Innovation and the Formation of African National Economic Systems of Production

Towards a Theory

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INSPIRATION

• ‘What chance is there of the continent producing real economic and industrial growth, or of developing a proper security system, when the great majority of new African states is no larger in population size than a single important city in a major industrial country. The conditions produced by this degree of balkanization guarantee permanent poverty and insecurity. ‘

Colin Legum, 1970
inspiration

• The present consolidation of African states within the former colonial frontiers runs counter to much of what had been both predicted and desired during the colonial era. It was widely assumed that as soon as Africans came to freedom they would sweep aside the arbitrary boundaries imposed by the imperialists which cut across tribes and overode the dictates of geography and economics. The continent had been partitioned to meet colonial convenience, but it would now be reshaped to realize its natural contours and return to its natural essence.

Rupert Emerson, 1962
inspiration

• Other regions of the world, including the most developed countries, are hard at work to change their neighbourhoods for the better. SA can only ignore or minimise this task. At our own peril, driven by a lingering sense that we are not an integral part of the African continent.

• THABO MBEKI, 2004 quoted from the Financial Mail

• Fate of south africa inextricably bound up with what happens in the rest of the continent

• Our foreign policy should reflect the interests of the continent of Africa

• If we do not devote our energies to this continent, we too could fall victim to the forces that have brought ruin to its various parts...

• Gathered from statements by leaders of the ANC
overview

• The challenges of African development
• Deficit conceptions in development theory
• **opportunity or danger** ..the inclusion of South Africa in Africa
• What can innovation systems theory offer
• Towards a new theory of African development
Challenges Blocking African Development

- Politically...formal independence without an African agency
- Post colonial liberation still on the agenda
- Economically...Continued fragmentation means dependence
- Knowledge...mimicry

- In the above important respects...Africa remains not a fully decolonised entity
- South Africa...rest of Africa link remains weak from vision to practice
- Radical social and spatial disparities...very narrow first economy, and vast second economy. Dual worlds persist
- Integrating research, training, creativities, governing, producing and circulating within an Africa wide economic system not in existence yet
- Creation of an African national system of production and consumption
- Linking academy, industry, government and labour on an African scale and scope not formed yet
Actually existing development theory

- Searches for solution within the existing arrangements as they are in Africa
- Does not engage, interrogate and critique them
- Tinkers with fragmented Africa
- Does not question dependence, nor relating it to the fragmentated status of Africa
- Fashions ideas and policies without questioning such fragmentations
- Blames Africans when conceptual and policy results show more poverty creation than wealth creation
In search of alternative theories

• Tools of analyses have become more of a problem than the many problems Africa continues to confront
• Most of the models from development economics are limited, often driven by short-term fixes rather than any other imagination
• We need to search for theories that can open a new and radically different intellectual agenda in and for Africa
Systems of innovation theory

• Question to puzzle over... Would the systems of innovation fit the bill
• What do I find useful in the systems of innovation approach
• Look at our book..Putting Africa First.. The making of African innovation systems
• We have made an initial start there
• But much hard work needs to be done yet
Discontent with the development theory

- From colonialism to development
- Modernisation theory
- Development imposed
- Development donor..local elite driven
- Never negotiated or even explained to the population
- Assumption that pattern of western development is universal

- Late 1940s to 1960s
- Growth theory
- Modernisation theory
- Five stages theory by W.W. Rostow
- Mixed economy
- Authoritative state intervention
- Planning
- Neo keynesian growth models
Origin of the growth models

- Extensions of Keynes saving-investment theory
- Equilibrium between aggregate saving and aggregate investment
- Full employment in relation to investment and saving behaviour, income
- Search for steady state balanced growth solutions
- Relating actual growth rates, with warranted growth and natural growth rate
- Actual growth rate calculated as ratio of the marginal propensity to save over the marginal capital-output ratio.
Key flaw

• Planning African fragmented economic entities economic growth by recapitualting in african countries the historical experience of the developed world.
• Predicted mainly economic pessimism stagnation, instability and the difficulties of attaining full employment
Modernisation theory is even worse

- Rostow claimed his stages of economic growth was also a non-communist manifesto
- US type society the ultimate goal to aspire for
- Bipolar competition
- Strategy of containment
- Aid donor competition
- Agents of modernity were
  - UN agencies, US government and client states
  - Social change through donor assistance
  - Indirect control through post-war international institutions
Structuralist development

- Originated from Ricardian theory of comparative advantage
- Inter’war depression and isi
- Latin american debate on terms of trade between core and periphery
- Structuralism said
  - Global and historical structures matter
  - Centres and peripheries exist in the global system
  - Unequal exchange because interests differ and terms of trade are differentiated
Dependency theory

• Dependent development  
  ..Cardoso

• Associated underdevelopment  
  ..Dos Santos

• Peripheral capitalism  ..Samir Amin

• A hierarchy of core and peripheries  
  ..Wallestein

• Development of underdevelopment  
  ..Andre Gunder Frank

• And so on
1980s.. Neo-liberal economics

- Washington consensus
- Export orientation
- Getting prices right
- Structural adjustment
- Minimal state
- Free market

- Open competition
- Free trade, deregulation
- Privitisation
- Liberalisation
- Short..term fiscal stablisation
- Cut expenditures on public spending
1990s

- Confused 1990s.. Post Washington consensus.. Joseph stiglitz
- Clinical economics... Jeffry sachs
- New growth economics.. From Neo..classical economics
- New institituinal economics.. from Neo ..classical economics

- Sustainable development
- Human development
- Poverty reduction
- Post..development theory
- Development theory dead
- But not buried
- Poverty of development economics
- Rise and fall of development theory
- Sen’s capability approach
Why a deficit conception

- The disciplinary dominance of economics
- Short...termism
- Rush to fix than conceptualise to transform social-economic structures
- Imposition
- Arrogance
- Goal setting scalar
- Solution approach peace meal...incremental
- Specificity
- Context insensitive
- Metaphor value
- Heuristic domain
- Real and relevant issues ignored
- No emancipatory imagination
- Structures ignored
- History also for the most part ignored
Deficit conception

• Universalising western development experience
• Abstracting it into growth models
• Catching up assumed possible and open to all
• Through free market competition
• Though no level playing field exists
• Recommend comparative advantage

• Development...the end goals
• High mass consumption society
• I consume therefore I am
• Poverty alleviation
• premium on economic growth
• Wealth accumulation
• Wealth concentration
Why prefer the system of innovation

- Conceptual framework to link South Africa with the rest of Africa
- To identify the significant synergies and syntheses to create an African system of political economy of production
- To inject a total learning and innovation culture in Africa
- To retain African resources to stimulate African development
- A national system of innovation to promote a national system of production
- To enable a system creation to produce what Africa consumes, and to consume what Africa produces
- To create Africa...wide producers and users interactions
- To embed knowledge creation, innovation, learning in African institutions, societies
The elements of system of innovation

- The idea of nation
- Systems
- Interaction
- Innovation
- Learning
- Competence building
- The organisation of productive power

- Africa..nation
- Integration
- Structural transformation
- Relation with the world economy
- Agency capability accumulation
Key challenges

- To use the NSI as a methodology to conceptualize the full integration of South Africa with the rest of Africa
- Possibly North Africa with the rest of Africa
- African countries with each other
- In relation to economic, knowledge, production and market relations.
Problems of Economic relations... of South Africa in Africa

- Major role in trade and investment
- South Africa ahead in FDI relative to other countries
- FDI trebled between 1997 and 2004
- SADAC region 25% of total FDI in region between 1994 and 2003
- Runs the cameroon’s rail road
- Manages power plants in Mali and Zambia
- Controls banks and supermarkets in Tanzania, Mozambique and Kenya
Major SA Investors in the rest of Africa

- Mining-Anglo Gold-Ashanti, De Beers
- Energy/utility-Sasol, Eskom enterprises, Umgeni Water
- Telecommunications-MTN, Vodacom
- Transport-Transnet, Unitrans
- Construction-Murray and Roberts /Group5/Grinaker LTA
- Retail and wholesale (market seeking)-Shoprite, Massmart Group
- Financial Services-Stanbic, IDC
- Tourism-Southern Sun, Protea
- Manufacturing-SABMiller, Barlow, World, Nampak
Sectors involved

- Mining and energy
- Telecommunication
- Retail
- Mega-project e.g. Inga dam project in DRC
- Transport
- Construction
- Financial services
- tourism
Patterns of South Africa’s FDI

- Is FDI from South Africa developmental or extractive
- Can it be seen differently from FDI from other places
- How does this economic expansion reflect the policy inspirations from the political leadership
- Is it systematic or ad..hoc ish
- How much is there a strategic coordination between South African government policy and corporate expansion
- Is expansion driven to avoid tough competition from established players
The NSI approach

- Linking South Africa with Africa means identifying and mapping where South African investment goes into Africa, which sectors, which regions
- Where innovation and technology goes and mapping any of the downstream benefits...employment, skill development, knowledge transfer and so on
- Does South Africa’s investment stimulate local production
- Do they replace local production
- Do they source inputs from the local economy
- Quality and character of the South African investment
- Mapping and data base creation
Is SA an opportunity or danger to the rest of Africa

- South Africa offers opportunities
- Corporate investible capital
- Technology transfer
- Relatively functioning NSI
- Stimulant for integration
- Extractive
- Playing a traditional exploitative role
- Regional hegemon
- Non developmental
- Fragmenting role
- Agent for international capital
The jury is still out

- NSI research essential both to show existing weaknesses To show what is taking place
- Also what should take place
- and suggest how a new relationship can be established

- Important to widen the scope of nsi research
- Not simply to see from the side of South Africa
- But integrated conception of South Africa with the rest of Africa.
- Also from the side of how the rest of Africa receives South Africa
Linking South Africa with the rest of Africa

- Is it possible
- Desirable
- Necessary
- Right

- If yes, then NSI very useful
- To link South Africa’s economy with the rest of Africa
- Find how this can be done with less cost and effort
Towards a new theory

- A theory of economic development that brings together these concerns:
  - the Idea of Africa
  - building strong institutions
  - geographical and population in Africa
  - The Building productive power

- Key challenge: Integration of economy, society, knowledge
- Pan-African unity
- African Renaissance
- AU/NEPAD
- Africa-nation
- Africa-citizenships
Concluding Remarks

• Not all the states in Africa can catch up
• Not sure even if they can catch up even if regrouped as regions
• Important to emerge united to deal with a world economy and respond to its many challenges.
• No alternative to learning and the social innovation of uniting, if Africans and Africa are to attain full dignity and humanity.