Is Ethiopia Missing the Opportunity of Labor-intensive Industrialization?

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Based on the study of the age structure of the Ethiopian population, the opportunity for labor intensive industrialization in Ethiopia is between 1995-2035. This is a period of an increase in working age population and an associated decline in the dependent age population (see Figure 1 below). Already 20 years have passed and still the immense potential of the cheap labor is out there for capital accumulation and expansion of industries. Since the labor absorbing capacity of the economy is limited, currently there is a large scale outmigration of a relatively educated labor particularly from rural towns. The agricultural-led development strategy, conceived on the idea that industrialization depends on success in agriculture, is keeping the rest of the rural labor to its smallholding. My point of departure is that labor outmigration and priority given to smallholder agriculture risks the opportunity created by demographic changes. If the country does not speed up the labor intensive industry now at a time when labor is cheap for exploitation (Asian path of rural industrialization), by the end of 2035, when the growth rate of the labor force drastically declines, the country will be compelled to use capital and technology intensive machineries (European path) to come out of its structural stagnation. In a country where saving rate is low because of child burden and missed capital accumulation, and where external finance is unpredictable, the search for great investments of money for machinery is an uphill battle and that will negatively affect the welfare of a growing population estimated to be 130 million.

Before proceeding to a suggestion of solutions I would like first to say few words on the performance of labor intensive industrialization and why Ethiopia should take this path at this stage of its development. Labor intensive industrialization is an industrialization path during which industries uses a large amount of labor to produce its goods or services. The degree of labor use is measured in proportion to the amount of capital required to produce the goods/services; the higher the proportion of labor costs required, the more labor intensive the business.
Since 1995, five years after the start of a decline in population growth rate, Ethiopia has entered into the period when labor became abundant and cheap. Moderate decline in the fertility rate and the echo of the baby boom generation of the 1975/76 land reform were the major driving forces for the upsurge of the labor force. In the rural area the labor force is estimated about 35 million and each year one million people are added in the labor force. 90 percent of the rural labor force is employed in agriculture and the rest is employed in the non-farm service sector. The problem is that the agricultural labor force is not self sufficient in food-grain production due to large family size and low land productivity. Since agriculture production could not increase through area expansion and labor productivity, there is a rural out-migration in search for wage employment in urban centers. Due to high population density and household dependency ratios, half million labor force migrates to the rural towns and cities of the country (causing higher urbanization rate by African standard) and outmigration to Arab and sub Saharan African countries.

In a country where the domestic capital is low to start industrialization, cheap labor is an important source of capital accumulation by industrial entrepreneurs. In a conducive investment climate, the profit gained from labor exploitation is often reinvested to promote...
industrialization. China is a good example. The China state, as the mentor of industrialization, forced the Chinese rural labor force to provide grain to the industrial towns through a fixed price. Not only that, the state make also sure that the rural labor force support the industrial process through the provision of labor ("leave the land but not the villages") in the form of rural industrialization and migration-led industrialization (in Special Economic Zone Areas). It was last year (2013) that the Chinese government came up with a new policy document of rural development after forty years of exploiting the rural labor to rapidly industrialize the country. Until last year, raising agricultural productivity in China was aimed at getting faster industrialization since both the government and the Chinese people recognize industrialization as a national security issue. What the Chinese and other Asian country experience shows is that there is no labor intensive industry without cheap labor and "growth ideology" shared by all. There is also no cheap labor without labor force growth or benefits of "demographic dividend" which Ethiopia has been blessed with. Ethiopia has to use this period labor force growth to speed up labor intensive industrialization.

I do not have data to review the performance of labor intensive industries in Ethiopia. In the industry section of the GTP, there is a focus on labor-intensive industrialization. The strategic direction of export-led industrialization support industries that are labor intensive. Medium and large labor intensive industries identified for promotion include i) textiles and garment industries, ii) meat, leather and leather products industries, and iii) agro-processing industries (sugar, fruits & vegetables processing, grain mills, bakery, soft drink industries, etc).

Labor-intensive industries are not necessarily large and medium scale; there are also small-scale industries which tend to be labor-intensive. The traditional footwear industry in Merkato area of Addis Ababa is a good example. In addition to the export led labor intensive industries there are also small-scale, labor intensive ventures in weaving, ironworking, wood processing, tanning and leatherworking. These are generally sectors that can create employment opportunities if they are able to compete with imported consumer items.

I do not have data to estimate the employment trend in the labor intensive industries. Has the share of the labor intensive industry in total employment decreased, increased or remained constant since the onset of the labor force growth in the early 1990s? What are the reasons for the dynamic changes in those numbers? Is the majority of employment in the export-led large scale labor intensive industries or in the small scale cluster industries? Where is the new opportunity for employment creation? Though these questions are interesting for revelation, I
can easily say that the annual average growth rates of total employment in the labor intensive industries is significantly lower than labor force growth in the country. As I have pointed out in my previous posting the young rural labor force is growing by about 4.7% per year.

One can mention various hindrance factors related to the labor intensive industrial sector in particular and to the level of industrialization in the country in general. A number of studies have underlined that industrial firms in Ethiopia have both internal and external problems. The internal problems are related to lack of proper production management and organizational structure. Internal problems are mainly related to product quality and productivity. They are often solved through improvements of the production process, for example through the use of Kaizen concept of Japan. The external factors are outside the firm management control. They include shortage and inferior quality of raw materials, shortage of working capital, lack of availability of spare part locally and long lead time for imported spare parts and infrastructural problems (shortage of water, interruption of power, land). Some of the external problems are related to lack of industrial linkages, absence of secondary manufacturing industries and lack of commitments related to the implementation of the industrial policy. I have outlined six industrial policy instruments to tackle the internal and external problems concurrently (see below).

In addition to the general problems about what happens within (“firm capabilities”) and between firms (externalities and coordination failures), labor-intensive industries have their own specific market access problems and these problem differ depending on their orientation. Export led-industries as newcomer to the global market must compete with many countries and this competition takes place in an environment where many emerging market countries are already on the ladder of industrialization and have similar resource endowments. Export-led industries of Ethiopia need not only the appropriate technology but also the right design and finishing quality of products that the European and American customers demand.

Those labor intensive industries producing for the internal market such as the footwear industry-- which is characterized by buyer-driven chains-- must compete with products imported from China. Textile and apparel industries producing for the internal market have difficulties to compete because of lack of quality cotton material. Most cotton producers prefer to export the raw material to international market to take advantage of government export incentives and this has created problem on availability, quality and price of cotton for domestic textile and apparel industries.
The labor intensive industries of Ethiopia have also additional problem related to labor quality. Abundant labor is cheap but this does not guarantee success in industrialization. Differences in productivity matters for profitability, paying higher wages, employing more workers, and attracting more investment. According to World Bank study Ethiopia’s wages are about one-third the average of Sub-Saharan Africa, but the labor productivity is much lower than the later. "Productivity levels remain low by regional and international standards. Ethiopia’s manufacturing and services enterprises operate at very low levels of productivity, which neutralizes their labor cost advantage against foreign competition. For most observed sectors, Ethiopian firms’ wages are low by international standards, as are their output per worker". See World Bank, report on “Investment Climate Assessment”.

Low labor productivity do not attract investment and it is internationally "expensive" even if wages are relatively low. In a competitive international market cheap labor should also be quality labor. Japan and China could embark on the path of labor intensive industrialization not only because they had abundant and cheap labor because they had had an internationally competitive labor. "Japanese wages were not just nominally cheap, but cheap relative to its efficiency". On the multiple skills and quality of the Japanese and Chinese labor during the stages of labor intensive industrialization see Austin, G. and Sugihara, K., eds. (2010), Labour-Intensive Industrialization in Global History. Routledge

Given the enormous problems surrounding the industrialization development in Ethiopia and the labor-intensive industries in particular, why is that the government of Ethiopia allocate 42% of the GDP to the agricultural sector? The Agricultural Development Led Industrialization (ADLI) policy was formed exactly on the eve of the onset of the labor force growth in Ethiopia. Since then agriculture has received the lion share of the already limited public expenditure despite continued low productivity and slower growth of production.

I have already commented on the logic, idea, plan and strategy of ADLI (see reference below). My point of argument is that if the same public spending would have been allocated to the industrial sector, the Ethiopian economy could have substantially absorbed the surplus labor of the country. Spending in agriculture will not make much difference to household welfare since history has shown that the sources of per capita income growth is industrialization and not agriculture. One cannot talk about a middle income country on the basis of weak industrialization.

The government has planned to significantly increase the public investment in agriculture from Birr 7.3 Billion by 2010/11 and Birr 14.7 Billion by 2014/15, to Birr 29.5 Billion by
2020. What will be the end result of this massive spending in agriculture? My answer is simple: it will lead to economic stagnation and there are two reasons for this.

If the government becomes successful in raising the productivity of agriculture using this significant amount of public investment the labor force will stay in the rural areas holding its small possessions and ensuring self-sufficiency and a tie to the urban food market. No one will be willing to migrate to urban centers to toil and sweat for a profit maker. Contrary to the current line of thinking, the cheap labor history of America, European and Asian countries shows that there is no rapid industrialization without the deployment of massive labor. Unfortunately the tripled public investment in agriculture will coincided with the decline in the labor force growth of the country. The policy and demographic effects will bring an end to the history of cheap industrialization labor in Ethiopia by the middle of 2030s, the former tying the labor to the rural areas and the later reducing its numbers.

The second interrelated reason for economic stagnation of the country is the need for massive investment in machinery and equipment. Because of low labor supply, the country will be forced to follow the path of capital/technology intensive industrialization and investment will then be a determinant factor for increasing the level of industrialization in the country. The country may need to allocate over 30 per cent of its GDP, excluding the investment needed for a possible restructuring of the economy (stagnation forces restructuring for a competitive future). Because of missed opportunity, the private sector will have a limited role in the future investment. That means the rate of capital expenditure by the government has to increase, provided that the government will have no budget deficit. Unless the country discover oil to fuel industrialization, missing the opportunity of labor-intensive industrialization complicates further the problems and factors of finding investment.

My conclusion is that the government has to rethink the Agricultural Development Led Industrialization (ADLI) policy orientation and plan. To seize the opportunity of labor-intensive industrialization, I suggested the following six policy instruments:

Policy Instrument 1: Construction of Special Economic Zones
Policy Instrument 2: Industrial Cluster Initiatives
Policy Instrument 3: Regional Industrialization Master Plans and Rural Industrialization Programs
Policy Instrument 4: Green revolution, agro-industrialization and value added processing of primary products
Policy Instrument 5: Horizontal Industrial Policy, and
Policy Instrument 6: Sectoral-specific industrial policy

(For details see http://aigaforum.com/articles/how-to-create-rapid-and-quality-jobs.pdf)

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For further comments on ADLI see

http://aigaforum.com/articles/miss_conceptualizing_smallfarms.pdf