Skills for Trade and Economic Diversification

STED

International Labour Office
Geneva

- Contributes to higher exports, economic diversification and more and better jobs
- Helps policy makers to ensure that firms find workers with the right skills and workers acquire the skills needed to find productive employment.

UPDATED VERSION OF 2017

Skills for Trade and Economic Diversification

STED is a programme that provides sector level technical assistance on identifying and implementing skills development strategies required for future success in international trade. It is designed to support growth and decent employment creation in sectors that have the potential to increase exports and to contribute to economic diversification.

STED takes a forward looking perspective, anticipating a sector's development and growth opportunities based on its global competitive position and market development. Together with an analysis of current skills supply and demand, this provides an outlook of existing and future skills shortages.

The programme works with national and sector stakeholders in sectors exposed to international trade to understand the strategic development of each target sector, and the contribution that skills development can make to address those challenges. STED projects identify strategies to meet the skills needs identified. Where funding allows, full-cycle STED continues beyond the analysis to assist stakeholders and other partners in implementing these strategies.

Thus, STED supports the formation of skills for which there is demand in the labour market and helps to avoid skill mismatches that contribute to unemployment, in particular among young workers.

The programme aims to develop and strengthen the capacity of national partners to institutionalize this analytic and implementation process within their country, either through provision of capacity building training or through working closely with national and sector partners on programme implementation.

The outcomes of STED are concrete recommendations at the policy, institutional, and enterprise level. The process involved in designing those recommendations contributes to improvements on the ground by raising awareness and stimulating dialogue on skills development among key stakeholders within a sector.

This note presents the ILO's **Skills for Trade and Economic Diversification (STED)** methodology. STED helps to align skill policies with sectoral strategies that contribute to export growth, economic diversification, and employment creation.

The note presents the rationale for this type of intervention, discusses some practical aspects of implementation, and explains the analytical process underlying STED. It also provides a brief overview of the experience so far with STED, in eleven countries and nineteen sectors.

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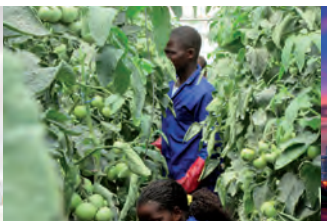



Why Technical Assistance on Skills for Trade?

SKILLS CONTRIBUTE TO HIGHER AND MORE DIVERSIFIED EXPORTS WITH MORE JOB CREATION. PROVIDING THE RIGHT SKILLS AT THE RIGHT TIME IS IMPORTANT AND REQUIRES POLICY COORDINATION.

Skills and Trade

The experience of many successful developing and emerging countries has demonstrated that trade openness can promote GDP growth and employment creation if accompanied by appropriate complementary policies.

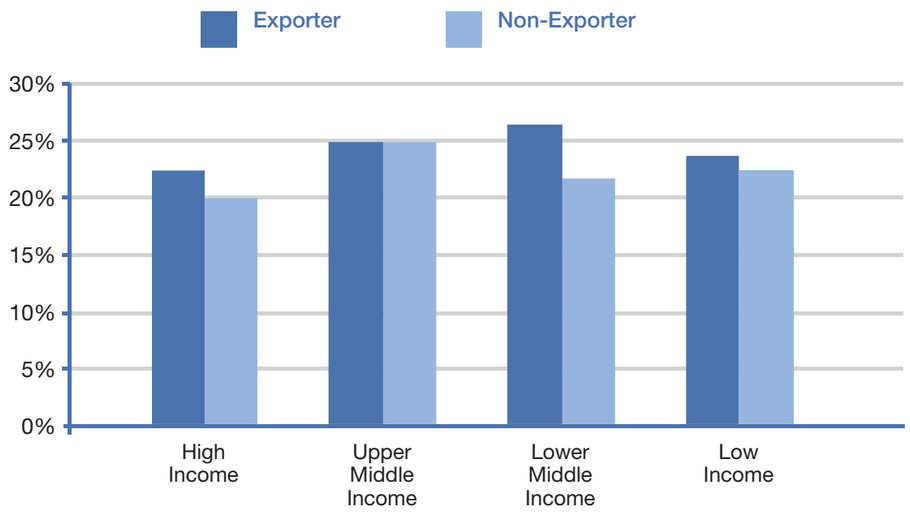
A key area in which well designed and pro-active policies are required to complement trade openness is skills development. Exporters tend to be larger, more productive, and employ more highly skilled workers than non-exporters. Enterprise survey data also shows that many firms around the world rank finding adequately skilled workers as a major constraint to their business (Fig. 1). Thus, in order for trade openness to translate into sustainable growth, investment in skills formation is crucial, especially in developing countries where skilled labour is scarce.

Skills are not only important for the quantity of export growth, but also for its quality. A country's level of skills is a key determinant of export diversification. Availability of skilled labour is also a prerequisite for countries to absorb new technologies through trade openness and FDI.

Experience from countries that have benefited from globalization suggests that strategic coordination between trade, investment, development, and skill policies was an important factor for success.

In the current fast changing context of globalization where technology and trading relations evolve rapidly, the responsiveness of skill supply to changes in demand plays a central role not only from an efficiency perspective but also from a distributional perspective. The wage premium on skills is rising in many countries due to increasing demand for skilled labour. Open economies need workers with higher skills better matched to industry demand. Education, training and life long learning are decisive factors for a worker's success in today's labour markets.

Fig. 1: Firms Ranking Inadequate Education of Workforce as Major Obstacle



Source: World Bank Enterprise Survey Data (2006-2016)

Why Technical Assistance?

Governments and social partners are aware of the importance of skills policies in the context of globalization. However, implementing these policies well is a challenge and requires strategic coordination with trade, investment, and development policies.

Trade leads to rapid structural changes and to a need for new capabilities at the firm level, which makes the anticipation of skill demand more complex for sectors with high trade integration.

Skills mismatch – a situation where the available skills do not match the demands of the labour market – is a common phenomenon and can have high social and economic costs, notably when it takes the form of youth unemployment.

Demographic trends in many developing and middle income countries contribute to the urgency of addressing these problems. Unprecedented numbers of young people are expected to enter the labour market over the next twenty years. Providing them with the right skills will be crucial for countries to benefit from this one time opportunity.

Why Sectoral Approach?

Companies working within the same sector usually have similar skills needs. In addition, employers' organizations, faculties or departments of education, research institutions, development agencies and regulatory bodies often take on a sectoral focus in dealing with industry workforce needs. This means that there is usually a clear set of stakeholders that can come together at the sector level to address the sector's skills requirements. Adopting sectoral approaches helps to focus attention on shared needs. It also proposes understanding and analysing the skills required for the successful development of a specific sector, and taking action based on the shared analysis.

Fig. 2 summarizes what is distinctive about STED, in that combines a sectoral approach to skills with trade and industrial strategy perspective, and social dialogue.

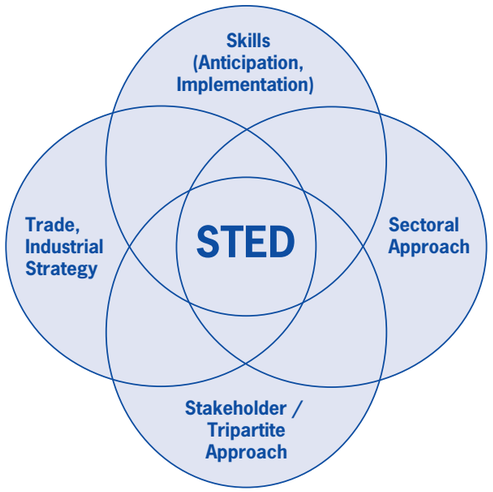
ILO's experience

STED builds upon the ILO's long standing experience in supporting its constituents on skills related issues. ILO technical assistance projects around the world contribute to the improvement of technical and vocational education and training (TVET), skills anticipation, labour market information systems, and active labour market policies.

On the trade side, ILO provides advisory services and capacity building on the relationship between trade and employment, integration with global value chains, and operations of multinational enterprises. Technical assistance in this area also covers competitiveness and worker-employer relations in exporting businesses.

Due to its tripartite structure, the ILO is uniquely positioned to work with governments, unions, and employers to promote social dialogue on skills development.

Fig. 2: What is distinctive about STED



STED Process

STED WORKS IN COLLABORATION WITH SECTOR AND NATIONAL PARTNERS TO ANALYSE THE CURRENT AND FUTURE SKILLS NEEDS OF TRADABLE SECTORS, AND TO ENABLE IMPLEMENTATION OF THE RESULTING RECOMMENDATIONS.

A Sectoral Approach

STED is designed for sectors that have potential to make substantial contributions to export development and diversification, or need to improve competitiveness in the face of foreign competition. They can be sectors that are still in their infancy, or established sectors with potential to diversify, for example through better products or new markets.

Methods in Analytic Phase

The analytic phase of STED typically involves a combination of technical work, dialogue with and among national and sector partners, and building institutional capacity. Technical work is undertaken at country level, backstopped by ILO field specialists and by trade and skills experts at ILO Headquarters. It typically includes desk research, a survey of employers, an examination of skills supply for the sector, and interview consultations with experts and key partners.

Dialogue with and among partners takes place through a steering committee organized at national or sector level, or through stakeholder workshops, or sometimes through a combination of both.

The organization of technical work aims to make best use of expertise available locally, and to develop the capacity of partner institutions and experts in the country to do similar work themselves in future.

Local Partners and Ownership

A key factor for the success of STED is to involve local partners in both analysis and implementation, and ensure that stakeholders have ownership of the analysis and a desire to implement the findings.

The ILO's strong relationship with labour ministries, unions, and employers' organizations greatly facilitates access to well-positioned partners for STED. STED initiatives often also partner with trade ministries and education ministries, and with line ministries responsible for target sectors such as those responsible for industry, tourism or agriculture.

Partners are systematically involved in the process from the beginning, including in the selection of sectors. In some cases, tripartite institutions for social dialogue on skills already exist as natural counterparts. In other cases, STED brings the relevant stakeholders in a sector together for the first time, and thus lays a foundation for social dialogue on skills and better policy coherence based on a strategic vision for a sector's future.

Implementation Phase and Follow-up

The STED analytic process contributes to improvements on the ground by raising awareness and stimulating dialogue on skills development among stakeholders within a sector. Ideally, a STED application will include an implementation phase with follow up activities to support implementation.

These include one or several of the following:

- If STED is applied as a stand-alone project, follow-up activities can include direct implementation under the project in collaboration with partners, for example in areas such as development and piloting of competency standards and new curricula or other targeted support for education and training providers.
- Building and maintaining an institution for continuous skills dialogue and support to implementation, such as a National Skills Council or a system of Sector Skills Councils.
- Providing support and backstopping for implementation by country partners, by other ILO projects or by other development partners.
- STED can also be embedded in broader technical assistance projects in the areas of skills, trade, sectoral and private sector development, and employment promotion. In this case, the analytical results from STED inform follow-up work through established ILO methodologies in areas such as Technical Vocational Education and Training (TVET) Reform, Dialogue on Trade and Employment, Skills Anticipation, Labour Market Information Systems and Enterprise Development.
- Finally, the STED methodology can be the basis for capacity building and support to existing institutions for skills anticipation and education planning. In this case, the focus is on developing in relevant local institutions the capacity to apply STED independently on an ongoing basis.

Fig. 3: Typical STED Process

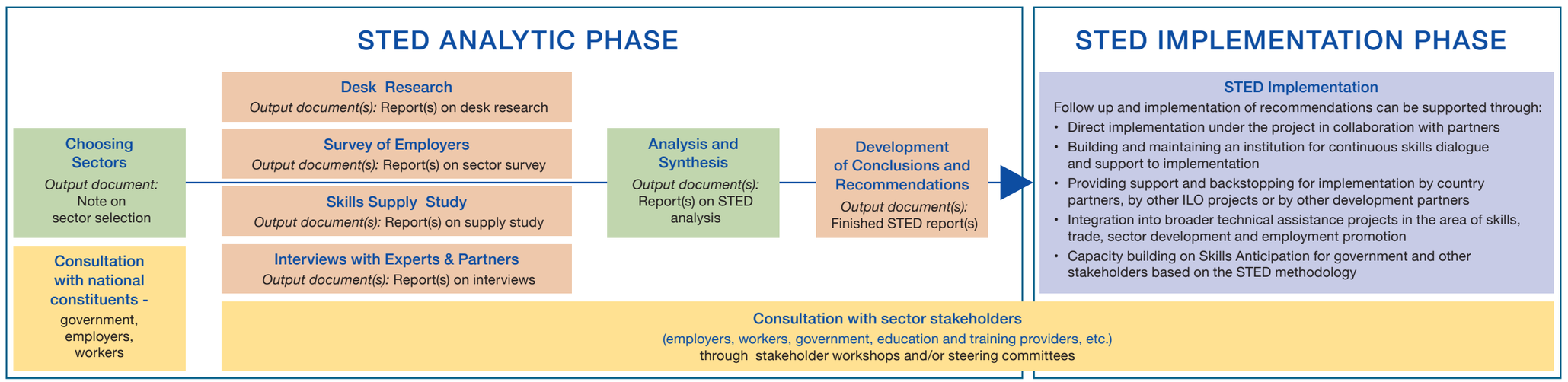


Figure 3 shows a model sequence of activities for STED application. In practice, this will often have to be adjusted to country or sector specific needs, or time constraints. Provided that sufficient resources are available, any number of suitable sectors can be covered in parallel.

Six Stages of STED Analysis

STED'S SIX-STAGE ANALYSIS ANTICIPATES A SECTOR'S FUTURE PERFORMANCE AND THE RESULTING CHANGES IN LABOUR DEMAND BY SKILL TYPE.

STAGE 1 /
Sector Position and Outlook

The first stage in a STED analysis is to analyse a sector's current position and outlook as well as external factors that are likely to affect its progress in the future. The results are discussed among sector partners in order to develop an ambitious but realistic growth scenario for the medium term, based on the following questions:

- **Business as usual:** What would be a realistic growth trajectory based on existing products and existing markets?
- **More of the same:** How can export growth for existing products be stepped up, and what would be a realistic target?
- **Upgrade:** Is there room to develop new products, access new markets, improve quality and branding, increase value addition, etc.?

STAGE 2 /
Business Capability Implications

The second stage identifies gaps between the business capabilities that firms in the sector have now and the business capabilities they will need in order to achieve the outcomes envisaged in the growth scenario from Stage 1. For example:

- What capabilities will firms need in order to develop new products in line with regulations and consumer tastes in foreign markets?
- What will they need to be able to do in areas such as logistics, sales, marketing and channel management in order to develop new export markets?
- What will a business in the sector have to be able to do better in its operations in order to become more competitive on cost, quality and responsiveness?

STAGE 3 /
What Type of Skills?

Improving business capabilities is not just about skills. It is also about technologies, work organization, processes, strategies, financing, business culture and other factors within and outside a firm. However, any capability improvement will also have significant implications for skill demand. These are analysed in Stage 3.The results point to the types of skills that will be important to deliver the medium term growth scenario. In addition, Stage 3 also identifies existing gaps in skills in all areas of relevance to firms (Box 2).

STAGE 4 /
How Many Workers by Skill Type?

Whether this stage is undertaken depends on data availability. Companies hire workers, not skill-sets. In order to develop useful policy recommendations, anticipated developments in skills requirements are therefore translated into demand for workers based on the sector's current occupational structure and the expected demand for new skills. The result is a picture of expected demand for workers by each relevant skill type.

BOX 2: Firm Level Analysis

Analysis of business capabilities (Stage 2) and types of skills needed (Stage 3) in STED takes account of all areas of activity within a firm.

STAGE 5 /
Skill Supply Gaps

Stage 5 matches the results from the previous stage with an assessment of the skills currently provided by the education system, on-job training, migration, etc. The purpose is to identify gaps between skill supply and demand now and in the future.

The analysis also covers the institutional set-up of the education system and available mechanisms for skills anticipation in order to identify potential institutional causes for skill mismatch.

STAGE 6 /
Proposed Responses

The results of the STED analysis are concrete recommendations at the policy, institutional, and enterprise level. Policy recommendations typically cover the development of specific curricula or training programs, labour market policies that improve job matching, as well as the overall incentive system (taxes, subsidies, etc.) for innovation and skill formation. Policy recommendations also cover ways to enhance coherence between trade, investment, labour market and skills policies.

At the institutional level, recommendations may suggest ways to enhance the relevance of training and educational institutions for the sector's needs, for example by improving dialogue with employers. In addition, the creation or improvement of permanent institutional arrangements for skills anticipation and skills governance might be recommended.

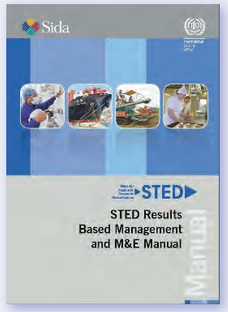
At the enterprise level, critical factors for skills development, such as in-house training, labour turnover, and mechanisms for social dialogue on training needs and delivery are considered and improvements are recommended where necessary.

Implementation

ILO technical assistance projects based on STED aim to continue beyond analysis to support and enable implementation.

STED RBM and M&E framework

The STED Results-Based Management (RBM) and M&E system has been designed to provide a consistent framework for capturing and reporting results and to ensure a coherent approach to measuring results across the programme. The purpose of the system is to deliver reliable and timely information so that programme management at all levels can transparently assess what is working, what is not and why. Better decisions will be made and resources will be allocated more efficiently through this feedback. The RBM and M&E system also plays an accountability function in providing the information needed to demonstrate the impact of STED-based investments.



STED's theory of change is about how skills interventions will effect changes in skills development systems that can enhance competitiveness, exports and economic diversification of the sector, and ultimately generate more decent jobs.

The STED RBM and M&E system places emphasis on assessing the sustainability of its interventions and the degree of systemic change that they achieve. STED defines systemic change in terms of long lasting transformation in both the structure and dynamics of a sector. STED aims to achieve transformation in two systems:

- Change in skills development system, with impact measured by "improvement in provision of skills for STED selected sectors".
- Change in productivity and capacity to participate in international trade of targeted sectors.

	STAGE 1 / Sector Position and Outlook	STAGE 2 / Business Capability Implications	STAGE 3 / What Type of Skills?	STAGE 4 / How many Workers by Skill Type?	STAGE 5 / Skill Supply Gap	STAGE 6 / Proposed Responses
QUESTIONS	**Internal** • Sector size • Growth trend • Structure (firms, value chains) • Employment • Sources of competitive advantage / disadvantage • Investment • Entrepreneurship • Sectoral strategy **External** • Enabling environment • World market growth & structure • Position in world market • Drivers of change • Competitors • Prices	What business capabilities are required to support the preferred growth scenario from **STAGE 1**? Which capabilities already exist, which need to be improved or newly created?	What skills are needed by firms to acquire the priority capabilities from **STAGE 2**? What are the existing skills gaps that should also be bridged? Demand for which skills is likely to newly emerge / expand / contract?	How is labour demand likely to develop for workers of different skill types (both new and existing)?	What are the critical gaps between current and future labour demand and supply by skill type? To what extent does the existing education and training system produce workers with the required skills? What other sources of skills supply (learning by doing, migration, etc.) are available?	How can existing and future critical skill gaps be closed? How can existing training/ education institutions be improved to match demand? What other sources of skill supply can be used? How can skill demand be better anticipated in the future? How can enterprises contribute to enhanced skills in their workforce?
RESULTS	**Growth scenarios such as:** • **Business as usual** • **More of the same** • **Upgrade the sector**	**Gaps and priorities in business capability development**	**Qualitative information on types of skills demanded**	**Quantitative and qualitative outlook on labour demand by skill type**	**Identification of current and future skill gaps**	**Recommendations at policy, institutional, and enterprise level to close critical skill gaps**
SIMPLIFIED EXAMPLE	Food exporting firms currently serve mainly neighbouring low income markets. They see an opportunity to export higher quality products to more developed markets in the future.	Accessing higher end markets requires regulatory approval and compliance with quality standards.	Production line workers will need better skills in safe food handling. Laboratory skills are required for quality control.	Accessing large high end markets will raise demand for production workers, and a need for specialists in a range of areas relating to quality control, assurance and certification.	There is a shortage of production workers trained in safe food handling skills. Too few specialists on compliance with EU and US food safety regulations and documentation are available.	Include training on safe food handling in technical education curricula. Provide training in safe food handling to production workers. Establish partnership with a leading university on food science education.

STED Results

THE FIRST STED INITIATIVES AIMING PROGRESS TO ENABLING IMPLEMENTATION OF STED RECOMMENDATIONS COMMENCED IN 2013.

Example on development and provision of specific skills development activities in Tunisia

Agro-food sector

Strengthening technical skills
- Organization of three training sessions on techniques of sensory analysis
- Training on compliance with the new European standard on food labelling

Mainstreaming of training on quality in vocational training programs
- Training of trainers on ISO 22000
- Training and certification of trainers on IRCA
- Development and mainstreaming of a specific module on quality in vocational training programs for the agro-food sector for BTS and BTP diplomas
- Design of a continuing training module on quality for companies and workers in the sector (target: specialized workers, technicians and senior technicians)
- Piloting of the new module on quality with a group of trainees at the training center for the agro-food industry

Metallurgy and metal construction

- Two training sessions were conducted on “Training with Qualification in Tube Welding (Qualification 6 G)”
- Two training sessions on “Control of Ultrasonic Welded Assemblies: Direct Access to Level 2”

For both sectors

- Training sessions on the theme “How to design an international marketing strategy”

STED results as of early 2017

STED has been applied in 19 sectors in 11 countries, with work in additional countries in early stages. Examples of sectors in which STED has been applied include food processing / agro-food, tourism and hospitality and pharmaceuticals. Reports on each country/sector have either been published or are in preparation for publication.

STED has strengthened dialogue on skills needed for trade between ministries, between government, employers and workers’ representatives, and between industry and providers of education and training in each of the countries where it has been deployed, most strongly in the 7 countries targeted since 2013.

The STED Programme has delivered capacity building training in the STED approach for national and sector partners (including ILO constituents) in four countries, with a total of 99 participants.

Recognizing the complexities in meaningfully attributing trade and employment outcomes to a process that focuses on analysis, stimulating dialogue among key actors, developing institutional capacity, and making a limited direct contribution to implementing recommendations, the STED Programme has developed a Results-Based Management and Monitoring & Evaluation framework based on the Donor Committee for Enterprise Development (DCED) framework. This is being piloted in three countries.

An evaluation of the STED Programme found that implementers assessed its relevance as high as 85 per cent. According to the evaluation: ”STED responds to the demand of Member States, many in serious need for economic diversification and trade …”.

Implementation of STED recommendations

Practical implementation work under STED-based projects varies depending on the skills needs identified and on the national and sector context. The aim is to address some of the highest priority needs identified directly in collaboration with partners (either under STED or in collaboration with other projects), and to mobilize ownership and momentum to implement other recommendations among partners. Types of implementation undertaken directly include, among others:

- Development of skills standards, and development and piloting of TVET curricula;
- Development and provision of courses in HR management and in marketing for managers at firms in target sectors, tailored to those sectors;
- Training of trainers in areas including: hospitality and food service skills; technical aspects of sourcing and finishing wood; and careers counselling;
- Development and piloting of programmes to develop priority technical skills in areas including: greenhouse horticulture; food labelling; and pharmaceutical production;
- Development of a platform to support certification and qualifications to international standards in welding;
- Mainstreaming of quality and food safety standards in TVET programmes for the agro-food sector;
- Preparation of careers information materials for priority occupations.

Example on Competency Standards Development in Cambodia

To directly support Cambodia’s skills development initiatives, the STED Programme is collaborating with DGTVET of Cambodia in the development of competency standards for four priority occupations identified in two STED target sectors. The occupations are welding, machining, baking and fruits & vegetable processing. In partnership with the National Polytechnic Institute of Cambodia (NPIC) and the Industrial Technical Institute (ITI), DGTVET led the drafting and validation process for the competency profiles, competency standards, competency-based curriculum, and competency assessment packages for the four occupations. In March 2017, the updated materials were presented to an Industry Advisory Group for endorsement to the Sub-Committee on Skills Standards and Testing of the National Training Board. Pilot courses will be conducted by NPIC and ITI in the second quarter of 2017.

STED work so far

Pilot countries

Aid for Trade Initiative for the Arab States (AfTIAS) project

SIDA-funded "Scaling up STED" project

Russian-funded "Applying the G20 Training Strategy" project

Ukraine
Year: 2010
- Metal Industry
- Tourism

Macedonia
Year: 2011
- Tourism
- Food Processing

Tunisia
- Metallurgy
- Food Processing

Kyrgyzstan
Year: 2012
- Garments

Viet Nam
- Tourism

Jordan
- Pharmaceuticals
- Food Processing

Bangladesh
Year: 2011
- Agro Processing
- Pharmaceuticals

Cambodia
- Food Processing
- Light Manufacturing)

Myanmar
- Tourism
- Vegetable & fruits

Egypt
- Furniture
- Food Processing

Malawi
- Oilseeds
- Horticulture

At early stages of STED work in Benin, Ghana, Guatemala, Morocco and the Philippines

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