Allow me also to summarize my argument point and clear possible misunderstandings. My point of departure is that smallholder based green revolution in Ethiopia is a financially costly business with limited economic value. To begin with, if the green revolution technology is not used according to the approved research findings, it is difficult to realize the potential yield. That means there is a problem of cost-inefficiency. The provision of fertilizer input is not sufficient by itself. The technology requires simultaneous provision of other essential inputs such as seeds, pesticides and water. Fertilizer application is relatively ineffective without adequate and timely water supplies. Improved seed varieties cannot respond efficiently without sufficient fertilizer provision. The compound benefits of fertilizer, water and seed varieties inputs rely heavily on controlling plant diseases, insects and weed infestations. What I am trying to say is the potential yields of green revolution technology are not attainable without adequate and timely water supplies, adequate fertilizer, seed and pesticides inputs and good management. The problem is further compounded if this happens for at least ten types of site-specific technologies. Green revolution as initiated in Mexico and Asia has “one-size-fits-all” character. In Ethiopia, however, the physical and socio-economic environments of the small holder agriculture are so diverse that it is not possible to develop and introduce one type of technology. This means location-specific nature of the green revolution technology in Ethiopia can create problem of ineffectiveness (the economic aspect of it).

By studying yield performance and the selective nature of the hitherto introduced agricultural technology, researchers with varying capacities have analyzed the same phenomenon differently. Some emphasized food deficiency while other mention about benefits acquired to some groups and areas. The reality is in between. For the purpose of my argument, what is important is the question of cost. What are the costs so far incurred to bring benefits to some groups and how much cost should be invested more to increase the technology coverage?

Recent study on quantifying the effects of government expenditure on rural poverty shows that the modest benefit so far gained in the agricultural sector is achieved at higher public expenditure. Based on MoFED data the researchers found out that the public resources for agriculture sector constitute 42% of the GDP. (See http://www.pep-net.org/fileadmin/medias/pdf/files_events/8th-PEPmeeting2010-
As I understand public expenditure on agriculture as a percentage of GDP gives an indication of how the government has prioritized agriculture in relation to its overall allocation of resources. It shows that the government is taking on a larger role in the agricultural economy which may not be sustainable in the future. Considering the limited capacity of public expenditure in Ethiopia and the low return from the agricultural sector, the researchers are testing alternative distribution of public resources across targeted sectors. They are reconsidering the agricultural strategy which “has not brought about the anticipated food security and sustainable growth”, but which still consumes higher proportion of public expenditure.

My observation is that I see no prospect for lowering high government expenditure on agriculture. The government expenditure will remain high since small farm households are multiplying in rural areas. As I have pointed out in my previous posting the young rural labor force is growing by about 4.7% per year. Even if I do not take this growth rate as an absolute truth (following the definition of CSA I used 10 as the lower age limit) in calculating the rate of household formation in rural Ethiopia, the labor force growth rate indicates a general broad trend on the formation of households in rural areas. The labour force growth is characterized by young age with high fertility reproductive behaviour. According to the 2005 Demographic and Health Survey (DHS) report, the mean number of children born in Amhara region is 7.0, in Tigray 6.0, in SNPP 7.5 and in Oromiya 7.1. Early age at marriage and extremely low use of contraceptives are the key behavioral factors contributing to high fertility. Even if fertility shows sign of moderate decline it is still relatively high in rural areas and we expect thus multiplication of subsistence households with higher food consumption requirements.

The reproductive behavior of the young labor force in rural area indicates a trend in continued growing of government spending in agriculture at the same rate as the economy itself. My observation is that considering the multiplication of child-rich households and site-specification nature of the green revolution technology in rural Ethiopia, the public expenditure on agriculture as percentage of the GDP will remain at the same level without delivering the “anticipated benefits”. Instead of idealizing smallholder agriculture, I suggest rethinking on how “to get rid-off of subsistence farming”. Migration led urbanization pull them out from their ecological settings and put them in a concentrated economic zone for specialization and productivity. Industrial decentralization serves as the economic basis of regional and rural towns. The implication is that the government has to start picking other key priorities to act within the current budget constraints.