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Fostering industry in countries with a large scale of the poor

：Revisiting Adam Smith's view on economic development

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＜Summary＞

1. When we discuss the development of developing countries, it is important to differentiate the targets under consideration. The levels of development of developing countries are widely varied, and it is impossible to treat them uniformly in a lump. In this article, while referring to the past literatures including *Wealth of Nations*, by Adam Smith. I will reconsider the desirable paths for the development of industry especially in low- and some lower-middle-income countries.
2. In developing countries, especially in low- and some lower-middle-income countries, a large proportion of people have been forced to live in poverty. Poverty ratio is high in countries in Africa and South Asia, with highest ratios seen in those countries in Inland Africa.
3. In low- and some lower-middle-income countries, a majority of labor population work in agricultural sector, which include a large number of the poorest. To create and develop industrial sector in these countries, it is important for them to have a highly developed agricultural sector through improved productivity, and enable many poor people in the agricultural sector to get rid of poverty.
4. Among the industry sectors that are considered to be developed following an increased productivity of agriculture, priority should be given to light industry that includes, inter alia,

food, textile, and sundries. Since these sectors produce daily necessaries, they can attract expenditures from a wide range of income groups.

5. Also in developing countries where the education level of laborers is low on average, the existence of labor-intensive light industry which creates many manual jobs is indispensable as a basis for job transformation of unskilled workers from agricultural sector to manufacturing sector.
6. Income level is still low generally in India and many other countries in South Asia and poverty ratio is relatively high. These counties need to fully enhance the productivity of agriculture before they embark on a full-scale industrialization.

1. Introduction

One of the discussions surrounding the development of developing countries includes the priority of industries to develop or the desirable order in their development. In this context, we often see the views that the development of agriculture should be given a first priority, or that it is wrong to put a top priority to the development of heavy industry and knowledge intensive industry with high capital equipment ratio needed rather than to the other industries.

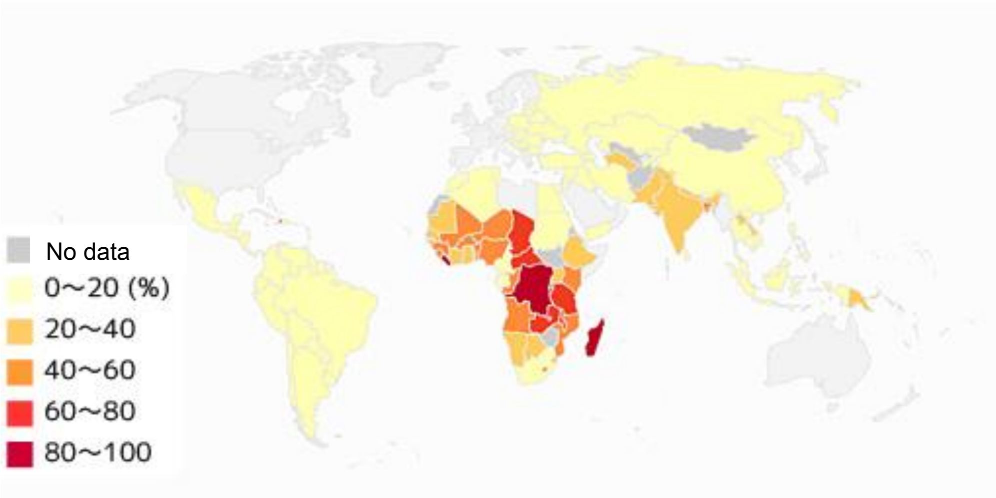
It is important in these discussions that we clearly differentiate the targets under consideration. It is impossible and not desirable to treat developing countries uniformly in a lump as they each have a different level of economic development. When we discuss the development policies of developing countries together with their desirable development paths, it is important to identify the targeted economy in respect of income level, endowment of natural resources, trade dependency, etc. Negative views on the prioritized development of capital intensive and knowledge intensive industries are often related to the case in the low- and some lower-middle-income countries where the majority of people are still forced to live in poverty. In this article, referring to literatures written in the past, I will reconsider the desirable paths of development especially targeting at the low- and some lower-middle-income countries.

2. Poverty levels by region

Among developing countries, especially low-income and some lower-middle-income countries have a large proportion of people living in poverty. To promote economic development and raise income level thereby to reduce poverty is one of the major objectives of development policies. What kind of people are poor people and how do they live? Where is poverty a problem? Let us confirm it by international definition and regional distribution.

The World Bank publishes the data on global poverty seen in many aspects. They give an international indication of poverty defining average poverty group as those living on less than \$2 a day (PPP of 2005) and extreme poverty group as those living on less than \$1.25 a day (PPP of 2005). Poverty ratio is defined as the ratio of extreme poverty group in the total population. Chart 1 shows the distribution of poverty ratio by country, which illustrates that countries in Africa and South Asia have higher poverty ratios with some in Inland Africa the highest ratio among regions where more of developing countries are located.

Chart 1 : Poverty Headcount Ratio（Ratio of people living on less than $1.25 a day in population, 2012）



（Source） World Bank site on “Poverty and Equity”

Absolute numbers of people in extreme poverty (those living on less than $1.25 a day) reach 1.2 billion in the whole world. By region, South Asia has 507 million, the largest reflecting the bigness of total population, followed by 414 million of Sub-Saharan Africa, and 251 million of East Asia and Pacific.

Chart 2 : Poverty Headcount by Region（2012）

	Poverty Group (million)	Total Population (million)	Poverty Ratio (%)
East Asia & Pacific	250.9	2,010.4	12.48
South Asia	506.8	1,633.2	31.03
Sub-Saharan Africa	413.7	853.6	48.47
Middle East & North Africa	8.0	331.3	2.41
Latin America & Caribbean	32.3	583.9	5.53
Europe & Central Asia	3.2	477.1	0.66
World	1,214.8	5,889.4	20.63

（Source） Compiled by the IIMA based on the site on Poverty and Equity Data of the World Bank

As to the expenditures of these extreme poverty groups, judging from the actual condition for living on less than $1.25 a day, it is estimated that most of their money is consumed on food that is essential for survival. Actually, Eswaran, M. and Kotwal, A. (1994) estimate in their book on India's development policies that poverty group, which account for 20% of the population, spend only about 15% on things other than food[1]. Although they have a potential demand for clothing, housing, fuels, transportation and others, they cannot realize most of their demand as expenditure. It is also imagined that there are not a few households whose income is too small to allow them to take enough foods necessary even for sustaining their health.

3. Desirable order of development of industry in developing countries

Next, I would like to consider the desirable order or sequence of industry development in my targeted countries, i.e., low- and some lower-middle-income countries.

（1） The order of development of agriculture and industry in developing countries

In the low-income and some lower-middle-income countries, a majority of labor force, including the poor people, is working in the agriculture sector and most of the workers in agriculture sector belong to low-income group including those categorized as poor. Generally, an improvement of productivity in agriculture will benefit all of the population through a decrease in expenditure on food in line with the fall of price of agricultural products. On the other hand, in the case when the export of industrial products accounts for only a small fraction of the economy and productivity of agriculture does not improve, development of industrial sector will have a smaller impact on the economic welfare for the poor from the reasons described below.[2]

First, as I noted above, in an economy where the poor people have to spend almost all of their income on food, their expenditure on industrial products is limited and small and therefore functional improvement of industrial products, increase of their variety of items, and price falls deliver little or no benefit to the poverty group. Second, workers in the industrial sector usually earn higher level of income and most likely have taken in enough food. So even if their income rises, they will not largely increase their expenditure on the agricultural products, which will limit the increase of demand for the agricultural products that are the main source of income for the poor. Third, the shift of labor from agriculture to industry is very slow. The income of

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[1] Eswaran, M. and Kotwal, A. (1994), *Why Poverty Persists in India*, Oxford University Press. Japanese edition was translated by Keizo Nagatani, and published by Nihon Hyoron-sha in 2000.

[2] It is not easy for a country in early stage of development to increase exports of its industrial products after winning in the fierce competition with the other competitors to broaden the market. The assumption that the export of industrial products has a smaller share in the economy will apply to many developing countries excluding former China, Vietnam and some other countries in East Asia.

agricultural workers that include poverty group will not be affected directly by the development of the industrial sector, but in ordinary circumstances, their income will grow by leaving the agricultural sector to take a job in the industrial sector. However, if the productivity in agriculture remains low and capacity to produce agricultural products does not increase, workers cannot leave the agricultural sector since the same amount of input of labor is required in agricultural sector to satisfy a certain amount of domestic demand for agricultural products. Therefore, looking at the country as a whole, even if industrial sector is established, without enhancing the productivity in agricultural sector, the industrial sector may face difficulty in operation because of labor constraint. So the development of industry in an environment of undeveloped agricultural sector with low productivity will not only fail to benefit the poverty group but also will create a limit by itself. In order to have a well-established and developed industrial sector, it is required that the agricultural sector fully develops with an improved productivity to the level that enables many of the poor people in agricultural sector to free themselves from poverty.

(2) Adam Smith's view on economic development and experience of Western Europe up to the 18th century

It was Adam Smith that for the first time theorized as an economist a desirable order of development of the economy that included agriculture and industry. According to Todaro, M.P. and Smith, S.C. (2008) who specialized in development economics, Adam Smith (hereinafter referred to Smith) was the first economist in development economics as ever and his book "*An Inquiry into the Nature and Causes of the Wealth of Nations"*, issued in 1776, was the first academic literature in the world that dealt with the development economics[3] .

Smith wrote in the first chapter of Book III of his "*Wealth of Nations"* that "according to the natural course of things, the greater part of the capital of every growing society is, first directed to agriculture, afterwards to manufactures, and last of all to foreign commerce" and said that "this order of things is so natural that in every society that had any territory it has always been in some degree observed". He gave the reasons that agriculture produces food that is indispensable for human subsistence and that this order of development of industry is the best pattern to increase jobs for workers in the quickest way.

The process that an economy develops in this order is as follows. In the early phase of development, agriculture sector produces only products that are necessary for subsistence, but as the productivity increases through an improvement of land use and others, surplus agricultural

[3] Todaro, M.P. and Smith, S.C. (2008), Economic Development, tenth edition, Prentice Hall. Translated edition by Pearson Kirihara, OCDI Economic Development Study Group, 2010

products can be produced and an early type of industry is formed by using that surplus as foods and raw materials. The industrial sector then produces and provides daily necessities as well as tools and machines for agricultural use to agricultural sector. Productivity improves in agricultural sector through the use of tools and machines while in industrial sector through division of labor, and this increases the production of both sectors, thus raising the income of laborers. As the supply of food, daily necessities and other industrial goods increase to be provided broadly among the people, domestic commerce will increasingly develop and finally enable some of its agricultural and industrial products to be exported abroad, stimulating foreign trade.

However, over the middle of the 18^{th} century that Smith concentrated his investigation, namely, prior to the industrial revolution, the economies in Europe did not necessarily actually follow the development of this order. According to Smith, after the collapse of Western Roman Empire, barbarian invasions and successive despoliations disrupted the commerce that had connected towns with agricultural communities, and when at last the confusions were settled both industry and commerce had experienced the deepest decline. As the lands, the base of agriculture, had been largely occupied by large land owners, farmlands became a major target for defense and despoliation by the land owners and had lost its role for cultivation. As the divide of farmlands led to the lower defense capability, there continued a situation where the farmlands were owned and managed by the feudal lords who had no intention nor leeway for farmland improvement.

In the 11^{th} to 13^{th} centuries, autonomous cities began to be formed in various regions of Europe, and they prospered as a center of commerce. As the productivity of agricultural sector remained relatively low with less surplus products, the rural areas of the cities were not in a position to supply the urban areas with sufficient products, while the cities, as they were mostly located at the key junctions of transportation along the rivers and coastal areas, enabled merchants to bring in products from abroad and intermediate them among the remote places, thus making profits from trades. As the trade developed and demand increased for foreign goods, some of the merchants in the cities began to process the materials they had brought back from abroad and sell the products in the neighborhood and even to export them abroad. In this way emerged an industry based on the development of foreign trade, which helped the cities to further prosper.

Prosperity of cities meant the provision of markets to the agriculture sector, which promoted the land improvement and the expansion of cultivated land. On the other hand, successful merchants in the cities purchased farmlands and earnestly administered as a new landowner with entrepreneurship, replacing the former large land owners. They created a system where the capital was put in for the improvement of land, and a rising productivity in the agricultural sector enabled expanded production of agricultural goods. This process is contrary to the natural development course, with the economy developing rather around the commerce. What made this possible was attributable to the military power and nautical technology that supported the procurement capability of Western nations. The industrial structure and production technology of these nations rather resemble to those of the present developing countries but they were the world's most advanced countries in political, military and diplomatic aspects in those days.

When the capacity of agriculture started to expand, then the industrial sector further increased its production capacity on a natural course, and it prospered first in the commercial cities located along the coastal areas and rivers, gradually expanding the supply of industrial products to the agricultural areas nearby. The industrial sector then added value of the products and exported them to distance places in a broader region. Thus, the economic development, which initially took the reverse order of "natural course "of Smith, namely, starting from commerce (foreign trade) to industry and then agriculture, began to return to the natural order of from agriculture to industry and then commerce (foreign trade) triggered by the improved productivity of agriculture.

Later England (refers to England and Scotland) succeeded in industrial revolution, and it is pointed out as one of the reasons for it that the improvement of agricultural productivity (agricultural revolution) was accomplished prior to the industrial revolution. Towards the end of 17th century, industry and commerce developed rapidly in England, and feudal lords tried to establish large sized farmlands (in a move of so-called Enclosure) by introducing modern agricultural techniques, which greatly enhanced the productivity of agriculture. As a result, the agriculture of England became far more productive than that in France and other neighboring nations. As of 1750 when both countries achieved self-sufficiency of food, about 60% of population worked in the agricultural sector in France while in England agricultural workers accounted for only 45% of population. (Eswaran, M. and Kotwal, A. (1994)) In England, laborers who lost their jobs in agricultural sector due to the Enclosure and enhanced productivity found one in the industrial sector in the urban areas, thus filled the factory labor demand.

（3） Development order of industrial Sector

Among the industrial lines of business to be developed after an increased production capacity of agriculture, prioritized areas are light industry such as food, fabric and sundries. These lines of business produce daily necessities and cover expenditures of a broad range of income class. As they are labor intensive, they create many jobs, too. In the developing countries where the average level of education is not so high, labor intensive light industry that creates many simple labors is indispensable to facilitate a smooth shift of unskilled workers from agricultural to industrial sector.

As pointed out by Otsuka (2014)and others, to develop the line of industry that collectively uses cheap and unskilled workers is the best way for the low-income countries and some of the lower-middle-income countries which have scarce capital both in terms of real and human resources and insufficient infrastructure to compete with other countries through trades. Within the industrial sector, therefore, it is a natural order of development for the low-income and some of the lower-middle-income countries to realize the development in the order starting from labor intensive industry, then promoting capital intensive industry and finally developing knowledge intensive industry.

Actually, in the English economy after the industrial revolution, heavy industry such as steel and machinery developed together with the construction of railroad, following the development of cotton industry among the light industry. The US and Germany which succeeded in their industrialization after England also followed the natural order of development from light industry to heavy industry and railroad construction, although the time of transition was much shorter. Also the order of development of industry has been the same in other industrialized countries such as Japan, China, and some of the other newly industrialized economies in East Asia.

4. Conclusion～Lessons to the economic and industrial development in South Asia

In contrast to England which succeeded in its industrialization for the first time in the world, the other countries in Europe and the US, Japan, and other emerging countries in East Asia could take advantage of a follower in introducing the technologies and systems that were invented and established in the front-line country. Thus they could save the time and the cost that would have been spent in a trial and error for the invention of original technologies and designing of original systems.

Looking at Asia as a whole, per capita GDP has reached the level of higher middle-income countries, as a barometer of economic development, and poverty ratio is low in China that has been raising its presence among the emerging economies and Malaysia and Thailand among the advanced ASEAN countries, let alone in Japan and Asia NIES that succeeded in higher economic growth through the industrialization (Chart 3). Indonesia and the Philippines among the advanced ASEAN countries, and Vietnam among the less developed ASEAN countries have been following the heels of the preceding countries, albeit in a varied degree of economic development and poverty conditions.

Chart 3: Poverty ratio, Per Capita GDP, and Export ratio in Asia

	Poverty Ratio				Per Capita GDP	Export ratio %
	Ratio of people living on less than $1.25 a day in population		Ratio of people living on less than $2 a day in population		2013	2012
	%	Survey Year	%	Survey Year		
Malaysia	0.0	2009	n.a.		10538	85
Thailand	0.3	2010	3.5	2010	5779	75
China	6.3	2011	18.6	2011	6807	27
Indonesia	16.2	2011	43.3	2011	3475	24
Philippines	19.0	2012	41.7	2012	2765	31
Cambodia	10.1	2011	41.3	2011	1007	63
Lao PDR	30.3	2012	62.0	2012	1661	39
Myanmar	n.a.		n.a.		n.a.	n.a.
Viet Nam	2.4	2012	12.5	2012	1911	80
Bangladesh	43.3	2010	76.5	2010	958	20
India	23.6	2012	59.2	2012	1499	24
Nepal	23.7	2010	56.0	2010	694	10
Pakistan	12.7	2011	50.7	2011	1275	12
Sri Lanka	4.1	2010	23.9	2010	3280	23

（Source） Compiled by the IIMA based on "World Development Indicators" of the World Bank

However, in countries in South Asia, including India, income levels are generally still low and poverty ratios are relatively high (Chart 3). Per capita income ranges from $600 to $1500 in four countries in South Asia excluding Sri Lanka, and these countries fall in the category of typical low-and lower-middle-income countries which this article tries to cover. Their poverty ratios at international poverty lines of below $1.25 a day remain at 10% to 20% except for Bangladesh, but the share in the population of "average poor" that live below $2 a day accounts for more than 50% in all of these four countries. As the export share in the economy is also relatively low in these countries, it is necessary, as I pointed out earlier, that they improve the productivity of agriculture sector to a full extent before they aim at full-scale industrialization of the economy.

In the present world where many advanced and emerging countries are competing one another, the low-and lower-middle-income countries can avail themselves various kinds of technologies and institutions to make use of from the leading countries and they can try to promote any industries and businesses they want if they can find a way of financing. However, if they take a wrong sequence, they may encumber not only the development of the kind of industry they intend to promote but also the development of the whole economy. Without having a roving, these countries should try to foster their industry and business in the "natural course" of sequence and this is what Adam Smith has been sounding an alarm bell on the economic development from the time of over 200 years ago.

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