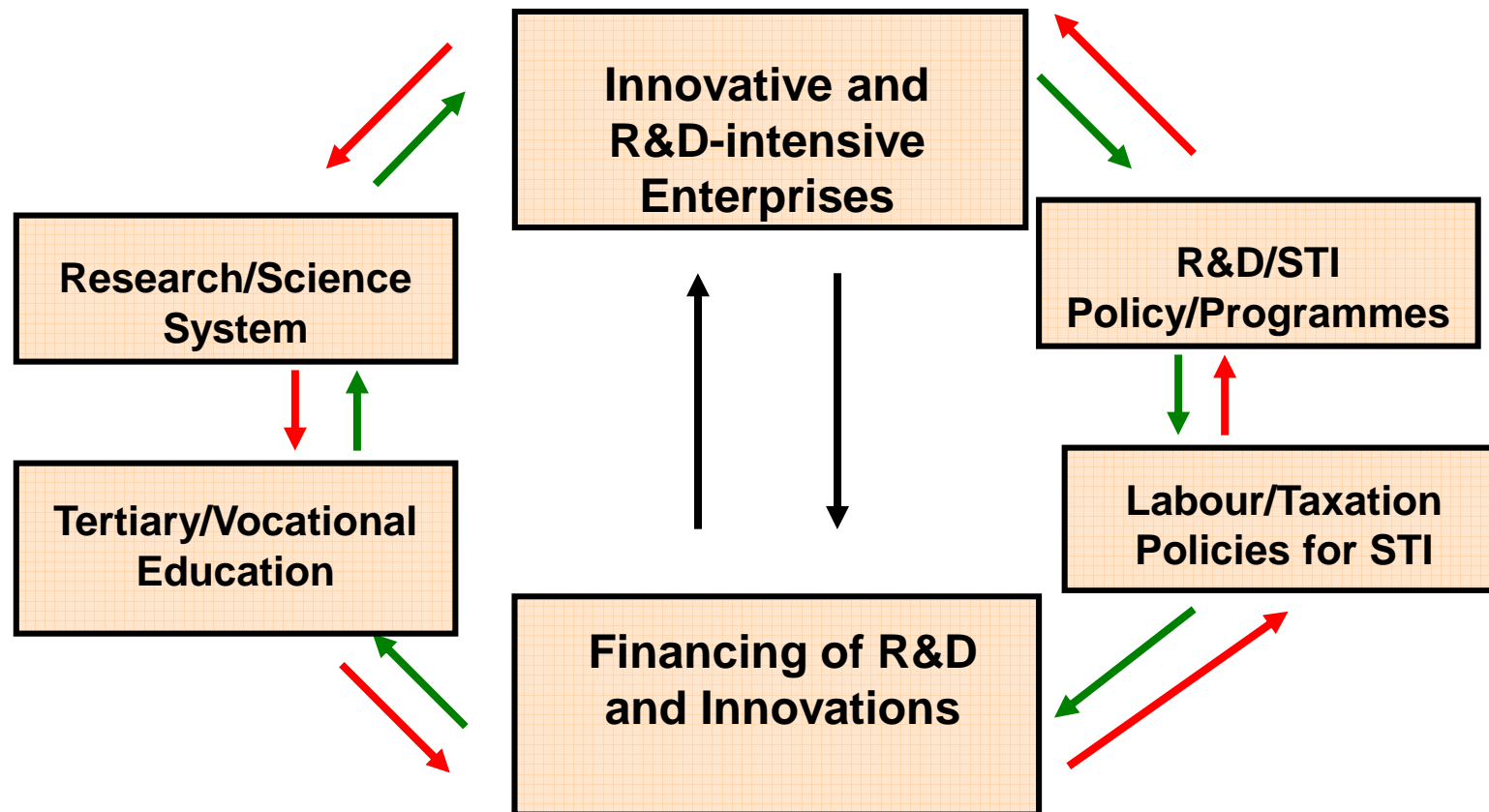
How to initiate Policy Forums on STI as a tool for national, regional and global networking?

Involving the key stakeholders: Comparative international experience shows that too often only a select number of stakeholders is involved, like representatives from research institutions and universities, or from the ministries of higher education and science; it is important to involve all the relevant policymakers at various government levels, the enterprises, the financing institutions, and the technical support institutions, like standards-setting organizations and patent offices.

The Example of the High Technology Strategy 2020 of Germany: Involved are important federal ministries, associations of enterprises, major research organizations, and country states.

An STI Policy Forum for Tunisia

Six Pillars, Key Stakeholders, and Mutual Linkages



STI Policy Forums for Tunisia – Important tools for economic reforms and for reindustrialization

Managing STI Policy Forums in Tunisia:

STI Policy Forums should be *autonomous* from government offices. The chair(s) should rotate between representatives of the science/education community, the political/administrative quarters and the enterprises (associations). *Links between the six pillars have to be strengthened by incentives to cooperate.*

STI Policy Forums should *include* the representatives of all the six pillars mentioned above, and the representatives of offices, enterprises and organizations *linking up the national innovation system of Tunisia with African, European and Global STI actors.*

Reindustrialization in Tunisia and the Role of STI Policy Forums: From Projects and Tasks to Sectors, Policies and Institutions

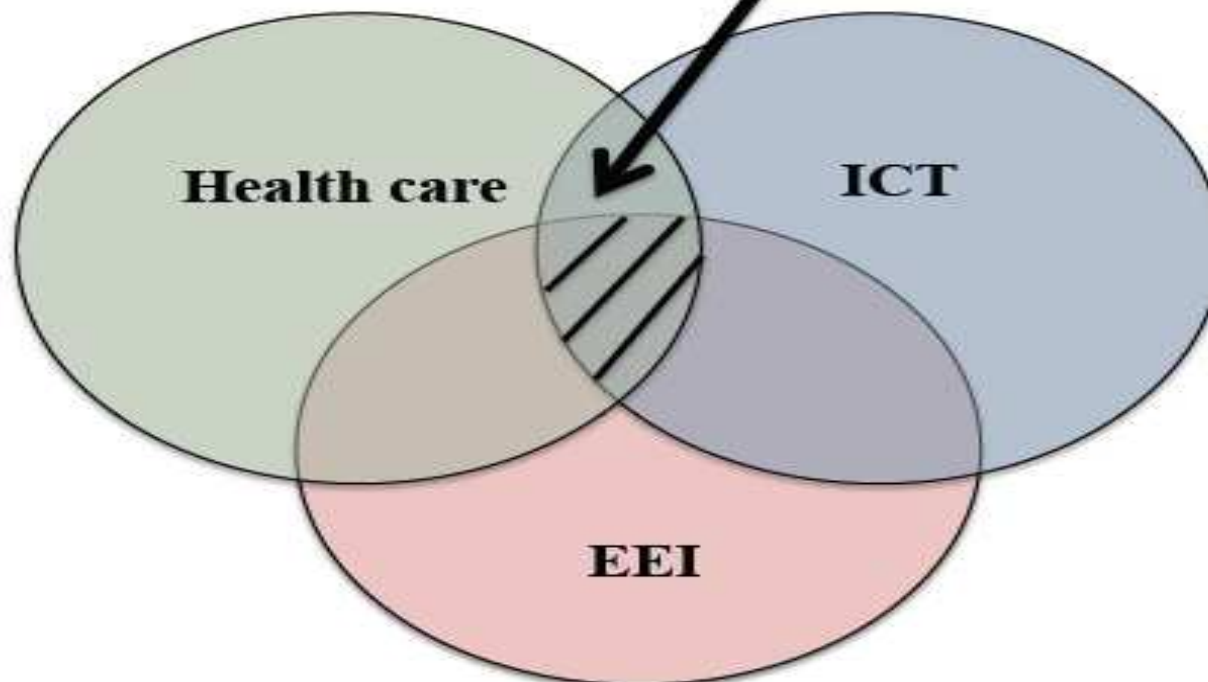
1. **Type 1: Reindustrialization** via Other Economic Sectors, such as Agriculture, Mining/Oil, and Services
2. **Type 2: Reindustrialization** via Initiatives aimed at Sub-Regional Development and Regional Economic Integration
3. **Type 3: Reindustrialization** via Deeper Integration into Global Value Chains
4. **Type 4: Reindustrialization** via Green Growth Development Strategies

Reindustrialization in Tunisia and the Role of STI Policy Forums: From Projects and Tasks to Sectors, Policies and Institutions

- 1. Type 1:** STI Policy Forums will involve sector stakeholders, such as for agriculture, agro-industries, and agribusiness
- 2. Type 2:** STI Policy Forums will involve stakeholders at sub-regional growth poles and of economic sectors with potential in the sub-regions
- 3. Type 3:** STI Policy Forums will involve stakeholders of specific global value chains along the whole value chain
- 4. Type 4:** STI Policy Forums will involve stakeholders in specific green growth areas, such as Clean Technology Companies

Medical Devices: Tunisia can develop competitive advantages based on its health sector, its ICT sector, and its electrical and electronical industry sector

Medical device, although nascent in Tunisia, is at the cross-road of all three innovative sectors,



**High Unemployment Rates of Tertiary Education and Vocational Education
Graduates – Reindustrialization Strategies can work in Tunisia****Table 4.7. Unemployment rates by level of education, Tunisia, 2010**

Percentage of the labour force

| Highest qualification achieved | Unemployment rate |
|--------------------------------|-------------------|
| None | 5% |
| Primary | 9% |
| Secondary | 13% |
| Tertiary | 24% |
| CAP | 21% |
| BTP | 22% |
| BTS | 25% |
| TOTAL | 14% |

Source: OECD calculations based on the Enquête Nationale sur la Population et l'Emploi (ENPE) [National Population and Employment Survey].

Strengthening the Three Core Capabilities for Reindustrialization and the Role of the STI Policy Forums

Three Core Capabilities matter for Tunisia's Industry and STI Policies and for Successful Reindustrialization Strategies

Three capabilities should be promoted by the STI Policy Forums. This will then be the basis for sectoral policies and for granting incentives for investment. First, *technological capability* as measured by the Comparative Industrial Performance Index; second, *innovation capability* as measured by the Global Innovation Index; and third, the *information technology (IT) capability*, as measured by the Global Innovation Technology Index/Networked Readiness Index. The developments of the many sub-indicators for these three indexes have to be assessed and reviewed carefully by the STI Policy Forums of Tunisia.

Reindustrialization in Tunisia and the Role of STI Policy Forums: Technological Capability is a Composite Concept

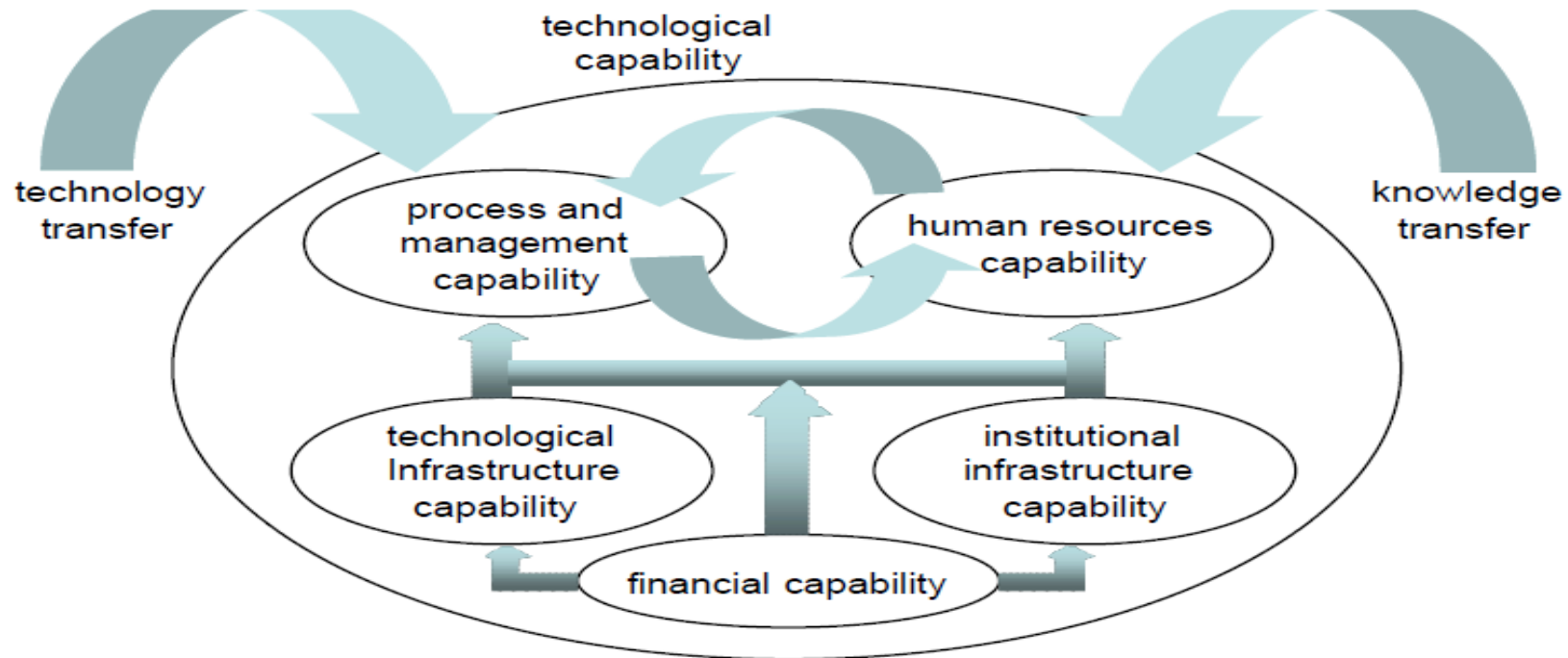
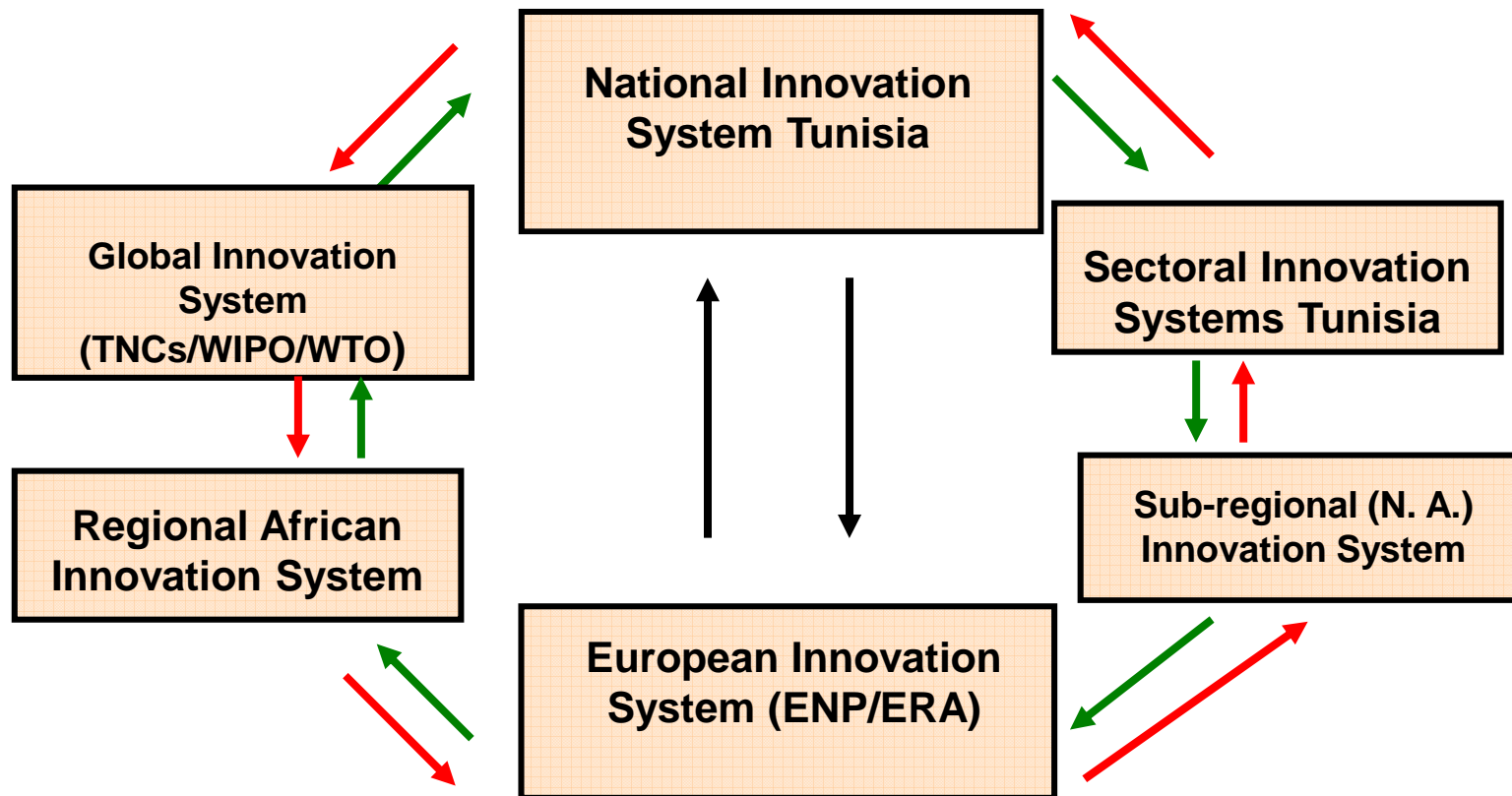


Figure 3. Capability building through technology and knowledge transfers

The National Innovation System of Tunisia is embedded into Regional and Global Innovation Systems



STI Policy Forums for Tunisia – Important tools for economic reforms and for reindustrialization

The National Innovation System of Tunisia is increasingly embedded into global, sectoral and regional innovation systems. STI Policy Forums should be supportive in *linking up the national innovation system of Tunisia with African, European and Global STI actors*. The European Innovation System (EIS), based on the European Research Area (ERA) and the European Innovation Union (EIU), is an example. The Global Innovation System (GIS) is composed of Global Sector Innovation Systems (GSISs), such as for Automotive, Aircraft, Space, Medical, Food, and ICT sectors, but also by Global Institutions, such as WTO and WIPO, and the TNCs.

Managing STI Policy Forums: African Initiatives for STI Policy Forums are becoming increasingly important

Coordinating the Tunisian STI Policy Forums with major African (UNECA, AUC, NEPAD, AfDB) and as well South-South Initiatives:

Forum for Agricultural Research in Africa (FARA); Science, Technology and Innovation Strategy for Africa (STISA) 2024 (AU); African Observatory for Science Technology and Innovation (AOSTI), AUC; Science and Technology Support Fund (AfDB); Science, Technology and Innovation Policy Research Organization (STIPPRO), formerly ATPS; Science Forum South Africa, DST, South Africa; International STI Centre for South-South Cooperation (ISTIC), which is supported by UNESCO, etc.

Capturing Value Added from STI Policy Forums

By establishing links and sharing information: between the six pillars in Tunisia and between Tunisia and African, European and Global Partners. Incentives for knowledge circulation are needed.

By intensifying the cooperation through established and new promotion instruments: matching grants; research corporations; commercialization strategies; revising jointly economic policies, education/training strategies, investment incentives, and STI system reforms; stimulating R&D in enterprises; developing a coherent innovation strategy for public administration and public enterprises; monitoring and evaluating STI funding mechanisms.



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