

This study is based on the experiences of the Industry-led apprenticeship project, a multi-stakeholder initiative to enhance access to training and employment opportunities for the poor and disadvantaged in the footwear and leathergoods sector in Bangladesh.

Industry-led Apprenticeships: facilitating sector-wide horizontal collaboration for sustainable and demand-led skills development

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VET in the context of Bangladesh

In Bangladesh, poverty rates have been declining rapidly since the 1990ies, reaching 31% in 2010, about half the rate in 1990. Besides strong and stable economic growth, the single most important factor for this impressive achievement is a marked decrease in birth rates, which has led to an increase in the share of the economically active population. As a result, **labour force growth now exceeds population growth**, with more than 2 million young people entering the labour market each year. This is both an opportunity and a challenge, as most of these employment seekers are unskilled.



The formal Technical and Vocational Education and Training (TVET) system is in low demand and **underperforming**: supply capacity, quality and labor market ori-

entation of training is weak, while access barriers are high. Only about 500'000 students are currently enrolled in 3'000 formal TVET institutions which barely meet 20% of the annual training needs and the job placement rate of graduates is less than 40%. More than 60% of the labor force has either no education or up to primary education only. The low skills level of the labor force leads to low productivity and low wages.

In response to these challenges - and with support from the Swiss Development Cooperation (SDC) and the European Union (EU) - the Government of Bangladesh embarked on major reforms and approved the **National Skills Development Policy (NSDP)** in 2012. The NSDP introduced a more holistic understanding of the skills development as a multi-stakeholder endeavour, recognizing the important role of the private sector and the contributions of formal, informal and non-formal actors. The policy stipulated a shift towards competency-based training and the introduction of a framework of nationally recognized vocational qualifications, with expanded and strengthened quality assurance and coordination functions for regulatory bodies. Crucially, in order to **better consult the private sector** on occupations and skills in demand, and to involve it in the development of standards, qualifica-

tions and the actual training delivery, the policy called for the creation of **Industry Skills Councils** that would organize industry associations along sectoral lines.

The Centre of Excellence for Leather Skills (COEL)

In 2009 the *Industry Skills Council for Leather* took the initiative to establish its own training facility to cater to the needs of one of its member association, the *Leathergoods and Footwear Manufacturers and Exporters Association Bangladesh* (LFMEAB). Previously, the association's skills gap analyses had revealed significant training needs for three priority occupations in the industry: machine operator (for cutting, sewing and lasting¹ leather), machine maintenance technician and floor level supervisor. Thus, a number of proactive companies decided to join hands and founded the *Centre of Excellence for Leather Skills (COEL)* to train and prepare a new generation of skilled workers for the member companies.

The main training centre was established in the footwear cluster area of Gazipur, close to Dhaka, in a building donated by a leading LFMEAB company. With initial support from the EU/ILO and sizeable contributions from member companies, the centre was gradually equipped with the necessary machinery (sewing, cutting and lasting). With additional support from the USAID PRICE project the training centre developed its first curricula, organized training of trainers, and was able to provide for learning materials and stipends to first its trainees. In 2009 the COEL in Gazipur started its operations, enrolling its first batches of machine operator trainees. However, the center's capacity soon reached its limits. Moreover, the association realized, that the centralized, "one-size-fits-all" trainings did not adequately address the needs of both prospective trainees and employers.

SDC took a keen interest in COEL and the idea to complement the centre's classroom based training with on-the-job working experience due to a couple of reasons: Firstly, Switzerland's own dual system is based on an industry-led VET, combining theoretical school-based learning and practical on-the-job training. Secondly, SDC could draw on its experience facilitating collaboration between VET institutions, employers and the government. And thirdly, the strong industry ownership of COEL made this initiative an ideal starting point to operationalize Bangladesh's NSDP and to experiment with new kinds of partnership models.

With a view to establishing a viable and ultimately self-supporting industry-led apprenticeship system in the leather sector, SDC initiated talks with the ISC for leather, the LFMEAB and COEL, which resulted in the *industry-led apprenticeship project*. By addressing a range of regulatory, administrative, technical and financial issues, this project intends to demonstrate that formal apprenticeship is a promising solution for skills development in Bangladesh. The overall objective of the project is to increase sustainable employment opportunities for the unskilled and unemployed and institutionalize cooperation between key stakeholders in the field of skills development in the leather industry.



¹ Lasting is the operation by which the sole and upper shoes are brought together.

The Industry-led apprenticeship model

The project pilots a decentralised apprenticeship model: COEL engages in a partnership with interested companies to train newly recruited *apprentices* through a mixture of theoretical and practical, on the job training. Under the Industry-led Apprenticeship Project, COEL has signed agreements with 22 footwear and leathers goods companies who outsource the training of newly recruited employees to the COEL. Each partner company hosts a dedicated, separate production line in the factory used for training purposes, dubbed COEL-sub-centre.

Apprenticeship scheme:

An apprenticeship typically lasts one year and is subdivided into two components:

- 1) An intensive 3 month basic training (inception programme), in which apprentices acquire basic skills in a company's separate production line, under close supervision from COEL trainers and coordinators; for companies in the vicinity of the COEL main center in Gazipur, some of this training takes place in the central COEL facility.
- 2) After successful completion of the inception programme, when they are deemed ready by their trainers and the company supervisors, the apprentices are fully integrated into regular production, but still closely accompanied and coached by in-house company supervisors and paired with experienced operators.



The vast majority of apprenticeships offered concern the following three major occupations: Machine Operator-Sewing, Machine Operator-Cutting and Machine Operator-Lasting¹. However, the COEL is increasingly offering trainings in other selected occupations such as Machine Maintenance Technician, Quality Control

Officer and Floor-level Supervisor, using different schemes. Occupational Health and Safety measures are part of all apprenticeship curricula.

Supervision and mentoring:

An in-charge mentor for each batch from the respective company supervises every trainee. Each apprentice maintains a training logbook regularly checked by the supervisor. An overall coordinator is placed by the COEL to oversee the program. The COEL coordinator has overall responsibility for the apprentices and runs a Training of Trainers program for the company trainers and factory supervisors.



Selection of Trainees:

The apprentices are selected by a team consisting of a representative of COEL and a representative of the company that will later hire the trainee, whereby the company has the final say. The companies look for candidates aged between 18 and 30 years who have at least completed grade 5 (primary school) and are literate, with a preference for female candidates.

Financing:

A crucial element of the project is the financing model applied to cover the costs of the apprenticeships. Testing and validating the financing model underlying the initiative, in particular the buy-in by leading companies in the leather industry is an objective in its own right in the framework of the project. The COEL is a not for profit entity, but its operations, in addition to the

salaries paid to the apprentices during the initial 3 months training period entail significant costs.

The following figure provides a cost breakdown (in Bangladeshi Taka) between SDC, previous donors and the partner companies.

Source	2011	2012	2013	2014	Total
Industry	2805700	7134547	12808883	86340546	85089676
SDC		7806117	18469754	56753256	83029127
USAID	2510182	759512	2553429		5823123
ILO (EU Funded)	7594480	10947100			18541580
Placement Fee		984000	3900340	10800000	15684340
Total	12910362	27631276	37732406	133893802	212167846

For the moment, SDC covers most of the COEL's operational costs, which consist of staff salaries mainly. In addition, SDC also provides a subsidy of BDT 2000 per month to the companies during the first three months inception programme, which they use to pay the apprentices' salaries while they are still in training and not yet integrated into regular production. This subsidy covers about one third of the salaries paid to trainees during these first three months. After completion of the inception training, the trainees are fully-fledged employees on the companies' payroll.

The companies in turn contribute in kind in the form of material, machinery and staff time, as well as in cash in the form of salaries paid to the trainees for the whole duration of the apprenticeships. They also pay a placement fee of BDT 3000 Taka to COEL for every trainee who completes the initial 3 months training and is integrated into production.

As they realize the benefits of investing in their employees' skills, participating companies and the Industry Skills Council, which already contribute approximately 70% of the training costs, should eventually shoulder the entire training costs. SDC expects to gradually phase out the subsidy to the trainees' salaries, while at the same time increasing the placement fee paid by the companies to COEL to a cost-recovering level. This way, the training

services provided to the companies should become commercially viable and financially sustainable. SDC expects that if the intervention works successfully, other industrial associations will recognize apprenticeship as a promising model and will start deliberations for replication and adaptation in their sector.

Assessment and Certification:

COEL collaborates with the Bureau of Manpower, Employment and Training (BMET) and the Bangladesh Technical Education Board (BTEB). BTEB provides accreditation to the courses and curricula designed for the apprenticeship programs. BMET currently provides certifications to the apprentices. There is no testing involved in the certifications so far; the certificates are delivered upon demand from the employers, who attest that the apprentice has acquired the knowledge and skills required to be considered a skilled machine operator. However, COEL is already piloting a new machine operator apprenticeship based on the newly developed National Qualification Framework (NQF) which will culminate in assessments by BTEB recognized industry assessors and BTEB certification. This nascent integration into the formal VET system is an important step for COEL and beneficiaries. Officially endorsed certificates based on assessments against recognized occupational standards should facilitate mobility of trainees and their access to further training in higher levels of competency, as well as transparency of the workers' qualifications for prospective employers.

Results and New Opportunities

Under the Industry-led Apprenticeship Project, COEL has signed agreements with 22 footwear and leathergoods companies who outsource the training of newly recruited employees to the COEL. As of August 2014, 5018 apprentices have graduated from the programme, out of which 4771 have found permanent employment in the company they were trained in. Of

those graduates who completed their apprenticeship a year ago, 88% are still working in the same company. The relevance of the apprenticeship model is becoming increasingly salient. Employers and apprentices report high levels of satisfaction and, for the latter, the apprenticeships have not just acted as a pathway to gainful employment: A recent tracer study has shown significant improvements in terms of income, livelihood and knowledge about their labour rights among graduates. Participating companies accrue benefits in the form of reduced training costs, e.g. more efficient training of new recruits and temporary project subsidy, reduced rejection and wastage rates. Moreover they experience higher staff productivity after completion of training, higher staff retention and an improved standing in the LFMEAB, which helps companies accessing other services provided by the association, which also issues export licenses. Despite continued dependence on outside funding, prospects for financial sustainability are promising if the transition is managed carefully and gradually.

Meanwhile, the COEL has been working on diversifying its service offer. The center's vision is to become a one stop service center for the leather industry, not only in relation to skills development but also with regards to product innovation, quality and compliance with the labor law and other regulations. It provides training in compliance to several external organizations, and has an agreement with the Footwear Design & Development Institute (FDDI) in India to further develop its expertise in this field through regular exchange visits, training of trainers and shared facilities. COEL has also branched out to other parts of Bangladesh by opening a sub-center in Chittagong, and provides training and job placement services to several NGOs working with disabled people, such as Action on Disability and Development (ADD).

Strength and Challenges

The initiative is clearly industry-driven, and ownership by the industry of the apprenticeship model is strong. The participating companies contribute a high share of the training cost, therefore they expect services provided by COEL to be flexible and tailored to their specific needs. This means that there is not a single apprenticeship model, the content, length and duration of training, as well as the remuneration of trainees varies somewhat across companies and trades. As the COEL expands the provision of apprenticeships applying the National Competency Standards for machine operators (National Qualification Framework Level 1), the right balance between accommodating employers' specific needs and standardisation will have to be struck. The current apprenticeships offered by COEL under the project have durations of 488 hours, while the NTVQF Level 1 Standard for Footwear machine operators foresees 720 hours of training. To manage these challenges, it will be crucial for the ISC to proactively contribute to the development and revision of standards and curricula.



The COEL team describes its culture as “corporate”, it sees COEL's role as that of a service provider to the industry, as opposed to an NGO. While this is a key strength and success factor of the project, it also entails some challenges for Development Partners: Understandably, the industry tends to select the best-educated

high-performing candidates for the apprenticeships, whereas SDC has an interest in aligning the selection process with its target group, i.e. disadvantaged, marginalized and poor people, as much as possible. While the selection process can be tweaked to a certain extent, e.g. by using incentive payments, this has to be negotiated with the industry partners. The competing aims of industry ownership on the one hand and social inclusion on the other have to be carefully calibrated. In the framework of this project, this problem is limited, as due to the level of salaries and the fact that working in the leather sector carries a social stigma in Bangladesh, most apprentices and leather workers are from poor, often rural backgrounds.

Success Factors

The industry-led apprenticeship project is a good example of private sector participation in skills development. Context-specific factors made this participation and the buy-in by the private sector possible. A quick analysis reveals a mix of structural and conjunctural factors that made the leather industry in Bangladesh conducive for such an initiative:

1. **The leather sector is booming:** Sales volumes of leather, leather goods and footwear grew by more than 30% in 2013/14, thus generating a high demand for qualified labour. The sector already employs about one million people in Bangladesh, and representatives of the industry assess future demand for new semi-skilled workers at around 40'000 a year;
2. **The nature of the production:**
 - leather goods and footwear production requires more advanced technology and a higher set of skills than other comparable products, e.g. ready-made garments;
3. **Quality demanding (export) market:** The industry is export-driven and caters to demanding international markets, where quality fetches a premium and compliance with labour standards and working conditions of staff is increasingly perceived as an important selling point;
4. **A raise in the minimum wage:** Following labour disputes in the wake of horrific accidents in the garment industry in 2013, the government of Bangladesh raised the legal minimum wage by 76%, from 3000 to 5300 BDT. This change in the regulatory framework probably helped create industry ownership of the apprenticeship model. Even though the higher wage may have slowed down overall employment creation in the industry, it further incentivizes employers to invest in training and productivity of a comparatively smaller but more expensive workforce.
5. **Sector organisation and intra-firm collaboration:** The sector is dominated by a relatively small number of large, established companies, with one company clearly in the lead. There are only about 95 companies catering to the export market. These were already orga-



nized and collaborative before the start of the project. This made overcoming the typical collective action / freeriding problem easier. In a more fragmented market, firms are usually wary of investing in training of staff that will likely end up working for competitors. Indeed, one of the risks to the COEL model is free-riding by newly founded companies, who poach experienced personnel from the LFMEAB members with marginally (and sometimes temporarily) higher salaries, but do not invest in skills. In the long run, this undermines collaboration on skills development in the sector. Generally, it is easier to convince a smaller number of firms to distribute the cost of training qualified personnel evenly among members.

6. **Model role of the lead company:** The lead company soon recognized the value of investing in employee skills. It wielded enough influence with the ISC and the association to convince other LFMEAB member companies to collaborate.

Strengthening private sector involvement is a major concern in SDC's Vocational Skills Development Initiatives, and this involvement comes in different shapes. The industry-led apprenticeship is not a blueprint to achieve this aim. As the list above should make clear, fostering involvement in VSD and buy-in from the private sector is challenging. But this experience provides some hints on what such a sector-wide collaboration and workplace-based learning model could look like. The following box summarizes some of the main lessons learned from this and other similar projects.



Chose the right sector

When planning similar VET initiatives, the choice of sector or industry is crucial. Ideally, the sector should display the following characteristics:

- 1) Strong and growing demand for skilled labor. Often, the private sector frames investments in training of employees in terms of immediate cost. The longer term benefits tend to receive less attention from company managers. A already noticeable or foreseeable “skills crunch”, or lack of qualified personnel is helpful to harness the self-interest of the private sector to contribute and invest in skills development.
- 2) Some degree of organization and tradition of collaboration within the sector: in situations where demand and competition among companies for qualified personnel is high, employee turnover and poaching of skilled workers can inhibit investments in skills development by the private sector. Strong and well-organized business member organisations such as industry associations can help overcome that obstacle. Such associations are usually stronger and better able to enforce agreements when they provide crucial services to member companies.
- 3) High-value and knowledge or capital intensive production: when the goods or services provided are knowledge or capital intensive, and key outlet markets reward quality over quantity and cost, investments in training become more worthwhile, and the business case for training can be made more easily. Where production is intensive in unskilled labor, labor cost is employers’ primary concern and price-competition prevails, involving the private sector in training is much more difficult.

Create Ownership and maintain flexibility

In order to achieve a measure of sustainability, it is important to listen to the private sector partners and let them come up with the solutions that best fit their needs. Employers should be in the driving seat. Planning of the training schemes should be participative. Ideally, it is best when the initiative comes from the industry itself, and Development Partners are approached at a later stage for advice and funding. Since sector-wide collaboration is important and the specific needs’ and interests of individual companies might differ, negotiations should be held within BMOs and associations beforehand. Flexibility should also be maintained by Development Partners after the launch of the initiative, project Documents and logical frameworks should not be carved in stone. The industry-apprenticeship project logical framework had to be overhauled after a mid-term evaluation, and many important features such as the decentralized sub-center model were not foreseen in the beginning.

Subsidize, but smartly, with a clear schedule for phasing out

Companies and Human Resource managers invariably complain about the difficulty of finding adequately skilled personnel. However, when it comes to devising training schemes and up-front cash investments in staff training, they are often more reluctant. Always remember that reported need for qualified labor does not automatically imply a willingness to invest in training, or to pay market wages for better skilled personnel. Subsidies can help demonstrate the benefits of investment and involvement in VET, they can mitigate the risks and kick-start collaboration. But the capacity and willingness of companies to eventually foot a growing bill on their own should be carefully ascertained in the beginning, and a clear phasing out schedule agreed upon. Also, subsidies can be leveraged to obtain commitments from private sector partners to respect minimum standards of working conditions, and agree to pass on part of the productivity gains to the staff in form of higher wages.

Strike the right balance between productivity and social inclusion objectives

As in the example of the industry-led apprenticeship project, there is sometimes a conflict of

interest between Development Partners' social inclusion objectives and companies' objectives of increasing productivity and profit maximization. Development Partners' agenda is to promote access to employment and income for specific target groups, defined by poverty or social status, sex, ethnic or cultural identity or health condition. For their part, employers mostly want to recruit and retain the candidates most likely to perform, often the best-educated and better-off candidates available. Requiring employers to recruit trainees from the target group exclusively, as a precondition for engagement, could kill ownership of the training scheme in the bud, and compromise sustainability. A right balance has to be found in negotiations. For Development Partners, one way to encourage companies to recruit more trainees from their target group is incentive payments, whereby the training, salary or recruitment costs of targeted trainees is subsidized to a higher level, thus reducing costs to employers. One should however bear in mind that such incentive payments are always temporary, and that they will not affect employers' preferences in the long run. Having said that, in some cases employers' reluctance to hire women for example can also be motivated by cultural norms that have little to do with candidates' ability or potential. In such cases, demonstrating the business case for hiring people from the target group can help, as well as targeted measures to address specific access barriers for the target group.

Integrate private initiative in the formal VET system, but gradually

The LFMEAB and COEL experience illustrate how meaningful and sustainable VET schemes with close private sector involvement sometime originate outside of the formal VET system. Among other advantages, this allows to experiment and to tailor and further develop training schemes that really correspond to the needs of the private sector. Eventually, as such schemes reach a critical size in terms of trainees and training services offer, standardization and integration into the formal VET system become more attractive. Official recognition by regulators helps accessing services such as testing and certification of trainee competencies by regulating bodies or accredited assessors, and in some cases public funding. However, the danger is losing flexibility along the way. Individual companies have different needs, and these can quickly evolve. For this reason, it is important for industry associations and BMOs to proactively contribute to the development and revision of standards and curricula.