IV

Issues and Trends in Skills Development

A number of basic questions seem pertinent for training systems in general and for TEVT in Asia in particular:

- How can supply and demand be balanced? How can demand-responsive training be created? How can flexibility be built into training systems?
- What role should government play in skills development? When is government support for training justified?
- What role can private training provision play?
- What can be done to stimulate EBT?
- What role can training play in reducing unemployment? In particular, what approaches are recommended to address youth unemployment?
- What can be done when there are not enough wage jobs to go around? What role can training play to improve incomes in the informal sector? What can be learned from previous experiences with training in the informal sector?
- How can financial transfer mechanisms be used to make training more effective and efficient?
- What can be done to facilitate sustainable systems of skills formation?

A. BALANCING SUPPLY AND DEMAND: HOW CAN DEMAND-LED, FLEXIBLE SYSTEMS BE CREATED FOR SKILLS FORMATION?

The fundamental issue in skills development is how best to balance the supply of skills with demands in the labor market. If the demand is unsatisfied, skills bottlenecks impede growth and

development. If the supply is not absorbed, unemployment and waste of scarce resources ensue (Johanson and Adams 2004, 17—18). What steps can be taken to establish a *demand-led* system of TEVT? First, one has to be clear about "demand." Whose demand? This usually means demand by employers, or demand by the labor market. The first requirement to be "demand-led" is to have some idea of the demand for skills.

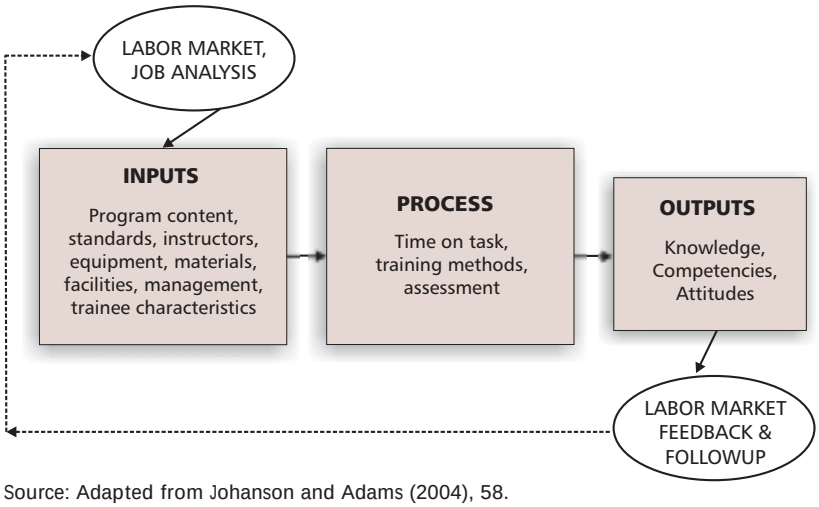
What should *not* be done is to repeat the mistakes of the manpower planning approach of the 1960s and 1970s. At that time, medium to long-term projections were made of occupational demand as a basis for decisions about training supply. There was inadequate appreciation of how economic uncertainty, technological change, and the nature of business cycles made it hazardous to forecast future labor and skill requirements. The forecasts proved almost universally unreliable, and the method was abandoned (Middleton et al. 1993, 136—139).

The following methods can be used instead to identify skills in demand:

(i) participation by employers in articulating which skills are in demand;
(ii) establishment of capacity to analyze market trends in terms of job creation and absorption, wage levels, waiting times for employment, etc. (see first "oval" in Figure 2, below);
(iii) tracer studies on the labor market outcomes of graduates over time, so that adjustments can be made in training supply (last "oval" in Figure 5); and
(iv) efficient dissemination of information to the public about employment trends.

In other cases, demand for training by potential trainees is taken as a proxy for market demand. If information about market demand is distributed widely, trainees will gravitate toward the occupations most in demand and where wages reflect scarcities, thus automatically adjusting supply upward to meet demand. Trainee demand, however, is a blunt instrument for gauging the strength of demand in the market

Figure 5: Steps in the Training Process



Source: Adapted from Johanson and Adams (2004), 58.

in most countries. Labor market information is generally not widely available. Strong demand for enrollment in TEVT institutions may merely reflect scarcity of places in general education and the belief that additional qualifications automatically enhance employment opportunities.

Other factors support the adjustment of supply to demand:

- The most important is linkages with employers, i.e. the extent to which employers are actually involved in advising and directing skills development. Employer advice is important, but the degree of their authority over decisions and direction in the training system is even more important. The most effective forms of employer participation confer some authority on employers to direct training systems.
- Another important factor in adjustment is the type of training system administration. Centralized systems, if they are competent and forward looking, can link training with industrial policy and direct adjustments. Such

centralized systems, however, tend to be exceptions. Alternatively, decentralization—-or delegation of authority from the center to the training institutions—-can provide incentives to link training outputs to local market demands.

- Allocation of training funds based on market performance is another means to facilitate adjustment of supply with demand. Managers of training institutions need incentives to break out of a supply-led mode. Owners and managers of private training providers often have strong financial incentives to adjust their course offerings to the demands of the market. Since their income derives mainly or exclusively from fees, they must be able to show good performance in graduate employment as a selling point to attract new trainees.

Building *flexibility* into skills provision can also facilitate rapid adjustments to markets. One of the reasons that the manpower planning approach failed is that prediction of skill requirements over the medium to long term has proved to be difficult—-even impossible. Employers themselves often do not know their hiring requirements 3 to 6 months in advance. This puts a premium on flexibility. Perhaps the chief means to build in system flexibility is to delay vocational choices and defer specialization until the later stages of training, when immediate market demands become clearer. A corollary would be to favor short-term over long-term training. This is a reason why school-based systems of training tend to be inflexible. Similarly, movement from time-based qualifications to modular training or competency-based training (CBT) enhances flexibility in training provision. Any mechanism that facilitates the shifting of resources also enhances flexibility. This may mean hiring staff on (short-term) contracts, or leasing rather than purchasing equipment where feasible, thus minimizing fixed assets, such as expensive buildings. Devolution of decision-making authority on training programs can also engender flexibility.

B. ROLE OF GOVERNMENT IN SKILLS PROVISION: WHEN IS GOVERNMENT SUPPORT JUSTIFIED?

Government *financing* of training programs differs significantly from government *provision* of training. In many cases government financing may be justified—-as in cases of market failure, or for equity purposes. Government provision of training, on the other hand, can only be justified in limited circumstances—such as when capacity is lacking for private provision, or government provision can be demonstrated to be the most effective and efficient means. Table 4 below shows the various cases, and the best and alternative policy responses.

In sum, the appropriate role of government in training is to let private training markets work where they function well, and where they do not, to engage the public sector. On this basis, the state is likely to maintain a continuing role in training in most countries. However, the economic rationale for public provision of training is considerably weaker than public financing of training (Ziderman 2003, 44). Public provision is acceptable only when it is efficient, effective, and market responsive, and mainly when private training provision is weak.

C. WHAT CAN BE DONE TO ENHANCE THE CONTRIBUTION OF PRIVATE TRAINING PROVISION?

Nongovernment trainers, for-profit and nonprofit, are a significant and growing part of TEVT. Building this capacity brings new private investment into training, broadens access, and reduces pressure on public spending for skills development. Nongovernment trainers have several advantages over public training. They are noted for their concern about efficiency (resulting in lower costs), their close linkages with the labor market, and their attention to female enrollments. However, private training also has its limitations. Variance in quality is the single most important issue. The for-profit sector focuses on skill clusters (e.g. secretarial/business, computers, languages) that require relatively low capital investment. Many

Table 4: Policy Options for Public Intervention in Training Markets

Reason for Intervention	Policy Options: State Subsidy ofTraining	State Provision of Training		Complementary Policies
Externalities[a]	P	N	—	None
Property rights (employer fear of poaching)[b]	A	N	P	Levy-grant schemes
Market imperfections	A	N	P	Deal with sources of market imperfections[c]
Inadequate enterprise training	A	N	P	Build up enterprise training capacity; levy-grant schemes
Weak private training provision	N	A/P	P	Build up private training capacity
Parity (of vocational trainees with peer group, e.g. in secondary education)	A	N	P	Reduce subsidies to trainees' peer group, together with introduction of selective scholarships
Disadvantaged groups	P	N	P	Targeted training subsidies; employment creation; income redistribution

P = preferred, A = acceptable (second best approach), N = not justified.

[a] "Positive externalities exist when the benefits of training that accrue to society exceed the private benefits realized by trainees and firms. Thus, from a societal perspective, the decisions of trainees and firms will lead to a shortfall of spending on training. For example, the shortages of a particular skill might inhibit the development of a new industry that is strategic for growth (Ziderman 2003, 40)."

[b] "Poaching imposed costs on firms that train because of the loss of newly trained workers to poaching firms. Training firms will then cut their training efforts or offer training that is narrow and not readily transferable… The result is a general under-provision of trained workers (Ziderman 2003, 42)."

[c] Policy may not be feasible.

Source: Ziderman (2003), 41. See also Behman (1990).

depend on the public sector for part-time instructors. Most private training is located in urban centers and is not available to those living in rural communities. Fees tend to exclude marginalized groups. However, nonprofit providers, including religious institutions, can serve valuable social objectives in reaching vulnerable and disadvantaged groups (Johanson and Adams 2004, 180—183 and chapter 4).

Ensuring that the regulatory framework does not erect unreasonable barriers to entry or expansion can enhance the provision of private training. Positive incentives can also be provided, such as access to public in-service training programs for managers and instructors, partial subsidies, tax credits, and loan guarantees.

D. HOW CAN ENTERPRISE-BASED TRAINING BE STIMULATED?

Enterprises may under-train staff for a variety of reasons, including fear of poaching, an uncompetitive production environment, and lack of company foresight. Yet enterprise training is highly important in raising the skills and competencies of the workforce. Both the Republic of Korea and Singapore (Table 3) concentrated early and continuously on upgrading the skills of the workforce. How can EBT be stimulated? The three most widely used methods are direct public subsidies, training grants within a levy-grant system,[15] and company tax concessions. Some observations on each of these methods are provided below.

- General training subsidies, e.g. subsidizing wages of apprentices, may result in more EBT. However, the burden of cost falls on public budgets.

[13] Earmarked levies on enterprise payroll. Two types of levies exist: (i) revenue-generation schemes, where levy proceeds are used to finance training provided by public sector institutions (the Latin American model), and (ii) levy-grant schemes aimed at encouraging training investment by firms themselves. In effect, the levy-grant system redistributes funds from non-training companies to those that provide training to their workers. The three types of levy-grant systems are cost-reimbursement, cost redistribution, and levy exemption (Ziderman 2003, 91— 92).

- Levy-grant systems, in contrast, are not publicly financed. The costs are met by enterprises (or shifted to workers). This has facilitated a more systematic, structured approach to enterprise training in many countries. However, care must be taken to avoid excessive administrative costs in levy-grant schemes. They may also bias training toward more formal and externally provided training, away from training on the job. Another risk is the "repackaging effect:" the adaptation and documentation of existing training provision to comply with eligibility requirements. Finally, the effect of the incentives may be temporary. In Asia, selected countries use levy systems: Malaysia, Singapore, Republic of Korea, Fiji Islands, and Taipei, China.
- Company tax concessions have not been favored worldwide. Tax concessions require a well developed and broadly based system of corporate taxation. The cost burden falls largely on public budgets in the form of reduced revenues. Firms often do not respond to the tax incentives because of excessive administrative costs or insufficient profits to benefit from the exemptions (Ziderman 2003,151—152).

E. WHAT ROLE CAN TRAINING PLAY IN REDUCING UNEMPLOYMENT, ESPECIALLY AMONG YOUTH?

Governments often launch massive crash training schemes for youth in response to concerns about socially unacceptably high rates of unemployment, and the socially dysfunctional behavior this can spawn. However, the record of success of such schemes has not been good.

> *Providing vocational…training is often posited as a cure for the large-scale unemployment of young people that is a widespread and persistent social and economic problem in developing countries. The logic assumes that young people cannot find employment because they do not possess the specialized skills required either by employers or for successful self-employment. Occupational training would therefore enable some significant proportion to achieve employment… Training as a solution to youth unemployment has not proven viable for two reasons. First, in the absence of job opportunities, the acquisition of labor market skills does not lead to enhanced employment; vocational education and training, alone, does not provide jobs. Second, even where an expanding modern sector does offer employment opportunities, most entry-level jobs do not require significant formal training before employment. The principal causes of youth unemployment are demographic and macroeconomic, not lack of skills (Middleton et al. 1993, 54—55).*

The basic problem with youth training is that it is essentially supply driven. However, increasing the supply of trained people does not create employment. Prudence demands that training for unemployment pay particular attention to addressing market needs.

Two types of training programs for the unemployed have had some success. The first is retraining workers displaced by structural adjustment, such as the downsizing of companies to make them more competitive in response to tariff reductions. The best retraining programs provide retraining along with job search skills to employees while they are still attached to the enterprise (Leigh 1992). Two youth training schemes in Latin America have also claimed some success—Chile Joven and Proyecto Joven in Argentina. What sets these schemes apart from typical youth unemployment programs is the inclusion of internships as an essential part of the training program, and competitive bidding for training contracts by interested training providers in both the public and private sector. Additional financial incentives are provided to contractors for results, i.e. for trainees who actually find employment. Initial evaluations showed that about 60% of the young people found a job at the end of the program, compared to less than 40% for unemployed people not in the program (Castro

[14] See Johanson and Adams (2004), Chapter 6, "Building Skills for the Informal Economy."

and Verdisco 1998, Castro 1999, ILO 1998a, 181). Both countries, it should be noted, have highly developed, modern economies with substantial wage employment. The approach may be less applicable to countries at lower stages of development.

F. WHAT ROLE CAN TRAINING PLAY TO IMPROVE INCOMES IN THE INFORMAL SECTOR?

In view of the growing proportion of people working in the informal economy in low-income countries, these countries must adopt strategies for training for self-employment and improving the productivity of the informal sector. What can training do to improve incomes and reduce poverty for those working in the informal sector?[16] Training, by itself, is not sufficient to raise incomes for those in the informal sector. Other interventions are often crucial—credit, marketing support, and business advice. Skills development is nevertheless an essential instrument in enabling the self-employed to generate income. Skills training in the informal sector is needed to enhance the productivity of informal sector activities, to improve the quality of its products and services, and thus to raise incomes of those working in the sector. Technical skills are crucial to diversifying product ranges and avoiding saturation of conventional informal sector markets. The breadth of tasks that need to be performed distinguishes skills requirements in the informal sector from formal wage employment. Self-employed persons in the informal sector usually need to complete specific jobs by themselves, from beginning to end. They must perform a full range of business functions from initial market surveys through cost and quality control, financing, and marketing.

Training providers can target three groups in the informal sector:

(i) mastercrafts persons and those already operating micro businesses, such as small manufacturing workshops,
(ii) trainees preparing to start their own businesses, and

[14] See Johanson and Adams (2004), Chapter 6, "Building Skills for the Informal Economy."

(iii) individuals undertaking income generating activities.

It is always risky to start new employment activities, so the best approach appears to be to work with existing enterprises. In particular, the best form of training for the informal sector appears to be support for traditional apprenticeship, thereby improving the productivity of the master, the enterprise, and the skills of apprentices working under the supervision of the master (Fluitman 1989). Conversely, the most difficult approach is to seek to generate self-employment for youth. Success often hinges on analysis of labor market opportunities and training follow-up, including credit, marketing, and business counseling. The promotion of income-generating activities is particularly relevant for rural areas. This requires transfer of practical knowledge about production techniques, raw materials, tools and equipment, and product design. This does not necessarily amount to a real skills training course, but requires activities such as pre-credit technical orientation, demonstrations of applications, skills transfer, and business counseling (Johanson and Adams 2004, 145).

G. WHAT ROLE CAN FINANCIAL MECHANISMS PLAY IN IMPROVING TRAINING?

Methods of allocating resources to training are powerful means to help training systems become more market-responsive and efficient. *Training funds* afford an opportunity to level the playing field for all providers by procuring training on a competitive basis. This encourages cost-effective delivery. An expansion of *cost sharing* increases consumer interest in the quality of training, as well as demand for training relevance and cost-effectiveness. Empowerment of consumers with training *vouchers* can lead to an expansion of training supply from different provider groups, more choice for trainees, increased relevance, and reductions in cost from competition.[15] The use of *budgeting norms* and *performance criteria*

[15] However, vouchers have proved to be complex to implement and control financially where low administrative capacity is an issue.

shows promise for improving training outcomes, and is especially relevant to shaping incentives and accountability for state-sponsored training. Norms for financing can be established using inputs, such as trainees enrolled; outputs, such as course completions; and outcomes, such as job placements. Allocation mechanisms for procuring training services vary in complexity and administrative requirements and need to be tailored to local circumstances. Combinations of the above norms could be feasible in most Asian settings, provided that reliable measurement criteria and adequate information systems are developed, results are reported candidly, and the political will exists to resist vested interests that may lose from their application (Johanson and Adams 2004, pp. 10—11 and Chapter 7).

H. HOW CAN SYSTEMS OF SKILLS FORMATION BE MADE FINANCIALLY SUSTAINABLE?

Achieving financial sustainability in TEVT projects is problematic. Each of the various possible sources for sustained financing has its limitation. Trainees, to the extent the clients are drawn from low-income groups, cannot afford to contribute much, if anything, to the cost of training. Still, some contributions by trainees (perhaps in labor or in-kind) are important for effectiveness as well as for raising revenues. Full cost recovery, however, is unlikely. Training institutions may also raise revenue by producing and selling goods and services on the market, or by renting facilities. “Training-cum-production” can lend a practical orientation to training provided it does not crowd out time for instruction. In addition, training institutions can seek to market their services to new clientele for full cost recovery. However, public institutions may lack incentives to mobilize resources if they are not permitted to keep the revenue they generate. In any event, experience shows that sale of products and services usually does not account for more than a quarter of operating costs. Student loans, another means for cost recovery, usually are not an option for vocational training. They may be an option for higher levels of technical education and training at the post-secondary level. Then the level of effective subsidy in the loans—taking into account

actual vs. real rates of interest, repayment rates, and costs of administration—-must be compared with outright grants to determine whether it is worth making loans.

Two types of training do provide scope for full cost recovery: training for enterprises, and private training provision. Public training institutions can often charge full costs for upgrading workers from industry. And private training typically is self-financing through tuition payments. To the extent that private training is encouraged, the overall system of skills development becomes more sustainable. Overall, however, most training will continue to depend on public subsidies for sustainability, but this does not necessarily mean public provision of training.