Labour and Skill Development: What South Asia can learn from East Asia? Santosh Mehrotra, Prof of Economics, Jawaharlal Nehru University, New Delhi (Santosh.mehrotra@nic.in)

Drawing on analysis of the East and South east skill development systems, as well as the literature on skill development in other parts of the world, this short paper outlines and briefly discusses several good practices that South Asian economies can adapt to suit their skills requirements and current stage of development. The policy recommendations for South Asian countries are categorised in the following way: the government's role; the private sector's role; the public and private responsibility in regard to financing technical and vocational education and training (TVET), which sorely needs to receive much more financial resources if the industrial transformation that South Asian countries needs is to be achieved.

The Government's Role

Governments have a central role in connecting skills development policies to its national economic development plan to avoid supply and demand mismatches and promote economic transformation. Governments in successful economies in East and Southeast Asia (e.g., the PRC, Korea, and Malaysia) played an active and central role in promoting industrial growth, skills development and job creation, as well as supporting export-oriented firms. Public policies promoting general academic education, school-based and non-school vocational programs, and in-firm trainings reinforced each other in creating the necessary human resources and capabilities to complement rapid industrial development. In Korea, for example, its government-led education and vocational training policy was one central factor for its fast economic growth (Amsden, 1989; Chang, 2003; Lee,). When the Korean government designed and implemented an economic development plan in the era of industrialization, its vocational training system was focused on ensuring a smooth supply of skilled workers necessary to execute the plan.

By contrast, India did have an industrial policy until the early 1980s, but it was too biased towards import-substituting industrialization to the exclusion of exploiting external market opportunities. The other South Asian countries till date have limited evidence of having an industrial policy. There is need therefore to have an industrial policy in place in each South Asian country, and the TVET system needs to be aligned to this policy.

Another problem that all South Asian TVET systems face is the lack of sufficient practical training as part of their TVET, as well as the lack of articulation between lower and higher level TVET institutions (Mehrotra, 2015). There is something to be learned by South Asian countries from East Asia. For instance, in Vietnam, the main difference between the technical secondary and vocational secondary streams used to lie in the proportions of theory and practice in the curriculum of each stream. Technical secondary schools had a curriculum that was about 40% practice and 60% theory (ADB, 2014). Meanwhile, the curriculum of

vocational secondary schools was about 70% practice and 30% theory. Graduates of technical secondary schools were eligible to enter colleges and universities. However, like in South Asia, a graduate of a vocational secondary school could not gain entry to a technical college, and a graduate of vocational colleges could not enter a university. Happily, this situation has recently been redressed in Vietnam (ADB, 2014). The proportion of theory and practice has been more standardized across two types of institutions, and a graduate of a vocational college may now enter university.

There are lessons here for South Asian countries. In India, there has historically not been any articulation between industrial training institutes (till recently managed by the Ministry of Labour) and vocational streams in secondary schools (managed by the Ministry of Human Resource Development). This situation has begun to change only recently with the initiation of the National Skills Qualification Framework (NSQF). But the articulation issue still remains to be resolved in Nepal and Bangladesh.

In most Asian countries the private sector is a bigger provider technical and vocational training (VET) than the government. However, South Asian government have failed to regulate private training providers, regardless of country. There are lessons from East Asia for South Asian governments in this regard. Vietnam's case stands out. Like in other countries, in Vietnam private trainers tend to concentrate on low-cost fields, such as ICT, business subjects, and languages. The regulatory environment for private training providers is relatively favourable (UNEVOC, 2013). Private training providers can set their own fee levels, provided they inform the responsible state authority, and go through the same registration screening as public institutions. They must also have a board of directors, which selects the manager of the institution. This nomination is sent to the respective government authority (provincial for secondary schools and below, and national ministry for colleges and above) for "recognition." Private training providers must follow the same curriculum framework as public institutions. There is no requirement for a set number or percentage of scholarships for needy students. The government is counting on private training providers to provide the bulk of increased enrolment (UNEVOC, 2013). According to the Vietnam TVET Strategy 2020, private training provision is expected to increase from 20% of enrollees in technical secondary schools to 40% by 2020.

Finding teachers/instructors is a problem facing TVET institutions throughout South Asia. Vietnam used to face this problem, with the participation of industry in TVET activities being minimal. There are mechanisms, or policies that encourage the participation of industry in TVET *in* Vietnam. This is a weakness that characterises South Asian TVET as well, and hence it is critical that the innovations in Vietnam are heeded by South Asian policy makers. The integration and application of knowledge and skill through project-driven, problem-based activities—aligned to broad-based national skills standards—is new to vocational education in Viet Nam (ADB 2013). Recent policies adopted by the Ministry of Labour and Social Affairs (MOLISA) require teachers to know how to prepare training curricula from skills standards set by industry and government. Teachers must also know how to assess the competence of students in applying knowledge and technical skill to achieve a specified

outcome. Colleges have sought to address this through the use of workshop instructors, who provide training in practical work within school facilities. Workshop instructors are often graduates from the college, or others who have some workplace experience. These instructors do have some technical and instructional skills, but do not have pedagogical training in integrating theory with practice. The result is poor integration between the knowledge developed through theory classes and the skills developed in college workshops (UNEVOC, 2012).

Vietnam, therefore, carried out reforms to current training and development for vocational teachers. Teachers are primarily recruited from universities that provide degree programs in education or other relevant disciplines. Government is aware of the shortcomings of the current arrangements to develop technical teachers, and has instituted the vocational teacher competency certificate. This course is designed for people with noneducation degrees who wish to become teachers, and provides the following core modules—vocational educational psychology, pedagogical skills, management of teaching programs, teaching skills, and subject-specific teaching methods. A student then selects two modules from the following bank of elective subjects to complete the requirements of the qualification—including science methods in vocational education, curriculum development techniques, technology teaching methods, and use of information technology in teaching. The course normally takes 6 months to complete and is delivered through universities and a teacher-training institution.

Similarly, China's TVET system has ensured regular training of teachers/trainers, quite unlike in South Asia. Teachers in vocational schools in China are required to first have a degree in the discipline/vocation they will teach plus a certificate in pedagogy. In addition, each instructor is required to undergo one month in industry each year, or two months every two years for their career progression and promotion. The practical training at the enterprises equips them with knowledge of evolving industry needs (Mehrotra, 2015).

In India, by contrast, around 32 per cent of the trainers in vocational institutes do not have any formal certificates (Mehrotra 2014). A significant proportion of them has neither the requisite teaching skills nor the relevant industry experience. Due to poor career growth prospects, attrition rate is also high among faculty in vocational institutes. The problem with finding enough teachers for TVET exists in not just India, but also Nepal, Bangladesh and Sri Lanka, and the Chinese policy in this regard is instructive.

Workers both in East Asia and in South Asia are migrating to other countries in search for work., and the issue of training standards that are comparable is growing in importance. However, this is not a subject visible in the policy dialogue in South Asia. In East Asia that is not the case. Vietnam is moving to prepare skill standards, and to conform to regional and international skill standards (ADB 2013). To date, only 123 national skills standards have been issued, and 50 are under development. The reason for these numbers is the necessary but time-consuming process of consultation with enterprises. Some ministries estimate the development of one national standard will take 2 years, twice the current estimate. The government also plans to develop regional-level and international-level skills standards. For

the regional skills standards, the government will adopt and adapt the skills standards used by regional neighbors, such as Malaysia. For the international standards, the government is looking to those used by countries such as Australia, the United Kingdom, and Germany.

While India and Sri Lanka already have a National Skills Qualification Framework, this receptivity to regional and international standards is not a matter that has been pursued seriously in these two countries. This is of particular relevance in the South Asia region (and not just in SE Asia), as the regional mobility and migration across the South Asian region, as well as to SE Asia and West Asia, is a reality that South Asian governments cannot ignore.

Governments also need to recognize that there are limits to their role in skills development. Beyond being a provider of TVET in the economy, the government should play an active in providing skills training where private solutions are not found. For example, certain geographical areas or highly strategic skills are too costly for private providers to cover. Nonetheless, governments should refrain from entering markets that are adequately served by private training providers to avoid crowding them out. To the extent that non-public providers are available and more efficient, the government can maximize the production of skills by financing its training through them, but even this financing of skills training should be largely confined for economically and socially disadvantaged groups, and for key occupations not covered by the private sector. Case studies show that excessive government control of training programs in Asian countries were sometimes not only ineffective, but discouraged private-firm training (Lee 2001, Ashton et al. 1999).

Governments should also play an active role in providing the public with information about labor market requirements, as well as the training system itself (i.e. options available to students and parents) and the performance of the public system. The government should also share information with citizens about the scope, quality, outcomes, and cost of private provision. For instance, in India the number of private Industrial Training Institutes has grown from 2,000 in 2007 to 10,000 in 2014, with little enhancement in the ability of the Ministry of Labour to monitor quality and outcomes.

Another role of government in creating demand for TVET would be to disseminate information (if such data is first collected) whether vocational education or training is more likely (than general academic education) to get youth a job. An analysis of the private returns to general education and vocational training based on data from the 2008 Viet Nam Household Living Standards Survey shows that workers with vocational training (including short-term training) are more likely to be employed than workers with a general education (ranging from no formal education to upper secondary) (ADB, 2013). It is only at the tertiary level that general education has better employment and wage outcomes than vocational college. Furthermore, workers with technical or vocational training at either the secondary or tertiary level earn 32% more than the average wage earner. Such research is needed in South Asia as well to show TVET is more likely to get youth a job.

There is a strong case for creating a law to guide TVET system. Unlike in many countries worldwide, including the PRC, Germany, Korea, and even Vietnam and the Philippines, none of the South Asian countries has a law to guide and raise TVET provision and define responsibility of different stakeholders. A similar law, if legislated in at least India could encourage greater industry participation in various aspects of TVET such as curriculum design, teacher training, practical training, certification etc. The Act should lay out the specific responsibilities of the state on the one hand, and skill providing institutes and industry on the other hand. Regular revision of curriculum in line with local industry needs, certification, and teacher training should also be included into the Act.

In Germany, for instance, the law enables the chambers of industry to carry out assessment and certification of competencies. In South Asia, certification tends to be a government responsibility, which stretches government capacity to even issue certificates, as system enrolment grows, let alone carry out proper checking of quality of training inputs or competency. Ultimately, competency should be measured and assessed by employers who will be the users of the trainees and their skills. The law could enable joint certification to take place in South Asian countries, by employers and government bodies together.

The 1996 Vocational Education Law of China was a landmark for its TVET system. The law spells out the roles and responsibilities of stakeholders, such as the central Ministry of Education (MOE) and Ministry of Human Resources and Social Security (MOHRSS), the sub-national departments; education and training institutes and the enterprises. The Law has provisions for integrating education and training with the industrial process through participation of local enterprises. In addition, it provides for adult training for those in the workforce as well as vocational training in rural areas.

Such a law could encourage greater industry participation in all aspects of VET – curriculum design, teacher training, practical training, certification etc. The Act should lay out the specific responsibilities of the state on the one hand, and skill providing institutes and industry on the other hand. Regular revision of curriculum in line with local industry needs, certification, and teacher training should also be included into the Act.

Moving South Asian TVET systems from a supply-oriented to a more market demand-oriented system training system is essential to ensure relevance of education and skills training programs to the changing industry demand. A review of technical and vocational education projects funded by ADB across Asia and the Pacific concluded that linkage with industry is the single most important factor in training success (ADB 2004).

The governments in each country should consider some of the following steps to build a more demand-oriented TVET system: (i) appointing employers in governance structures of VET institutions – this is beginning to happen at least in the Industrial Training Institutes in India, though not very effectively so far (Mehrotra, 2014); (ii) institutionalizing regular tracer or tracking studies to measure effectiveness of training programs and continually change program offerings accordingly, which again happens rarely; (iii) paying incentives to

providers for meeting market-based performance standards of quantity and quality (e.g., per trainee on schedule, per graduate meeting competency standards, per graduates employed); (iv) making managers and institutions accountable for results to boards of governors dominated by employers; (v) earning all or some of the budget through the market; (vi) making institutions autonomous with proper safeguards and accounting controls; (vii) enforcing competitive bidding for private companies to manage public training centers; (viii) renting premises and equipment, while hiring instructors through short-term contracts, for greater flexibility.

As discussed earlier, centralized TVET systems in South Asia, which tend to be governmentand supply-driven, suffer from lengthy decision-making processes, remoteness from clients, and rigidity to change. Giving training institutions independence in operation— procurement and human resource management, program development and marketing, and income management—can go a long way towards making training services responsive to demand. It allows training institutions to generate and mobilize their own resources, as well as develop their market. Relationships to the employment market can be much closer. Although full autonomy may require more planning and monitoring, partial autonomy may be realistic and generate impact (ADB, 2009).

Flexibility in respect of new course introduction and curriculum design is urgently needed in South Asia. For instance, in China, local industry participation in TVET is encouraged and has been provided for in the 1996 Vocational Education Law. The curriculum of a senior secondary vocational school is designed such that one- third consists of general academic skills defined nationally by the

Ministry of Education, another one- third is again nationally defined content associated with the particular occupation, and the remaining one- third is defined again with respect to the occupational field but is determined locally at the school level with the help of local enterprises.

This shows the flexibility of the Chinese TVET system, that curriculum for each trade has a local content. There is no such flexibility in curriculum design permitted in South Asia. For instance, in India there is no flexibility at all in either Industrial Training Institutes (of the Ministry of Labour), nor in senior secondary vocational schools.

There is need to strengthen training for the workforce in the informal economy. The informal sector will continue to absorb the vast majority of new entrants to the workforce in many countries of the region (South Asia and several countries in East Asia). Skills are essential in the informal sector to raise productivity and incomes. Training for the informal sector is different from training for wage employment and must include business skills such as market analysis, pricing, and sales. Most skills training at present is oriented toward wage employment and is therefore not appropriate for the informal sector. A major shift is needed in training supply for the informal sector. Training alone is not a sufficient condition to improve productivity

Traditional apprenticeship is the dominant form of skills acquisition in the informal economy particularly in South Asia. Traditional apprenticeship is skills development provided to young people by a master craftsperson, i.e., enterprise-based training in informal economy enterprises. There could be some strategies to improve traditional apprenticeship. Some elements of the strategy could include assisting the poor in financing their apprenticeship training. A second could be to upgrade the skills of master craftspersons. A third would be to link apprenticeship with specialized training providers through facilitators and vouchers. All this could be facilitated by supporting and building informal sector associations, especially if micro-enterprises exist in geographical clusters.

In addition, there is a case for introducing supplementary training for apprentices in informal sectors—apprentices need theoretical training to grasp the basics of the trade such as measuring, calculating, reading of drawings; and expanded technical training, e.g., on equipment unavailable in their workshops.

South Asia has a large rural population that aspires to migrate to cities and to better jobs outside of agriculture. At an earlier stage of development many South East countries had the same problem. China and Vietnam still face this problem. An exemplary programme from Vietnam that is of value for South Asian countries is a very deliberately designed Rural Training Programme, which states that "vocational training for rural workers is to improve the quality of rural labor in meeting the requirements of industrialization and modernization of the agriculture sector and rural areas" (UNEVOC 2012). It recognizes that there is a need to shift vocational training for rural workers from a supply-driven approach to a demand driven approach, and to link training to socioeconomic development strategies and road maps nationally, regionally, sectorally, and for each locality. The programme seeks to provide vocational training for about an average of about 1 million rural workers per year, including training for 100,000 village civil servants. It also aims to improve the quality and efficiency of vocational training to generate employment, increase incomes, contribute to restructuring the rural economy and labor force, and support the industrialization and modernization of agriculture and rural areas (ADB 2012). The program would develop a pool of qualified village civil servants to support industrialization and modernization of agriculture and rural areas. Similarly, China has for long had purpose-built training schools for adults already in the workforce who only have informally acquired skills on the job.

There is need to promoteTVET programs that are gender-sensitive to encourage and support greater female labor force participation in South Asia. Girls' school enrolment has grown not only at primary level but is especially increasing fast at secondary level in South Asia, but its female LFPR remains lowest in the world (Mehrotra and Sinha, forthcoming). Unemployed female workers in Asia can enter modern services, and even manufacturing activities in small towns and peri-urban areas, if TVET access is improved (Mehrotra and Sinha 2015). While TVET access is generally very narrow in South Asia, not only for females, because of the lack of TVET courses there is an additional constraint in that girls would usually prefer to enter service sector wage and self-employment activities, but there has been historically been

a shortage of service sector courses in TVET programs in South Asia. As non-agricultural jobs grow in this region which has seen very rapid GDP growth in the past decade, along with a decline in poverty rates, there will be growing demand from girls for non-agricultural employment. The TVET sector needs to respond to this demand.

The Private Sector's Role

In-firm training can be stimulated, especially in middle-income South Asian countries. The incidence of in-firm training varies considerably across regions and countries and is very low in South Asia. Although public support for it may be needed in a few clearly defined areas, direct public subsidies should be avoided since many enterprises provide their own training without government support. Instead, to encourage in-firm training, various measures can be adopted by public authorities to provide enterprises with incentives to expand their own infirm training programs. These may include training grants or loans to enterprises to help them cover or recover part of the cost of training. Another form of incentive for the expansion of in-firm training is the provision of a wage subsidy by the state during the period of training.

Most of the in-firm training conducted in South Asia is in large firms and not in SMEs which dominate the region. Such SMEs could be encouraged by governments to join hands, and jointly fund training within a cluster where such SMEs are producing similar products (Mehrotra et al. 2014b). The government should advocate training as a means to increase productivity and profits within such enterprises, but also facilitate such training by offering the premises of government TVET institutions. This could raise the basic skill levels of entrants to the labor market, stimulate training for low-educated workers and workers in small enterprises who have little access to training and build the capacity of trade and sector associations to provide training services to their members.

The experience of Korean industry is particularly instructive for South Asia generally, but India especially has a large industry sector to consider the following. Korea's training system is designed such that both supply and demand sides are addressed (Oh 2013). On the supply side, Korea has a training account system. The unemployed, with and without previous work experience, are entitled to an individual training account as job seekers. Through this training account, job seekers could enroll for training programs and cover the cost of training. Therefore, the system provides the right to the unemployed in search of job to be trained and to select the programs at their disposal in the labor market. In this way, candidates can find the training programs that better serve to their purpose.

On the demand side, for the companies, Korea has a training cost reimbursement system as a part of its employment insurance system. Companies contribute employment insurance premiums and they can be reimbursed up to a maximum amount proportional to this contribution from the employment insurance fund. This is not dissimilar to the Malaysian and Brazilian systems (and variants of it are found in 63 countries around the world, a subject we return to section 3) (see Mehrotra, 2013 for a detailed discussion of such funds). If and only if the companies have implemented training, they can receive the reimbursement from the fund. Thus, companies have an incentive to provide training for their own employees since otherwise they would waste the training fund. However, the problem among SMEs under the system is that they do not have the time and resources needed to provide training. Therefore, some SMEs form a training consortium among themselves, in order to implement training more efficiently, thus utilizing economies of scale (Oh, 2013).

Local governments in China try to attract the support of local enterprises in TVET. The local enterprises because of fear of punishment (taxation or negative publicity or taint on reputation) at the hands of local governments (empowered by the provisions of the 1996 VE Law) do participate in practical training. The local governments help local enterprises by incentives such as allotment of land at subsidized prices, or preferential treatment in award of government projects. Such measures encourage industry to actively participate in vocational education and can be adopted in case of South Asian firms as well.

Innovations such as competency-based training and vocational qualification frameworks can help to put appropriate quality standards in place, but this requires the private sector to work with government to prepare the standards. Poor educational attainment of incoming trainees limits skill achievements. The level of skills and knowledge of teachers and work-based instructors is a key determinant of the quality of any country's system of education and training. Inadequate numbers and qualifications of instructors, discussed earlier, are among the main factors responsible for low quality of instruction. This applies especially to lack of industrial experience by trainers. Public bureaucracies seldom recognize the need to certify and remunerate instructors based on industrial experience. This is precisely where the private sector must play a role.

Usually employers may pay little attention to the formal qualifications in their hiring practices. Quality assurance processes may also be weak, including skills testing systems. Reforms in trade testing and examinations can exert a beneficial influence on the system to the extent that they are rooted in occupational analysis. Many systems of vocational training focus rigidly on preparation for terminal examinations or trade tests. Too often the tests have become obsolete and disconnected from labor market requirements. Still, testing can be used as a powerful means to reform the content of vocational training. The key is to root the tests in the competencies required for the job, as determined by occupational and job analysis. But this requires adequate training in relevant competencies for the examiners and assessors. That is why we have emphasized the need for direct industry and employer involvement in assessment, which should be mandated in South Asian countries by law.

Good practice would involve employers in testing graduates. This has been done traditionally by the industrial chambers in Germany. Reforms in the Association of Southeast Asian Nations (ASEAN) are moving in the direction of establishing a regional qualifications

framework. However, as conceived, these standards may be too complex for present capacities in some countries (DFID Briefing 2007). In South Asia it is still too early to move towards regional qualification frameworks, although mobility and migration was identified in an earlier section as a pattern characterizing labor markets in the sub-region and across the region as well.

Finance for TVET: A Joint Public-Private Responsibility

Financial mechanisms can be powerful instruments for improving effectiveness and efficiency. Financial resources are usually allocated to public training institutions on ad hoc, historical bases regardless of performance in South Asia. This reinforces inefficiency. Competition for funds has proven effective in creating training markets and reducing unit costs. Use of normative financing focuses efforts on outputs and results.

However, we have advocated training levies in India to ensure that the private sector participation in training increases (Mehrotra and Ghosh, 2013). Training levies can be collected from firms to create a training fund. Training levies have been widely practiced for many decades by over 60 countries worldwide. One successful case is found in Brazil, which has been operating several sector funds based on levies for around 6 decades. They are also found in Malaysia, Singapore, as well as in other countries in Latin America, Europe, and South Africa. Because these schemes are more effective in countries with a large formal sector (i.e., large tax base), training levies tend to apply almost exclusively in middle- and upper-income countries, where these two essential conditions exist, not in low-income countries (Dar et al. 2003; Ziderman 2003). Nonetheless, one country in South Asia that should adopt a training levy and establish a training fund is middle-income India. It can be imposed on large and medium-sized firms with 100 workers or more, whether or not the workers are permanent employees, or contract workers performing essentially the same tasks as regular, permanent workers. In fact, the new draft National Skills Policy 2015 proposes it as a payroll tax, following it being first mooted in a paper for the Planning Commission (Mehrotra and Ghosh, 2012), whence it was included in the 12th Five Year Plan (see chapter on Skill Development, vol 3).

Sector, or industry-specific, training funds are an alternative to national (centralized) funding models. These have proved very effective in Brazil (Castro 2012). Sector levies are limited to a defined sector of the economy, such as industry or transport. A national system of sector funds offers the advantages of flexibility and the ability to focus more directly on sector training needs. They may be more palatable to employers because of a sense of greater industry-specific orientation, less bureaucracy, and greater sense of ownership. However, they do not facilitate redistributing funds across sectors or financing nonsector-related skill priorities. Sector funds may duplicate efforts and fail to develop common core skills, transferable across industries. Earmarked payroll levies can be viewed as "benefit taxation," i.e., those that benefit (employers and workers) pay for the training. Levies can provide a steady and protected source of funding for training, particularly in the context of unstable

public budgets. However, under fiscal pressure, government may divert levy proceeds into general government revenues.

The modus operandi varies according to type of scheme: cost reimbursement, levy-grant, or levy exemption (train or pay). The Skills Development Fund in Singapore is a levy-grant system. The Human Resource Development Fund in Malaysia uses both the cost-reimbursement system and levy exemption. Beneficiaries tend to be larger enterprises, and within enterprises, those at higher occupational levels. Small firms tend not to benefit proportionately. Enterprise incentive funds are the most common form of levy scheme worldwide. Rigorous evaluation is generally lacking, but in some cases levy schemes have led to an increase in the volume of training within enterprises. Levy-grant systems, in particular, can allocate resources according to national priorities. However, enterprise incentive schemes require administrative capacity to operate and can discourage enterprise participation because of red tape. The Brazilian success with such funds shows that when managed mainly by the private sector itself, the funds achieve their objectives. Government management of such funds should be avoided also because big companies would then be reluctant to even contribute towards such a levy.

More demand can be generated among the poor by providing stipends to be drawn from a national training fund based on the training levy on large enterprises. As noted earlier, the poorest students drop out of school and join the labor market in South Asia directly, without any formal training or preparedness for the world of work. The financial cost and opportunity cost of school or training participation usually determine the youth's decision to continue in school, whether in a vocational program or not. Unless these two costs are offset, TVET access will not grow.

In addition, to encourage students from poor families to stay in school, vocational education should be integrated into all secondary schools in South Asia. Nonetheless, the mere availability of a vocational program at age 15 may not necessarily lead to an increase in demand for TVET. Students and their families face direct (i.e., tuition fee) and indirect costs (e.g., transportation and food allowance, opportunity cost) when participating in school or training programs (Mehrotra and Ghosh 2014). Indirect costs, especially the forgone income when in school or opportunity, are usually substantial and cause school drop-outs.

In South Asia, like in China decades back, very few students opt for the vocational stream, which is often perceived as a dead-end in terms of educational advancement vertically. But China encourages vocational education through stipends. At secondary high schools a stipend for rural students for boarding and lodging, and making tuition fee free of cost (since 2009) for all students has shown very positive outcomes. It is offered only to vocational students (not for general academic students at secondary level). Around 95 per cent employment rate of senior secondary vocational school graduates speaks for the external efficiency of China's TVET system.

Concluding remarks

This short paper has identified many of the weaknesses of TVET systems in South Asia. It has also drawn upon the experience of East Asian economies and their TVET systems to suggest good practices that the governments and private sector could adopt in South Asia. Adoption of a clear industrial policy is a pre-requisite in South Asian countries. Then a clear alignment of industrial policy with skill development policy is needed. Beyond that the government role will need to be more sharply focused than it has been so far. At the same time, government has to ensure that the private sector takes more responsibility than it has historically. An important means of doing this is training levies.