



Trade, Agricultural Growth, and Poverty Reduction

What we Know and Don't Know

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Major components

- There are critical differences between the “agriculture is important” school (Mellor, et al.) and the trade studies done with CGE models.
- Literature on links between growth in agricultural productivity and poverty reduction
- The CGE trade liberalization story
- Reconciling the differences



What are the differences?

- The “agriculture is important” school argues that agricultural growth is important (maybe necessary) to achieve overall economic growth and poverty reduction.
- The CGE world demonstrates substantial welfare gains from trade liberalization due to improved resource allocation and efficiency gains.
- These aggregate welfare gains can occur even if economic conditions are worsening in rural areas.



Some examples from the agriculture is important area

- Kanwar (2000) uses Indian data to establish that growth in agriculture, infrastructure and services are all causally prior to growth in manufacturing and construction, but the reverse is not true. Rangarajan (1982) quantifies this effect, showing that 1 percent growth in agriculture generates 0.5 percent growth in manufacturing and 0.7 percent growth of the overall economy.



Some examples from the agriculture is important area

- Datt and Ravallion (1996) show that the sectoral composition of economic growth matters to the poor in India. First, rural growth reduces poverty both in rural and urban areas, but urban growth does not alleviate poverty in rural areas. Second, a decomposition of growth in terms of output sectors establishes that growth in the primary sector benefits the poor in both urban and rural areas, while growth in manufacturing has no impact on poverty in either.



Some examples from the agriculture is important area

- Woden (1999) produces similar findings for Bangladesh, where simulations show that rural growth reduces poverty 3 percent more than urban growth, by 2008, and the differential effect on the poverty gap is greater. Throbecke and Jung (1996) come to similar conclusions for Indonesia using simulations from a SAM.



Some examples from the agriculture is important area

- A cross-country examination of the relationship between growth and poverty by Gallup et al. (1997) establishes that a one percent increase in agricultural GDP leads to a 1.61 percent increase in income of the poorest quintile, while the corresponding values for the manufacturing and services sectors are only 1.16 percent and 0.79 percent. Other cross-country studies (Timmer, 1997; Bourguignon and Morrisson (1998)) provide further evidence of the pro-poor bias of agricultural growth.



Some examples from the agriculture is important area

- Thirtle, et al. conclude that research led technical change in agriculture has substantial poverty reduction impacts in Africa and Asia:
 - A 1% increase in yields reduces the numbers living in under \$1/day poverty by over 6 million, with 95% of them in Africa and Asia.
 - The per capita cost of poverty reduction in Africa and Asia are \$144 and \$180, but it is \$11,400 for Latin America.



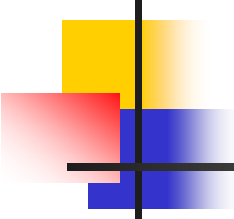
Some examples from the agriculture is important area

- Thirtle, et al. (2003) conclude that “agricultural productivity growth has had a substantial impact on poverty reduction in the two poorest continents, as well as paying for itself by being an extremely profitable investment.”
- “The results also show that **the sector does matter: that growth needs to be agriculture led**, and it is effective only in the poorer continents, but that is where the poor are, and predominantly in the rural areas.”



The CGE literature includes scores of studies showing large benefits from trade liberalization

- Most of these studies show significant gains from trade liberalization as countries shift resources towards production and export of goods for which they have a greater comparative advantage and import cheaper products. These cheaper imports increase the well-being of consumers, which can lead to an overall welfare increase for the country.
- To the extent that the cheaper imports are food products, part of the welfare increase for consumers is at the expense of the rural producers of the foodstuffs.



The CGE literature includes scores of studies showing large benefits from trade liberalization

- In an often cited World Bank study, the global gains for developing countries from trade liberalization amounted to \$142 billion with fixed productivity and \$390 billion with assumed productivity gains.
- An important question is how to achieve these productivity gains.



Reconciling the differences

- The CGE work is comparative static; that is, it compares economic welfare with and without the assumed change in policy, technology, or other factors.
- The agriculture is important school is based on empirical work linking economic growth and poverty reduction to agricultural and manufacturing growth. It is theoretically grounded in strong Keynesian multipliers associated with agricultural growth.



Reconciling the differences

- CGE work cannot say directly what are the impacts of a given change on **economic growth**. It is a comparison of welfare differences with and without the change, but does not have direct links to growth.
- So while the welfare changes are often associated with growth, these links must be established.



The May 2004 UNCTAD Report on the Least Developed Countries

- This report can be summarized as saying that trade liberalization is an important component for economic growth and poverty reduction, but it is far from sufficient.
 - “An inclusive form of economic growth requires not simply export expansion but also an economy-wide expansion of income-earning opportunities, encompassing exports and import-competing activities, and non-tradables as well as tradables.”



The May 2004 UNCTAD Report on the Least Developed Countries

- “Virtuous trade effects are most likely to occur if there is a balanced pattern of economic growth, in which **domestic demand expansion is the major component of economic growth**, but export expansion also makes a significant contribution to the overall process.”
- This report also stresses the importance of gaining a better understanding of linkages among trade, agricultural productivity, and factor markets.



Reconciling the differences

- The “agricultural growth is important” school argues that agricultural productivity growth and subsequent increase in incomes stimulates rural demand, which, in turn, leads to increased non-agricultural economic activity in rural areas. This school accepts certain rigidities in rural labor and capital markets that accentuate the importance of agricultural productivity growth.
- This approach also highlights the importance of the rural non-agricultural sectors.



Mellor (2001)

- John makes a compelling case for the role of agriculture in overall economic growth and poverty reduction.
- One source on rural small-scale industries in developing countries is the 1987 work of Liedholm and Mead.
- That work is based on data mainly from the 1970s
- Rural industries are quite important in the overall picture on rural growth and poverty reduction, but we have little current work.



Reconciling the differences

- CGE analysis, in contrast, generally assumes labor and capital markets function efficiently and that rural and urban capital and labor are easily substitutable and mobile.
- CGE work generally makes no distinction between rural and urban industries.



Reconciling the differences

- In reality, it is difficult to study and obtain data on rural capital and labor markets and rural small-scale industries.
- But if we are to be able to improve the reality of CGE models and our understanding of rural growth processes, we must do that work.



Reconciling the differences

- The two approaches are really asking and answering different questions:
 - Mellor et al. are attempting to explain the role of agriculture productivity gains in economic growth and poverty reduction through empirical research.
 - CGE is attempting to calculate the one time economic welfare gains from trade liberalization.
 - While the latter is sometimes confused with economic growth, they are not the same thing.



Reconciling the differences

- The two approaches are making different assumptions about the way markets work:
 - CGE models generally assume perfect competition in factor markets and do not differentiate between rural and urban activities
 - The agriculture is important scholars use Keynesian logic and ground their work in empirical observations of what has been happening.



Reconciling the differences

- Perhaps most importantly, CGE work does not offer many insights on how development occurs.
 - UNCTAD concludes, “A major danger which has arisen from an exclusive focus on the question of trade liberalization and poverty is that integration into the global economy has come to be seen as a mechanism of poverty reduction in itself. But it is development, the long-term process in which the incomes, productive capacities and freedoms of people increase, which is in practice the key to poverty reduction.”



Where does this leave us?

- Both camps recognize the importance of trade liberalization
- The empirical work on economic growth makes a convincing case for the importance of agricultural productivity gains
- We must gain a better understanding of rural factor markets and rural non-ag small scale industries both for CGE work and for implementing development activities



Important sources

- Mellor, John W. *Meeting the OECD Poverty Targets Through Growth and Productivity Increase – The Central Role of Agriculture's Employment Multipliers*. Abt Associates, 2001.
- Thirtle, Colin, et al. "The Impact of Research Led Agricultural Productivity Growth on Poverty Reduction in Africa, Asia and Latin America." *World Development*, 2003.
- UNCTAD. *The Least Developed Countries Report 2004*.