# Discussion of UNCTAD's LDC report for 2015. Transforming Rural Economies

**Alexandros Sarris**

Professor of economics, emeritus

National and Kapodistrian University of Athens, Greece

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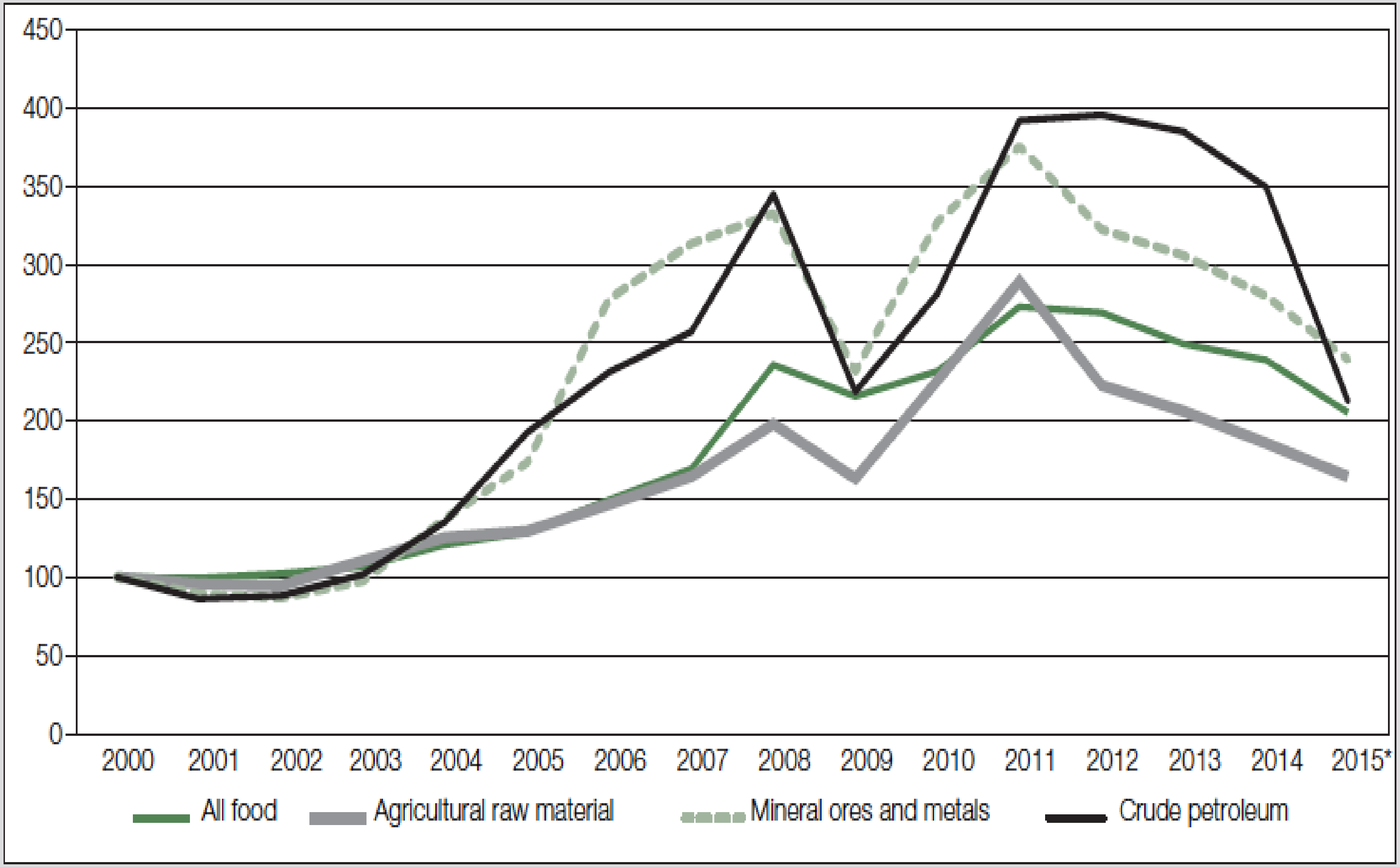
# Structure of discussion

- General comments on report
- Comments on chapter 2 on Agricultural Productivity: Developments, Determinants and Impacts
- Comments on chapter 3, on Economic Diversification, Non-farm activities and rural transformation
- Comments on chapter 5, Transforming rural economies in the post-2015 era: A policy agenda

# General comments on report

- Very interesting and comprehensive report, with a lot of food for thought. My comments complement and augment some points in the report and highlight some issues for further discussion and possibly analysis.
- LDCs a heterogeneous group of low income countries, with low GNI per capita, low human assets indices, high vulnerability indices, and not too large in terms of population.
- While they have high poverty indices, they do not include countries with large numbers of poor, such as India, because of the population criterion (population greater than 75 million).
- Many LDCs commodity dependent, hence vulnerable to commodity market fluctuations. Recent global commodity positive price shocks have subsided and since 2011 agricultural and mineral commodity prices have been declining, and recently were joined by petroleum prices.

**Box chart I.1. Commodity prices, 2000–2015**
(Indices, 2000 = 100)

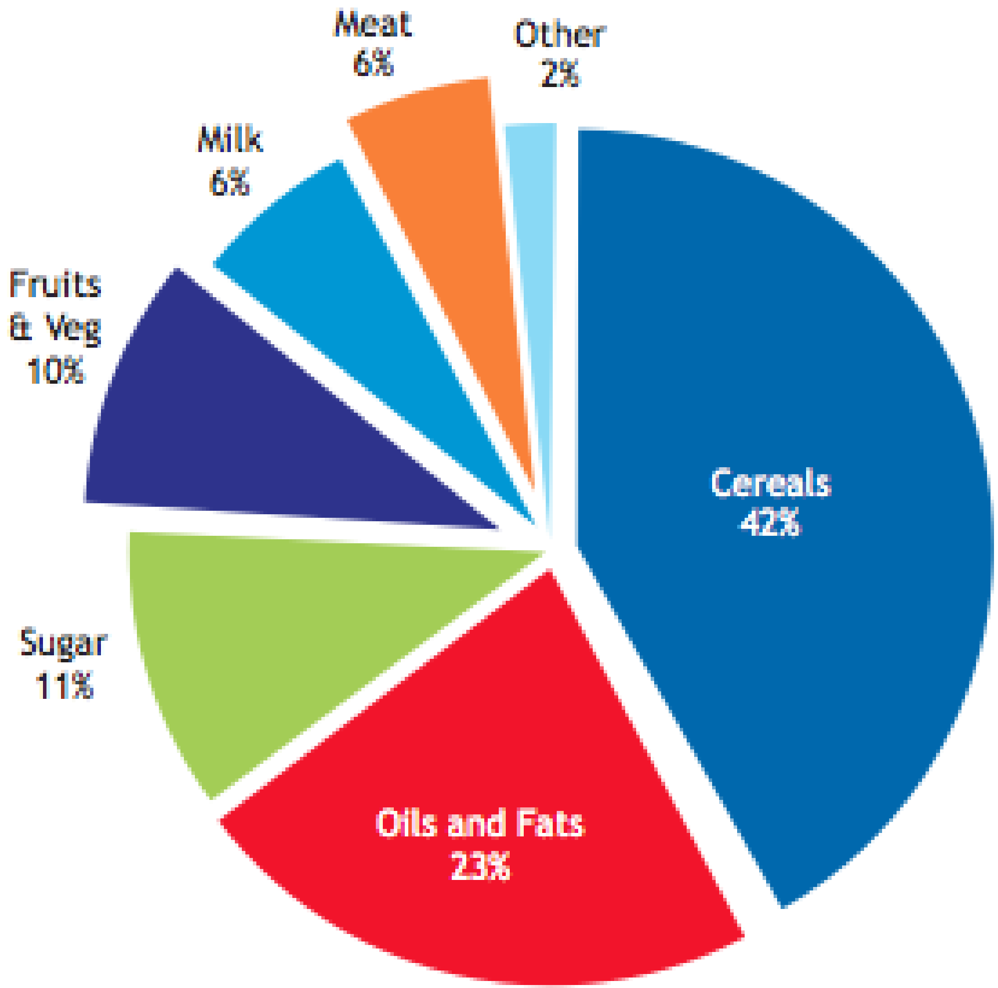



*Source:* UNCTAD, *Commodity Price Bulletin*. Crude petroleum: average of United Kingdom Brent (light) / Dubai (medium) / Texas (heavy), equally weighted (dollar/barrel).
*Note:* *January–August.

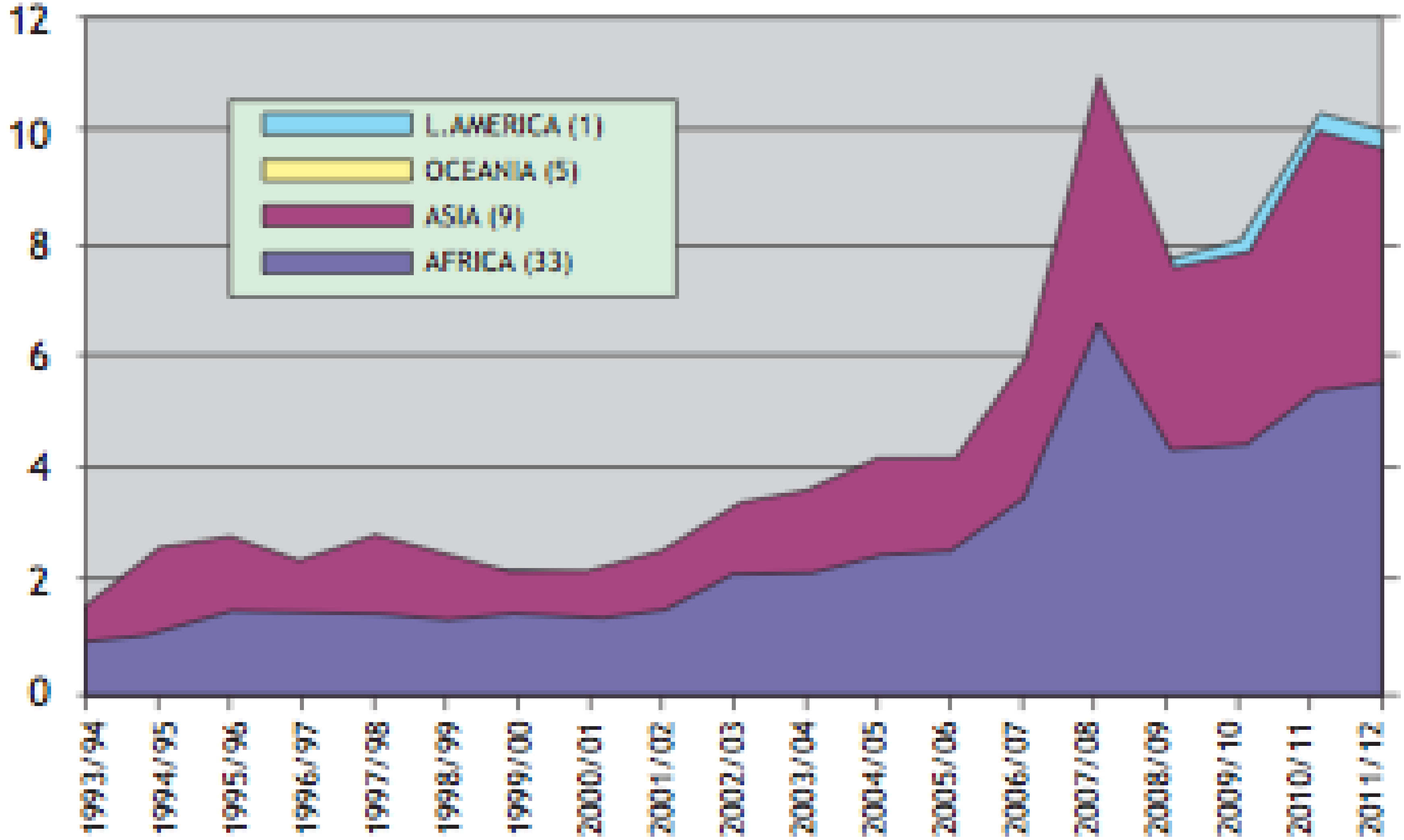
# Commodity boom dependence seems to have created external imbalances

- Despite lower commodity prices LDCs have exhibited robust growth, higher than that of developed countries, but fuel and food and fuel exporters have exhibited more unstable growth paths.
- BOP deficits have grown significantly after 2011, suggesting that commodity boom windfalls may have been judged as more permanent than in reality, or that expenditures grew in a less elastic manner.
- Reliance on ODA, and migrant remittances, a sign of vulnerability. Performance of ODCs and developed countries condition these two variables.
- Positive development is increase in FDI inflows and high GFCF.

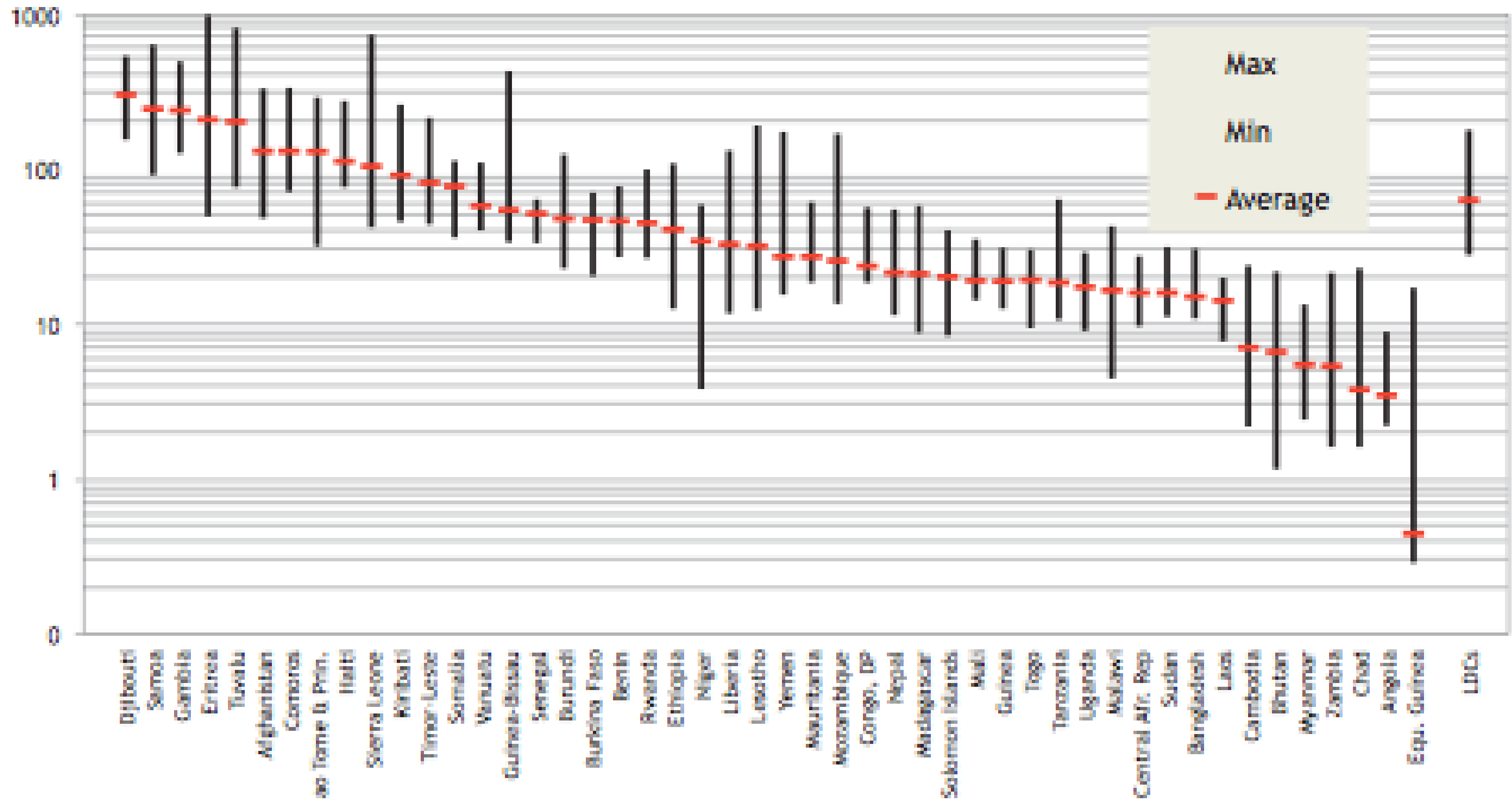
# LDCs. Growing food and agriculture deficits. Main commodity groups (in %) of the value of food and animal products imported 2000-2009



# Cereal import bills of LDCs (billion US$)



# Large shares of food imports (%) in total merchandise exports of LDCs (1990-09) (log scale). Average for LDCs around 60-70%



# Rural and agricultural development in LDCs crucial for overall development

- Food and agriculture trade balances have mostly deteriorated, threatening food security
- Structural transformation must be accelerated to speed up the adjustment and growth process. However, what is the causal link betweens structural transformation and growth? Seems that growth must come first and structural transformation follows.
- Rural urban poverty differences have increased in LDCs
- Need to substitute push factors of rural-urban migration with pull factors

# Stages of RNFE growth

- Stages of RNFE growth highlighted in table 1.2 appropriate and useful.
- Stage 1. in remote areas, rural-led low productivity
- Stage 2. In intermediate regions. Rural led but higher productivity growth
- Stage 3. Peri-urban export led. Not always the case. In several cases export led economy can be quite remote (coffee in Mbeya in Tanzania)
- But interesting in that it highlights the different types of policies that could be appropriate in different zones

# Transformation

- Virtually every one of today's high income economies enjoyed sustained agricultural productivity growth coupled with transformation of the rural non-farm economy that jointly sparked rapid industrialization and inclusive economic growth.
- The economies of Africa and other LDCs are finally enjoying robust economic growth and the group shows early signs of agricultural productivity growth that can be stimulated further by appropriate policy interventions to help reinforce and sustain that growth. But much remains to be done.

# Structural transformation in LDCs must be accelerated

- Transfers cannot be the driving force for LDC growth in the next two decades
- Idea of Poverty Oriented Structural Transformation (POST) quite interesting and appropriate.
- Major aspects of POST in the context of SDGs is increases in hard and soft infrastructure investments, and human capital. This must be done in a labour intensive way to ensure high employment. Also production and demand for goods consumed by poor, notable staple foods and basic household goods.
- Synergies between agriculture and non-agriculture crucial.

# External conditions

- Current external conditions for LDCs include climate change (affecting agricultural production, with impressive envisioned losses of agric output indicated in chart 2.12 (>10 percent in about 1/3 of LDCs). Greater impact on African LDCs ), large migratory flows (affecting developed countries and availability of development finance), and developments in China, India and other major ODCs (affecting global demand and residual ODA)

# Agricultural productivity growth and rural development

- Agricultural labour productivity and yields have risen most strongly in manufactures exporters and mixed exporters.
- Suggests that greater structural transformation and economic diversification are generally associated with greater improvements in agricultural productivity.
- While this confirms mutual reinforcement of development in agriculture and other productive sectors, it does not imply causality,  but rather a pull factor for agric prod growth.
- It is not clear how agricultural productivity in fuel exporting LDCs and manufactures exporters is higher or has increased more than that of service and mineral exporting LDCs. Interesting topic for further analysis.

# Differential patterns of partial agricultural productivity measures are interesting

- Why is it that Asian LDCs have exhibited faster agricultural labour productivity growth with similar land productivity growth as African LDCs? (non-agric labour productivity growth?)
- Why is it that TFP growth has been faster in African LDCs?
- T**he basic ingredients that make up for faster agricultural TFP growth are known, and include agricultural R&D, extension, rural infrastructure, and human capital such as education, and health.** However, **while we know the variables affecting agricultural TFP, the magnitudes of the elasticities of TFP with respect to the various factors above (which may condition public resource allocation) is not known, as well as the ways in which these elasticities are affected by other conditions.** Both structural parameters such as distributional variables, as well as institutional factors, such as the degree of market imperfections may impinge on these elasticities.

# Conditions that make agric development both growth enhancing and poverty reducing

- Agriculture must account for a large share of aggregate employment.
- Initial distribution of land must be equitable and property rights must be well specified.
- The technological improvements must not be risk increasing, nor should they require substantive private capital to be implemented.
- The marginal expenditure shares (both from consumption as well as from investment) of the direct beneficiaries of agricultural growth for labor intensive local nontradables must be large.
- There must be an excess supply of underutilized local labor resources.
- There must be complementary improvements in the provision of human capital assets at the local level (education and health), as well as improvements in marketing infrastructure (e.g. roads).
- There must an income and price elastic source of demand for the increased product of agricultural, wither domestically (in the case of food crops), or internationally (in the case of exports).

# Means for agricultural intensification

- Farmer education needs are modest (a minimum of 4 years of education)
- Investment in road corridors is not conducive to improvements in productivity of smallholders and agricultural production. A feeder road strategy seems better. Good point in report.
- On soft infrastructure policy reforms to induce higher returns to agriculture (via e.g. reducing explicit and implicit taxation).
- Access to credit for farmers important.

# Agricultural technology adoption

- **On R&D there are already several proven technologies in African agriculture**, that can be adopted, and several reasons have been advanced for the lack of adoption, but not a single explanation has been dominant.
- **Why, albeit technologies for farm intensification and yield increases exist, they are not adopted? The answer is price incentives**: Look at the fraction of the price that the farmer gets compared to the border or consumer price. It is a matter of incentives, education and supporting investment.
- **Incentives and measures to face risk**, will persuade a farmer who lives under rain-fed conditions and is very risk averse to adopt a technology that has already existed for a long time. That could be a technological breakthrough.

# Agricultural technology adoption 2

- A host of demand and supply side factors have been invoked to explain the limited adoption of fertilizer in LDCs including limited knowledge and education, risk preferences, credit constraints, irregular rainfall, limited profitability of fertilizer, lack of market access, incomplete markets,  inefficiency of input use, as well as limited or untimely availability of the inputs themselves. Each one of these calls for different policy measures.
- Country-level factors, embodying policy and enabling environment, appear most important in driving agricultural input adoption.
- Education of farmers is key to technology adoption and productivity improvements, with a minimum of four years of education something of a downward limit to education.

# Rural diversification

- **Why do households diversify**?. By need, by choice, or to manage risk? Efforts to self insure can lead to poverty traps, by concentrating on low-return low risk activities .
- Farm household diversification into nonfarm activities emerges naturally from diminishing or time-varying returns to labor or land, from market failures (e.g. for credit) or frictions (e.g. for mobility or entry into high-return niches), from ex ante risk management, and from ex post coping with adverse shocks.
- Additional explanations turn on incomplete markets (e.g. for land, labor, credit, or insurance). Missing land markets, for example, can help explain why a skilled blacksmith who inherits land spends scarce time farming although his comparative advantage lies in smithwork.
- Missing markets can also discourage diversification. For example, missing credit markets can impede diversification into activities or assets characterized by substantial barriers to entry.

# Barriers to rural diversification 1

- There seems to be a positive relationship between nonfarm income and household welfare
- **Are attractive nonfarm opportunities presently accessible to just a limited subpopulation of rural Africans that are already relatively comfortable**, i.e. higher incomes open the door to attractive nonfarm opportunities?
- **Can the poor be targeted by appropriate interventions? And even if the poor are reached, can they successfully exploit such externally-provided opportunities? Does the nonfarm sector presently offer a ladder out of poverty**, i.e. do nonfarm opportunities cause greater improvement in household income or well-being? Or are both of these hypotheses true, creating a positive feedback loop, but one that is at present inaccessible to many of the rural poor?

# Barriers to rural diversification 2

- **The evidence suggests there seem to exist substantial entry or mobility barriers to high return niches within the rural nonfarm economy**. These barriers manifest themselves in labor market dualism wherein the skilled and educated are self-employed or can secure stable long-term employment at relatively high salaries, while the unskilled and uneducated depend disproportionately on more erratic, lower paying casual wage labor, especially in the farm sector.
- **Constrained access to credit and financial savings**, where access is an increasing function of ex ante income and wealth for reasons familiar in the development economics literature, can impede acquisition of livestock necessary to diversify out of crop agriculture and of lumpy assets .
- **Educational attainment proves one of the most important determinants of nonfarm earnings, especially in more remunerative salaried and skilled employment**. Just as in high-paying professions (e.g. law, medicine) in post-industrial countries, skills and educational attainment serve as substantial entry barriers to high-paying nonfarm employment or selfemployment in rural LDCs.

# Barriers to rural diversification 3

- **Greater physical access to market consistently improves nonfarm earnings opportunities.** Public services such as education, communication, and transport infrastructure matter significantly to participation in nonfarm activities. Most importantly, the benefits of such investments thus come not just from reducing transactions costs on existing activities but, perhaps more importantly, from opening up whole new opportunities previously inaccessible to rural populations.
- **The fact that ex ante endowment of financial capital, skills, education, or market access appear to increase the probability of participation in higher-return nonfarm activities must not be misinterpreted as suggesting that all the wealthy move out of farming.** The wealthy have greater freedom to choose among a wider range of options than do the poor. One therefore finds the wealthy bifurcating into two groups: full-time farmers and those with attractive nonfarm enterprises. The poor, meanwhile, have little choice but to diversify out of farming into unskilled off-farm labor, whether in agriculture or not.
- **Attractive nonfarm opportunities are indeed accessible mostly a select few among the many poor rural LDC residents and typically to those who start off in a better position.**

# How to enhance rural diversification

Given the evidence that there exist significant barriers to entry into remunerative nonfarm opportunities in rural LDCs and that such opportunities afford significant opportunities for income growth and improvement in other welfare indicators, what are policymakers to do?

A laissez faire approach to the rural nonfarm economy seems unlikely to generate substantial poverty reduction in the current generation since few poor, unskilled and uneducated from more remote areas are likely to participate.

# Rural diversification challenges 1

- The **first challenge in designing an effective policy to make more attractive livelihood strategies available to the rural poor lies in investing a particular body with a sense of ownership over research and policy on the rural nonfarm economy** since the theme presently falls in the gap between the institutional walls of governments, research institutions, and NGOs.
- Being nonfarm means that agricultural researchers and policy institutions do not usually believe that it is in their “mandate.” Being rural, informal, and usually small-scale means that those involved with industry and employment policies and research usually eschew it for urban, medium-large scale, and formal enterprises.

# Rural diversification challenges 2

- The second challenge rests in stimulating rural financial systems.
- The third challenge revolves around human capital formation in the face of the HIV/AIDS pandemic in Africa and recurring violence in many African and other LDC nations.

# Rural diversification challenges 3

- **The fourth concerns improving market access**. This includes not only the usual physical infrastructural fare of road building and maintenance, improved intra-regional communications, and rural electrification, but also institutional innovations to reduce entry costs through the introduction of grades and standards and public price reporting systems, and the relaxation of burdensome licensing and regulatory requirements on microenterprises.
- **Finally, the positive role of rural nonfarm activities in poverty reduction, is the development of rural towns,** which mediate the flow of inputs, goods and services between rural hinterlands and larger urban centers, seen as the most effective generators of nonfarm employment for the poor .

# Emphasis on rural towns

- **There are a number of reasons to believe off-farm jobs generated in nearby villages or rural towns may be more readily accessible to the poor.** First, unskilled and semi-skilled workers often make up the vast majority of the workforce in rural towns, while semi-skilled and skilled workers dominate the workforce in the cities. Second, while rural towns have lower wages, they may also have lower unemployment rates.
- Thus, while urban concentration may be more conducive to aggregate economic growth—and important caveats remain—**the pro-poor marginal incidence of nonfarm employment expansion may be higher for secondary towns**

# The role of the missing middle

- Case study based research has found that the middle between agrobased rural and urban (namely the small rural towns and non-farm rural sector) has a significant role in poverty reduction.
- Rural diversification and secondary town expansion yields on average faster poverty reduction and more inclusive growth patterns than  metropolitization.

# Wages in RNFE

- In the new data collected and analyzed for the report (table 3.2, 3.3) there seems to be a high correlation between the shares of labour employed outside agriculture and the shares of income obtained outside agriculture. This suggests that the **rewards to nonfarm labour is similar to that of farm self employed labour.** This is contrary to national data., where the share of labour is much larger than the share of income in agriculture implying larger wages in the non-agricultural sector.
- From table 3.5 the level of education of those involved in RNFE is higher for services, mining and finance, but the share of income is similar to the share of labour employed.

# Barriers into high earning RNFEs

- **Major entry barrier into higher earning NFEs in rural areas is startup capital.** This is why RNFEs can be inequalizing. Even if opportunities are there it maybe difficult for the poor to engage in them.
- Need to engage in activities that generate savings.
- A major way to get this is through **migration**. Hence, one may say that a first response to gaining higher incomes through pull factors, is migration to cities or internationally, and then through savings and remittances small scale NFEs in rural areas. Happened in many ODCs and current developed countries in early phases of development.
- Other factors that are important for RNFEs are fixity of land, population pressures, infrastructure

# Structural features impeding structural transformation in LDCs

- Land especially low soil fertility, diversity, lack of titling.
- Water resources, many LDCs semi-arid, coupled with high water intensity of agriculture. Level of irrigation low.
- Weak human capital, both in terms of education as well as nutrition. Fosters poverty traps.
- Weak institutional and physical infrastructure, including weak market integration
- High level of uninsured risk.
- Weak governance and political capture

# Key priorities for rural economic transformation in the post-2015 era:

- agricultural upgrading;
- diversification into non-farm activities;
- strengthening synergies between agriculture and the nonfarm economy;
- empowering rural women;
- kick-starting the virtuous circle of rural economic transformation; and
- sequencing investments and interventions.

# Policy priorities

- Policies in five cross-cutting areas — finance, technology, human resources, enterprise and institutions — followed by
- A consideration of international dimensions of policy for rural economic transformation: development cooperation, trade, finance and regional and interregional cooperation.

# Agricultural upgrading

- **Emphasis on rainbow revolutions ie differentiated ones is appropriate, but then one needs to specify how many of these are needed**. One cannot plan a revolution for a very narrowly defined agroecological area
- **Report calls for right-sizing in terms of technology.** This seems appropriate, albeit it is not easy to assess the optimal plot size and there is probably a significant range of sizes that could be considered optimal in any one agroecological environment.
- **Issue of farm size not so important** or relevant as the inverse size productivity relationship has been shown in several cases to be due to market imperfections and other factors.
- **Rightly emphasizes cooperatives and producer associations, but in most countries such institutions have been suffered from considerable political interference** and have not bee allowed to fulfill their potential.
- **Policies should** rightfully not discriminate in terms of farm size, but **be size neutral**.
- **Product differentiation** through certification is something that can be effected by a large intermediary, as there are economies of scale in such activities. Policy should allow such efforts while not allowing monopolistic practices and monopoly margins to marginalize producers.
- In areas of small farms, diversification into high valued cops mostly through subcontracting. In areas of land abundance, more specialization with improved crops or products.

# Agriculture-RNFE synergies

- **Emphasis on staple foods is a good idea, but not overemphasis**. Staple food production can also lead to marketed surpluses that can promote development.
- **Local food stocks is not a good idea when the marketing system works. It is a good idea only in remote places**, where market signals take time to arrive. Food stock management is a very difficult undertaking and subject to manipulation and political interference.
- **Agroprocessing an appropriate focus, but need to focus on small scale agroprocessing, except when there are considerable economies of scale**. But need to promote labour using activities in periods other than peak labour demand ones.

# Measures to increase agricultural supply response

- Ability to mobilize inputs or switch inputs in response to price signals.
- Recent food price hikes did not lead to much supply response in Africa or LDCs, and whatever was done took some time, but much faster and voluminous supply response in developed markets.
- Aspects: Farmer training: Seasonal production credit. Rural roads to manage increased supplies. Rural processing to increase storability. Local storage facilities. Can be managed through appropriate farmer organizations for staple crops, larger intermediaries for other crops.
- Input subsidies can lead to non-reversible investments in some of these, so as to lessen the price differentials between small and/or remote farmers and marketing hubs.

# Kick-starting rural transformation

- Kick starting rural transformation through electrification or labour intensive construction projects seems like a viable policy option. But nrrds to be combined with agricultural intensification
- Strengthen development or rural hubs through health and education facilities also appropriate.
- Stocks again not a very good idea, except in very remote areas.

# Development of the RNFE

- It is not easy to distinguish and **not clear which of the many small enterprises will or can expand. Better to have an open policy that allows all types of activities,** as it is not easy to pick winners.
- Policy of **expanding existing enterprises could backfire if such enterprises are inefficient, or rent seeking**. It is not appropriate to limit enterprise creation, as it is impossible to predict which will be successful. **Better to have horizontal policies, favoring enterprise expansion (eg electrification, roads, communications, legal framework, speedy conflict resolution institutions, etc.).**
- **However, differentiated policies by urban proximity maybe appropriate. In remote areas more enterprise creation, while in peri-urban areas more enterprise expansion.** Electrification and rural roads maybe more appropriate in remote areas, while finance maybe more appropriate in periurban ones.
- **Picking possible rather than picking winners.** Ok but the risks are similar, and easy to err.

# Sequencing of investments and interventions

- Emphasis on production and supply response related investments as priority seems a good idea.
- Interesting idea is to first connect local hubs, and then rural to large urban hubs.
- Three broad phases of a post-2015 process of rural economic transformation, the first focusing primarily on creating the preconditions for effective supply response; the second on demand-creating infrastructure investment, including in local rural roads, and increasing supply capacity; and the third on improving transport connections with urban areas, while further strengthening the capacity of rural producers to compete with their urban counterparts.

# Policy Issues
# Risk transfer mechanisms
# Structure of marketing of small farmers in LDCs

- Bulk of marketings in early post harvest season, in response to lumpy need for cash.
- Cash needs determine most marketing of agricultural products during a year.
- Marketed amounts in any one transaction are small. Induces high cost of marketing.
- Fragmented nature, and relation based marketing.
- Large margins between producers and final (such as urban) consumers). Due to risk premia along the marketing chain?
- Three main marketing institutions: cooperatives, private traders and processors, parastatals

# Risk, marketing and credit constraints

- The poor typically can only borrow small amounts for short periods, (or in linked transactions)
- Formal credit in rural areas is much more constrained than in urban areas
- For rural households, need for cash, in absence of credit induces seasonal pattern marketing.
- Seasonal marketing, coupled with undeveloped marketing structures, induces large seasonal price variations, large margins, and hence high price risk exposure.
- Welfare and growth gains can come from lower marketing margins, and more seasonal credit availability.

# Possible market based price risk transfer institutions:
# Forward sales and contract farming

- Simple and compatible with many current institutional structures in LDCs
- Can be combined with additional services, including provision of technical packages, and loans
- Can be arranged with individual farmers or groups of farmers
- Has been tried with cash products. Can it be applied also for staple food products? Not easy. For staples perhaps better to provide initial conditional input subsidies.
- Premium for price risk management (such as gruaranteed price in the future) hidden in the contract details.
- Issue is transactions cost of dealing with small farmers. How can it be reduced? Are cooperatives or groups of farmers the answer?

# Pooling contracts

- Need marketing aggregator (cooperative, wholesaler)
- Can be combined with advance or initial payment. Issue is how the aggregator can hedge initial payment or price until final sale.
- Initial payment includes a substantial risk premium. This can be reduced with aggregator hedging.
- Delayed final payment

# Warehouse receipt systems (WRS)

- Main advantage is possibility to use warehouse receipts for credit
- Needs appropriate warehouse facilities for reliable storage
- Minimum size needed for warehouse receipt. Inappropriate for individual small farmers
- Needs aggregators (cooperatives, merchants) to access appropriate warehouse facilities. Aggregators are the ones who may retail credit and provide price risk management to small farmers
- Issues of trust in the system (needs regulatory framework)

# Harnessing technologies for agricultural transformation

- Must identify agroecologically similar regions for R&D.
- When appropriate technologies exist, extension key. Also subsidies may help initially.
- But this must be coupled with appropriate infrastructure development to create marketing structures.

# Human resources

- Focus on basic literacy
- Local primary schools
- Adult education
- Farmer field schools
- Mobile training units, mobile extension, community based education modules
- Vocational skill training through on the job for local public works
- If priority sectors identified then can identify skill gaps
- Barefoot college a model

# Fostering enterprise and innovation

- Improving the business environment is easiest in peri-urban areas and intermediate areas with relatively high population densities and favourable natural resource endowments.
- Demand growth through labour intensive public works.
- Information access through radio or mobile phones.

# Institutions

- Health and education services key.
- Farmer associations, women’s networks, another priority.
- Adult education systems
- Extensions systems

# International dimensions

- Providing access to water to some 600 million people, and electricity and sanitation to some 900 million in just 15 years.
- Must promote public revenue base, through local economy growth.
- ODA goal of 0.35% of donor GNI OK in principle but depends on a lot of things.
- Aid effectiveness, ie eliminate tying of aid, reduce unpredictability of flows, transfer ownership of aid programmes to LDCS, but also to reduce rent seeking and local capture.
- International safety nets, such as financing for excess FX needs (for food imports)

# Trade

- DFQF market access can be impeded by ROOs and other conditions. Need to find common ground. Preferential ROOs?
- PTAs could target longer term investments. Establish and promote SDG brand.

# Development regionalism for rural development

- Regional PTAs,
- Regional value chains appropriate
- Regional R&D centers and extension programmes (along with technology focus along similar agroecological systems)

# Epilogue

- The RNF economy should not be promoted in the absence of agric transformation
- Focus on the missing middle (rural town connectedness)
- Differentiate policies according to distance from urban centers
- Promote viable intermediaries (coops, firms)

- Thank you