IMPLEMENTING PARIS AGREEMENT: NEW RESEARCH AND POLICY AGENDA

Vikrom Mathur, Senior Fellow
Common Futures: India and Africa in Partnership
The 12 contributions in this volume presents, through the eyes of both African and Indian experts, six interlinked themes of growth, empowerment, security, sustainability, employment and food.

Read more

Health is Wealth: Indian Private Sector Investments in African Healthcare
This paper examines the nature of Indian private sector investments in African healthcare by focusing on four opportunity sectors — medical tourism, tele-health, frugal innovations, and the pharmaceutical industry.

Read more

Elephants in the Room: Challenges for India as an Emerging Development Partner
This paper argues that India faces three main challenges in building development partnerships with other southern states: an emerging challenge, a development challenge and a partnership challenge.

Read more

India-Africa Partnership for Food Security: Issues, Initiatives and Policy Directions
This paper argues that there is a strong rationale for India-Africa collaboration on food security, given their common challenges of hunger, undernutrition, and low productivity.

Read more

Asia with Africa: Opportunities and Challenges
This collection of policy-oriented opinion pieces by leading scholars from around the world examines how Asia’s recent and emerging outreach to Africa can contribute to African development and security-how opportunities can be capitalised upon and challenges negotiated.

Read more
Africa Security Summit Warns of Spread of Terror, If Not Tackled Urgently
Fundamentalist Islamic terrorism is the most important threat facing Africa. Unless terrorism in West and Central Africa is tackled urgently, it would spread to other regions.
Read more

India-Africa Cooperation in Science, Technology Goes a Gear Up
With the rapid growth of the Indian economy and an increase in the role of information technology in India's growth story, the scope of technology cooperation between India and Africa has now widened.
Read more

Post Africa Summit, India Must Focus on Implementation
In a nutshell, the India-Africa Summit is a feather in the cap of India's Ministry of External Affairs, but to expand its economic ties with Africa, India needs to focus on implementation.
Read More

Why Africa Matters to India? The Energy and Agricultural Dimensions
Cooperation in energy and agriculture are the two critical pillars in India's economic engagement with Africa. India's energy imports from Africa have grown dramatically and Indian companies have also made investments in Africa's energy sector.
Read more

Global Goals, National Actions: Making the Post-2015 Development Agenda Relevant to India
With the world having formally adopted the post-2015 development agenda, the set of 17 goals and 169 targets known as the Sustainable Development Goals, developing countries need to unpack and interpret the development framework.
Read more
EARS TO THE GROUND:

SCALING-UP GRASSROOTS “SOCIO-TECHNICAL INNOVATIONS” FOR ADAPTATION IN INDIA AND AFRICA
A NEW POLITICS OF TECHNOLOGY (AND INNOVATION)

• Global Policy has been mitigation centric
• Paris Agreement was a significant but nor overwhelming step forward on adaptation
• Adaptation is critical for both Africa and India to sustain growth and development
• Calls for technological revolutions, transitions, transformations echoed in Paris
• Innovation, new ideas, new technologies that will lead us to 1.5 degrees
• Focus however is on large scale industrial – energy technologies (Solar Alliance, Mission Innovate etc.)
• Technologies for adaptation, for the poor: agriculture, water resources, disaster management, habitation, health etc. not adequately addressed in the global discourse
HUMBLE TECHNOLOGIES

• Government: Innovation programs, support temples of scientific excellence, foster ‘startups’, incentivize investment

• Private firms engage in ‘product development’ – stay in the race & leapfrog

• Humble technologies and grass-root innovations not part of foresight exercises

• Market signals alone will not generate technological applications for the poor: we need a new politics, new research and policy making
WHY GRASS ROOT INNOVATIONS?

- Predict and provide is the dominant paradigm in adaptation research and policy

- Downscale global scenario driven model outputs to local scales, predict impacts, identify vulnerabilities and define adaptive action. Uncertainties. Glossing over local institutions, agency and knowledge

- Skewed research: Focus of research on removing uncertainties in the physical science basis of impacts

- Flawed policy: Lack of spatially and temporally precise and accurate foreknowledge of future climates has been used to justify inaction, confusion and the proliferation of investment in ‘hard infrastructure’ for adaptation

- Rather than fretting over model accuracy and ‘over determining fragile impact data’, there needs to be better understanding of how communities cope with current climate variability and extreme weather events to generate strategies and practices for coping with future impacts
ORFs Technology and Society Initiative seeks to identify successful ‘grassroots socio-technical innovations’ for adaptation in India and Africa, to understand:

- What are the important success stories?
- Why were they successful?
- How can they spread, from India to Africa, Africa to India?
- What can we learn from other grass root innovation movements: the appropriate technology movement in the 1970s around development assistance; the People’s Science Movement in the 1980s; Honey Bee Network; National Innovation Foundation

- Theory: ‘multi-level perspective on technological transitions’ – linking niches, regimes and landscapes. Can grass-root movements rooted in diverse communities be seen as niches? Protected spaces to deal with teething problems?
SOME BRIGHT SPOTS

**DROUGHTS**

- Combing long range weather forecasts with local knowledge and communicating these through mobile sms;
- Reviving traditional water conservations practices – rain water harvesting, ground water recharge pits, renovation of wells. Setting up of local institutions.

**CLIMATE SMART AGRICULTURE**

- Drought resistant maize in Africa: researchers, farmers, GATES foundation. The initiative has benefited 30-40 million people across 13 African countries through collaboration with national agricultural research systems in partner nation.

- Rice: 40% of all water used is for rice, 10% of methane produced from rice fields. System for rice intensification, Alternate Wetting and Drying System. Kagga rice variety for brackish water and deep water/flood resistant varieties in Varada river basin in Karnataka
SOME BRIGHT SPOTS

DISASTERS:
-Barmer Aashray Yojna is a people driven initiative with support from the SEEDS (Sustainable Environment and Ecological Development Society) has constructed disaster friendly housing in Rajasthan;

-A trans-boundary project aims to establish community early warning systems on the Koshi and Gandak rivers in India and Nepal.

ALTERNATIVE LIVELIHOODS
- Seaweed farming presents itself as an unusual yet potentially effective avenue to synergize the efforts to reduce both poverty and the effects of climate change.

-Indian Lac Research Institute in Ranchi district of Jharkhand and several lac growing villages of other regions have revealed that income generated from lac cultivation is more than paddy
WHAT ARE THESE GRASS-ROOT SOCIO TECHNICAL INNOVATIONS?

• New organizational arrangements, new tools and new practices: complex configurations of artefacts, institutions and actors reproducing technological practices.

• Diverse social actors who negotiate innovation; pervasive technological mediation of social process

• Grass-root always include local institutions, civil society and networks of activists But not exclusively. Pioneering organizations, co-operatives, social enterprises, community groups, associations.

• Varied sources of funding — grants, voluntary inputs, limited commercial activity to start with..
SCALING UP?

- Grassroots innovations studied have emerged in locally specific contexts. Supporting their spread – appropriation/transport to a new reality and culture is a significant challenge for research and policy.

- Often face challenges in commercialization. Commercialising can produce dilemmas as it can seek to modify existing objectives and modes of production and resource utilisation.

- Can help create new institutions that may seek change at regime levels or influence incumbent interests in mainstream initiatives.

- Can help in “creating a space for: developing new ideas and practices; experimenting with new systems of provision.”
Crop Research Institute for the Semi-Arid Tropics (ICRISAT) and International Livestock Research Institute (ILRI) are at the forefront of India-Africa cooperation in agriculture.

Indian private sector is already active; Jain Irrigation has wide presence in Kenya, Rwanda, Ethiopia, Tanzania and Nigeria and is spreading drip irrigation technology in Africa.

National Seed Association of India and Syngenta Foundation of India are spreading better seeds to African farmers and opening up markets for Indian seed companies through "India-Africa Seeds Bridge" project.

India’s partnership with Africa on science and technology is half a century old. Africa was a major focus of the Indian, Technical and Economic Cooperation (ITEC) programme.
Common Futures: India and Africa in Partnership
The 12 contributions in this volume presents, through the eyes of both African and Indian experts, six interlinked themes of growth, empowerment, security, sustainability, employment and food.
Read more

Health is Wealth: Indian Private Sector Investments in African Healthcare
This paper examines the nature of Indian private sector investments in African healthcare by focusing on four opportunity sectors — medical tourism, tele-health, frugal innovations, and the pharmaceutical industry.
Read more

Elephants in the Room: Challenges for India as an Emerging Development Partner
This paper argues that India faces three main challenges in building development partnerships with other southern states: an emerging challenge, a development challenge and a partnership challenge.
Read more

India-Africa Partnership for Food Security: Issues, Initiatives and Policy Directions
This paper argues that there is a strong rationale for India-Africa collaboration on food security, given their common challenges of hunger, undernutrition, and low productivity.
Read more

Asia with Africa: Opportunities and Challenges
This collection of policy-oriented opinion pieces by leading scholars from around the world examines how Asia’s recent and emerging outreach to Africa can contribute to African development and security—how opportunities can be capitalised upon and challenges negotiated.
Read more
Africa Security Summit Warns of Spread of Terror, If Not Tackled Urgently
Fundamentalist Islamic terrorism is the most important threat facing Africa. Unless terrorism in West and Central Africa is tackled urgently, it would spread to other regions.
Read more

India-Africa Cooperation in Science, Technology Goes a Gear Up
With the rapid growth of the Indian economy and an increase in the role of information technology in India's growth story, the scope of technology cooperation between India and Africa has now widened.
Read more

Post Africa Summit, India Must Focus on Implementation
In a nutshell, the India-Africa Summit is a feather in the cap of India's Ministry of External Affairs, but to expand its economic ties with Africa, India needs to focus on implementation.
Read More

Why Africa Matters to India? The Energy and Agricultural Dimensions
Cooperation in energy and agriculture are the two critical pillars in India's economic engagement with Africa. India's energy imports from Africa have grown dramatically and Indian companies have also made investments in Africa's energy sector.
Read more

Global Goals, National Actions: Making the Post-2015 Development Agenda Relevant to India
With the world having formally adopted the post-2015 development agenda, the set of 17 goals and 169 targets known as the Sustainable Development Goals, developing countries need to unpack and interpret the development framework.
Read more
Network of policy practitioners, social entrepreneurs from India and 7 African countries.

PUTTING WOMEN AT THE HEART OF THE INDIA-AFRICA DEVELOPMENT PARTNERSHIP