

1. Johnston and Mellor emphasized five things the agricultural sector contributes to the industrialization process:

- [1] Supply of food to industry (spurred by controlling food prices or spurring agricultural productivity).
- [2] Supply of labor to industry.
- [3] Supply of national saving.
- [4] Demand for industrial output, strong at the margin (this matters only for nontraded industrial output because there is no demand constraint on traded industrial output). This backward linkage dominates the growth multiplier from higher agricultural income to GDP, which is slightly higher than the growth multiplier from non-agricultural income to GDP.
- [5] Source of foreign exchange. (In this view agriculture is traded, so agricultural prices are determined outside the country and don't play a key role in the mechanism.) Productivity growth in agri would now strengthen the country's comparative advantage in agri (and NOT in industry), which seems to discourage industrialization. But rural poverty would fall even faster with productivity growth in agriculture when food is traded than when it is not, because food prices would not fall; this in turn would strengthen the demand linkage to nontraded non-agricultural goods.)

2. The textbook adds two more (which I actually find less convincing as stated):

- [6] Better nutrition, faster growth (note, this is probably a 2-way relationship: Fogel's work on France and England in the 19th century seems a good example of correlation rather than causality).
- [7] They cite Timmer on a 'stability linkage', where national price-stabilization schemes contribute to growth by reducing income risks to farmers. But this institutional/policy choice is not intrinsic to agriculture, and it is not obvious it is a "linkage" in the sense of the other linkages. A more convincing stability linkage may be that a healthy agricultural sector can contribute to political stability by providing food security for the whole population (but this is just a political channel from [1]).

3. To these I would add at least one other crucial element in the argument for a balanced growth or even an "agriculture first" strategy:

- A healthy agricultural sector tends to reduce national income inequality because rural areas are disproportionately poor, and also to promote intergenerational equality of opportunity by supporting investment in the human capital of children.

4. Finally, I would add the challenge of generating productive employment for a rapidly growing population. Once the demographic transition gets underway with falling infant mortality rates (a characteristic of the 20th century in all developing areas), population growth rises until fertility rates start to fall. Low-income countries therefore have the challenge of providing livelihoods for a rapidly growing population, with the bulk of natural increase coming in the rural areas where most of the population initially resides. The small modern sector cannot possibly grow fast enough to provide employment for the bulk of the growing population. Investment in agriculture is therefore required to help overcome the threat of diminishing returns in the countryside and/or the resulting displacement of population into a congested and low productivity urban informal sector.