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Utilization of Labor in South Asia

by

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Abstract

The dominant productive resource of an overwhelming majority of households in South Asia, if not the only resource, is their endowment of labor. How this resource is utilized at each point of time and over time depends on the evolution of the framework governing the decisions of employers and households about their production, consumption, labor force participation, employment, schooling and accumulation, as well as public policy interventions intended to influence them. The interaction of these decisions in the short and long run determine in large part the outcomes, such as the evolution over time of aggregate and sectoral growth, employment and unemployment, as well as poverty.

I deliberately avoid the use of the phrase “labor market”. In my view there is no national, unified and dynamic market in the sense used in analyzing labor markets in developed countries and in which a structure of equilibrium wages, equating the demand for labor of various skill categories with their supply emerges at each point of time. I attempt an analytical description and discuss the policy implications. The implications are meant to improve the existing framework in which labor use decisions are being made in the transition, which is very likely to be long, towards the challenging goal of creating an integrated and efficient national market for labor. The overarching national objective of all countries of the region, namely, to alleviate mass poverty and eradicate it within a reasonable time horizon, will further recede into a very distant future without a vastly improved framework.

Keywords: Utilization of labor, South Asia, rural-urban migration, urbanization, agricultural land, policy implications.

JEL Classification No.: J11, J20, J40, J60, O15, O20.

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Part I: Utilization of Labor in South Asia

T.N. Srinivasan

1. Introduction

The dominant productive resource of an overwhelming majority of households in South Asia, if not the only resource, is their endowment of labor. How this resource is utilized at each point of time and over time depends on the evolution of the framework governing the decisions of employers and households of their production, consumption, labor force participation, employment, schooling and accumulation, as well as public policy interventions intended to influence them. The interaction of these decisions in the short and long run determine in large part the outcomes, such as the evolution over time of aggregate and sectoral growth, employment and unemployment, as well as poverty.

The important distinguishing features of employment in South Asia include, first, that a large proportion of their population (and potential labor force participants) live in rural areas, with rural-urban migration as well as trends in urbanization being relatively modest as compared to other developing countries. Second, a large proportion of the employed in rural areas (and to a lesser extent in urban areas) are self-employed, either as farmers, or as petty manufacturers, artisans and service providers and as own account workers, largely in informal sectors. Third, half or more of the employed still depend on agriculture for their employment. Fourth, average size of land cultivated is two hectares or less, except in Pakistan where it is somewhat larger. Fifth, the distribution of agricultural land is skewed with a very large majority of farmers owning less than a hectare of land and, with the extent various forms of tenancy being modest, the distribution of land operated also exhibits the same feature as land owned with very small

farmers constituting very large majority. Sixth the share of land owned or operated by the small farmers is considerably less than their share in the number of farmers. Seventh, the average size of land holding taking all farmers together has been steadily declining since the 1960s due to demographic pressure. The small farmers who are self-employed in their farms during peak agricultural season also work for others in the off-peak season. Besides the income potential from self-employment in such small farms is further constrained by lack of access to credit, technology and non-labor inputs.

The utilization of labor in urban areas shows that the proportion of those in the formal/organized sector for regular wages and salaries among the employed population is small. In South Asia working population includes a significant number of children between the ages of five and fifteen. Those not working in the organized sector are engaged in various forms of non-contractual employment with significant uncertainty about their terms of employment.

I have deliberately avoided the use of the phrase “labor market”. In my view there is no national, unified (i.e. unsegmented) and dynamic market in the sense used in analyzing labor markets in developed countries and in which a structure of equilibrium wages equating the demand for labor of various skill categories with their supplies (or in which demands in equilibrium do not exceed supplies if wages are not flexible) emerges at each point of time. For this reason analysis of a unified national labor markets is impossible since they do not exist. Instead, in this paper, I attempt an analytical description, rather than a formal, model-based analysis with an integrated framework of the potential determinants of relevant decisions by households, employers and public authorities.

Section 2 focuses on the commonalities and differences across South Asia of demographic characteristics and determinants and their empirical values of decisions on labor force participation, occupational choice, geographical mobility and skill accumulation (including education) by households, given the local, national (and possibly global) opportunities available to them for the use of their labor.

In Section 3 the differences in some of the determinants discussed in Section 2 within countries are presented. It also explains the relevance of the data in Sections 2 and 3, as well as the socio-political and legal framework, including the relevant laws and public policy decisions impinging on the decisions of households and employers for labor utilization.

The concluding Section 4 is devoted to policy implications. These are meant to improve the existing framework in which labor use decisions are being made in the transition, which is very likely to be long, towards the challenging goal of creating an integrated and efficient national market for labor. The overarching national objective of all countries of the region, namely, to alleviate its mass poverty and eradicate it within a reasonable time horizon, will further recede forever into the distant future without a vastly improved framework.

The paper does not cover Bhutan and Maldives and covers Nepal only cursorily. In any case, Bhutan and Nepal are land locked countries, and Maldives is a small island economy, all with their specific problems arising from these geographic features.

2. A Broad Picture of Labor in South Asia

2.1 Data Sources

Usually more than one source of data exists on employment, unemployment, labor force participation, and wages in almost all large countries of the region. They often vary in their definitions of a worker, employment, unemployment, employment status, and their coverage of population. The length of the reference periods to which employment pertains ranges from a day at one end, a week in the middle, and a year at the other. The frequency of data also varies from every decade in the case of population census, to more frequent, but not annual, in labor force surveys and annual in most of the household survey and/or establishment surveys. In India, not only the sources of data are more than in others but their findings are also more actively debated. Any policy analysis of labor utilization and employment, in particular their comparison overtime in a country and its sub-regions and across countries, obviously require comparable data over time and. Moreover for assessing change over time panel data are more useful than repeated cross sectional data. Also to study aspect of household behaviour, it would be desirable to have data on relevant variables for each household collected in the same survey. An approach similar to the current population survey of the US with panel and cross sectional features on a quarterly basis is eminently worth exploring. I have discussed the data problem and possible steps to address them in Srinivasan (2003, 2009a).

2.2 Demographic Characteristics of South Asia

It is appropriate to begin our discussion of labor utilization with the broad features of South Asian Demography shown in Table 2.1. Countries varied enormously in their

population size in 2010. India with 1210 millions was at one end, and Pakistan with 173.4 millions and Bangladesh with 164.4 millions were in the middle, and Nepal with 29.9 millions and Sri Lanka with 21 millions were at the other end. Sri Lanka has a well known history since colonial times of very good reproductive health as well as education indicators for a country of its level of real per capita income. It attained replacement level of total fertility rate (TFR) of 2.1 children per woman of child bearing age soon after 2000 according to National Data¹. Eleven out of 22 states in India have attained or expected to attain that level between 2000 and 2010, with Kerala, which has a reproductive health history similar to Sri Lanka's having achieved it in 1998. Bangladesh is likely to reach it soon thereafter. However, Nepal and Pakistan, with TFR's close to 3 and 4 respectively, are not likely to reach replacement level soon.

The differences in fertility are reflected, through their effects on crude birth rates, in differences in average annual rates of growth of population during 2000 – 10, with Sri Lanka having the lowest at 0.8 percent, and Nepal and Pakistan at 2.0 and 2.3 percent respectively being at the high end. Bangladesh at 1.6 percent and India at 1.4 are in the middle. The medium variant of the 2010 Revision of Population Prospects by the Population Division of the United Nations paint a considerably less rosy picture than National Data of the date of TFR reaching and remaining below 2.1 Thereafter, with, India in 2030, Nepal in 2035, Pakistan after 2040, Bangladesh in 2015, and surprisingly, Sri Lanka only in 2020. Clearly the differences in fertility, birth and death (particularly infant mortality) rates affect the age distribution of the population. In particular, children (the age group 0 – 14) account for 30-36 percent of the population in countries other than

¹ It is noted below that the latest projections (medium variant) show later dates than national data for the achievement of replacement level of fertility.

Sri Lanka where it is 25 percent. The high child/population ratio could be a reason why the labor force participation rates of primary care-givers, namely women are low. There is a brighter side at least for countries that are close to the replacement level of total fertility. Not only has their rate of growth of population will slow down (assuming the mortality rates decline more or less exogenously) but the age distribution would shift towards the age group 15-59, the prime working ages. Whether this potential “demographic dividend” will be fully realized or not would depend on providing the complementary human and physical capital requirements². I will take up this issue also in the concluding section.

The Indian sub-continent consisting of Bangladesh, India and Pakistan is known for the bias of their households against females in general and female children in particular in intra-household resource allocation decisions. Going beyond resource allocation decisions, extreme forms of bias such as female infanticide and feticide as well as the so called honour killings of women are also widely practiced. However the extent of discrimination against females within households and the practice of extreme forms vary across countries. So does the extent of fundamentalist practices (in particular as they relate to the treatment of women) among the large Muslim populations of the three countries. It is not surprising that males constitute a majority, around 52 percent, of the population in the three countries and the average sex ratio (the ratio of females to males) in the population at 0.94 is well under parity. In urban areas there are relatively more

² In India some Southern and Western States with more rapid GDP growth and better education and health care systems have already achieved or are close to achieving replacement rates of fertility and are facing the problem of aging and the associated problems of income and health security for the older age groups. The potential demographic dividend is greater in other slower growing states with relatively poor health and educational attainments, but perhaps less likely to be realized soon.

males and the sex ratio is even more unfavourable towards females than in rural areas, possibly reflecting the fact that in rural-urban migration males predominate.

In Nepal and Sri Lanka females are the majority, though it is likely that in Nepal the excess of females might in part be reflecting migration of males out of Nepal. A rural-urban migration of males is in part seen in the lower excess of females in urban Nepal.

There are also inter-temporal effects to migration, given that married male migrants very often migrate without their families, and for extended periods of time. This has material and psychological costs on those left behind. Return migrants and their families, after the migrants' return after an extended stay away from their spouses and children, face a psychological and adjustment of reestablishing their interrupted relations within the family. A forward looking potential migrant will take into account these future costs in deciding whether not to migrate.

The very large literature on fertility behavior has addressed the role of husbands and wives in the fertility decision and indeed in any choices about the use of contraceptives and other forms of birth control and others relating to determinants of fertility. One of the determinants found to be statistically significant was literacy of mothers. In general greater is the education level of wives, the couples have fewer, healthier and better educated children. Clearly a gender bias that denies (or reduces the level of) education to female children has a long term deleterious effect on the health and education of their children. A sufficiently forward-looking household whose welfare increases with increases in the welfare of all its future progeny will naturally take this into account in making its fertility decisions. On the other hand a myopic household will

not. A satisfactory analysis requires well-specified behavioural models about fertility choices, resource allocation, migration and labor force participation. These have to be empirically estimated and tested rigorously for the robustness of their findings.

2.3 Concepts and Reference Periods

Labor Force Surveys in Bangladesh, Nepal, Pakistan, and Sri Lanka apparently use common concepts of employment and other characteristics as suggested by the International Labor Organization (ILO). India's household surveys of the Employment and Unemployment Situation use more nuanced and broader concepts than the ones in the ILO template. These concepts as well as nuances are in my view relevant for other South Asian countries. For this reason let me elaborate them. The annual reference period in Indian surveys applies to a person's "usual activity status" during the 365 days preceding the date of the survey, divided into usual principal activity status (ps) and subsidiary activity status (ss). The former is the activity in which a person spent relatively longer time (i.e. major time criterion) during the reference year. To decide on his/her principal activity, a person was first categorized on the basis of major time criterion whether he/she was or was not in the labor force. A person who neither worked nor looked for work during a longer part of the reference year was deemed to be out of the labour force. Those in the labor force were broadly divided into working and unemployed on the basis of, once again, major time criterion. Those not in the labor force were assigned the broad activity status of "neither working nor available for work". For those in the labor force the broad activity status of working or unemployed was determined by major time criterion, namely relatively longer time spent in the 365 day

preceding the survey date. Subsidiary economic activity status relates to a person whose usual principal activity status was determined by the major time criterion but who could have pursued some economic activity for a relatively shorter time (minor time) which is not less than 30 days during the 365 days preceding the survey date. The status in which such economic activity was pursued was the subsidiary economic activity status of that person. This could arise either because the person is engaged for a relatively longer period during the reference period in one economic/non-economic activity and for a relatively shorter period in another economic activity or because a person is pursuing one economic/non-economic activity and for a relatively shorter period in another economic activity or because a person is pursuing one economic/non-economic activity almost throughout the year in his/her usual principal activity status and simultaneously another economic activity in a subsidiary capacity. The usual status, determined on the basis of primary activity is denoted as us (ps) and on the basis of secondary activity denoted as us (ss), and both taken together as us (ps +ss). This is what is used in this paper for annual reference periods for India only.

For determining the current weekly employment status (cws) , a certain priority cum major time criterion is used, in which the status of 'working' gets priority over 'not working' and 'seeking or a available for work', which in turn gets priority over 'neither working nor available for work' . A person was considered 'seeking or available for work,' if during the reference week, no economic activity was pursued by the person, and if he or she made efforts to get work or would have been available for work had work been available, though not actively seeking work. A person who either worked (i.e.

employed) or sought or was available for work (i.e. unemployed) was deemed to be in the labor force. All others were deemed to be out of the labor force.

The labor force participation rate for usual (ps+ss) and cws are person rates i.e. the ratios of number of persons in the status to the number of persons in the population of the relevant age group.

The current daily activity status of a person (cws) during the reference week was determined through a somewhat complicated procedure that was meant to take into account the fact that activity pattern of the population is such that during a week or even a day, a person could pursue more than one activity. An additional complication is that many undertake both economic and non-economic activities during the same day of the reference week. The current daily activity status of a person was determined on the basis of his/her activity status on each day of the week using a priority-cum-major time criterion (day-to-day labor time disposition). Time disposition for every member of a sample household was based on recording the set activities pursued by that member along the time intensity in quantity terms for each day of the week. In more detail:

- 1) Each day of the reference week was looked upon as comprising either two “half days” or a “full” day for assigning the activity status
- 2) A person was considered “working” (employed) the entire day if he/she had worked for 4 hours or more during the day
- 3) If a person was engaged in more than one economic activity for 4 hours or more on a day he/she was assigned two out of the various economic activities on which he/she devoted relatively longer time on the reference day (for each of those two activities, the intensity was 0.5).

- 4) If the person had worked for 1 hour or more but less than 4 hours he/she was considered “working” (employed) for half-day and “seeking or available for work” (unemployed) or “neither seeking nor available for work” (not in labor force) for the other half of the day depending on whether he/she was seeking/available for work or not.
- 5) If a person was not engaged in any “work” even for 1 hour on a day but was seeking/available for work even for 4 hours or more, he was considered “unemployed” for the entire day. But if he was “seeking/available for work” but more than 1 hour and less than 4 hours only, he was considered “unemployed” for half day and “not in the labor force” for the other half of the day.
- 6) A person who neither had any “work” to do nor was available for “work” even for half a day was considered “not in the labor force” for the entire day and was assigned one or two of the detailed non-economic activity statuses depending upon the activities pursued during the reference day.

Thus, for each person, out of the seven person days available, the number of person-days he or she was deemed to be in the labor force (with a day given a weight of half if he or she was in the labor force for one half of the day and not in the other) during the reference week denotes the number of person-days in no labor force of that person during the week. By multiplying it with that person’s sampling weight (i.e. the probability of that person being in the sample) and adding over all persons in the sample, one gets the estimated numbers of person-days in the labor force in the population. Dividing this by the total number of person-days in the population (i.e. 7 times the size of the population)

one gets the cds labor force participation rate. This rate, unlike the usual (ps+ss) and cws participation rates, is a person-day rate and not a person rate, as it is the ratio of person-days in the labor force to total person days available. Not recognizing this distinction can lead to misleading comparisons of the three.

The information on the “usual” or annual employment status of each sampled person is also canvassed in the LFSs of Nepal, but apparently not in others. As far as I can judge, no other country canvasses the current daily status. The Indian NSS justifies canvassing cds for the reason, as mentioned earlier, that a person that during short periods, such as a week or even a day, a person could not only pursue more than one activity, but could undertake both economic and non-economic activities in the same day. This phenomenon is particularly common among females, who can switch between being in and out of the labor force at all frequencies, a year, a week and a day. It is unfortunate that other countries of the region do not collect data documenting the phenomenon. Clearly policy interventions addressed at labor force participation might be different if this phenomenon is quantitatively significant.

2.4 Employment (ER), Unemployment (UR), and Labor Force Participation (LFPR) Rates

In countries other than India and Nepal, the reference period of LFSs is one week preceding the date of the survey, comparable to the current weekly status (cws) of India. They do not have anything comparable to the usual (ps + ss) and cds of India, except that Nepal has a usual rate roughly comparable to India’s. I must add that by comparability I

do not mean that concepts and measurement procedures for comparable statuses used in different countries are the same in every respect but only similar.

The concepts of employment and unemployment and the population it refers vary across countries. In India, the populations covered in principle are age specific and include all five year age groups. The commonly referred employment (ER) and unemployment (UR) rates in India refer to all age groups together, that is the entire population. But from the detailed tables the rates for population above age 5, age 10, and age 15 can be put together as is done in this paper. In Bangladesh, both rates refer to population above 15. In Nepal population covered both ages 5 and above as well as age 15 and above, for both employment and unemployment. From the detailed tables in the LFS, it is possible to compute the relevant ratios for population above the age of 10, although I do not do so. In Pakistan and Sri Lanka, both rates refer to population above 10. In what follows, I try to preserve as much comparability as is consistent with the available data. This in effect means using a reference period of a week only for most of the comparisons.

A comprehensive indicator of labor use is LFPR. Table 2.2 provides the data on LFPR. It is seen that with a weekly reference period, Nepal has a very high LFPR of 84 percent, while India and Bangladesh have 55.6 percent and 58.5 percent, respectively. For populations of age 10 and above, Sri Lanka's at 49.5 percent are close to each other, while Pakistan's is somewhat lower at 45.9 percent. For populations of age 5 and above, Nepal again has a high LFPR at 68.5 percent as compared to India's 44.2 percent.

With unemployment rates (UR) extremely low in all countries, the employment rates (ER) follow LFPR closely. It has been suggested that low unemployment rates as

well as non-negligible participation of children in the labor force reflect high incidence of poverty. Nepal is a land-locked country, arguably much poorer than the other South Asian countries. Its relatively high LFPR could therefore be reflecting its greater poverty relative to others in South Asia. Without a formal causal structural model for LFPR and incidence of poverty, one has to treat such ideas as no more than suggestive.

Sri Lanka is the only country, which holds LFS not only annually but also on a quarterly basis. Because of the very recently ended conflict in Northeastern province and also in earlier Eastern province, until the fourth quarter of 2002, both these provinces were not included in the estimates. Since 2003, the Eastern province is included and in 2004, the survey excluded only two districts of the Northern Province. In the year 2005, following the tsunami of 2004, no regular LFS was conducted, except for a special LFS in August of 2005.

2.5 Self-employment Status

Self-employment is the single most frequent status of employment in South Asia. Definitions of the concept seem to vary across countries. In Bangladesh, there are in all eleven detailed categories of employment status including a narrow notion of self-employment, which does not include (i) employees and (ii) unpaid family workers and (iii) paid or unpaid apprentices. The most inclusive notion includes (i) and (ii). In India, self-employed are persons who operated their own farm or non-farm enterprise or were engaged independently with a trade or profession on own account or with one or a few partners. The essential feature of the Indian concept of self-employment is autonomy in deciding how, where, and when to produce and economic independence (i.e. market, scale of operation and money) for carrying out their operation. The categories of self-

employed covered own-account workers, employers, and helpers in household enterprises.

In Nepal the self-employment status category includes all categories other than paid employees. In Pakistan, the employment status categories are (i) employees (paid workers) (ii) employers (on own account or with one or few partners in a self-employed job) (iii) own account workers (works on own account in self employment jobs) (iv) unpaid family workers and (v) others. Again, other than category (i) and (v), the rest correspond to the most inclusive concept of self-employment. In Sri Lanka, the categories are (A) employees (in public and private sector repeatedly), (B) employers, (C) own account workers and (D) unpaid family workers. Again other than (A) the others would correspond to the most inclusive notion of self-employment. Table 2.3 presents the data using the most inclusive notion of self-employment. Nepal again is an outlier at 83.1 percent for the employed population above 15. Bangladesh is next at 63.4 percent again for population above 15 (and an even higher 8.4 percent for informal non-agricultural employment). India, at 55.92 percent, is the last. For the employed population above 10, the self-employment percentages are 55.75 for India, 62.0 for Pakistan and 41.3 for Sri Lanka. It is evident that self-employment is the largest single (i.e. dominant) status of employment in all countries, though the extent of dominance varies across countries and the employed population age groups.

2.6 Industrial Composition of Employment

Table 2.4 presents the shares of different sectors of employment of the employed persons. Agriculture and fishing (predominantly agriculture) are dominant (except in Sri Lanka) in employment in South Asia, accounting for as large a share of 74 percent in

Nepal, between 54.2 to 58.2 percent in India depending on the reference period, 48.1 percent in Bangladesh, 44.8 percent in Pakistan and the smallest 32.6 percent in Sri Lanka. The next highest share is accounted for by Services and Others, with a share 15.3 percent in Nepal, between 23.0 and 26.1 percent in India, 36.1 percent in Pakistan, 37.4 percent in Bangladesh and the highest (in fact the dominant) 42.3 percent in Sri Lanka.

All the South Asian countries assigned great importance to industrialization in their development strategies since their independence. India, the largest, pursued industrialization with significant emphasis on developing heavy industries such as equipment manufacturing, steel and industrial chemicals. Pakistan similarly pursued industrialization without as much emphasis as in India on heavy industries. All countries protected domestic industries to varying degrees from import competition though high import tariffs combined with import quotas. Yet Table 2.4 clearly shows that both the shares in employment of the broad sector, industry, that includes mining and quarrying, manufacturing, electricity and water supply as well as manufacturing are low. Even in the large countries of India and Pakistan, the share of industry (manufacturing) is just below 20 percent, (15 percent). In Bangladesh and Nepal, the shares are 14.5 percent (11 percent) and 10.8 percent (6.6 percent). Only in Sri Lanka, the share of industry is somewhat, though not much, higher at 25.0 percent (24.0 percent).

Ever since the industrial revolution in England in the 18th century, in almost all developed and rich contemporary countries, other than a few exceptions of countries richly endowed with natural and mineral resources, the route to development has been through a progressive shift of an initially large share of labor employed in low productivity primary activities primarily agriculture to industry, particularly

manufacturing, and later to higher productivity services. The initial shift away from agriculture was aided by improvements in agricultural technology that released labor towards labor intensive manufacturing, particularly textiles. South Asian countries did experience improvements in agricultural technology ushered in by the Green Revolution in the late sixties, and also invested in textiles and apparel, but not adequately in labor intensive manufacturing in general in which they presumably had a comparative advantage, for meeting growing domestic and global demand. In part this was due to their insulation of domestic markets for consumer goods across the board from imports to varying degrees across countries and the emphasis on capital intensive heavy industries in India and, to a lesser extent, in Pakistan. Although they did subsidize manufactured exports, the fact that any restriction on imports was by definition a restriction on exports (Lerner Symmetry Theorem), if understood, was completely ignored by policy makers.

The shares in GDP was shown in Table 2.4 reinforce the inference from the shares in employment. Share of agriculture in GDP has fallen significantly as the economies grew, about much more rapidly than the fall in shares of employment (the trends in shares are not shown in Table 2.4 but are available in national data on-line). If we measure the average (not marginal) productivity per unit of labor in terms of value added in U.S. dollar terms (the World Bank data on output are in U.S. dollars at the official exchange rate) by dividing the share of output in GDP of a sector by its share in employment (ignoring that the two shares refer to different but adjacent years) we find it is as expected to be the lowest in agriculture, varying between 32 cents in India to 47 cents in Pakistan. Average productivity of labor per unit is the highest in the service sector in all countries (marginally so in Pakistan) except in Bangladesh, varying between

\$1.34 in Sri Lanka and \$3.20 in Nepal. In Bangladesh, labor productivity is highest at \$1.93 in industry (in other countries it varied between \$1.20 in Sri Lanka and \$1.65 in Nepal). In all countries (except Pakistan) labor productivity in manufacturing was lower than in industry as a whole – in Pakistan it was higher by a small margin.

The productivity estimates have to be cautiously used and interpreted for several reasons³. First, the three-sector aggregation masks differences that could be substantial across countries (and over time within countries) in the composition of each sector. Within the broad similarities in the aggregate picture in South Asia, there are significant differences in the nature and composition of each of the aggregates, particularly in industry and manufacturing and above all in services. The services sector consists of the following diverse group of services, both formal and informal: trade, hotels, restaurants; transport and communications; financing, insurance, real estate and business services; and community, social and personal services. Some of the services are not marketed (e.g. public administration and defense) so that their value added is by definition is the cost of factor inputs used in their production. For the informal component (that varies across countries) value added is indirectly estimated.

In addition there are problems connected with the deflators used in estimating real value added. Given these problems it is hazardous to compare uncritically the service sector not only across countries, but also extrapolating from a sub-component of the service sector such as financial and business services to the service sector as a whole. For example, in India some have extrapolated from so the undoubted success and rapid growth of India in the global market for information technology (IT) related services to the service sector as a whole and claimed that India might be able to leapfrog the

³ I come back to this issue in Section 4.9 in my discussion of the World Bank's Report on India.

industry-manufacturing stage of the development process and base its future growth on the service sector! Doing so neglects the fact that the IT sector is skill-based and the needed millions of low-skilled and barely literate workers in low production primary activities to the supply of high productivity IT related services is extremely unlikely in the next several decades. I will come back to this issue in Section 5.

2.7 Time Trends in Labor Force Participation, Employment and Unemployment

Thus far I discussed the most recent data on the labor situation in South Asia. The economic environment in South Asia countries has changed to varying degrees across countries since 1980. Two contributing factors were the most recent wave of globalization since the end of the Second World War and in particular, after 1980 when international investment gathered steam, as well as domestic political and economic reforms that brought about greater integration with the world economy and greater role for market in some of the countries. It can be argued that at least in India, the collapse of the Soviet Union, India's model for central planning, as well as the rapid growth in China (with whom India fought and lost a border conflict in 1962), since its opening to the world economy and market forces were extremely important in the ushering in of systemic reforms in 1991. These followed hesitant and piecemeal reforms of the mid-1980s. Whether or not these reforms, both hesitant and systemic, induced the observed acceleration in the growth compared to 1950-1980 and led to more egalitarian distributional outcomes including reduction in mass poverty has been debated. I will not get into this debate, most of which, unfortunately, is not founded on a well-specified analytical model without which one cannot attempt to answer the counterfactual question

of what would have happened had the reforms not been introduced. Instead, I will describe what the available time series data show. Unfortunately long enough time series data are not available for Nepal since it had only two LFSs. I will focus on the rest.

For Bangladesh, data are available on LFPR, ER and UR for the period 1983-84 to 2005-06. These show steadily rising rates over time with male LFPR, already high at 78.5 percent in 1983-84, increasing by about 10 percent to 86.8 percent by 2005-06. This increase is however dwarfed by the phenomenal near quadrupling of female LFPRs from 8 percent in 1983-84 to 29.2 percent in 2005-06. URs have been modest throughout, though they quadrupled from a very low 0.5 percent in 1983-84 to a still low 2.1 percent in 2005-06. With URs being so low, the time trends in ER and LRPR are very similar. With data only for seven years in all, that too starting from 1983-84, it is impossible to test whether there were statistically significant break in the trends associated with greater integration with the world economy and/with domestic reforms.

India has the longest time series data, though not necessarily for every year, between 1972-73 and 2007-08 providing in all 22 observations. Srinivasan (2010) estimated simple descriptive linear time trends (allowing serial correlation) from the data. As he emphasizes (p. 28) “Given the significant auto-correlation in the time series suggesting persistence and also very high values of R-squared, the results have to be interpreted with extreme caution as not more than suggestive. A more sophisticated time series analysis, including exploration of possible co-integration among different series is beyond the scope of this paper. It is in any case severely constrained by the fact that there are only 22 unequally spaced observations.”

Srinivasan estimated in all forty-eight trends: three for us, cws, and cds, separately for males and females for LFPR, ER, and UR and employment status and for rural and urban areas. He finds that trends in LFPR in rural areas were significantly positive for males according to cds, and for females according to both cws and cds. In urban areas the trend was positive only for males according to cws, with the trends in us and cds rates for males and all three (us, cws and cds) for males and females showing no statistically significant trend.

A mixed picture is seen in trends in male employment rates: there is no significant trend in rural areas, while in urban areas there is a significant negative trend according to us and a positive trend according to cws and cds. For females, there is no significant trend in urban areas according to us and cws, with all other trends (three in rural areas and one (cds) in urban areas) being positive and significant. Trends in unemployment rates are broadly consistent with those for employment rates: rural males experienced a significant increase in unemployment according to us, while in urban areas they experienced a significant decrease according to cws. None of the other four rates showed any significant trend. For females four of the six unemployment rates showed a significant downward rate and the other two showed a downward but not significant trend.

The employment status regressions also show a mixed picture. Taking into account that a share in the three statuses (self-employed, regular wage/salary work, and casual labor) have to add up to 1 by definition, the data show that for males there was a significant increase in self-employment as well as in casual labor and significant decrease in wage/salary employment in urban areas, while in rural areas there was significant

decrease in self-employment as well as wage-salary employment and increase in casual labor. For females, self-employment increased and wage-salary employment decreased both significantly in urban areas and in rural areas wage-salary employment increased significantly, with all other trends not statistically significant. One has to be careful in interpreting these trends. For example, it is sometimes asserted that increases in self-employment and casual labor represent “proliferation” of labor, whatever that means. But since self-employment is a very heterogeneous category with poor own-account workers such as village artisans and casual labor at one end and rich ones such as lawyers, doctors, etc. at the other end such facile assertions are unwarranted with going into trends in components of self-employment. This is hard to do in the absence of needed data.

In sum the overall picture of labour utilization in India is disturbing. Given that the population is overwhelmingly rural and males dominate labor force participants, the large and significant positive trends in female employment (and negative trend in unemployment) in rural areas do not compensate for the observed stagnant employment picture for males in rural areas and contradictory trends in urban areas.

In Pakistan, the Federal Bureau of Statistics has been conducting labor force surveys since 1963. However, the data from all the surveys since 1963 are not readily available. Data for the period 1998-2010 show that crude LFPR (as a proportion of the population) fell every year from around 30 percent until 1996, then began to rise to reach close to 30 percent in 1997, remained roughly at that level until 2000 and then began to rise reaching 33.4 percent in 2009-10. It is fair to describe these data as showing a

virtually constant LFPR. During the same period the URs showed greater fluctuations, albeit in a relatively narrow range of 6 percent to 8 percent.

Annual data on LFPR of the population above age 10 from 1990 until 2010) show that the rates moved within a narrow range of 47.9 percent (in 1996) and 51.9 percent (in 1990). LFPR for the 2009-10 was 45.9 percent. As a share of the labor force, employment (unemployment) steadily increased (decreased).

The trends in LFPRs naturally show greater movements over time at more disaggregated levels of regions (rural and urban) and gender (male and female). Had data on even further levels disaggregation of geographical regions and industrial sectors were available, undoubtedly they will show even greater movements. These movements notwithstanding, the overall trend in labor utilization is a disturbing one of lack of dynamism, if not of complete stagnation.

3. Labor Situation in South Asia: Rural/Urban, Male/Female and Age Group Differences Within Countries

Having presented of the broad picture of the labor situation, I turn to some relevant details relating to differences in LFPR, ERF, UR, educational attainments and other aspects according to residence (rural/urban), gender (male/female) and age groups within countries. Data on all details are not available for the countries considered but will I provide as much detail as available in Tables 3.1-3.5. A number of noteworthy features emerge from these tables.

First, significant differences between rural and urban area and between males and females within each area are seen in all countries (but with country distinctions between countries) in all aspects of labor utilization such as, participation (LFPR), employment (ER), and unemployment (UR) rates; level of education of the population, which naturally has an impact on the educational attainments of the workforce; and, the share of informal sector in employment of employed workers. Comparing rates for population above age 15, the LFPR for both males, and more so for females, are higher in rural areas in Bangladesh, India, Nepal and Pakistan (for population above age 10). In Sri Lanka where separate rates for males and females are available only for the country as whole, once again female LFPRs are lower than male rates. The gender differences are particularly large in Pakistan in urban areas (though not as large in rural areas) where LFPR of females is as low as 10.27 percent as compared to 66.43 percent for males (and 27.57 percent for females in comparison to 0.182 percent for males in rural areas). The rural/urban and male/female differences in employment rates follow the same pattern as LFPR. Unemployment rates, UR, are low in all countries. However, the pattern of spatial and gender differences in URs, because they are by definition the differences between LFPRs and ERS, both of which, as noted, have a similar pattern, are not predictable a priori.

Rural residents and females have lower educational attainment than urban residents and males, in a situation in which the entire population has a low attainment. The proportion of population above age 15 with no education (or illiterate) was 40.5 percent in Bangladesh, 37.2 percent in India, 46.7 percent in Nepal and 43.8 percent in Pakistan. With a substantial share of each country's population being rural, the national

shares of population with no education or is illiterate, are driven largely by the higher rural rates and much less by the lower urban rates. Although the proportion of females in the population is less than half in Bangladesh, India, and Pakistan, and more than half in Nepal and Sri Lanka, still the excess or shortfall over half is not large enough, so that the LFPR, ER, UR, rural, urban, and national rates are close to the simple average of respective male and female rates.

Lastly, a very large share of jobs of the employed is in the informal sector, particularly in the rural areas. The share of informal sector in jobs held by employed females is higher than the share of jobs for employed males. A very high 96.2 percent of employed in Nepal work in informal jobs. At the other end, Sri Lanka has the lowest, but still high, 61.3 percent of jobs of the employed are informal. In Bangladesh, India and Pakistan, the share respectively is 78.4 percent, 79.5 percent and 72.8 percent.

Sections 2 and 3 were devoted to the presentation of the data on the broad picture of labour utilization in South Asia and also of the significant differences within and between countries. Of course, the differences within countries would be larger if the data are further disaggregated into well defined administrative, political, or other sub-regions. However some commonalties are seen in the data among countries in employment and production structures and also in the marked differences between genders and between rural and urban areas. Although in all countries except Nepal real GDP grew at an average annual rate of 5 percent or more since 2000, still all have low per capita incomes and a very large majority of their population is poor, using a widely used international poverty line of \$2 a day per person at purchasing power parity exchange rates. The commonalties in employment include 50 percent or share of agriculture (except for a 32

percent in Sri Lanka) coupled with a much lower share of agriculture (around 20 percent) in real GDP except for Sri Lanka (at 12 percent). This disparity between employment and real GDP of agriculture implies that average productivity of labour in agriculture is between 30 percent and 40 percent of average productivity in the economy as a whole. The other commonalities include importantly the overwhelming shares of self-employment in total employment in almost all countries, with Sri Lanka at the bottom end of Nepal at the top end of the range. Substantial differences between genders and between rural and urban areas are also common in the region. Importantly the commonalities are interrelated, not independent of each other.

A moment's reflection should convince any one that a conventional wage-salary focused labour market is inappropriate for an analysis of these interrelated outcomes. This is not to say, of course, that an analysis of labour demand/supply framework of conventional labour market equilibrium is irrelevant but the determinants of demands and supplies for different types of employment (e.g. self, informal/formal, wage/salary, sector, etc.) and their determinants as well as endogenous adjustment mechanism to imbalances between supply and demand, have to reflect the context appropriately. For example conventional adjustments through changes in wages/salaries specific to type are likely to be less relevant. Moreover as exogenous shifters of demands and supplies associated with changes in policy, output prices (domestic and external) and time have to be taken into account. Since the aggregate demands and supplies are aggregates of the corresponding demands and supplies at the level of forward looking individual household and employer behaviours ultimately these have to be building blocks for the analysis. And of course in any even moderately complex economy, all markets are interrelated

some weakly and others strongly at a point in time and over time. As such, in principle an inter-temporal general equilibrium approach is needed.

A fully satisfactory inter-temporal general model-based, empirically estimated and tested for robustness is impractical even for developed countries with their sophisticated data bases, skilled researchers and resources. As discussed earlier in South Asia, databases on labour utilization are inadequate and unsatisfactory, resources, both analytical and monetary are scarce. My speculations below about explanations for the commonalities found in South Asia data are based on available data and analyses. As is to be expected a very large share of the analyses is of India.

It would appear that an explanation for the dominance of agriculture, self-employment and informal employment as well as persistent poverty has to be the forces that kept far more workers (and their dependents) in agriculture and rural areas than would keep farmers, agricultural workers (tenants and share-croppers, casual labourers) and non-agricultural workers (mostly traders and input suppliers in rural areas above poverty. These forces include both policy driven and non-policy structural aspects. Some of them are within agricultural/rural sectors and others are outside. Let me speculate on possible explanations based on admitted partial studies, starting with the dominance of self-employment in rural areas.

The relevant alternatives to self-employment for a labour force participant residing in a rural area within an appropriate area near his/her residence (which in turn would depend both on costs of transport and of opportunities available outside) are: regular wage/salary or casual employment. In rural areas those employed on a regular wage/salary basis are most often teachers in government or private schools, government

or public sector (e.g. commercial banks), employees of private sector agencies and enterprises (e.g. contractors, NGOs, traders, service providers). All these jobs would require some education and skills. On the other hand, for employment, most often on a daily basis with pronounced seasonality, as casual labourers almost no education or skills is needed. For one with little or no education, regular/wage salary employment is not a relevant alternative. On the other hand, self-employed work in one's own farm or enterprise or as own-account workers, heterogeneous category including highly skilled lawyers and physicians and those with artisanal skills working for themselves with relevant capital in terms of tools. Again for those with no access to assets (such as land or capital) and no education including artisanal training, self-employment is also basically ruled out. They have no alternative but to be employed as casual workers with relatively low and uncertain earnings. It is abundantly clear that to enable them to other forms of employment, with higher and more secure earnings, they have to be enabled to acquire education, skills and access to assets. Public policies with respect to education and health, land assets, access to credit and insurance are crucial in this regard.

It turns out that the non-farm enterprise owned by self-employed turn out to be very small and possible factors keeping them small is poor access to capital, credit, information on potential product markets elsewhere as well as technology. It is also likely that thin and poorly functioning asset markets and lack of knowledge about risks and returns to their capital invested in their enterprises were they to sell them off and invest the sale proceeds elsewhere.

The size distributions of farms owned by self-employed is very closely correlated to the size distribution of the land each farmer cultivates. This distribution is not only

highly concentrated with a very large of farms being small and marginal cultivating a hectare or less of land, though their share in total land cultivated is much less, but also the concentration of the distribution has hardly changed in nearly four decades. This demonstrates the abject failure of land and tenancy reform laws enacted over the period. The earnings from the farms also depend on land quality, access to technology and inputs of water, fertilizer and seeds. The fact that many of the self-employed operating small farms during peak agricultural seasons covering major part of the year also seek employment in casual labour during off-season suggests that were they able to sell off their land and use the proceeds in more rewarding activities, they would have done so. The constraints on their ability to do so include the inefficient and thin markets for land as an asset, lack of knowledge about risks and returns to their assets elsewhere and as well as poor growth of employment opportunities outside agriculture in manufacturing (particularly unskilled of a labour intensive kind) and in upper end services, because of their lack of requisite skills. In effect, the large numbers of farmers operating small and medium farms have few opportunities outside of self-employment, given that possibly riskier taxable incomes from non-arm activities are unlikely to dominate their risky farm income.

One other feature of South Asian agriculture is the fragmentation of land holdings, with even small holdings not being compact but distributed in several spatially separated parcels. From the colonial days, the so-called Consolidation Laws, have attempted to consolidate fragmented holdings into relatively more compact ones for the obvious reason that productive investment in irrigation and in mechanization when appropriate are impeded by such fragmentation. Any policy attempt to induce more to

move out of agriculture and restructure agriculture, introduce new crops, new technology, etc. to be successful, the problem posed by the prevalence of many small and fragmented farms has to be addressed. It happens to be the case that a very large of fruits and vegetables in India are processed and wasted. It has been suggested that that opportunities to export profitably fresh fruits, vegetable and cut flowers, provided adequate transport infrastructure, cold storage facilities, market intelligence could be created. It is very likely that the as yet unexploited potential for remunerative employment in agro-processing and exports is large

It is also possible to speculate on the many possible explanations for other commonalities relating to labour utilization in South Asia. For brevity, I do not do so. But, three things are absolutely clear: first, most of the commonalties stem from the myriad unaddressed problems of the agricultural sector; second, for resolving these problems not only of policy reform in the agricultural sector are essential but equally so are reforms outside for agriculture; and third, a narrow focus on direct employment generation policies are woefully inadequate for solving labour utilization problems. For example, unless attractive opportunities for employment for relatively low skilled in non-agricultural sector, particularly labour intensive manufacturing and in some service sector activities are available, there will be no incentive for the workers currently in low productivity primary activities in agriculture and others to move. In other words, the “pull” factor for movement will not operate effectively. For making it effective, reforms of industrial policy and in deed of the development strategy that did not emphasize labour intensive employment opportunities outside of agriculture adequately are essential. By the same token, the absence of clean land-holding records (in India, with it’s “deed’

rather than” title’ system of land records with reality that many deeds may be recorded for the same piece of land) creates the fear among small landholders that if they move out of land they are cultivating they will lose their claims of ownership. This problem is compounded by the thinness and inefficiency of the market for land as an asset. Even landholders with clear record of ownership are unlikely to realize a sale price that equals a fair market value for their land. Also, if the landowner has leased out his land, it is hard to sell it without the consent of the tenant Thus the “push” factor out of land and agriculture does not operate effectively. The legal reforms needed for addressing this are clearly outside of the agricultural sector. Reforming and creating well functioning and efficient asset market for land is not entirely an agricultural reform issue.

The industrial revolution of the late eighteenth and early nineteenth centuries was preceded by technical changes in agriculture that raised land productivity. The enclosure movement that had been going on from mid thirteenth century had removed the free access of land for holders of cattle for grazing them after the main harvest. Deprived of their main source of income, they moved away from land-based animal husbandry and became a source of labour supply to meet the labour demand created by the industrial revolution.

With the introduction of the green revolution technology in South Asia, which raised land productivity, there was an apprehension that landlords who wished to reap the benefits of the new technology from all the land they owned would evict their share croppers and tenants and resume personal cultivation. This did not happen since given the tenancy laws that had been enacted, eviction was a costly process. Instead of evicting tenants, terms of tenancy were changed to induce tenants and share croppers to cultivate

the high yielding varieties of the green revolution technology. The changed tenancy contacts involved the landlord sharing the costs of purchased inputs such as fertilizers and pesticides and seeds of the new varieties and also costs of investment in the tube wells and pump sets as well as cost of fuel. Rents paid by the tenants to the landlords as well as the landlord's share in the output of share-crops were appropriately adjusted to reflect input. Cost sharing enabled tenants and share croppers also benefit from the introduction of the new technology. Also with its introduction demand for agricultural labour and to some extent casual labour also increased. All these further attenuated the push factors.

Had there been a stronger pull factor, the effect of the lack of a strong push factor would not have mattered. Unfortunately the development strategy and industrial policies pursued by not adequately emphasizing labour intensive manufacturing, did not create growing labour demand at wages high enough to act as a strong pull factor.

4.0 Policy Implications

In the introduction, I noted that for an overwhelming majority of households in South Asia, particularly the poor among them, their only potentially production resource is still their endowment of labour. It is therefore of primary importance for their lifetime welfare how effectively their labour is utilized in generating welfare. I emphasized that the evolution of the endowments of labour of each household as well as the extents and efficiency of their use, and also of the aggregate endowment of all households together depends on the framework governing the decisions of each household, producers and the

government. Household decisions cover those regarding fertility, labour force participation, schooling, consumption, saving and investment. Producer decisions are wide-ranging as well: on outputs and inputs including importantly, employment of labour and their efficient use, investments in production capacity and innovation of new technologies, products and input uses. Above all public policy decisions directly and even more importantly indirectly influence private decisions of households and producers. The interactions between private and public policy decisions by and large determine the outcomes with respect to aggregate and sectoral growth, labour utilization, distribution of incomes and poverty.

The discussion in the earlier sections clearly showed that the effects of narrowly defined policies relating to labour such as employment policies, unemployment insurance etc. are quantitatively likely to be far less significant for generating adequate and remunerative employment for a growing labour force than across the board monetary, fiscal, trade and exchange rate and industrial policies. Some policies may reinforce, while other policies may offset, each other's effects. To think through the effect of various policies in place in a positive mode and in a normative mode, to recommend actions that could improve the performance policies in a desired direction or more ambitiously, to recommend a socially optimal set of policies, one needs, as pointed out at many places in the earlier sections, a coherent overall analytical framework. It has to be consistent with empirical realities as well. Unfortunately, again as pointed out in earlier sections, only narrow analytical frameworks for particular sectors or issues, and empirical studies on them are available in the literature. Some of them relating to South Asia including an important report on India's Employment Challenge by the World Bank were discussed in

Section 4. However, few studies with a coherent and integrated overall framework are available. The closest are those based on applied general equilibrium models. But they are data and parameter intensive. The available data severely limit their sectoral coverage and the number of parameters that are econometrically estimated and not calibrated. The robustness of their findings with respect to choices relating to sectoral aggregation, calibration of parameters and many others can be questioned. Because of these weaknesses, they are not discussed in this paper although they have their strengths as well.

The policy problems cannot however wait until scholars come up with country context specific, perfect, overall frameworks to analyze each country's issues. One has therefore to make do with the available data models, analyses and their policy implications. It is to be hoped that many of them will be robust to changes in frameworks. What follows is based on my reading of the literature on trade, development and policy reform and the discussion in the earlier section. My sense of priorities among reforms is implicit, and more general than specific in terms of country contexts than I would have liked. This is partly because of relevance of some for all countries for the region and in part because not many studies are available on all.

The problems to be addressed through policy reforms are several. The more notable among them are accelerating the rate of growth of real GDP and sustaining it, expanding foreign trade, and ensuring that the rate of growth of GDP is reflected in growth of remunerative employment, at least at similar rates, it not faster and making the benefits of rapid aggregate growth to be better distributed across socio-economic groups, as well as achieving faster rates of poverty reduction. The objectives of the policy reform

agenda and the set of policies needed to achieve them have both short and long term dimensions. Moreover there could be trade offs between short term and long term objectives and also the possibility that policies to promote short term goals, unless carefully thought through, could end up either foreclosing some long term policy options altogether or reducing their effectiveness, if they are still available. Unfortunately it is hard to say anything rigorous and well founded in empirical realities of South Asia from the available studies about these trade-offs and possibilities.

Helping the poor and vulnerable to cope better with the consequences of volatility in their levels of living in the short run and enabling them to achieve an average level of living comfortably above the poverty line permanently in the long run through public policy are obviously important. The volatility arises from volatility in their employment opportunities, temporary and reversible shocks to their health, shocks to earnings from self-employment and others. In addition to being temporary and reversible, there could also be long term permanent component to some of these shocks. Naturally helping the poor to address these better has to be part of the longer term policy agenda. Both short and long term policies would depend on the extent private institutions, particularly the existence markets and their functioning, could help the poor and vulnerable. Naturally these would vary across countries and their stages of development.

The policy instruments available for addressing these are likely to be far fewer than in developed countries and their budgetary costs, as well as the administrative capacities needed to implement them stretch limited resources of governments. Besides most of the available instruments are not free of their own distortions. The resources and

capacities of the public sector vary across South Asian countries. Still the policy instruments used in addressing volatilities and vulnerabilities are similar. Most of them relate to provision of various public services including education and health, employment in public works, forms of insurance including importantly crop insurance, health care, old age support, and others. Some of these policies have been more successful and less costly than others in reaching the poor and vulnerable than others. But the successes and failures have varied within and between countries.

For example, the performance of one of the more successful National Rural Employment Guarantee (NREG) Programme in India amply illustrates this variation: in some states it has succeeded in reaching the targeted population, the employed have received the guaranteed days of employment and the promised wages etc. i and in others it has failed in one or more respects. Even if successful, it can at best reduce the chances of the employed and his/her household from falling below the poverty line in the short run. In general it does not materially improve the chances of the employed escaping poverty permanently. Of course a few of the households of the employed by NREG programme have increased their savings and expenditures on education from the additions to their income from such employment. These private actions could potentially raise their chances of escaping poverty permanently.

In the short run the feasible alternatives to policies like NREG and public service delivery programmes are few. There is a large literature on the potential for making them more effective and efficient, including ways of involving the private sector as a partner. Doing so, while minimizing their resource costs and distortions, have to be the most immediate and urgent policy reform.

The long term policy reform agenda is, as is to be expected, long and assigning priorities among the elements of the agenda is not only somewhat difficult, but also dependent on country contexts. However, the stark reality of South Asia as documented earlier is that nearly seventy percent of its population lives in rural areas and nearly half or more of the labour force is employed in agriculture and other primary activities with an average labour productivity between a third and a half as compared to the economy as a whole. South Asia seems to have virtually ignored the primary lesson from the economic history of contemporary developed countries. It is that successful development has involved shifting over time a large share of the labour initially employed in low productivity primary activities largely in agriculture to more productive employment elsewhere in the economy, first in labour intensive manufacturing and then in other industry and services. The industrial revolution in the 18th century, preceded by labour saving and yield raising technical change in agriculture, accomplished this. Expanding markets for labour intensive manufactures at home and abroad, assisted by a fall in transportation and communication costs, with the invention of the steam engine and its use in railways and steam ships, telegraph and refrigerated ships and others in the nineteenth century, as well as importantly by the spread of free trade policies, played major roles.

As noted in earlier sections, manufacturing, particularly its labour intensive component, still has a relatively low share in GDP and in employment. Compared to China, South Asia does not seem to be cost-competitive internationally in a wide range of commodities, both from the perspectives of exporting to world markets and attracting foreign direct investment interested in making South Asia an export platform. Foreign

trade and investment policies are still not sufficiently oriented to expanding regional trade within South Asia from low levels in compared to other regions of the world, particularly East Asia, and global trade. The share of South Asia in world merchandise exports was less than 2 percent in 2008 as compared to China's 9.4 percent share as the world's largest exporter.

Undoubtedly, India in particular has succeeded in the global market for information technology related commercial services and its off-shoring component. However these services are skill-intensive and until the skill levels of those currently employed and those entering the labour force are raised substantially, the rapidly growing I-T service sector is unlikely to raise overall employment growth significantly. It is clear that the policy reforms have to address several issues, more or less simultaneously: in agriculture raise the productivity of those who would continue to be employed in it; in rural areas, the productivity of those already employed in non-farm activities and also encourage new activities to locate in rural areas have to be raised; in industry, policy created barriers (such as labour laws and other regulation) investment in labour intensive manufacturing have to be removed or at least reduced, small and medium enterprises have to be enabled to grow in number, diversity and productivity to occupy what has been termed "the missing middle" in the distribution by size of employment of industrial establishments, and ineffective and dysfunctional policies (e.g. reservation of certain products by small scale industry) have to be eliminated; an enabling policy environment has to be created for the self-employed including own-account workers in petty manufacturing, services, including trade and artisan services, and other low income earning occupations, either to become regular wage/salary earners, or to restructure their

activities to yield much higher incomes; economy-wide reforms have to provide a sound underpinning for the success of other policies – starting with technology upgrading, encouraging innovation, and investment in physical and importantly human infrastructure, the list of required physical infrastructure investments include on expanding the road networks (national, regional, and rural), railways, air transport, particularly for providing speedy and efficient cargo services and airport facilities for expansion of exports of perishables such as cut flowers, fresh fruits and vegetables and fashion garments etc., upgrading of ports for speedy internationally comparable turnaround times for ships and also for cargo handling; needed human infrastructure investments, vastly improving access, quality and cost of delivery of education and health services reform of universities and institutions for higher education and research; required financial sector reforms for expanding delivery and lowering costs of credit to agricultural and non-agricultural producers, particularly small farms and enterprises, consumer credit and insurance; foreign sector reforms needed include improvement in exchange rate and trade, and capital account liberalization policies; monetary policies to maintain price stability after introducing a price index that measures inflation far better than the existing wholesale price index and doing more research on the quantitative impacts of and time lags in the transmission of monetary policy changes on inflation rates; reforms of labour and bankruptcy laws, above all doing away with layers and layers of bureaucracy to ensure that in the cost of doing business India is internationally competitive enough to attract both domestic and foreign investors and producers. With this extensive reform agenda in mind, I elaborate the rationale for the agenda in some

detail. In doing so some repetition of what was said in the last couple of pages is unavoidable.

First, it is clear that the work force dependent on agriculture as a share of total work force and relative to land cultivated, and also on other low productivity primary activities, has remained large regardless of their current stage of economic development, and declined slowly, in all South Asian countries. By the same token the shares of workforce as well as in real GDP of manufacturing in general, and labour intensive manufacturing in particular, have remained low and increased very slowly. Both features are related and the consequences of following a development strategy that ignored lessons of development history of contemporary rich countries. In my view, as I have pointed out repeatedly earlier, the challenges of development, poverty eradication, and of efficient utilization, all turn to a substantial, though not entirely, on shifting as many as workers as rapidly as possible away from employment to agriculture and low productivity primary activities to higher productivity employment elsewhere in the economy. This shift or transformation is extremely unlikely to leap frog the stage of labour intensive manufacturing and shift labour to high productivity service sector activities such as skill-intensive information technology based ones. The rapid growth of service sector in India, and less rapidly but still faster than of other sectors elsewhere in South Asia as well, has led to pipe-dreaming by some of leap-frogging the stage of manufacturing, substantially if not altogether, . The low educational and skill endowments of agricultural and of low productivity primary activity workers relation the requirements of employment in IT preclude the pipe-dream from being realized. Thus economy wide policies on the one hand (e.g. foreign trade and foreign direct investment, human capital, financial sector

policies, labour utilization oriented policies designed to encourage labour intensive manufacturing, and reform of agricultural policies (see below) have to be in any policy agenda.

Second, once the issue is posed, not narrowly as a challenge of employment and labour utilization but very broadly one of radically changing the development strategy followed by South Asian countries during the inexistence as independent nations, the challenge became formidable. The framework of institutions and policy formulation has to become much more conducive to achieve the intrinsic objective of eradication of poverty in a reasonable time horizon. This in turn would require the adoption of appropriate instruments, such as adequate investments in physical and human capital, innovation, and efficient utilization of human and non-human resources, all oriented towards acceleration of aggregate and sectoral growth. These instruments also have to be obviously broad ranging.

Third, the development strategy pursued until recently involved an active role for the state both as owner and operator of enterprises in key sectors (the Leninist phrase “commanding heights” of the economy was popular among Indian policy makers) most importantly in transport, communications, energy as well as controller of the operations of private sector enterprises. The strategy with broad industrialization as a major objective insulated domestic economies from world markets for goods and services markets and investment flows. The interventions included price interventions (taxes, including those on imports and exports, and subsidies) and non-price interventions (explicitly licensing), allocation of critical inputs, quantitative restrictions on imports and exports and foreign capital flows. The institutional arrangements and framework for the

exercise of the myriad instruments of state involvement in the economy was through the Planning Commissions (PCs) and their five year and annual plans. The PCs of India, Pakistan and Bangladesh were the most influential. Although the Soviet Union was the model for planning for all three, India's PC went the farthest attempting economy wide central planning with the most intrusive set of controls on the private sector and the economy as a whole. None of the PCs came anywhere near to achieving most of their physical and financial targets even those for the public sector. They were more successful in preventing the private sector from deviating from the targets set for it in the plans than in incentivizing them to meet them. Although the lack of success of the strategy and planning in accelerating and reducing poverty was evident, no serious reforms were undertaken until forced to do so in the mid-eighties by a serious macroeconomic and balance of payments crisis, the collapse of central planning and Soviet Union, India's mentor, and the rapid growth of China since Deng Tsiao Ping became its paramount leader in 1978. India had fought and lost a border conflict with China in 1962. China's opening to world trade, foreign investment and introduction market forces were evidently contributed to the acceleration of its growth. Being left behind by China in economic growth by not reforming the economy systemically was not a politically viable option for India.

Thus the he factors that led to reforms in India were not evident domestic failures, but external. China had counted foreign direct investment successfully to make China into an export platform supplying global markets for simple labour intensive manufactured goods for a while and the increasing the sophistication of export products as the economy matured, and its success in agricultural output with the house

responsibility system and the use of markets were clear. Interestingly, the major disasters of the Great Leap Forward and the associated famines and of the disruptions of the Cultural Revolution were domestic factors favouring reform at the death of Chairman Mao and the fall of the Gang of Four. The domestic pressure for reforms was less intense in South Asia. Besides the fall of the Soviet Union and the rapid growth of China, there was also the increase after 1980 in the extent and strength of the forces of globalization. All these external factors brought about reforms, in a piece-meal and hesitant fashion in India in the mid-eighties and systematically and across the board after its macroeconomic crisis of 1991. The reforms were successful in accelerating growth and reducing poverty. The question is whether South Asian policy regimes by not reforming enough precluded more spectacular outcomes?

Fourth, it is evident that Chinese success in terms of aggregate or sectoral growth, in poverty reduction and in employment growth was not replicated to the same extent in South Asia. One clear indicator of China's success in its external opening is the share in world merchandise and commercial service exports and inflows of foreign direct investment. China's share in world merchandise exports rose sevenfold from 12 percent of world merchandise exports in 1981 to 9.4 percent, making China the largest exporter in 2008. In contrast, India's share rose from 0.5 percent to 1.2 percent. In fact, even before China formally became a member of the WTO in 2001, China's share in European, North American and world markets of labour intensive manufactures including textiles and apparel had risen phenomenally in comparison to Indian's stagnant or declining shares. Although, India does better in the share of world exports of commercial services, still its share is lower than China's. As the discussion of China's much greater

success in turning its special economic zones (SEZs) into export and employment platform demonstrated, it takes far more than liberalizing trade or establishing SEZs.

Put another way, liberalizing trade is an enabling policy in that it creates opportunities that did not exist earlier. But to avail of the opportunities fully other policy created constraints (e.g. poor infrastructure, restrictive labour laws, caps on foreign ownership) have to be eased or eliminated as well, as China did. For example, in Bangladesh the apparel industry has been very successful in exports as well as creating employment for women. Yet there are no other significant labour intensive manufacturing or agricultural products in Bangladesh. The policy of reservation of labour intensive products in which India could have been internationally competitive to production by small scale units only, coupled with the labour laws which made it attractive to replicate inefficient small units with few workers and escape the rigours of labour laws than to create units large enough to reap economies of scale long deterred exports of many labour intensive manufactured products other than apparel. The reservation on most products was removed only recently.

Some analysts, who have looked at one policy change at time, such as of trade liberalization, have found that it had minimal effects. But the question to ask is not whether the effects of trade liberalization alone were beneficial or not, but a counterfactual one of whether removal of other constraints at the same time as liberalizing trade barriers would have been beneficial net of costs. Similarly, those who found Indian labour laws had no significant effects on existing units, which means only units that entered the industry and not exited, should have asked a similar counterfactual question of whether repealing the laws would have induced more entry and exit, thereby

improving the efficiency of the units that enter and continue to operate even though they need not have entered or exited, once having entered.

Fifth, again drawing on China's experience is that most of her labour force had at least a secondary level of education. The productivity of a worker with even a primary level of education as compared to one with no education has been shown to be higher. Unfortunately, with the exception of Sri Lanka, in other South Asian countries the population that is illiterate and/or has no education even if literate is large as shown in Table 2.1. The preference of employers as was pointed out in the World Bank (2008) study on India for workers with good general education as compared to vocational education is also an aspect of the importance of an educated workforce. A worker without formal education could however acquire and accumulate human capital specific to the product that he or she produces through learning by doing.

Lucas (1988) demonstrated that for the productivity effects of learning by doing to translate to growth effects, the marginal product of the stock of product specific human capital. It is very likely that human capital accumulated through learning by doing by producing any one product will run into diminishing marginal returns very quickly. For growth effects to arise, workers have to shift from producing one product exhibiting diminishing marginal returns to producing another in which diminishing returns are yet to set in. To be able to do so, not only the economic environment has to be one with many potentially producible products that already exist, and also one in which innovation is active so that new products are constantly being introduced into the market at a steady rate. Lucas (1988) points out that an economy insulated from world markets not only will have a narrower range of producible products in existence but also will be excluded from

markets elsewhere where new products are being introduced. For both these reasons insulation from world markets, as South Asian economies did to varying degrees, is counterproductive from the perspective of growth from accumulation of human capital through learning by doing. Again it is important to note that liberalization trade by itself will not materially expand access to world markets if other constraints on availing access still remain.

Sixth, the restrictions in access to credit, particularly for the self-employed poor and also to small and medium enterprises, limit growth of employment as well as that of output. Borrowing and lending as credit transactions also serve for inter-temporal consumption smoothing and as insurance and risk allocation arrangements. For example, a poor household faced with an unexpected adverse health shock in an environment of no health insurance as in South Asia may be thrown immediately into bankruptcy by the health expenditures, but would be able to spread it over several years with borrowing, if the expenditures are not too large, i.e. the shock becomes a potential liquidity rather than a bankruptcy problem with access to credit. More generally credit is also a potential instrument for poverty reduction. These aspects of the role of credit and the potential deleterious consequences of restriction to its access are well known, along with the need for public policy interventions to improve access. South Asia has been an innovator in microfinance schemes designed to provide credit to the poor, particularly women. Of course Grameen Bank BRAC of Bangladesh is well known. In India there is some evidence that micro-finance extended through women's Self Help Groups has had some success. In Pakistan and elsewhere in South Asia micro finance schemes are in place though not as extensive or successful as their counterparts in Bangladesh and India. The

interest rates on micro loans depend on the cost of capital for microfinance institutions (MFIs) as well as the efficiency of their operations. Leaving aside subsidized finance provided by foreign donors to MFIs, the cost of capital would be driven by rates set by monetary authorities. Thus monetary policies influence indirectly what happens to employment and poverty reduction through cost of micro finance as well as through private investment in general in the economy.

Seventh, fiscal policies obviously influence the efficiency of an economy's performance at each time and its aggregate and employment growth over time. Public sector borrowing could divert an economy's pool of investible resources from domestic savings and foreign capital inflow from investment by the private sector to financing fiscal deficits, that are likely to be less socially productive. For the public sector's use of these resources to be more productive than investment by the private sector, would depend on public expenditures as well as tax/subsidy policies, avoiding being socially wasteful. Equally important is that public expenditure and tax subsidy policies are unlikely to maximize inter-temporal welfare and thus distortionary. As discussed earlier the existence of such domestic distortions could reduce and even reverse the social net benefits from other policies such as trade liberalization nor labour law reforms and many more. Thus fiscal reforms has to be a major component of any reforms agenda including one intended to improve the efficiency and equity of labour utilization.

Eighth and last but certainly not the least is the major issue of reform of agricultural sector policies. Development history shows not only that the industrial revolution opened up more productive employment opportunities in labour intensive manufacturing, thus "pulling in" labour employed in primary activities, but also that a

prior technical change in agriculture, if not altogether a revolution raised labour productivity was probably labour saving rather than labour using, thus so to speak up a “push factor” for labour in agriculture and primary activities.

The Green Revolution in South Asia did raise agricultural productivity of land and on balance labour using than labour saving without other reforms such as consolidation of land holdings into larger ones, thus opening possibilities for better utilization of water (ground and surface) and selective mechanization. Also in the absence of well functioning and efficient system through which landowners with low returns from ownership could divest ownership at fair value as well as the fact that land ownership served as collateral for credit as well as bestowed social “prestige” kept more landowners not divesting. Thus a “push factor” was notably absent. This together with the “pull factor” through opportunities for more production employment opportunities being muted because of inappropriate trade and industrialization policies and labour laws kept more workers, petty land owner and population as a whole in agriculture, on land and in rural areas. It is no surprise that rural-urban migration is relatively low in South. Thus comprehensive land and agricultural reforms are essential for employment growth. I have not explicitly discussed policies of macroeconomic stabilization per se, not because they are not important from the perspective of growth of employment or GDP. They are. I have not discussed them only because it would require an extended analysis and discussion, a number of issues including for example the impact of the current financial crisis on South Asia as well as broader ones on the state of financial institutions.

In conclusion I would argue that a reform portfolio that recognizes the need for interrelated and systemic reforms, and includes reforms of agriculture, trade and foreign

investment, industrialization, fiscal and financial sector policies, and of labour laws, but in combination of different elements in the portfolio that is appropriate to the country contexts is the way forwards. Above all the country context has to include its political economy. South Asian political system, varies from one of a vigorous and very competitive participatory Parliamentary democracy in India to movements to civilian rule from one military rule in Bangladesh and Pakistan and so on. Political reforms have been kept of this paper. But in reality without them the success of economic reforms might be limited.

Table 2.1
Demographic Characteristics

Country	Bangladesh	India	Nepal	Pakistan	Sri Lanka
Population (2010)	164.43	1210.1	29.9	173.4	20.5
Population (<i>UN Forecast</i>)	148.7	1224.6	29.9	173.6	20.9
• Males	75.31	632.55	14.86	88.24	10.23
• Females	73.38	592.07	15.01	85.36	10.56
Average Annual Growth Rate (2000-2010)	1.57	1.43	2.02	2.30	0.89
Sex Ratio	0.97	0.93	1.01	0.96	1.03
Sex Ratio, <i>at birth</i>	102.6	106.8	98.4	103.4	97.5
Urban Population (%)	30.1	28.1	17.3	35.8	14.7
Population aged					
0-14	31.3	30.6	36.2	35.4	24.9
15-64	64.1	64.5	59.6	60.3	67.0
Above 65	4.6	4.9	4.2	4.3	8.2
Total Fertility Rate (TFR)	2.3	2.7	2.8	3.9	2.3
<i>UN Forecast</i> (<i>TFR</i>)	2.2	2.5	2.56	3.2	2.2
Dependency Ratio	56	55	68	66	49
• Old-Age	7	8	7	7	12
• Young	49	47	61	59	37

Source: World Development Indicators (2011); United Nations (2010)

Table 2.2: Rates of Employment (ER), Unemployment (UR), And Labour Force Participation (LFPR)
(Percent of Population)

Country	Reference Year	Reference Period	Population	ER	UR	LFPR
1. Bangladesh	2005-06	Week	All Ages	34.5	1.5	36.0
			Age 15 Plus	56.0	2.5	58.5
2. India	2007-08	Year	All Ages	37.0	1.1	38.1
			Age 15 Plus	51.8	3.8	55.6
			Age 60+	54.1	1.0	36.4
3. Nepal	2008	Year	All Ages	80.0	2.1	82.1
	2008	Year	Ages 5 Plus	67.0	1.5	68.5
	2008	Week	Age 15 Plus	81.7	1.7	83.8
4. Pakistan	2009-10	Week	Age 10 Plus	40.3	5.6	45.9
5. Sri Lanka ^a		Week	Age 10 Plus	46.8	2.7	49.5

^a Third Quarter of 2009

* Percentage share in total employment in the non-agricultural sector

** Percentage share of informal employment in total employment in the non-agricultural sector

Sources:

1. Bangladesh: Labour Force Survey 2005-06,
(www.bbs.gov.bd/labour_wing/Labour_force-06.pdf)
2. India: National Sample Survey , NSS Report No. 531 Employment and Unemployment Situation in India, 2007-2008 (mospi.nic.in/rept _pubn/ftest.asp?rept_id=522&type=NSSO)
3. Nepal: Report on the Nepal Labour Force Survey, 2008
(www.cbs.gov.np/Surveys/NLFS-2008_Report.pdf)
4. Pakistan Labour Force Survey 2009-10
(<http://www.statpak.gov.pk/fbs/content/labour-force-survey-2009-10>)
5. Sri Lanka Quarterly Report of the Sri Lanka Labour Force Survey: Third Quarter 2009 (www.statistics.gov.lk/samplesurvey/2009q3report.pdf)

Table 2.3

Self-employment Share (Percent) in Employment

1. Bangladesh ⁴ (2005-06)	15+	63.39
2. India ⁵ (2007-08)	All Ages	55.82
	15+	55.92
	10+	55.75
	5+	55.47
3. Nepal ⁶ (2008)	15+	83.1
	15+ (Only informal non-ag)	86.4
4. Pakistan ⁷ (2009-10)	10+	62.0
5. Sri Lanka ⁸ (2009 Third Qtr)	10+	41.3

Sources: See Table 2.2

⁴ Includes employees, unpaid family workers and self-employed

⁵ Includes own account workers, employers and helpers in household enterprises

⁶ All categories of employment other than "paid employees"

⁷ All categories of employment other than employers (paid workers) and others

⁸ All categories excluding employers in private and public sectors

Table 2.4

Sector of Work of Employed persons (Percent Shares)

Country	Bangladesh	India			Nepal	Pakistan	Sri Lanka
Year	2005-06	2007-08			2008	2009-10	2009
Population	15 Plus	0 Plus			15 Plus	10 Plus	10 Plus
Reference Period	Week	Years	Week	Day	Week	Week	Week
Agriculture and Allied	48.1	58.2	55.9	54.2	73.9	44.8	32.6
Agriculture, % of GDP	18.8	19.0			34.9	21.2	12.8
Industry	14.5	18.8	19.9	19.7	10.8	19.3	25.1
Manufacturing	11.0	11.9	12.7	12.5	6.6	13.3	24.0
Industry, % of GDP	28.5	26.3			15.0	25.4	29.4
Services and Others	37.4	23	24.2	26.1	15.3	35.9	42.3
Services, % of GDP	52.6	54.7			50.1	53.4	57.8

^a Includes mining and quarrying, manufacturing, electricity and water supply and construction

*Shares are person-days employed in each sector as a percent of total person-days of employment

Sources: See Table 2.2

3.1 Bangladesh: (2005-06)

LFP (Labor Force/Population)

	Rural			Urban			Rural and Urban		
	Male	Female	Population	Male	Female	Population	Male	Female	Population
LFP	88	29.8	59.4	83.2	27.4	55.7	86.8	29.2	58.5
LFPRE	49.9	34.2	46	68.4	57.8	64.9	54.3	35.7	50.5

Employment

ER	85.1	27.6	56.9	80.2	25.6	53.3	83.9	27.1	56
ERE (Educated)	47.6	30.5	43.4	65.4	48.8	61.4	51.9	34.8	47.7

Unemployment

UR	2.9	2.2	2.5	2	1.8	2.4	2.9	2.1	2.5
URE (Educated)	2.3	3.7	2.5	3	5	3.5	2.4	3.9	2.8

Level of Education (share of population per 100 - age 15 plus)

No education	40.9	54.3	44.2	25	40	28.6	37.1	50.9	40.5
Elementary	24.5	24.9	23.3	21.6	21.3	21.5	24.1	22.9	23.8
Secondary	20.2	14.4	18.7	23	18.5	21.9	20.8	15.3	19.5
High School	11.4	6.8	10.3	15.9	13	14.6	12.4	7.8	11.3
Higher Education	2.7	1.3	2.3	14.7	9.4	7	5.6	3.2	5

Formal Education	20.8	9.2	18	33.7	31.1	33	23.8	14.3	21.6
0-14	10.1	15	4.9	8.1	10.7	5.5	10.6	16.1	4.8
15-64	90	30.7	60.7	81.7	28.1	56.8	88.6	30	59.7
65+	61.4	15.5	40.5	48.5	11.7	30.7	59.3	13.8	38.7

Share of informal sector in employment (percent) of persons age 15 and above

	Rural			Urban			Rural and Urban		
	Male	Female	Population	Male	Female	Population	Male	Female	Population
Agriculture									
Non-Agriculture									
Both Sectors	79.2	90.9	82.0	66.4	68.9	67.0	76.2	85.7	78.4

3.2 India: (2007-08)

LFPR (Labor Force/Population)

	Rural			Urban			Rural and Urban			
	Male	Female	Population	Male	Female	Population	Male	Female	Population	
0+	0.561	0.314	0.441	0.566	0.099	0.368	0.562	0.275	0.423	Usual Activity
10+	0.725	0.403	0.568	0.688	0.185	0.447	0.716	0.349	0.537	Usual Activity

Employment Rate

0+	0.549	0.31	0.433	0.54	0.093	0.35	0.547	0.271	0.413	Usual Activity
5+	0.612	0.346	0.482	0.588	0.155	0.381	0.606	0.3	0.458	Usual Activity
10+	0.711	0.399	0.558	0.658	0.173	0.426	0.697	0.343	0.525	Usual Activity
15+	0.837	0.456	0.649	0.753	0.193	0.483	0.815	0.389	0.606	Usual Activity

Unemployment (UR)

0+	0.011	0.004	0.008	0.025	0.007	0.018	0.014	0.005	0.01	Usual Activity
5+	0.012	0.004	0.008	0.027	0.01	0.019	0.016	0.006	0.011	Usual Activity
10+	0.015	0.004	0.01	0.031	0.012	0.022	0.019	0.006	0.013	Usual Activity
15+	0.016	0.005	0.011	0.034	0.013	0.024	0.021	0.007	0.014	Usual Activity

Level of Education (share of population per 1000 - age 15 plus)

Illiterate	303	567	433	114	268	188	253	491	375
Up to primary	277	200	239	190	192	191	254	198	227
Up to secondary	313	188	253	380	316	350	231	221	277
Up to higher education	57	27	42	118	94	106	73	44	59
Diploma/degree and above	50	17	33	197	130	165	88	45	62
Total	1000	1000	1000	999	1000	1000	899	999	1000

3.3 Nepal: (2008)

LFPR (Labor Force/Population)

	Rural			Urban			Rural and Urban			
	Male	Female	Population	Male	Female	Population	Male	Female	Population	
0+	60.3	63.2	61.9	54.8	45	49.9	59.5	60.6	60.1	Weekly Activity
5+	70.9	71.9	71.1	60.3	49	54.6	68.5	68.4	68.5	Weekly Activity
10+										Weekly Activity
15+	90	84.2	86.8	76.6	58.5	67.3	87.5	80.1	83.8	Weekly Activity

Employment (ER)

0+	59.6	62.6	61.2	51.4	41.3	46.3	58.3	59.5	58.5	Weekly Activity
5+	69.2	71.1	70.2	56.6	45	50.7	67.1	67.2	67.1	Weekly Activity
10+										Weekly Activity
15+	88.7	83.3	85.7	71.5	53.4	62.2	85.5	78.5	82	Weekly Activity

Unemployment (UR)

0+	1.2	1.1	1.1	3.4	3.7	3.6	1.2	1.1	1.1	Weekly Activity
5+	0.9	0.7	0.8	3.8	4	3.9	1.4	1.2	1.4	Weekly Activity
10+										Weekly Activity
15+	1.3	0.9	1.1	5	5.1	5.1	2	1.6	1.8	Weekly Activity

Level of Education (percentage share)

Literate

5+	71	49.8	60	88.5	72	80.2	74.7	53.1	63.2
15+	66.7	38.8	51.1	88.1	67	77.2	70.7	43.1	55.6

Schooling (15+):

Nothing	36.5	62.5	51.1	14.4	35	25	32.4	58.2	46.7
Less than primary	14.3	9	11.3	8.3	7.7	8	13.2	8.8	10.7
Primary	17.5	10.8	13.8	13.3	11.4	12.3	16.7	10.9	13.5
Secondary	29.5	16.5	22.2	51.9	40.5	46.1	33.6	20.3	26.3
Diploma/degree and above	1.6	0.3	0.8	11.1	4.3	7.6	3.3	0.9	2
Other	0.8	0.8	0.8	1	1.1	1	0.8	0.8	0.8
Total	100.2	99.9	100	100	100	100	100	99.9	100

Share of informal sector in employment (percent) of persons age 15 and above

	Rural			Urban			Rural and Urban		
	Male	Female	Population	Male	Female	Population	Male	Female	Population
Agriculture							99.5	99.8	99.7
Non-Agriculture							83.8	91.8	86.4
Both Sectors	95.3	99.1	97.4	84.2	94.0	88.6	93.6	98.6	96.2

3.4 Pakistan: (2009-10)										
LFPR (Labor Force/Population)										
	Rural			Urban			Rural and Urban			
	Male	Female	Population	Male	Female	Population	Male	Female	Population	
0+	48.96	19.28	34.5	50.6	7.77	29.99	49.5	15.5	32.9	Weekly Activity
0-9	0	0	0	0	0	0	0	0	0	Weekly Activity
10+	70.18	27.57	49.5	66.4	10.3	39.5	68.8	21.5	45.9	Weekly Activity
age 10-59	71.9	26	49	69.4	8.4	39.1	70.4	19.9	45.5	Weekly Activity
60+	64.1	19.4	44.9	38.5	6.6	31.0	59.6	15.5	40.7	Weekly Activity
Employment (ER)										
10+	68.4	23.9	46.5	63.2	6.9	36.2	66.5	18	42.8	
Unemployment (UR)										
10+	4.8	3.9	7.2	5.2	20.8	7.2	5	9.5	2.3	
Share of formal sector										
	25.1	23.2	24.9	29	32.5	29.5	27.2	27.4	27.2	
Level of Education (percentage share)										
Illiterate							31.8	56.4	43.8	
Below high school							44.1	29.3	36.9	
Above high school							19	11.5	15.3	
Degree and above							5.1	2.8	4	
Share of informal sector in employment (percent) in Non-Agriculture of persons above 10										
	Rural			Urban			Rural and Urban			
	Male	Female	Population	Male	Female	Population	Male	Female	Population	
Agriculture										
Non-Agriculture	74.9	76.8	74.9	70.8	67.5	70.5	72.8	72.6	72.8	
Both Sectors										

3.5 Sri Lanka: (2009) (excluding northern province)

LFPR (Labor Force/Population)

	Rural			Urban			Rural and Urban			
	Male	Female	Population	Male	Female	Population	Male	Female	Population	
10+			49.2			44.9	66.2	33.2	48.7	Weekly Activity
15+			54.8			49.6	74.3	36.6	54.2	Weekly Activity
20+			59.3			54	81.1	39.3	58.7	Weekly Activity
60+							42.5	13.3	26.7	Weekly Activity

Employment (ER)

0+										Weekly Activity
10+			46.4			41.7	63.3	30.3	45.8	Weekly Activity
15+			51.6			46.1	71	33.5	51	Weekly Activity
20+			56.3			50.6	78	36.2	55.6	Weekly Activity

Unemployment (UR)

10+			2.8			3.1	2.9	3.9	2.9	Weekly Activity
15+			3.2			3.5	3.3	3.1	3.2	Weekly Activity
20+			3			3.4	3.1	3.1	3.1	Weekly Activity

Employed (by level of education - age 10 and above)

Below grade 6							20.4	22.1	21
Grades 6-10							51	41.1	47.5
GCE(O.L)/NCGE							15.1	14.7	15
GCE(A.L)/NCGE							13.5	22.2	16.5
Total							100	100.1	100

Unemployed (by level of education - age 10 and above)

Below grade 6							2.2	4.9	3.6
Grades 6-10							51.5	34	42.3
GCE(O.L)/NCGE							24.8	23.3	24
GCE(A.L)/NCGE							21.5	37.7	30
Total							100	99.9	99.9

Share of informal sector in employment (percent) of persons 10 and above

	Rural			Urban			Rural and Urban			
	Male	Female	Population	Male	Female	Population	Male	Female	Population	
Agriculture										83.4
Non-Agriculture										51.1
Both Sectors										61.3

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