

The role of agriculture in addressing poverty and climate change

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Why is agriculture important in Sub Saharan Africa ?

- Agriculture constitutes 1/3 of GDP
 - ½ of total value of exports
- 2/3 depend on agriculture for their livelihood
- Approx 72% of active rural population are smallholders
- Women comprise about 50% of agricultural labor force participation
 - 60% of employed women are in agriculture
- Households produce a large share of their own consumption
- Most of UNICEF's children live in small holder families and grow up to be farmers

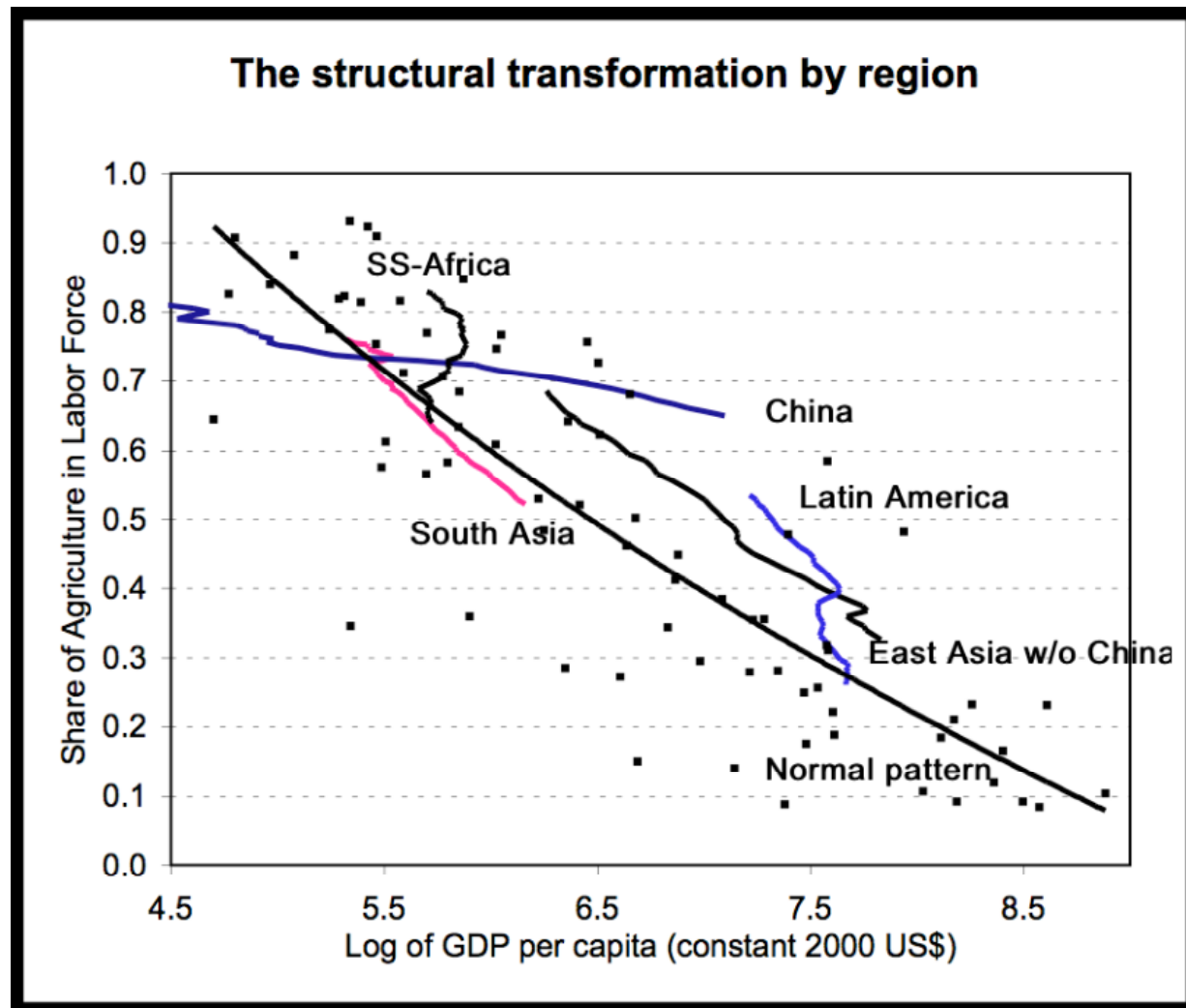


What is the role of agriculture in economic transformation?

- Patterns of growth and transformation: for most countries, agriculture has been the initial motor of growth, gradually becoming less important over time.
- Agriculture makes key contributions to poverty reduction in this process:
 - Raises agricultural profits and labor income
 - Raises rural non-farm profits and labor income, via linkages
 - Lower food prices, which also makes tradable sectors more competitive
 - Leads to tightening of urban and rural labor markets, which raises unskilled wages in the wider economy
- Historically, successful poverty reduction depends not only on overall economic growth, but whether based on rapid agriculture growth.



Classic pattern of structural change has not occurred in Sub Saharan Africa



(de Janvry and Sadoulet, 2011)



Little change in long term structure of economies of Sub Saharan Africa

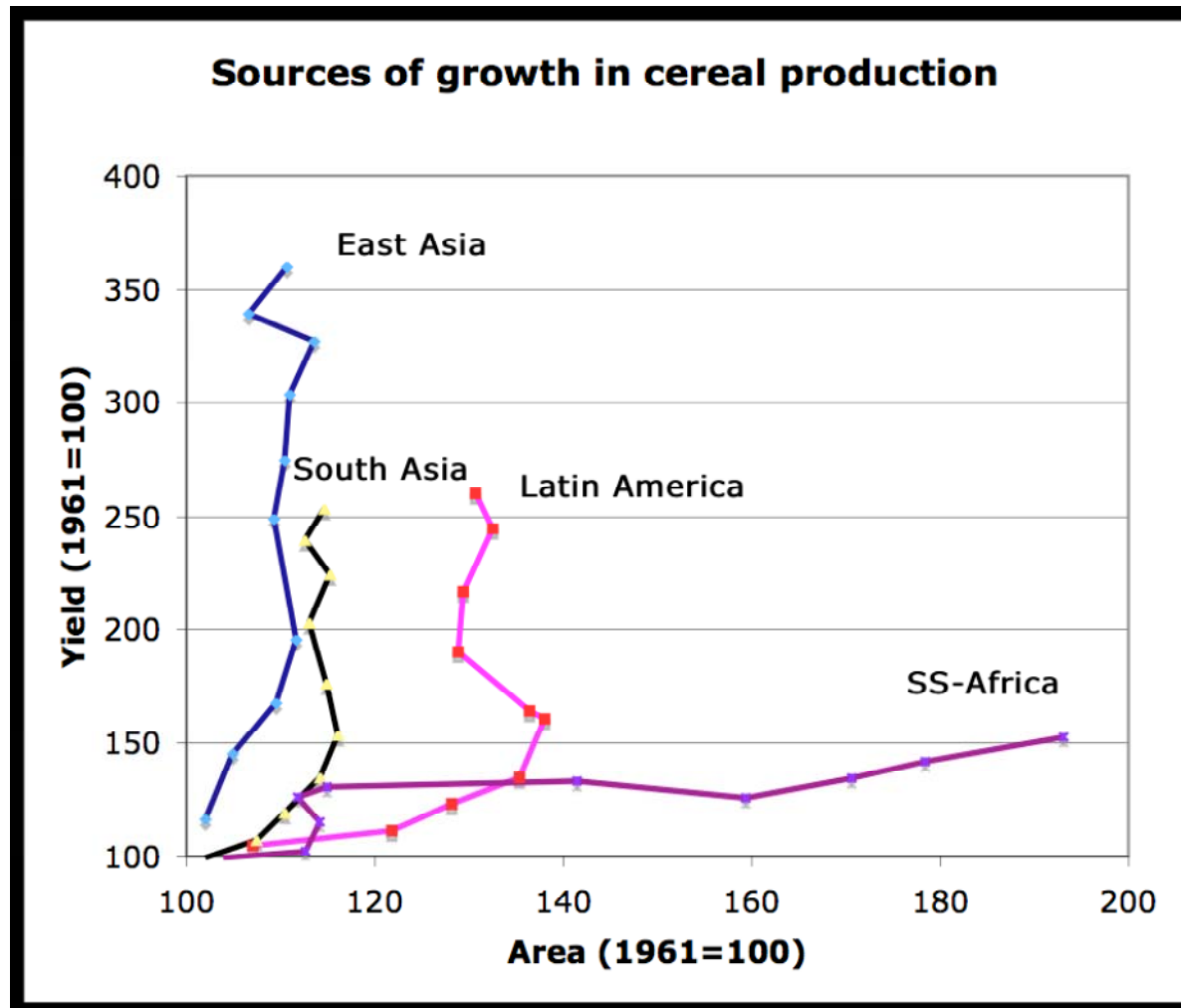
Long-term evolution of the structure of African economies					
	<i>1961–70</i>	<i>1971–80</i>	<i>1981–90</i>	<i>1991–20</i>	<i>2001–07</i>
GDP per capita growth (annual %)	2.4	0.8	-1.13	-0.40	2.43
Industry, value added (% of GDP)	31	33	34	30	30
Manufacturing, value added (% of GDP)	17	17	17	16	14
Services, etc., value added (% of GDP)	48	48	48	53	52
Agriculture, value added (% of GDP)	21	20	18	18	17
Crop share of agricultural output (% of total)	76.8	76.4	74.6	77.9	77.3
Livestock share of agricultural output (% of total)	23.2	23.6	25.4	22.1	22.7
Share of labor force employed in agriculture (% of	82.9	78.2	73.1	68.2	63.8
Irrigated cropland (% of area harvested)	3.1	3.4	3.9	3.4	3.3
Tractors per area harvested (units per 1000 hectares)	0.7	1.0	1.2	1.1	1.1



(Binswanger-Mkhize, McCalla and Patel, 2010)



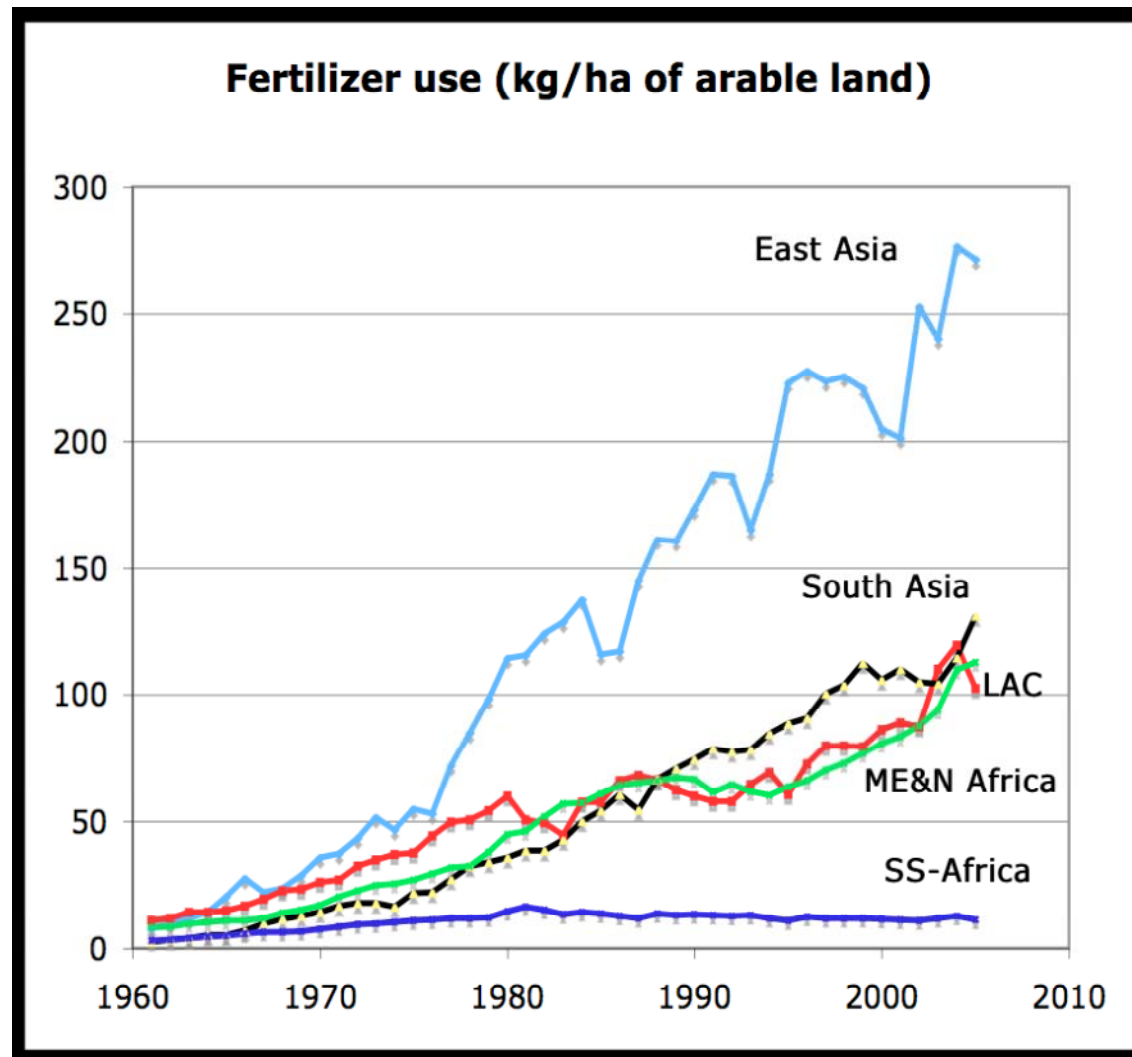
Most growth in cereal production via expanding area



(de Janvry and Sadoulet, 2011)



Little use of modern inputs, irrigation, or mechanization



(de Janvry and Sadoulet, 2011)



Sub Saharan Africa remains poor because of the failure of agriculture

- Why has agriculture failed?
 - Particular challenges of African agriculture
 - Dominance of soils with poor fertility
 - Extreme heterogeneity and diversity of agroecological environments and farming systems
 - Predominance of rain fed agriculture; with traditional cultivation practices
 - Poorly functioning input and output markets; high transaction costs
 - Large impact of human health on agriculture
 - Low levels of human capital
 - Public policy antagonistic
 - Low public spending; excessive implicit and explicit taxation; capture of political economy by urban elites; food aid instead of investment in raising productivity; dismantling of agrarian institutions under structural adjustment, etc



The future of Sub Saharan Africa: More, not less, reliance on agriculture

- GDP growth originating in agriculture is two to three times as effective in reducing poverty as GDP growth originating outside of agriculture
 - Outside of India, agricultural growth also has greater impact on child undernutrition and energy supply
- Most of recent decline in global rural poverty attributable to better conditions in rural areas rather than out migration of the poor
 - Migration to cities has not been main instrument for global rural poverty reduction



The future of Sub Saharan Africa: More, not less, reliance on agriculture

- Agricultural growth in Sub Saharan Africa has larger multipliers than non agricultural growth
 - estimated on order of 1.3 to 1.5
- Comparative advantage will lie in primary activities and agroprocessing for foreseeable future
 - resource endowments, difficult investment climate, etc
- Food remains imperfectly tradable because of high transaction costs and prevalence of lightly traded staple foods, such as roots and tubers, so many countries must largely feed themselves
 - Agricultural productivity determines the price of food, which in turn determines wage costs and competitiveness of tradable sectors. **Productivity of food staples is thus key to growth**
 - Given limited tradability, foreign exchange constraints, and recurrent emergencies, increasing and stabilizing domestic food production is **essential for food security**



Improve productivity, profitability and sustainability of smallholder farming

- Support to small holder farming should be dominant approach on both efficiency grounds as well as in terms of poverty reduction
 - Recent review shows that large scale commercial agriculture is profitable primarily for plantation crops
- Major provider of environmental services, usually unrecognized and unremunerated
 - Sequestering carbon, managing watersheds, preserving biodiversity



What must be done?—the easier stuff

- Small holder farming requires increased access to land, water and human capital
 - Poor health status and levels of education limit productivity and access to better options
- Reverse public neglect of agriculture
 - Rebuild institutional infrastructure dismantled under structural adjustment
- Renewed attention to food security strategies which should include:
 - increased productivity gains in agriculture,
 - combined trade and food reserves policies,
 - social safety nets for the vulnerable



What must be done—the harder stuff

- Technological innovation: a new Green Revolution emphasizing
 - locally specific food crops
 - Heterogeneity and local approaches
 - Focus on sustainability and agroecology
 - Yields resilient to extreme climatic events
- Reduced exposure to risk and vulnerability
- Better functioning markets



What is unique about a small holder household?

- Missing/poorly functioning markets link production and consumption activities
 - Credit, insurance, labor, inputs
 - Reducing risk and vulnerability affects in either dimension
- Implications for “social” side—you can’t separate from livelihoods
 - Labor allocation (including child labor)
 - Intra household decision making
 - Care giving
 - Investment in schooling and health
- Small holder family is “subject” of both agricultural and social sectoral policy



Lessons for UNICEF

- Poverty reduction (including child poverty) driven by growth in agriculture
- Productivity of food staples key to economic growth
 - Both agricultural and non agricultural growth
- Small holder households key to agricultural growth and food security
 - And climate change mitigation and adaption
 - And provision of environmental services
- Increase in human capital crucial component of small holder agriculture, labor productivity and economic growth
 - Nutrition and health status, educational attainment
 - Social protection reducing vulnerability and risk
- Again, most of UNICEF's children live in small holder families and grow up to be farmers

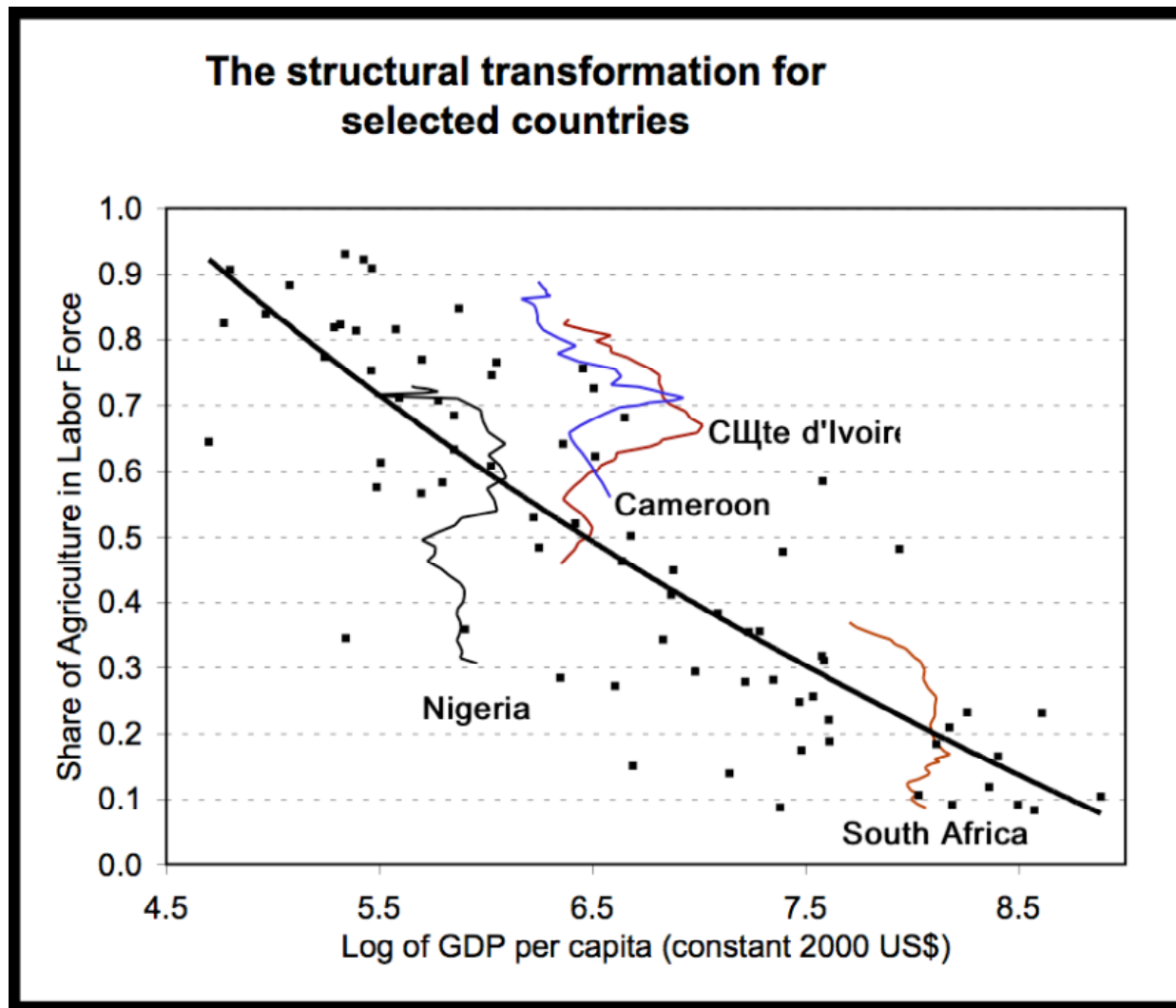


An emerging new paradigm of role of agriculture in development

- No longer just agriculture for industrialization
- Agriculture seen as having multiple functions in helping
 - trigger overall economic growth at early stages,
 - reduce poverty,
 - increase food security,
 - equalize gender status,
 - reduce rural-urban income disparities,
 - conserve resources, and
 - provide environmental services
- But within a very different structural context
 - globalization of food system,
 - emergence of integrated food value chains,
 - increasing resource scarcity and climate change, and demands on agriculture to serve as a provider of environmental services.



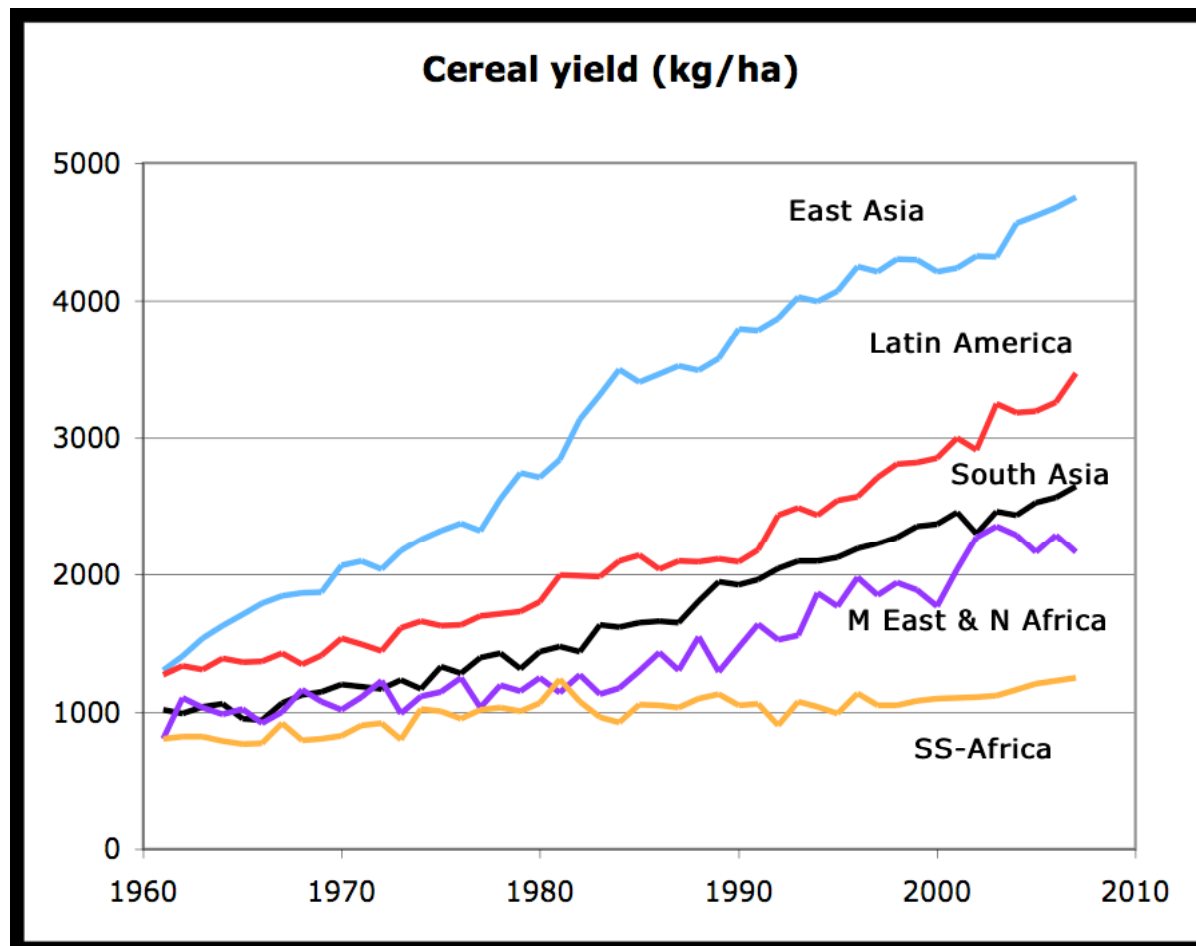
Sub Saharan Africa has a different pattern of structural transformation



(de Janvry and Sadoulet, 2011)



Little improvement in cereal yields



(de Janvry and Sadoulet, 2011)

