

Embarking STI Open Innovation for Leapfrog Africa

STI for TICAD 7 Task Force Team

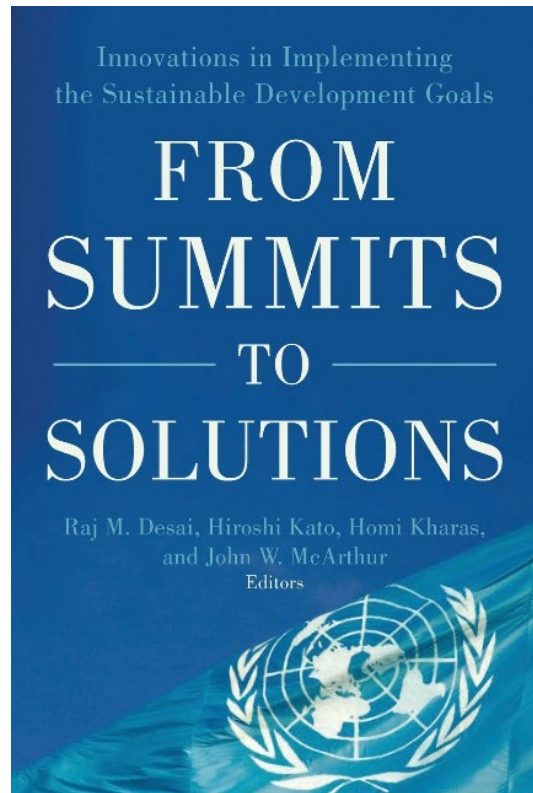
Japan International Cooperation Agency

Why: STI Open Innovation for Leapfrog Africa

- **Science, Technology and Innovation (STI)** are positioned as key Means of Implementation for the SDGs.
- While Africa still require traditional development pathways in many aspects, it is obvious that the recent **disruptive technological change** is significantly **influencing to Africa's today and future**.
- The disruptive technologies offer **new opportunities** to accelerate progress towards both the economic development and poverty alleviation, but we should also carefully look at its **possibility of downside risks** including increased inequality within and between countries.
- As a STI-led developed economy, **with the spirit of TICAD**, Japan and multi-stakeholders must do something to **accelerate Africa's STI use leapfrog development**.

When: Now is the Time for Action

From Summits to Solutions: Innovations in Implementing the Sustainable Development Goals



Edited by
**Raj M. Desai, Hiroshi Kato, Homi Kharas,
and John McArthur**
July, 2018, Brookings Institution Press

Chapters

1. The Need for Innovations to Implement the Sustainable Development Goals

Part I: Capturing Value

2. Expanding Women's Economic Opportunities

3. From Green Bonds to Sustainable Development: The Case of Nigeria

4. Collective Action on Business Standards, Goals, and Metrics to Achieve Scale and Impact for the SDGs

5. Professionalizing Cross-Sector Collaboration to Implement the SDGs

6. Building Sustainable Financing Architecture to Achieve the SDGs: The Case of Brazil

Part II: Targeting Places

7. Making Rural Areas Places of Opportunity: Not Just a "Rural Agenda"

8. Using Remote Sensing and Geospatial Information for Sustainable Development

9. Enhancing Statistical Capacity for Development

10. Rescaling Government for an Urban Future

11. Protecting Half the Ocean?

Part III: Updating Governance

12. A Canadian North Star: Crafting an Advanced Economy Approach to the SDGs

13. A People's Agenda: Citizen Participation and the SDGs

14. Safeguarding Our Global Commons

15. Unity in Diversity: Reshaping the Global Health Architecture

16. Crowding-In Private Finance: What Multilateral Banks Can Do Differently

What: Mobilize the Power of STI for Africa's Leapfrog Development through Open Innovation

- **Raising Awareness** among multi-stakeholders in relation to Africa's development using the power of STI.
- **Consensus Building and Acceleration** particularly between African countries and JICA to re-identify development agenda and practice of using the power of STI.
- **Resource Mobilization and Ecosystem** through inclusive and collective approach with multi-stakeholders include encourage private finance to accelerate the STI for Africa's development.

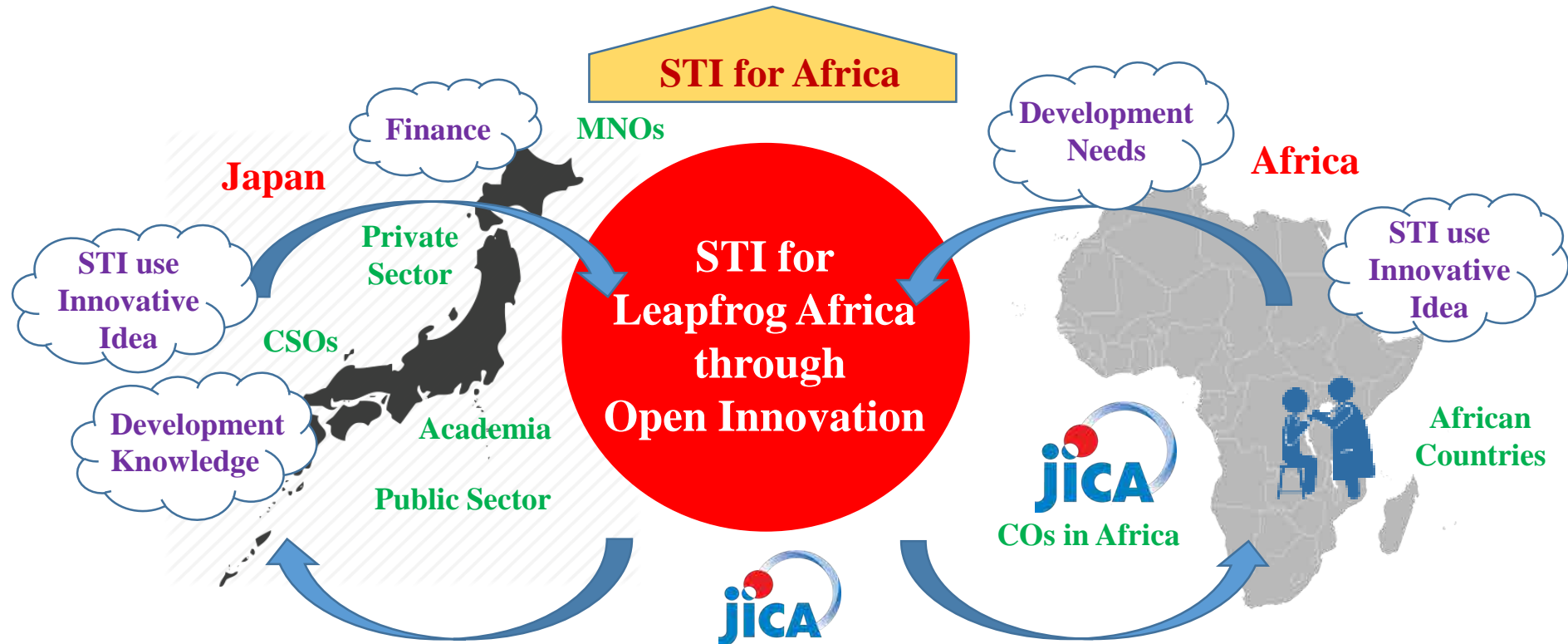
Who and How: STI for Leapfrog Africa through Open Innovation

SDGs

STI Private Investment to Africa

STI use Solution Provision for Africa's Development

- ✓ **Raising Awareness** among multi-stakeholders in relation to Africa's development using the power of STI.
- ✓ **Consensus Building and Acceleration** particularly between African countries and JICA to re-identify development agenda and practice of using the power of STI.
- ✓ **Resource Mobilization and Ecosystem** through inclusive and collective approach with multi-stakeholders include encourage private finance to accelerate the STI for Africa's development.



STI for Leapfrog Africa through Open Innovation

1st Ideathon (Sep.27) @ JICA : Summary

Agriculture

- ◆ (Japan's know-how used) Weather Info App for farmers.
- ◆ Logistics / Sales Innovation through Digitalization.
- ◆ COOKPAD for Africa

Universal Health Coverage

- ◆ Trust Accumulation Insurance
- ◆ Visualization of Human Capital data.
- ◆ Blockchain use medicine management.

Data for Development

- ◆ Promotion of '*Digital Identification for Development*' project in all African countries.
- ◆ Proposed '*Smartphone for All*' project.
- ◆ Enhancement of seed-funding to early stage startups in Africa.
- ◆ Human capital development for Africa to be a healthy data society.



Agriculture

Challenges	<ol style="list-style-type: none">1) Production: Unstable weather2) Processing: Lack of processing facility, Processing equipment is not affordable.3) Logistics: Need improvement of access to market4) Sales: Lack of market information
Value Proposition	<ol style="list-style-type: none">1) Production: Detailed and reliable weather data should be shared to farmers. Promote E-learning to farmers in order to enhance business mind on farming.2) Processing: Use 3D printer for necessary spare-parts printing for processing machines.3) Logistics: Visualize logistics through data digitization. Install Uber-type GPS service to tracks(include evaluation function to stimulate market mechanism) in order to strengthen cold-chain security.4) Sales: Visualize sales information through data digitization. Enhance digital payment by Fintech to secure transparent trading.5) Others: Introduce COOKPAD like web info which will contribute to improve the stunting issue.
Solution	<ul style="list-style-type: none">➤ (Japan's know-how used) Weather Info App for farmers.➤ Logistics / Sales Innovation through Digitalization.➤ COOKPAD for Africa

Universal Health Coverage

Challenges	<ol style="list-style-type: none">1) Finance: Available finance resources for health sector is limited. Thus, the preventive measures are important. Appropriate information dissemination and education is crucial.2) Human Capital: More health workers are needed. Unbalance between urban and rural area is in crisis.3) Medicines: Sufficient volume and better quality medicines are required. Strengthening of proper medicine management is necessary (e.g. expiry date, stock management, etc.)
Value Proposition	<ol style="list-style-type: none">1) Finance: Need innovative finance idea such as ‘Trust Accumulation Insurance’. US’s Friend Insurance or Social Impact Bond can be referred.2) Human Capital: Visualization of health workers’ performance and medical data are required. Sharing of best practices among regions should be valuable.3) Medicine: Use blockchain technology to track medicine data would valuable to reduce unnecessary stock.
Solution	<ul style="list-style-type: none">➤ Trust Accumulation Insurance➤ Visualization of Human Capital data.➤ Blockchain use medicine management.

Data for Development

Challenges	<ol style="list-style-type: none">1) The lack of data in Africa still a bottleneck to pursue further development and poverty reduction.2) Trust is important for daily economic activities, but the lack of data prevents to create sufficient trust between B and B/C in Africa.3) Prioritization work of development issues also require more objective and transparent data.
Value Proposition	<ol style="list-style-type: none">1) Bring the power of data to every African citizens through disruptive technologies.2) Support the people for affordable device acquisition.3) Create Trust in people through digital identification and objective data.4) Secure transparency and privacy.
Solution	<ul style="list-style-type: none">➤ Promotion of <i>'Digital Identification for Development'</i> project in all African countries.➤ Proposed <i>'Smartphone for All'</i> project.➤ Enhancement of seed-funding to early stage startups in Africa.➤ Human capital development for Africa to be a healthy data society.

STI for Leapfrog Africa through Open Innovation

SDGs

STI Private Investment to Africa

STI use Solution Provision for Africa's Development

- ✓ **Raising Awareness** among multi-stakeholders in relation to Africa's development using the power of STI.
- ✓ **Consensus Building and Acceleration** particularly between African countries and JICA to re-identify development agenda and practice of using the power of STI.
- ✓ **Resource Mobilization and Ecosystem** through inclusive and collective approach with multi-stakeholders include encourage private finance to accelerate the STI for Africa's development.

