

Skills and Competitiveness: Can Pakistan Break Out of the Low-level Skills Trap?

RASHID AMJAD

The paper argues that if Pakistan is to survive and prosper under the competitive conditions of the new global economy, then it must move away from its overwhelming dependence on “cottonomics” into more technology- and knowledge-based products where global growth is concentrated. For this to happen, it must break out of the “low-level skills trap”, which is the result of the very low levels of education and skills of its work force. It then poses the question whether the development of a well-educated and skilled labour force is sufficient for the country to graduate from labour-intensive to higher value-added, skill-intensive, technologically advanced sectors. The paper argues that while this is essential, the real challenge is to change the mind-set and develop institutions which recognise the value of investing in people and provide dignity, respect, and a fair deal for working men and women.

INTRODUCTION

The major challenge facing Pakistan is to break out of its overwhelming dependence on “cottonomics” (i.e. the cotton economy) into the knowledge economy, the driving force of economic dynamism in a globalising world. The task should not be underestimated. Despite far reaching structural and economic reforms over the past twenty years, including radical tariff reforms, the Pakistan economy remains heavily dependent on producing and processing cotton. More than 70 percent of its manufactured exports are cotton dependent. Cotton textiles and related goods account for over 20 percent of large scale manufacturing and around 40 percent of total employment. All in all “cottonomics” contributes almost 12 to 15 percent of all national product.

“Cottonomics” has served Pakistan well. The growth of the cotton textile industry in the 1950’s brought Pakistan into the industrial age. Its growth in subsequent years generated jobs in large scale manufacturing and export earnings the much needed foreign exchange to finance imports. In the 1980s it was a major

Rashid Amjad is Director, Policy Planning, Employment Sector, International Labour Organisation, Geneva.

Author’s Note: The views expressed in the paper are the author’s own and do not necessarily represent those of the organisation in which he works.

engine of economic growth as production of raw cotton more than doubled and cotton manufacturing and exports grew at very high rates. After a slow down in the 1990s which hit both production of raw cotton and cotton manufacturing the cotton related economy has shown robust recovery and growth between 2002-2005. After investing heavily in balancing and modernisation to prepare for the post-MFA regime Pakistan has performed satisfactorily in the first 6 months of 2005. Its exports of cotton manufactures have shown a robust increase, its share in the US market exports has increased by around 11 percent¹ but the share in the EU market has fallen by around 16 percent mainly to China.²

The question may well be asked that if “cottonomics” has served Pakistan well why should we not continue on the same growth path. The reason is simple. Most of Pakistan’s cotton exports remain in the low-technology low-value segment of global manufacturing which is not a growing sector of the new global economy. If Pakistan is to survive and prosper under the competitive conditions of the global economy then it must move into more technology and knowledge based products where global growth is concentrated. This is not to say that Pakistan should no longer compete in the global cotton product markets and try to maintain if not increase its share especially in higher value-added products. As a major cotton growing country Pakistan will always strive to be an important player in the global cotton textiles and clothing market. But it alone cannot serve as the engine of growth into the knowledge economy. Pakistan must diversify into new products.

What then has held or holds Pakistan back from breaking out of “cottonomics” into higher value added products as many countries have done notably in East Asia and more recently neighbouring India. There are a number of explanations and factors and it would be impossible to do justice to them all. The basic argument advanced in this paper is that the binding constraint is the education and skills of its work force. Pakistan has for too long remained in a low-level skills trap. If it is to move into the knowledge economy then it must break out of this trap.

The fundamental proposition that this paper advances is that breaking out of this low-skills equilibrium trap is not simply of investing more in education and skills development to improve the very low ranking Pakistan now has in the development of its human resources. This is essential and we examine the weaknesses of our present education but more particularly the training system and how to make the latter both cost effective and demand driven. But this is not sufficient.

The real challenge is to change the mind set and develop institutions which recognises the value of investing in people and provides dignity, respect and a fair deal for working men and women or what we call in the ILO “Decent Work”. This means recognising the basic fundamental rights of working people and creating a

¹Ahmad (2005, p. 3).

²*Financial Times*, Monday, November 28, 2005, p. 3.

conducive environment where the government together with employers and workers jointly strive to develop the skills, productivity and efficiency of the work force and develop the momentum to move into the knowledge economy. The battle has to be won in the minds of the people of Pakistan.

The Rise and Shortcomings of “Cottonomics”

The story of Pakistan’s industrialisation has been often told including by myself. It started with the Korean boom in the early 1950s when prices of raw cotton shot up and commercial traders made huge profits to invest them subsequently in the production of cotton yarn and cloth in the aftermath of the boom when prices fell and import controls were imposed. Papanek’s famous “robber barons”³ or the handful of traders turned industrialists were at the forefront of this industrial revolution as they reaped high profits in a captive domestic market and built up Pakistan’s cotton industry.

“Cottonomics” is also the story of the battle between the industrial classes, initially a small handful but who over the years grew in numbers, who manufactured cotton products and the landlord and farmers who provided “cheap” raw cotton as they were forced to sell it substantially below “world prices” because of the trade and pricing regime imposed by the government. This battle lasted well over four decades and the exact terms of trade between industrialists and farmers fluctuated in response to domestic and external conditions. Economists fuelled the battle lines by arguing that despite its high growth and contribution to GDP at domestic prices the cotton textiles industry was in fact adding “negative value” when inputs and outputs were costed at “world” prices.⁴ In the 1990s this classic battle was fought between the industrial classes represented by the Nawaz Sharif government and the cotton producing belt of Southern Punjab and Sindh represented by Benazir’s Peoples’ Party. Who got a better deal depended very much on which party was in power.

Tariff reforms and removal of price controls as they were implemented over the last ten years or so leveled the playing field and led to the emergence of a more efficient cotton manufacturing sector. Investment in modernisation and balancing of textile machinery increased both productivity and efficiency though it reduced drastically the employment in the textile sector.

On the factory floor skills needed in the early industrialisation process were fairly rudimentary and what was lost in efficiency was made up through keeping wages low during the 1950s and 1960s enforced through labour legislation which decreased considerably the bargaining position of workers.⁵

In the 1980s and 1990s as machinery became more sophisticated the need for better skilled workers especially middle level skills increased. But unfortunately

³Papanek (1967).

⁴Lewis (1969, p. 170).

⁵Khan (1967) and Amjad (1982).

investing in skills development and developing a well trained labour force has always been of low priority for factory owners and managers in the cotton industry. I have not come across any analytical study of the level of investment made by factory owners and managers in the textile industry on skills development or on types of training provided. This summer we had with us in the ILO a senior production manager who has served in the Pakistan textile industry for over four decades including as production manager for one of Pakistan's leading industrial houses in textiles. In discussions and in a brief note written by him it is clear that training of the work force continues to be a very neglected area and except for some rudimentary training there is little systematic upgrading of skills of the workers. Especially at the middle-management level and specialised skills there are shortages and quality problems.

The textile industry is becoming aware of these shortcomings and Pakistan's "Textile Vision 2005" does identify human resources development as one of the key challenges. The Textile Institute of Pakistan set up in Karachi is trying to meet the specialised needs of the industry. An institute on similar lines has been set up by the towel exporters financed and managed by them. This too is helping the industry to meet its specialised skill needs. But there is still a long way to go.

What has been perhaps most damaging in efforts to develop a well trained labour force, and this trend is not just restricted to the textile industry, has been the increasing use of contract workers mainly supplied through outside contractors who pay low wages without any fringe benefits and social protection. There is little incentive in these arrangements, with resulting high labour turnover for either the factory owners, the contractors or for the workers to invest in skills development. To quote a recent article published in the *Pakistan Textile Journal*, "Most of the growers and management of spinning mills by-pass the relevant clauses of the labour legislation by showing their workers as contractual workers, working under a contractor. The response for the payment of wages is thus shifted to the contractor. Nevertheless for all intents and purposes these workers are employees of the respective growers and the spinning mills and receive their wages alongside other (permanent) workers."⁶

Despite these shortcomings Pakistan's textile and clothing industry has been far from stagnant and moribund. In the past few years there have been some notable successes in moving into higher value added segments in the export market notably in bed sheets and linens.

But despite these achievements there are a number of real constraints in relying on "cottonomics" to move Pakistan into the knowledge economy. This in no way implies that Pakistan will not remain a major player in the world textiles industry but that its move into the global economy and to achieve long run

⁶Sheikh, H. R. Social Compliance in Pakistan's Textile Industry. *Pakistan Textile Journal*, April 2004, Karachi.

dynamism requires a major diversification in its present industrial and export structure. Let us examine why such a growth path is both essential and necessary.

Why Pakistan Must Break Out of “Cottonomics”

Sanjay Lall, the eminent Oxford economist, and a friend, who sadly passed away very recently at a relatively young age, summed up Pakistan’s challenge to achieve industrial competitiveness in a study for the Asian Development Bank⁷ with John Weiss in 2004 as follows:

- First, technology-intensive and more sophisticated manufactured exports are the most fast growing and the dynamos of change, in particular, electronics products related to IT. These products enjoy very high income elasticity of demand and have pervasive links through the industrial and technological system. South Asia (including Pakistan) is a weak performer in the competitive stakes. Its world market share remains small and its export structure is dominated by low-technology and low sophisticated products. Since the study covered the period 1990-2000 this description may apply somewhat less to India now but certainly applies to Pakistan.
- Second, Pakistan scores relatively low on export sophistication. Its low score reflects its dominant specialisation in low technology products, and within these, on products that are at the low commodity ends of the sophistication spectrum.
- Third, in textile and clothing exports while Pakistan will continue to be a major player there is no reason to believe that its raw material base will suffice to maintain its strong export position if it does not match its competitors in terms of technology, skills, designs and quality. Pakistan continues to focus on the least sophisticated products. It has a low share of *champions*⁸ and is losing market share in many of the most dynamic global textile and clothing exports.
- And fourth, the picture of the main driver’s of competitiveness in Pakistan—human resources, technological effort, technology inflows and supporting institution—seems clear and consistent, and it is far from encouraging. Pakistan has a weak base for building competitive capabilities, *and it is not improving over time in response to growing international challenges.*

An earlier analysis by the ILO (1998) shown in Table 1 for selected regions and countries between 1970 and 1995 came up with very similar results.

⁷Lall and Weiss (2004).

⁸Defined as dynamic products in which the country is gaining market shares—the best position for an exporter. Again with some significant increases in exports of bed linen in recent years this situation has somewhat improved.

Table 1

<i>Share of Technologically Advanced Goods In Manufacturing Exports</i>						
	1970	1975	1980	1985	1990	1995
<i>East Asia</i>						
South Korea	8.8	13.5	16.9	19.6	32.5	42.6
Singapore	9.4	23.0	25.8	34.3	52.0	68.5
<i>South Asia</i>						
India	4.0	5.6	7.4	6.7	9.2	7.7 (1994)
Pakistan	1.7	2.6	1.7	2.6	2.0	2.0
<i>Latin America</i>						
Brazil	3.7	7.3	10.6	9.3	12.1	12.8
Mexico	14.6	11.1	5.3	19.3	15.3	42.4

Source: M. Pigato, *et al. South Asia's Integration into the World Economy* (Washington, D.C., World Bank, 1997) cited in ILO (1998).

The most impressive performance in increasing the share of technologically advanced goods in manufacturing exports was by the East Asian economies, represented here by South Korea and Singapore. South Asia is clearly the least advanced although in the case of India the share of technologically advanced goods would have shown a relative increase since 1994. Pakistan's share over the entire period has remained at around 2 percent. In Latin America, the figures are marginally higher in the 1990s, and the sudden sharp increase in Mexico is mainly due to the North American Free Trade Agreement (NAFTA) and the resulting increase in operation of US-based MNEs.

“Low-level Skills Trap”⁹

The essential argument being put forward in this paper is that Pakistan's failure to break away from its dependence on low-skills low-technology manufactured exports is because of its very low level of development of its human resources. Employers faced with this lack of educated and skilled work force make do with sub-optimal skills or use sub-optimum processes. The very absence of sufficient skilled labour results in market adjustments which involve acceptance of less efficient methods and lower quality. The need for a trained and skilled work force therefore may not be manifest or explicitly recorded in the job market.

In Pakistan a large part of the labour force is illiterate. In 2003-04 around 48 percent of the population 10 years of age and above was illiterate of which males

⁹The analysis presented in this and next section relies heavily on the ILO's 1998-99 World Employment Report entitled, *Employability in the Global Economy: How Training Matters*, of which I was the principal author.

were 36 percent and females 60 percent. The figure in rural areas was significantly higher at 44 and 73 percent respectively.¹⁰ The mean years of schooling for adults over the age of 15 was 3.9 years compared to 8.5 for the Philippines, 6.5 for Thailand and 5.1 for India.¹¹ One third of the labour force in 2003-04 had an education level below matric.¹² Less than 10 percent of new entrants to the labour force possess any formal training. A major part of industry with the exception of a few multinationals and a few large-scale employers, depends upon informal channels to recruit and train its work force. With the informal apprenticeship system (*ustaad-shagrid*)¹³ has many elements which make it attractive in terms of cheap on-the-job training the cost in terms of quality and productivity is high.

There can be two important manifestations of this “low-skills trap”. The first that the bulk of production and exports remain in low-value added low technology manufactured goods. The second, as the pace of globalisation quickens and both the domestic and external markets are subject to increasing competition, it becomes increasingly difficult for the manufacturing sector built on low-level skills to compete against cheaper and better quality goods. The result is that the share of manufacturing in domestic output remains stagnant or even falls leading to a process of de-industrialisation. Protection against international competition effectively protects “low technical competence” which becomes increasingly difficult to do in the new WTO regime.

Pakistan has been fortunate in that it has not seen the share of its manufacturing sector decline over the years. But its state of “low technical competence” has meant that its share in GDP has risen insignificantly since the late 1960s even though the share in total employment of large scale manufacturing has certainly fallen. This should be compared with the significant increases of 280 percent in Malaysia, 170 percent in the case of Thailand and 120 percent in the case of South Korea.¹⁴ Only in recent years has the share of manufacturing increased in Pakistan from around 14.8 percent in 1999-2000 (it was 16.37 in 1994-95) to 18 percent in 2004-05.¹⁵ A part of the increase was due to the very high growth rate of consumer durables mainly assembly lines behind heavy protection in automobiles and electronic goods.

Another important manifestation of this low-skills trap is that most of the new jobs generated are in the informal economy characterised in most cases by low incomes, low productivity and poor and hazardous working conditions. This is

¹⁰Federal Bureau of Statistics (FBS), *Pakistan Social and Living Measurement Survey 2004-05*. (FBS website).

¹¹Barro-Lee Data set, 2000 cited in Ministry of Industries, Production and Special Initiatives (January 2005, p.10).

¹²FBS, *Labour Force Survey 2003-04* (FBS website).

¹³Teacher-student.

¹⁴Ministry of Finance, *Pakistan Economic Survey 2004-05*, Ministry of Finance Website.

¹⁵*Ibid.*

clearly what has been happening in Pakistan. Over the last ten years the most of the new jobs are created in the informal economy and in recent years its share in non-agriculture employment has increased from 64.6 percent in FY 2002 to 70 percent in FY 2004.¹⁶ The number of decent jobs has clearly fallen over the years.

Before we leave the discussion on the “low skills trap” it may be pertinent to raise the issue of the impact of overseas migration from Pakistan on its ability to move decisively out of this trap. Large scale overseas migration in the 1970s saw large numbers of skilled, semi-skilled and unskilled workers leave for the Middle-East on contract employment. Many of these have had their contracts renewed and stayed on for most of their working lives. More recently migration has been mainly to the US and European countries and this has been more of professionals mainly engineers, doctors and business graduates. Pakistan has found most of its computer and software specialists picked up by firms abroad although the collapse of the dot.com bubble in the late 1990s did make it difficult for Pakistanis at least temporarily to find employment abroad in these professions.

With rising unemployment it would be difficult to argue that migration of skilled workers and professionals has been a binding constraint on the Pakistan economy to break out of the low-level skills trap. But in certain key sectors especially ICT it has been a major constraint in developing the sector.

The Role of Education and Skills in Moving to Higher Value-added and Technologically Advanced Products

Economic growth is a result of the interaction of a number of key variables including human capital. Equally if not at times more important is an enabling environment and supporting policies increasingly associated with the degree of openness to the world economy, especially export orientation, and an overall favourable macro and institutional framework conducive to economic growth.

At the same time there is now increasing evidence to show that the education and skill levels of the workforce are significant determinants to economic growth and raising productivity. Since the mid-1980s a wave of “new” growth theories focus on increasing returns not only in physical but also in human capital. In Romer (1990, 1993) human capital is a key input to both the “use of ideas and the production of ideas”. For developing countries that are not on the technological frontier, larger initial stocks of human capital thus enable them to adapt any new ideas readily and acquire technological capability.

These considerations allow endogenous growth theorists to claim that “... the main engine of growth is the accumulation of human capital ... and the main source of differences in living standards among nations is differences in human capital” (Lucas, 1993, p.290). *The public policy implications of the new growth theories is indeed a presumption in favour of government intervention going beyond*

¹⁶FBS, LFS 2003-04 (FBS Website).

compensating for market failures to more deliberate and aggressive investment in education and training, including a move from low-skill labour-intensive products, to more skill-intensive goods and services, thus attaining rapid, globally competitive growth.

A number of studies point to the positive impact of primary and secondary education on economic growth. A study by Topel (1998) based on data on output per worker and educational attainment for 111 countries over a 30-year period (1960-90) using within-country changes in education and productivity, finds that a one-year increase in average years of schooling for a country's workforce raises output per worker between 5 and 15 percent. In Pakistan it has been shown that districts with a higher literacy level have a higher level of development [SPDC (2003) cited in Hussain (2005)].

The question which we now pose is whether the development of a well-educated and skilled labour force assists countries in graduating from labour-intensive to higher value-added, skill-intensive, technologically advanced sectors? Would Pakistan possess, as Rodrick (1996) suggests "a richer menu of options" if its labour force was more "well-educated and skilled".

The need for developing a well educated and skilled labour force needs to take into account not just the forces of increasing global competitiveness but also the unleashing of rapid technological change in the last decade or so with the "information revolution" at its centre-piece. As the ILO (2001) global report on information technology points out that the full benefits of the new wave of technological change cannot be reaped without an impressive complement of skills. The working of the knowledge economy puts a large premium on acquired education and skills and accelerates the need for continuous learning to keep up with the pace of change. Also as the report points out without the minimal levels of competence in information and communication technologies, developing countries employers and workers may well find themselves excluded from markets and slotted into inferior positions in new production systems. ICT cannot substitute for basic economic development. But it may be essential to support and accelerate it.

The East Asian example is perhaps the most commonly cited in the supporting role played by education and skills in moving into higher value-added and technologically advanced products (Table 1). Comparing progress made in the mean years of schooling for population over 15 years between East Asia/Pacific and South Asia is indicative. Between 1960 and 1990 in East Asia/Pacific this increased from 2.83 to 6.08 with the gender ratio (female to male average years of schooling) increasing from 0.59 to 0.84. For South Asia the corresponding figures were 1.51 in 1960 and 3.58 in 1990 with the gender ratio increasing from 0.31 to 0.52. In the case of Pakistan the figure was 1.9 years of schooling in 1992 for population 25 years and above.¹⁷

¹⁷ILO (1998, p.126).

The story of East Asia is so often told that I will not repeat it here. What may, however, be of considerable interest is the development of vocational education in South Korea and a comparison with Pakistan as shown in Table 2, which though dated, is still very revealing in the approach to vocational education and training followed in the two countries. It is important to note that in South Korea the initial push to expand primary and secondary education in the 1960s was accompanied by an expansion of vocational training to provide the skilled labour for export-oriented industries. During the transition to higher value-added industries starting with the late 1970s, vocational education was expanded despite demand for more traditional academic education. The Government kept a strict control over university entrance and this policy remained more or less intact until the 1990s, with the Government firm in its attempt to channel more young people into vocational schools and technical universities.

Another experience from a different continent which may be of interest is that of Costa Rica which since the 1960s made a deliberate effort to invest in education. Also at a time when the sub-continent is immersed in confidence building measures which may one hopes lead to reducing defence expenditures, its example is also pertinent as Costa Rica from the early 1950s took a policy decision to shun heavy expenditures on armaments or the formation of a strong militia after banning the armed forces in 1949. In 1999 the active population who had completed university or technical education reached 18.5 percent, a figure substantially higher than the average for developing countries. The illiteracy rate again in 1999 was 3.5 percent; it was still lower among women at 2.7 percent; and the higher education level for women reached 24.7 percent.

Attracted by the quality of its human resources one of the world's largest semi-conductor companies INTEL made major investments mainly for the export market. This boosted economic growth in the late 1990s, dramatically improved the balance of payments, generated new jobs and saw the gradual growth of the domestic software sector. Besides INTEL, the other major ICT-related activity is ACER's setting up of its telephone customer service in Costa Rica to take advantage of the low-cost trained labour. In recent years there has been a significant growth of software exports based on the availability of a highly skilled workforce. In 2000, the major software firms employed an estimated 1,500 persons with estimated total exports of US \$ 50 million.

An example of Pakistan's foray into software development is telling. In 1996-97 ABN-AMRO Bank decided to set up its regional back-office hub for software development and support for its operations in Lahore. It initially wished to hire around 400 to 600 software specialists. Despite their best efforts they found it extremely difficult to get the numbers in the quality they required. A year later they moved their operations to Chennai and Mumbai closing down their software operations in Lahore. Here they found the specialised software skills in sufficient

Table 2

Comparison of Technical-vocational Education: Pakistan and South Korea

Pakistan	South Korea
<ul style="list-style-type: none"> ● Pre-vocational educational education is offered in limited number of schools and to limited number of students at primary and middle schools. The annual intake in technical-vocational education schools is extremely low. ● Most technical-vocational institutes are public. ● There are few continuing programmes (B-tech) for industrial workers. ● Technical-vocational institutes for women are far fewer than for men. ● Most textbooks are imported and written in English. ● Technical-vocational teacher education is not systematised. ● 30 to 40 percent of teaching posts are lying vacant ● Student drop-out rates from VTIs are very high. ● Teaching-learning materials, especially raw materials for practice and audio-visual equipment, are very poor. ● Vocational education programmes with work experience are not operated. ● There are no close links between schools and industry. 	<ul style="list-style-type: none"> ● Education for introduction to the world of work , career awareness and career exploration are offered at primary and secondary school as part of general education. ● The share of students going to technical-vocational high schools in 1970s was about 50 percent. In 1990 it was 32 percent. ● About 65 percent of technical-vocational high schools and 84 percent of junior colleges are private. ● Most junior colleges offers short-term or regular evening classes for providing continuing educational opportunities to industrial workers who graduated from technical/vocational high school. Also there are correspondence, university and open colleges for workers who graduated from junior colleges. ● Girls can apply to any technical-vocational institute according to interest and competency; 46 percent of students enrolled are female. ● All textbooks are compiled by the Ministry of Education and written in Korean. ● Departments have been established at 4-year colleges or universities to produce qualified vocational teachers since the early 1960s. ● Technical-vocational teachers are actually oversupplied. ● An average of 10 percent of technical-vocational high school students drop out every year. ● The budget for laboratory practice and shop work is adequately met by Government. ● Work experience for technical-vocational students is compulsory, ranging from one to six months. ● Schools and industries make a conscious attempt to develop closer relations. Industry provide scholarships and may have sister relationships with technical schools.

Source: M. Keun Lee *Technical Vocational Educational System: A Comparison of Pakistan and South Korea* (Islamabad: ILO-ARTEP/UNDP, 1990) reproduced in ILO (1998, p. 127).

numbers and were over the years able to increase the number to around 3000. Earlier this year they decided to sub-contract their entire global operations to two Indian software companies and one US company with its operations for this project in India at around US \$2 billion! This amount is equal to almost half of our of our total “cottonomics” manufacturing exports. The real game in the now is to search out a “niche” in the global economy and here the quantity and quality and skills you can offer are critical. Pakistan found a “niche” but was unable to hold on to it. Lahore is a beautiful city and the golf course just around the corner from ABN’s office may have tempted its officials from setting up their software operations there. But it is not enough. If you cannot provide the quality services the foreign investor is looking for he will soon pack up his bags.

Breaking Out of the Low-level Skills Trap

What then needs to be done? Before one holds forth with a set of the usual prescriptions let me very clearly state that a lot is being done through a number of bold initiatives launched by the present Government.

Also a lot is planned to be done. A reinvigorated Planning Commission has been very active over the last few years and has recently launched the Medium Term Development Framework (MTDF) 2005-10 with an impressive set of measures to take Pakistan into the knowledge economy as its overriding objective.

Both the on-going and new initiatives place considerable emphasis on developing and investing in Pakistan’s human resources so I shall not dwell on them at great length. But what I will take more head on is what I believe is critical in moving Pakistan into the knowledge economy—developing the mind set and institutions which provides decent work and acknowledges and respects rights of working people. I am aware that there is a large body of opinion which equates rights of workers with labour market rigidities and uses this argument to deny rights and keep labour markets flexible. While I do believe that globalisation increases competition and requires greater flexibility for employers in adjusting their labour force in the face of fast changing demand, it is at the same time perfectly possible to achieve this while recognising the rights of working people.

What is New in Our Development Strategy

I believe that the development strategy which has evolved over the past four or five years has made certain distinct breaks from what was followed in the past.¹⁸ Of these, the two major initiatives relating to increased investment in higher education and a major thrust in science and technology will play an important part in moving Pakistan

¹⁸I have elaborated on this new development strategy in a forthcoming article entitled, *The Musharraf Development Strategy, Will it Deliver?*, *Lahore Journal of Public Policy*, Lahore School of Economics, Lahore. An earlier abridged version of the article was published in the *Dawn Economic and Business Review*, February 14-20, 2005 under the heading “Will the Development Strategy Deliver”?

into the knowledge economy. The Lakha-Babar Ali report¹⁹ on improvement of higher education in Pakistan has in great detail identified our major shortcomings in these areas and put forward a cogent plan to implement them through the Higher Education Commission and the Science and Technology Ministry.

Over the last few years there has been a major increase in resources allocated to higher education and concerted efforts made to improve the quality of teaching and resources for undertaking research. While opening of new and development of private sector universities and centres of excellence in selected subjects is being encouraged at the same time strict measures are to be enforced to ensure that they deliver high quality education. But the really needed boost has come for the public universities, which over the years had been starved of funds, and which are being given considerable flexibility and resources in hiring faculty from abroad and upgrading its teaching staff.

The hall mark of a successful higher educational system is the quality of the graduates it produces and the relevance and quality of its research outputs. What must be avoided is the mechanical churning out of numbers to meet pre-set targets especially at the Masters and the doctorate level. The same applies for upgrading the teaching faculties. Quality must be the watchword or we could end up with churning out doctorates by private and public universities to meet HEC's faculty strength and qualification targets and set in motion a vicious circle which could be very damaging for the quality of higher education in the country.

Also while the emphasis on higher education is most welcome and overdue it should not in any way compromise our commitment to universal primary education and eradication of illiteracy. Primary education in Pakistan still has the highest rate of return and remains the major means of helping people move out of poverty. Looking at the very large increase in resource commitments to higher education and knowing that capacity to generate additional resources for the public sector has always been difficult it is important that primary and for that secondary education are not squeezed. Looking at the resources allocated in the MTRF 2005–10, it is not that clear whether primary and secondary education are being squeezed or not. I could be wrong but it needs careful analysis.

Similarly the thrust on science and technology both in terms of increasing science and engineering graduates as well as investing in necessary infrastructure including space technology is most welcome and again was long overdue. What remains of some concern is that the large investment and support programmes for the ICT sector are not showing any apparent results either in terms of export earnings which still appear to be negligible or in output of a substantial number of graduates to support the development of this sector. The strategy regards ICT development may merit some reconsideration.

¹⁹Ministry of Education, *Report of the Task Force on Improvement of Higher Education in Pakistan: Challenges and Opportunities*, January 2002, Islamabad.

India's success in ICT was anchored in the high quality of its graduates from its prestigious institutes of technology. Besides the growth of a number of now mega giants starting from very small enterprises a number of established industrial houses (Tata's for example) moved into the ICT sector from an early stage and are now global players in their own rights. In the case of Pakistan on reflection if we had not moved lock stock and barrel in setting up business schools under private initiative (many of which like LUMS are now world class) but had also set up institutes of technology we with hindsight would have been clearly better off. But it is not too late. LUMS is moving in this direction and GIK is establishing its reputation as a leading technology institute. But much more needs to be done with active government support to set up world class institutes of technology so that we can produce the minimal mass, which even after taking into account the many who may migrate, would help set up a vibrant ICT industry in Pakistan.

The number of really successful firms in the ICT sector serving domestic and foreign markets still remains limited. Indeed some of the early successes seem to have disappeared and the more successful ones seem to have reached a ceiling without breaking into what one may call the "big times". I am not aware of any of Pakistan's major industrial houses having moved into this sector but if there is a time to do so it would be now. If one recalls Dr Mubashir Hassan's many initiatives which he took as Finance Minister in the early 1970s, in setting up specialised semi-autonomous consultancy services with public sector support, the one and perhaps only successful surviving institution is NESPAK, an engineering consultancy firm employing over 800 professionals with world wide operations. Could one see a similar initiative to muster together ICT graduates into a semi-autonomous corporation in the ICT sector led by a leading ICT specialist from the private sector?. Or perhaps encourage NESPAK to take on this role. Again these are ideas and they need to be thought through because what we have planned for the development of a vibrant ICT sector in the country appears not to be working.

Developing a Globally Competitive Work Force

The MTDF 2005-10 sets out the strategic vision to develop a knowledge economy by committing increased resource allocations for : (i) higher education, with enrolment at tertiary level education increasing from around 4 percent at present to 8 percent by 2010; (ii) science and technology and research and development; and (iii) improvements in ICT infrastructure.

The MTDF 2005-10 also places considerable emphasis on investing in skills development to make Pakistan's labour force globally competitive. The MTDF envisages a major increase in the number of institutions (Polytechnics, Technical and Vocational Institutes) with the ultimate target of at least two in each district (of which one will be for women). It also plans for a major increase in the annual intake for skills and technical education to 400,000 by 2010 as compared to 105,000 in

2004-05. Of this 330,000 are planned as annual intake in public institutions while the remainder is expected to be part of private sector involvement. The introduction of the skills and technology stream in 2000 high schools (equally divided among boys and girls) will allow 240,000 children of age groups 14-15 to enter the programme each year. The number of apprentices is to be more than doubled from around 40,000 to around 100,000 as well as steps taken to formalise the existing informal *ustaad-shagird* system.

The total cost envisaged for all these measures is Rs 33.78 billion.

A national body, National Vocational and Technical Education Commission (NAVTEC), is to be set up, which would undertake training needs assessments, forecast technical changes and demand, and plan alternative pathways for those who drop out or could not finish normal school. It would also undertake in conjunction with the provincial counterpart Technical Education and Vocational Training Authorities (TEVTAs) national planning, curriculum development, standardisation of technical education, training of trainers, national accreditation of private polytechnics and institutes and develop strong linkages with the industrial end users.

The expansion envisaged in technical and vocational training and on-the-job training though justified needs again to be clearly worked through. The challenge is to convert what appears to be a supply-driven strategy to one which is more demand driven and geared to meeting skill needs in a cost effective manner. While a mechanistic projection of demand for skills yields at most times poor results, identifying skill gaps and needed skills for expected fast growing sectors through surveys and analysis of skills demand would be very much warranted. Also demand for skills overseas need to be built into the overall system.

This planned expansion must also take into account the performance of the existing public sector vocational training institutes especially in the Provinces. After suffering from considerable weaknesses in terms of quality, placements and meeting the standards demanded by the private sector a number of successful ventures have been taken of which the TEVTA in the Punjab and Skill Development Councils in some major cities stand out.

One of the most important lessons that emerged from our exhaustive study of training systems worldwide for the ILO's World Employment Report 1998-99 [ILO (1998)] was that training systems are a product of the labour market institutions and incentive structures in which they operate and of the support they receive from employers, workers and governments. Yet most skills developed over a life time are acquired on the job, mostly in enterprises in which people work in both the formal and the informal economy. The incentives for enterprise-level training and the means of overcoming disincentives to spending on training need to be carefully analysed so as to move closer to optimal levels and to efficient delivery of training. Employers' and workers' organisations play a key role in this process.

Let me set out the 4 Cs which the ILO Report identified as the basis for countries to develop training systems that can respond to effectively to the changing demand for skills. These should provide some guidelines for the expansion of the vocational training system in the country.

- *Co-determination* or social partnership between employers who are the end-users of the skills, the workers who receive them and the government that provides the framework is essential. It also generates realistic information on skill needs.
- *Co-financing* because constraints on public spending necessitates that employers and individuals sponsor or undertake training. This can be done by providing incentives e. g. tax deductions and providing credits and loans with favourable repayment arrangements to individuals.
- *Certification* for improving mobility of labour through introduction of recognition systems for skills and competencies including those acquired on-the-job or in the informal economy.
- *Cost-effectiveness* and market tests in the provision of training including through private training providers.

Respect for Workers' Rights

At the heart of Pakistan's transformation into a knowledge based globally competitive economy is the need to embed into the thinking of all people—whether employers, policy-makers, land owners, factory workers, farm workers, self-employed—the basic notion of decent work and respect and enforcement of basic workers' rights.

This realisation has been slow in coming to Pakistan. The experience of the 1970s is still seen by many as one in which workers once given those rights and the political clout to exercise them, did so in a manner that resulted in immeasurable damage to investors confidence and in slowing down Pakistan's economic progress. Whatever the merits of such a view, and I for one do not subscribe to it, this suspicion unfortunately has swung the pendulum subsequently far too much in the opposite direction with considerable curtailment in the fundamental rights of workers over the more recent past. It is time now to move towards a new equilibrium. This is essential both if we are to develop a globally competitive work force and also meet our obligations in the new WTO regime.

It is being repeatedly argued with little hard evidence that the labour market is far too rigid and the existing labour regulatory framework acts as a strong disincentive to offering permanent employment and expanding employment opportunities in the formal or organised sector with the benefits it offers. At the same time we have seen an increasing trend towards the hiring of contract workers on low wages and without supplementary benefits through contractors, who even

though they are suppose to do so, do not pay prescribed minimum wages or benefits. This could indeed be interpreted as the labour market becoming far too flexible rather than rigid and the labour regulatory framework especially in terms of its enforcement far too lax.

There is need to develop a new labour regulatory framework which combines a degree of flexibility for employers with a measure of stability for workers in terms of tenure and affordable benefits, while at the same time fully respecting fundamental principles and rights at work. But such a regulatory framework must be developed through negotiations and dialogue between employers and workers. Unfortunately such an agreement reached in 2001 (when late Omer Asghar Khan was Labour Minister) was ignored and in its place the IRO (2002) was promulgated, many provisions of which are not in conformity with international labour standards to which Pakistan is a signatory.²⁰ Also changes in the administrative arrangements for the enforcement of labour inspection which in some Provinces has become almost non-existent is cause for serious concern.

In the end it is a question of the kind of society in which we wish to live and in which we wish to see our future generations grow and prosper. We may through unfair and exploitative arrangements be able to gain short term advantage in the global economy. But if we are to stand by the principles embedded in our Constitution and the vision of our founding fathers—the Quaid-i-Azam and Allama Iqbal, whose memorial lecture I deliver today—then we must build our economy and comparative advantage on the basis of a fair and just society. And let me assure you that by developing institutions and respecting dignity and rights at work in the long term is productive and profitable and the only sustainable route into the knowledge economy.

*Eik hi saf may khare ho gayay Mahmood o' Ayaz
Na Kohi banda raha na kohi banda nawaz—Iqbal*

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²⁰Specifically, Convention No.87 (Freedom of Association and Protection of the Right to Organise), Convention No. 98 (Right to Organise and Collective Bargaining) and Convention No. 81 (Labour Inspection Convention).

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Comments

1.

Dr Rashid Amjad is a man who has maintained his optimism about Pakistan including the cricket team all his life. We need people like that to sell the country and its soft image these days. Unfortunately, the powers that be who really do not like economists do not concur.

Rashid always has an interesting and earnest approach, reasonably sprinkled with his idealism but all to make this country better. Certainly, we all join him to pray that we break out of the poverty, skills and all manner of other traps that we seem to fall into every now and then. Unfortunately each of our prescriptions is distorted in its implementation for political economy reasons. And that is what I think needs to be brought into Rashid's paper. So let me turn to that.

First, "cottonomics"! Rashid seems to argue that cottonomics was organic to Pakistan and indeed may have served us well all these years. I think that this is a proposition that needs serious examination. The cotton industry has through our history got a huge subsidy and protection. Indeed it would be interesting to see what the net benefit to the economy was after the subsidy has been taken into account. One can only speculate on the counterfactual: what path would the economy have taken had we not subsidised cottonomics to the extent that we did, especially if had maintained an open economy from day one.

Second, cottonomics has now matured and we are into "autonomies". This sector too is being produced through a lengthy labour of protection, subsidy and deletion. While textile in the last 3 years have grown at an average rate of 12 percent and in the last year by 24 percent. Automobiles have been growing at an average of 40 percent in the last three years and by 50 percent in 2003-4. Similarly electrical goods are averaging a growth of 40 percent. This too is happening in a protection/subsidy regime. Once again like textiles our autonomy remains in the low quality end of the spectrum. I think Rashid you should include autonomies in your story!

Third, Rashid says that we have a low-level skills trap and he has a long wish list relating to what the government should do about it. All I can say is "amen". Nobody will disagree with that motherhood and apple pie type prescription. Why does the trap prevail? The paper seems to gloss over this and seems to imply that it

may be out of a neglect of a proactive policy for skill development. Indeed a fairly long list of action is presented. The paper suggests that the skill problem is a supply side problem, i.e. Not enough skills available. What about the demand side? What is ignored is the possibility that there may be no need to improve productivity through skill development since the protection subsidy regime allows for easy profits without that. Alternatively, profits from rent seeking that arises from the protection subsidy regime are easier than building skills. If this is true then the policy conclusion should be to open out and deregulate the economy thus eliminating the protection subsidy regime and not to develop the supply of skills.

Fourth, when discussing the ABN-AMRO case, Rashid notes that “Lahore is beautiful city and the golf course just around the corner from ABN’s office may have tempted its officials for setting up their operations there. But it is not enough”. I think that says it all. Eventually it is all about society’s values and the incentives that those values imply. Yes our cities have been adorned with golf courses and even polo grounds but there are no libraries and even schools are made in houses. Perhaps there is a need to move away from “commodity-nomics”.

Rashid lists the government policy on skill development about which we also heard from our keynote speaker. Yes a lot is happening, being done as we are continuously told. But let us look at the system of incentives and ask the question does some one really need an education in Pakistan and what do they gain by it. We always deal with this issue in a halfhearted fashion. Take for example we were told in the keynote address that we have raised the professor’s salaries way above a ministers. But dose the comparison include all the perks of the various powerful. Then you throw in the houses across the street from here or in GOR Lahore, the cars, the front seats on the plane and the various other perks of the VIP, the professor remains where he or she has been for the last fifty years—at the bottom of the pyramid. For example, I see no professors on the news or in official photographs of official functions.

May I remind you of the adverse selection problem? At the heart of our system lie 2 groups—the army and the bureaucracy—who do not need skills to run all our important agencies of governance and public service provision. Even a Nobel prize like Abdus Salam does not qualify you for a serious position. What kind of a signal is that to skill acquisition? Of course some of the élite like to point out that when we are talking of skill acquisition, we are talking of our plumbers and carpenters. Thus skill development is only to serve the élite to 2 elite groups who will rule public policy and service provision. Will that work? I think not! We cannot partially change incentive structures!

	Take	Reject
Other Skills Serving	8,6	2,2
Professional	4,2	6,6

- (1) If all individuals are the same and they are faced with this problem, they will opt to specialisation in non-professional skills or “serving” as Dr Ashfaq put it. These would include self promotion, closeness to the powers that be ad all manner of non-professional skills. And the powers that be will be happy to take such people. The “take” “other skills” box is the nash equilibrium here. No one will seek the professional route. I submit we have had that in place for a while and truly need to change that as part of our reform process.
- (2) How do we account for as Salam or a Dr Ashfaq in this structure. We can throw in heterogeneity and say that there are some individuals who would like to be professional because of some personal quirk. Well then we have separating equilibrium “Other skills” and “take” and “reject” and “professional” this is the brain drain that Prof. Colclough was talking of yesterday. Yes tampering with the payoffs and possibilities of changing the structure through reform could lead to some professional being confused about the payoffs and remaining in the country an in the government with a different notion of “serving” the country.

So to conclude, the story of Pakistan can be written in terms of commodities like cotton or autos or it can be also thought of through our attitudes towards merit and talent. To my mind the 3 closures—of the economy, of the governance structures to professionals, of the market to the incumbent favourites—has through our history distorted the talent market and subverted merit either forcing our Salams to go overseas or to switch to the category of “serving”—both states are a loss to society. I have a paper on this and would be happy to share it with Dr Amjad.

Nadeem Ul Haque

International Monetary Fund,
Washington, D. C.

2.

The basic argument of the paper: Cotton dominates the economy in terms of employment (40 percent of total), its proportion of manufactured exports (70 percent) and is an important generator of income (15 percent of GNP).

But cotton exports remain low-tech and a low-value segment of global manufacturing. It is not a growing sector of the global economy. Therefore there is a need for a more technological and skill-based strategy for growth. Accordingly, more investment in education and training is required, in a way which respects and supports the rights and obligations of workers. The paper presents an argument for 'education and employment with a human face'.

Main Comments

- (1) I have no doubt that stronger emphasis on education and training is needed: less than half the adult population is literate, as defined by most measures and parties. The proportion is particularly low for women (<30 percent). Primary net enrolments are probably no more than 50 percent of age group, and of those who enrol half drop out by the end of fourth grade. This is not even sufficient to allow literacy rates to improve. Secondary enrolments are less than 40 percent of age group. These statistics are in the main substantially lower than other countries in South Asia and very low by global standards. Why so? Mainly because only around 2 percent of GNP is allocated to education—compared to 4 percent in India and an international norm of around 5 percent-6 percent. So public spending on education needs to increase substantially over the coming years.
- (2) The priorities for that spending are, however, critically important. It seems clear that a manufacturing/services export strategy will, as Rashid argues, require a more broadly educated and skilled labour force than presently exists. This is particularly so as the competition from China intensifies across a very broad range of manufactured products. The vast labour resources of that country suggest that labour returns to broad swathes of manufacturing output and exports could remain low for many years to come.
- (3) At the same time, increases in skill-based manufacturing and exporting depends upon capturing and maintaining a competitive advantage in comparison with those who are already succeeding in this strategy—i.e. East Asia and increasingly China. Whether Pakistan can bridge the gap and steal a lead in these areas of production is not a foregone conclusion. Indian growth, for example, has been strongly based upon low-medium

skill production for the internal market. Exports are growing fast including skill-intensive ones, but this is only a small part of the growth story there.

So a very important strategy for increasing the incomes of the poor in Pakistan is the achievement of literacy, numeracy and basic livelihood skills for all the population. Accordingly education strategy needs to focus strongly on expanding the base of the system. The direct income benefits from primary expansion and quality improvement are likely to be significant as the rural population becomes literate. Major benefits are to be gained (private and social) from the education of girls and women. The social returns to achieving universal primary education of good quality are well known to be substantial. So a strategy of secondary/tertiary emphasis must be built on a basic education strategy which is given first importance. This will need substantial financing changes—away from fees at the bottom towards, perhaps, fees and scholarships at the top.

Thus the strategy needs three legs—expansion at the top, yes, but strong quantitative expansion and qualitative improvement also at the base. In addition, as the paper argues, a much greater emphasis on technical and vocational training, is needed, based upon a tripartite approach and a shift away from contract labour which brings employers short term gains, but very high costs (private and social) in the longer term.

Christopher Colclough

University of Cambridge,
U.K.