

**A HIGH-TECH, LOW EMPLOYMENT FUTURE IN THE  
MANUFACTURING SECTOR – A CORRECT CONCLUSION?**

**A paper contributed by  
Asif Ibrahim  
Director, Dhaka Chamber of Commerce and Industry  
Managing Director, Newage Garments Ltd  
Bangladesh**

**1. Is the combination of (i) the “Chinese monopoly” on the low cost manufacturing and (ii) the increased automation with manufacturing industries likely to limit the scope available to developing and transition economies for reducing poverty through employment generation in the manufacturing sector?**

Automation usually implies an entrepreneur's effort to cut down cost in the long run by leaning more towards the fixed costs of owning machineries rather than generating more variable costs in human resource employment. Having said this, automation and employment generation then stand at paradoxical ends of the factors of production. Can we not, thus, easily surmise from this that automation in the manufacturing industry may help reduce poverty in a country such as ours through increased production, but probably not employment generation?

A country such as Bangladesh, developing and with one abundant source of production being its labor force, may not be able to sustain the blow that may be rendered by flooding its manufacturing industry with high-tech machineries. Such a step would mean that manual labor would be replaced by low-cost but machine-oriented methods of production. Yet, it is not only our labor market that would suffer if manufacturers of our country begin following the trends set by the “Chinese monopoly” on low-cost FMCG. Jute, one of Bangladesh's crowning glories in the export sector has suffered precisely in the face of such changes. The rise of synthetic substitutes like polypropylene is now favorites to manufacturers. Hence, this has caused the jobs of over 25 million of the poorest Bangladeshis.

Yet, however, if chosen carefully the type of technology we use and the industries we employ them in, this paradox may be hoodwinked into spawning more employment opportunities for our extensive labor force. It is simply a matter of how we employ our capital resources that is the dependant factor. For example, Malaysia did not forgo its extensive labor force in hopes of generating increased GDP when it welcomed foreign investors to layout their high-tech manufacturing plants in its terrains. It simply adjusted its labor force to comply with the changing needs of the world market. As early as the year 1998, its manufacturing sector proved to be the second largest employer of labor, providing opportunities to 27.5% of the total labor force. The Malaysian government helped mobilize its labor force towards more advanced technologies through vocational training and development in skills-oriented tasks. Gone were the days of British settlement, when officers of the East India Company sought to make “the sons of farmers better farmers”. It has been over a decade now that Sony has registered Malaysia as its base for electronic manufacturing and Malaysian labor workers as their assembly line.

Left on our own, a high-tech industry may not be so financially feasible for a country of our economic stability (or a lack thereof). Frankly, our banks and investors alike have a low loaning and borrowing tendency due to the volatility of our economy. A politically hostile environment where each political party is too preoccupied with overbalancing the position of the other to sense the magnanimity of the depravity of its people to lay out stable monetary and fiscal policies has made its populace wary of its economic health and risk-averse. The ruling government can easily, in attempt to get on the good book of its civil employees, offer a pay rise. However, supply of goods cannot increase as easily to accommodate people's increased purchasing power, leading to an unparalleled rise in inflation. From 3.1% in 2002, inflation has risen to 5.6% in 2003, 6.0% in 2004, and roughly 6.7% in 2005. The GDP growth rate of the past five years also account for our economies fluctuating nature. The growth rate was 5.3 percent in 2000-01, it went down to 4.4 percent in the following year, and then it increased in the successive two years and stood at 6.3 percent in 2003-04, but again fell down to 5.4 percent in the last fiscal year. Thus, how any entrepreneur would muster the confidence to bring in the machineries required to revamp the industry is questionable.

The only way out would be through attracting higher level of FDI. As the local manufacturers do not have the financial backings necessary to import too many varieties of high-tech machineries or maintain them once they are here, a smarter option would be to encourage major foreign companies to invest in our labor pool. Recent trend towards global integration has made this very

possible. The unemployment rate for skilled labors with higher degrees in our country is stupendous. If companies such as GM, Motorola and Samsung showed as much interest in our country as they did in China, much of our unemployment problems would solve themselves. Providing government imposed incentives such as lowering taxes in certain manufacturing industry may be the trick to luring such big names into our country.

Collectivizing manufacturing entrepreneurs in various industries may also be attempted. It has happened numerous times in the service industry, which generates over a quarter of employment opportunities in our country. Banks have known to merge to pool their resources to provide better services to their customers, and thus, generate more profit for themselves. If major manufacturing bodies, such as Otobi and Hatil, were to merge and bring their financial resources together, they may be able to distribute their employment opportunities throughout Bangladesh by establishing plants and warehouses in cities other than the typical Dhaka. Vertical mergers such as between flourmills and bakeries such as Hawk and Nabisco can also reduce land, capital and entrepreneurial costs to expend more into labor factors. Basically, it is collectivization through either acquisition of smaller firms by larger names or mergers between SMEs that is required here.

Taking other Asian economies that have been able to move itself out of the tag of being third world nations to at least second world nations into consideration, the general trend has been that the government played an active role in the mobilization of labor and other resources in every sector from agriculture to manufacture. For example, countries such as India, Malaysia and Singapore have shown a penchant for taking on one industry at a time in hand to improve. Singapore, when jumping the bandwagon for IT expansion, provided IT training institutes to attend for its student body when they failed to pass their 'O' level examinations. For India, the effort expended was even greater, launching a full-fledged organization of making Bangalore the Silicon Valley of Asian subcontinent. This is a "non-possibility" for our country. Being rated as one of the most corrupt nations of the world, members of our government body would show the general tendency of incrementing more wealth and power for the bureaucratic body than any industry of actual concern.

To control the problem imposed by the political setbacks of our nation, privatization maybe sought. The capitalistic nature of private firms is bound to add value to the GDP growth rate. However, in order to ensure that privatization heads towards a more effective pattern rather than lingering on the more superficial sectors before developing basic foundation industries, the government needs to guide the trend through proper monetary and fiscal policies. For example, more subsidies and reduction of corporate taxes can be implanted towards agricultural and hardware industries than suppose entertainment industry. However we look at it, certain level of government intervention towards the positive is necessary to produce any corporal changes towards GDP growth and employment generation.

## ***2. In addition to employment generation, how else can the export-oriented manufacturing sector contribute to poverty reduction?***

Concentration on the manufacturing industry would have to mean some extent of automation to make the effort profitable in the macroeconomic level. Recent wage crisis in the RMG sector should be noted here. The average garment worker currently is paid a salary of Taka 900 but is demanding a figure of Taka 3000. The industry entrepreneurs claim that they can raise the bar to only Taka 1500 while protecting their own interest as well, a declaration that has caused quite an unrest in the garments' sector. A need to avoid hassles such as these is precisely why most entrepreneurs prefer to lean towards low-labor force employment methods of production. Yet, in developing countries, the tendency has been that labor cost is lower than capital cost (the reason why so many major brands out source to nations such as Vietnam and Cambodia). And as it is only China that provides a making cost quotation lower than Bangladesh, at the moment,

Bangladeshi garments companies can afford to raise the wages without any loss of orders from its foreign correspondents.

Assuming that Bangladesh's current economy is at the status of where China's economy was some twenty years ago, we might surmise the steps to be taken for our country and procedures she may undergo before showing actual results. In 1985, when agriculture accounted for about 50% of Bangladesh's GDP and 82% of its population lived in the rural areas, China employed 63% of its labor force in its agricultural sector though contributing only 33% to its GNP; on the other hand, its manufacturing industry employed only 17% of its labor force but its proportion of GNP was some 46% whereas in Bangladesh, manufacture contributed to only 10% of her GDP. From China's statistic, which is the stronger economy even today, we may assume that increased GDP, and not labor employment, led to the gross income of her economy. At present, however, agriculture sector has declined considerably in its share in Bangladesh's economic structure. In the year 2005, agricultural sector came down to only 21.9% of the economy, whereas industry and services sectors increased to 28.4% and 51.4%, respectively.

However, it does not necessarily mean that with increased production, poverty is coincidentally lifted from a nation. There is a slight matter of income distribution to be considered here. As late as the year 2000, the percentage of income allocated to the richest 20% of the population was 42.8% of the total GDP, and allocated to the 20% of the poorest Bangladeshis were a mere 8.7% of the total GDP. One of the major reasons for this disparity is the fact that most of the economic transaction takes place in a very small region of Bangladesh, surrounding the capital. Thus, if Bangladesh's GNP should increase, we must seek to ensure that GNP per capita is, accordingly, well distributed. This can be done if manufacturing plants are distributed throughout Bangladesh and not just in and around Dhaka City. In order to maneuver the building up of newer industrial hubs, government can facilitate the construction of infrastructure and housing in areas away from the capital and surrounding the regions in which the newer manufacturing facilities are set up. So that poverty is not removed from a small region only.

When the nation realizes a greater amount of its GNP potential, relative poverty can be reduced also in terms of health and literacy. Better hospitals and academic institutes can be created, and again, not only in Dhaka City. People's relative standard of living can be thus improved greatly. Moreover, if export-oriented production were to be emphasized, then opening up of vocational training centers would mean more people would be better suitable to meet the changing needs of the world community. We may also see to it that government is equally able to get itself out of deficit so as to employ any surplus in its balance of payment to improve public facilities. For example, a major problem throughout Bangladesh's history has been its inability to create and deliver enough energy sources and the necessity to impose electricity load-sheds on its people. With a surplus, money can be employed in improving energy manufacture so as to eradicate this problem and improve people's standard of living.

Of course, if we turn to low-cost production, it can mean that the market would have a greater supply of FMCG. When aggregate supply of products are higher than aggregate demand, the price is bound to decrease, making the inflation go down and providing possibilities for foreign investors to venture into our nation. Meanwhile, also ensuring that surplus can be sold abroad, thus, increasing the GNP of Bangladesh.

**3. *What are the high employment, export-oriented manufacturing sectors that have a future for developing/transition economies and how can competitive advantage be sustained, while maintaining the sector's contribution to poverty alleviation?***

While concentrating on the industry sector, what we are forgetting is the sector upon which our nation had been dependent for so long. Bangladesh's agriculture should not be disregarded so easily as a non-profitable venture. Indeed, there is still room for export-oriented foreign income where labor can also be adequately employed. In fisheries, for example, shrimp export has shown to be a very lucrative business in recent years. Between 1990 and 2001, the value of Bangladeshi shrimps has risen from US\$6 per Kg to US\$12 per Kg (with a dip in prices during the EU ban period in 1997-1998). That is doubling the price in just a decade. In fact, some exporters are now recording the price to be at US\$16 per Kg, again showing a steady rise in value of shrimp in our country. About 1.3 million people are currently employed by the frozen shrimp industry and the greater processing takes place in Khulna. Moreover, as it is now common usage for farmers to use their paddy fields in off-seasons for the cultivation of shrimps, it can be the same people who cultivate rice during the rest of the year, which may decrease the unemployment rate that emerges through seasonal cycle.

Collectivization in the agricultural sector may also be a trick that our local industrial heads may borrow from countries such as Russia and China. Local institutes such as the Sheikh Mujibur Rahman Agricultural University has the idea straight. They are basically an R&D facility that provides training and employment opportunities in the farming business. Their research facility seeks to better the cultivation process for various forms of vegetation in Bangladesh as well as introduce local farmers to the newer opportunities in this field. For example, mushroom, which basically multiplies best if left alone, have been introduced in Bangladeshi farming for less than a decade and can be produced for exportation if pursued vigorously.

What more, this research organization even maintains a closed-door community system where residential quarters are made for the employees and their families as well as students. For further convenience of the employees, lower level schooling opportunities are also offered for employee children. At the end of the management chain, whatever surplus they opportune from their cultivation in process, they sell to the market. If more and more cooperative farming establishments like this are distributed throughout Bangladesh, there maybe enough surplus to export overseas. And perhaps Bangladesh may then venture into the canned food industry as well because the fact remains that developing countries can often do well to export food products because they can be produced at low cost, given that basic foreign standards of approval are met through appropriate technologies and sanitation lookouts. Such methods of amalgamating brain and brawn power should be employed in every industry.

Manufacturers of man-made goods would do well to adopt the example set by Sheikh Mujibur Rahman Agricultural University. By collectivizing the organizational bodies of various heads of each industry, the resulting conglomerates may take the opportunities of lowering capital costs by transferring technologies within the industry. Technology transfer can be achieved within an organization, across industry, amongst related industries, as well as to governmental bodies. As such, if accumulation of brain and brawn is achieved intelligently, conglomerates can afford to move their manufacturing facilities away from Dhaka City, so as to afford better distributional of income geographically. For example, ceramics plants in Maymanshingha or various crafts in accordance to the region those are popular for their manufacture. Such manufacturing firms may easily then bring about new labor communities by offering job opportunities with the help of the government in housing development and road construction as well opportunities for vocational training in that particular sector, generating further employment. Moreover, if smartly organized, then transportation cost can also be outwitted. For example, Chittagong and Khulna, where wood is abundant, should be the grounds for manufacturing furniture.

Items such as furniture, crafts, and other FMCG might also be a sector to be revamped with more advanced technologies. These industries may be distinguished into two facts: automated goods

and labor-intensive alike. For example, low cost manufacturing through automation maybe employed to produce large quantity of furniture to be sold to the locals at low price, with surpluses rearing for exportation. But as handicrafts are very well sought abroad, there may be a labor-intensive sect of furniture makers that produce handmade furniture to concentrate on exporting their products to increase our GNP. This way, poverty alleviation maybe induced both by increasing production and generating employment. Such efforts may be employed in other sectors such as crafts and garments too. For example, pottery, jewelry, glass bangles, art are sectors that we have not yet fully exploited in the export world.

Another industry that Bangladesh can profit from if ventured into extensively would be the exportation of granite and other construction material rocks that are plentiful in Sylhet and its surrounding regions. And while we are on the subject of construction, ceramics industry should also be exploited towards exportation. The tiles and bricks production in Bangladesh is relatively stable and can be further developed. As such, it would then require a larger manpower to carry on the various stages of setting up and burning the items. If the finished good could be then exported to countries such as Malaysia and Singapore, where ceramics is highly popular, then again Bangladesh may increase its gross national income.

And why should we forget the crowning glory of Bangladesh's export history? As late as the years 2001-02, the various jute-manufacturing plants produced almost 293000 tons of jute products worth over US\$ 244,000,000. Yet, today, this is a dwindling sector. If the market is not buying the old fashioned items such as bags and canvases, then Bangladesh should develop market for carpet items. Creating a carpet industry with a competing nature against those of Persia may be the key. Especially, if the carpets are hand-woven, then they should receive a greater amount of positive response in distant western nations, where such depiction of rich Asian culture is hard-come-by. And as hand-woven would mean requiring a large labor pool, jute items would be just the ticket.

In the land of the farmers, we really should not forget by-products such as fertilizers and leather. Although, currently Bangladesh is not producing fertilizers even sufficient for herself (in 2003, she had to import US\$ 93000000 worth of fertilizers), with four plants, she is able to produce 117000 tones of Urea and 1250000 tons of Ammonium Sulphate alone per year. If the number of plants is increased, then Bangladesh can easily get out of importing fertilizers and begin exporting them. In fact, if Bangladesh sought to produce artificial fertilizers, which is now very popular for domestic vegetation growth overseas, perhaps more plants may be opened to facilitate the many chemists graduating from Dhaka University each year. In the Asian continent, at least, exporting fertilizers would turn out to be very lucrative venture.

Leather, by no means, should be neglected at this point. The Bangladesh leather industry is fairing well and is most active post-Aidul Azah period of the year (about 72.6 lakh pieces of skin and hide can be obtained from cattle, 1.2 lakh from buffalo, and 4.9 lakh from sheep/goat, amounting to 44% of leather contribution throughout the year). A total of one crore and 65 lakh pieces hides and skin are produced every year in our country and only 2.75 crore square feet is consumed for domestic purpose. The rest is exported as crust finished leather and various products originated from leather. Moreover, Bangladesh leather industry has the advantages of low labor cost, low setup cost; international quality leather can be made available at low prices locally, as well as duty drawbacks in many areas.

Bangladesh may follow the examples of countries such as China and Malaysia and go into developing its electronics and software industries. In recent years, a large pool of software engineers have been brought up in our country, what with our governments effort to improve its computer industry by levying 0% tariff on computer imports and subsidizing tertiary education in computer related courses. What Bangladesh may do is have foreign investors outsource their resources to Bangladesh and employ our labor force in such assembly lines as electronics and software manufacturing, somewhere along the lines of what they have done in the garments industry.

In China, foreign firms have gone to the extent of not only financing manufacturing software plants, but multinational firms such as Nokia, Microsoft, GM, Motorola, and Samsung have established over 100 R&D centers as well. That should require a huge labor force to maintain. Considering the fact that Bangladeshis make very good engineers and has always shown high technological potential, this would be just the industry to tap into. The trend has been for Bangladeshis to imitate whatever technological consumer good that arrives as fast as possible and then to sell it at a cheaper price to locals. If this ingenuity was to be generated towards a more legal and record-able output, then the process of poverty alleviation could be quickened. We already have companies such as Philips, Siemens, and Nokia investing in our country on a small scale; now we just need to make them instigate stable foundations. And that can be done by providing vocational training centers, and that is where governmental efforts come in.

But if we are talking of increasing our GNP through exporting, what better to manufacture than labor itself. Service industry contributes to over 51% of the nation's GDP. With proper vocational training centers such as polytechnics to concentrate on careers like as nursing, various forms of engineering, or hotel and tourism management, we can produce a labor force with direction and discipline, which we can then flood the foreign market with. Currently, lower level manual labor workers in the fields of construction and building jobs are what Bangladesh is ample of for exporting. The wheels of sending Bangladeshi construction workers to Malaysia was set in 1994, when the government of Malaysia agreed to allow up to 50,000 workers per year to be imported into their country. The Middle East is another section of the world where we supply much labor. The fact is that, in today's world of globalization, we are dependent on taking into account foreign needs. And the world is increasingly investing into services sectors. If the world needs nurses, we should provide nurses, and if the world wants to be waited upon, we should supply waiters. But to increase the world's demand for our nurses and waiters, we have to ensure they are at top of the world's standard chart. And therefore, we need polytechnics.

#### ***4. What programs have individual countries introduced that have increased the export-oriented manufacturing sector's contribution to poverty reduction and how has this contribution been verified?***

Perhaps, as one of the industrial heads of the world today, it is China's accomplishments that should be mentioned first. The road to economic independence has not been easy by any means, it having undergone many political upheavals for the very specific reason of eradicating economic inequality from the country, uprooting and dismantling the government's whole structure before replacing it with a Communist one. And, although Communism soon gave its way to its less extreme cousin, Socialism, so as to incorporate features of foreign cooperation to increase economic growth, the fact remains that state controlled economy was the gateway to China's road to success.

Interestingly, although farming was the main source of employment generation even in the late 1980s, it was not this sector that contributed to her economic growth. It was an intelligent move on the government's part to keep most of the working population (63%) occupied in what they know best and to at least ensure that the country produced at a self-sufficient level, so that it could concentrate its GNP growing effort in the export oriented sectors. Nevertheless, cooperative farming did ensure that the country produced enough to feed itself. The early stage of the Socialist China's economy (before 1979) saw the works of the people's commune, where each commune comprised of 30,000 members, 16 production brigades, 7 production teams to each brigade, and so on. The production teams were the basic agricultural collective units that corresponded to small villages who worked together to harvest a certain one or few types of crops per year. This crop would then be handed over to the state to be redistributed.

The system had bureaucratic elements to it, but for the most part, it ensured guidance and discipline in the production system. As each commune was responsible for the production of its

own crop and had a benchmark set up for them as to how much to produce, the country could at least come out of the need to import food. By 1979, however, people's commune had given way to the "responsibility system", which took a more capitalistic view of things and by 1984, 98% of the old production teams had adopted the new system. It allowed each cooperative unit to look after itself as a profit-oriented organization would, keeping trade and competition foremost in its activities planning, whereby after the harvest of a certain amount of crop, which was signed over to the village officials, any surplus belonged to the family to be either consumed or sold. Moreover, because cooperative farming allowed greater cost efficiency in terms of land labor and entrepreneur, these joint farms could expend its finances on advancing farming technologies to eventually increase production to enable its move into the export business.

Malaysia, similarly had concentrated on developing its agriculture in its initial stage when under the East India Company. However, the British officials had seen to it that the nation's understood export-manufacture before it left. Because of its climatic advantage, Malaysia began cultivating rubber and teak from a very early stage. By the 1920s, her tin industry had shown equal, if not greater, signs of flourishing in the export business. Malaysia, on her own, however, has brought about great changes in all its sectors. It began by employing any unskilled labor towards infrastructure and housing constructions whenever there seemed a high rate of unemployment in the country.

Since 1995, however, the unemployment rate has been consistent to a mere 2.5%. In fact, in late 1996, the total of unfilled vacancies was reported to be increased by 13.7% (38,076 vacancies). However, the government did not see this as a condition to be overlooked, comprehending correctly that the resultant vacancies were due to shortage of skilled labors and not labor force itself. The manufacturing sector has been the second largest for employment, accounting for 27.5% of total employment in 1997, which was an increase of 129,800 person compared to 26.7% in 1996, showing a growth rate of about 3%. There has been a consistent growth since, which is still saying something since Malaysia opportune a growth of at least 3.1% jobs each year in its service sector (through its tourism policies in hotels, transport, communication and retail trades) generating work for at least 47.5% of its labor force, keeping most of its working population occupied.

But most of the unemployment has been due to the unavailability of skilled labor in the manufacturing sector. In the year 2000, a shortage of 5,250 engineers and technicians and 44,450 skilled and semi-skilled workers occurred, found in industries such as electrical and electronics, information technology, ceramics, chemicals, machinery and engineering, foundry, plastics, textile and wood based industries. The increase of foreign employees (estimated to be 1.7 million) also led Malaysia's labor crisis, as skilled labor of other countries were chosen over local unskilled labor. This trend led to the implementation of the 7<sup>th</sup> Five Years Plan, which emphasized on public and private sectors to increase the employment of local over foreign employees by incorporating female workers into their organizations and also urged to increase the productivity level by upgrading workers' skills through comprehensive exercise on training and retraining.

Private sectors were asked to help government organize in-house training as well as play an important role in the education sector towards human resource development and research and development activities. To encourage greater FDI, government has set up more polytechnics that provide courses in skilled labor manufacturing and implemented a mechanism to relate the increment of wage with level of productivity in all sectors. Since the mid-1990s, companies like Sony have been known to make permanent their manufacturing base in Malaysia. As most of these manufacturing facilities concentrate on assembling of various products, it requires a large labor pool, for which, the Malaysian government has been jointly providing facilities to churn out skilled labor.

Singapore, unlike its mentor nations, however, did not have an abundance of land to employ in agriculture. So she took its largest resource, people, and employed them in the manufacturing



industry. Much of Singapore's economic history has been occupied with export-oriented activities, having been one of the "four dragons" (along with Honk Kong, Taiwan and South Korea) of Asian economy and being the port-of-call for South East Asia. But following a socialist trend like China, (perhaps because the ruling government, PAP consists mostly of Chinese), Singapore has also shown a tendency towards concentrating on developing a few sectors at a time. For example, when the world focused on IT development in the late 1980s, Singapore did not stay long behind in providing IT workers. By the year 1994, the government passed a condition that any student failing to pass their 'O' level examinations would have to take on the opportunities provided by the various IT institutes that the government opened out of its tax revenues or not be enrolled in any further studies. This ensured that students who showed a lack of academic ambition could be employed to bring up Singapore's IT sector. Currently, Creative Blaster, sound software, has the advantage of monopoly over the world.

Most of these fast developing nations, however, rely heavily on FDI. Foreign investment not only allows an inflow of capitals and opportunities for local labors to be employed, but also lends a huge hand towards human resource development. As many foreign companies also invest in research and development, this facilitates the host nation's growth in terms of technologies and skilled labor as well. By 2003, Microsoft alone invested over US\$80 million in Chinese research institutes and another US\$50 million to the creation of a Microsoft Asian Technology Center in Shanghai. Motorola has been one of China's largest source of FDI since 1987 had invested over US\$3.4 billion by 2003, owning to wholly owned subsidiaries, 8 joint ventures and 18 R&D centers. Moreover, local firms that supply to their foreign counterparts receive various types of support other than simply financial assistance. China's ability to conform to the world market and opportune low-cost manufacture in every industry from stationary to garments has made it the breeding ground for more advanced technologies.

While most countries nowadays have shown the tendency towards creating its comparative advantage by guiding its labor force towards specific manufacturing skills, some still make use of the comparative advantage granted them by nature. Thailand is such a nation, which has profited much from producing and exporting leather-based FMCG. Small and medium enterprises comprise 90% of Thai leather industry. The only factor that has been stifling the industries growth has been a lack of fashion expertise. However, the industry has now been encouraged to make use of IT in order to allow fashion designers from Italy, France and other western fashion hubs to communicate orders to local entrepreneurs. Bags, shoes, jackets and other clothing items is only the beginning of various leather items produced in Thailand, and this has been encouraged further by government's policy of OTOP (One Tampon One Product). Thailand has been ranked number six in the world's leather exporters and its 2,750 enterprises employs well over 300,000 workers. Major costs of leather SME are raw materials (59%), salary (24%), and miscellaneous (17%). Various international fairs instigated by the government and leather producing firms in recent years have contributed to its image in the world market and the subsequent demand that has followed.

***5. In conclusion, does export-oriented manufacturing represent a logical solution to poverty reduction for the majority of developing countries, and least developed countries in particular?***

Viewing its most basic factors, high-tech manufacturing is just not feasible for a country such as Bangladesh simply for its financial incapability. First of all, local entrepreneurs may simply not be able to afford advanced technologies to incorporate into their methods of production. Unawareness of technology life cycle may also make entrepreneurs averse to adopting new technologies. Moreover, lack of in-house R&D capabilities and skilled supervisors to monitor the machines can mean that even if newer technologies are adopted, proper usage or maintenance is not guaranteed. Thus, it is less likely that manufacturing heads of our country would suddenly spring up and all start adopting more advanced machineries in their respective fields. However, if

granted that proper direction will be maintained, then it is high time that even a country at the poverty level of Bangladesh should enter into an export-intensive economy.

Most of the nations that have been able to move out of the underdeveloped label of economy have certain elements in common that have ensured their success. For one, FDI from outsourcing companies such as Microsoft, Nike, Sony, etc. have proven to be high source of employment generation. This is an important aspect as labor is an abundant resource for these countries. Secondly, government and the private sector have both delegated efforts towards mobilizing their labor force according to world market demand through specialized vocational schools and then distributing the skilled labor into their respective job fields. A further advantage has been that these countries did not fall into the trap of concentrating their business efforts in one region only. For these countries, manufacturing facilities are usually distributed in more than one hub, and certainly throughout the country. Finally, the governments of these countries did not try to take on too many tasks at once. Most of these countries have shown tendencies to develop basic sectors such as agriculture and manufacture before entering into services, although in all these countries service now contributes the most to GDP growth. These countries have ensured the industries where they were naturally endowed with comparative advantage flourished before entering into newer grounds to which they were previously unaware. If developing nations such as Bangladesh can adopt the smarter movements of the out-of-danger zone nations and take note of risks that came with the averse, then they would do well.

In the year 2000, the inflow of foreign direct investment (FDI) in Bangladesh was some US\$280 million, whereas in Asia (excluding Middle East) the net total inflow was about US\$71,197 million. That means that FDI inflow for Bangladesh was less than even 1% of FDI circulation in Asia! And let us at least agree that there are not that many nations in the Asian continent for Bangladesh to excuse such dismal statistics. Bangladesh has a high potential for further FDI inflows if it can only improve its image through a more stable political, and thus, economic condition. The RMG sector has proven that if taught, Bangladeshi workers can learn to cooperate and produce with efficiency. Such confidence should be shown in other sectors such as electronics, metallurgical, agricultural production too. The government should activate a vigorous effort to mobilize the labor force to build their skills in various occupations in accordance to world demand as well as distribute the various industries throughout the country so as to ensure more people get a chunk of whatever increased GNP we achieve. Privatization should be maintained so as to ensure that bureaucratic corruption of the state is avoided in production and capitalistic point of view leans on increasing productivity, and the industries should be ventured into with proper short-term planning such as most other nations that have followed the Five Years Policy method. Only then can we sustain the statement that export-oriented manufacture can be a logical solution for underdeveloped countries such as Bangladesh.

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