



## PROFESSIONAL EDUCATION IN BOLIVIA: “WE NEED MORE ELECTRICIANS AND FEWER LAWYERS”



What to do to create more job opportunities and reduce poverty in Bolivia? A key factor is to improve the professional technical formation. In a country where 70% of the population works in the informal sector, good training can make the difference: it increases the productivity and improves the individual income. Switzerland has a vast experience in technical formation that responds to the necessities of labor markets. The Swiss Cooperation, together with public and private partners, promotes a wide agenda in support of professional technical formation in Bolivia.

“In Bolivia reigns the old mentality: you ought to be a licentiate. We form lawyers, doctors, licentiates – but we don’t have good technical professionals,” says José Torrico, alternate education Director. With 62 years old and 42 years in the magistrature, Torrico is a tireless promoter of professional education in the remote town of

Mizque in Cochabamba. “Who moves our economy? The people who haven’t studied at the university!”, says Torrico and points to a couple of new constructions around him. “The contractors, the foremen, the bricklayers – none of them have had a professional technical formation.”

In Mizque, as in the whole country, alternate education programs have grown. This branch of the educational system assists young people and adults, which could not go to school or finish their studies due to a lack of economic means. At the beginning, about five years ago, alternate education in Mizque possessed 4 facilitators, each one in his specialty. Today, the Ministry of Education pays salaries for 16 permanent facilitators. They teach in different Centers of Alternate Education. The offer is wide and englobes civil construction, textile confection, sausage elaboration, flower and grape production, to name a few.

## THERE IS NO DEVELOPMENT WITHOUT TRAINING

"The equipment of our workshops is as good as the one in an industrial bakery or a sausage company in a big city", Torrico says. The workshops with modern machinery are attractive. "The participants know that the formation here is not theoretical but oriented to practical application. Once they finish the training, they have very soon a work place assured or tools at their disposal to start their own project." The basic investments are – in relation to the tight budgets of the communes – quite substantial. They range from 10,000 to 25,000 dollars per workshop. The ovens, sausage machines and other investments are financed by the City Hall, the Foundation Education for Development (FAUTAPO) and the Swiss Cooperation in a common effort.



"People know who I am and that my flowers don't wither soon", says Doña Rosalía proudly. The owner of a flower greenhouse belongs to the first promotion of alternate education.



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A committee with representatives of the Municipal Government, the Ministry of Education and the local private sector define the branches that require professional education. "Trainings are linked to production. They are addressed to young people and adults of both genders that have not had the chance to continue studying. More than the school degree we consider the motivation of participants", explains Lino Flores, a 50 year old agricultural engineer who manages the programs in Mizque and Aiquile region for FAUTAPO. The private foundation advises and supports the local initiatives of professional education and administers part of the Swiss Cooperation funds. "FAUTAPO makes us grow", Torrico says without hesitation. FAUTAPO professionals have elaborated the textbooks for facilitators and students. "Professional education is a crucial factor for development in remote areas", says Flores.

There are many success stories. Silvia Pardo, a 44 year old bakery owner, and Rosalía Velázquez, a 42 year old greenhouse owner, belong to the first promotions of alternate education students in Mizque. They have become successful entrepreneurs. For Doña Rosalía it was important that the facilitator visited her regularly in

her greenhouse Santa Cecilia. "He was very hands-on and gave me practical advice. I even managed to replace the seeds to stop the degeneration of flowers from local production. The colors looked pale, something that the clients did not like". Sellings at Mizque market have become her main source of income. "People know who I am and that my flowers don't wither soon", smiles Doña Rosalía with a notion of well-deserved pride.

Making bread and owning her bakery was Doña Silvia's youth dream. She finished fifth grade of primary school. Since she married young, she could not continue her education. Her wish to get trained in a bakery in Cochabamba did not prosper. "With four children and a husband at home I could not fulfill my dream", says Doña Silvia. When she heard about the first alternate education course for bakers in Mizque, she was one of the most enthusiastic participants and promoters: "It was like a salvation when the municipality installed the first oven and we were called for a training." When Doña Silvia graduated from the training, she mortgaged her house and bought her first oven with a 15,000 dollar credit. She paid the debt three years later. Today, Bakery Silvia is the biggest in Mizque. It produces daily 2,400



**"Making bread and owning a bakery" - Doña Silvia's dream came true due to her formation in an alternate education center. Today, Bakery Silvia produces 2'400 loafs of bread daily and is the biggest in Mizque.**

loafs of bread and supplies eight stores in the neighborhood. The company has become a true family business. Her husband left his job and works now in the bakery.

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**"WE TECHNICIANS ARE WANTED!"**

"In the urban area we observe a strong demand for training and education", says Elmo Condori, responsible for job formation at "Faith and Happiness", a catholic movement of popular education that runs public centers for technical formation in El Alto city, close to La Paz. The offer in professional education is weak not in rural, but also in urban areas. In Bolivia the trend to urbanization accelerates year by year. "You are in La Paz, you are progressing. This is how people think. We have to accept and face that reality" summarizes Condori.

"Faith and Happiness" is one of the pioneers of professional technical formation. Founded in 1997, the *Santo Toribio Institute* in the El Alto is the first Superior Technical Education Institute in Bolivia. It works in tight coordination with the Ministry of Education. The state pays for the teachers'

salaries. The program of technical formation of "Faith and Happiness" relies on the support of Swiss Cooperation. "We are an attractive alternative to a study at the university", says Oscar Tambo, who leads the institute with over 360 students. Graduates have to fulfill six semesters of theory and practice in branches such as industrial computer science, telecommunications and industrial electronics. Tambo would like to offer more careers. However, the lack of resources to equip new workshops is a limiting factor.

The pride of Santo Toribio teachers and students are the good learning conditions based on the merge of theory and practice, that other institutes of superior education cannot offer. Mario Pillco has studied both at a university and at a technical institute. Thanks to his parents' support he was able to study a career in a private university. "It was expensive and very theoretical", says Pillco. Once graduated as an engineer, he enrolled in *Santo Toribio*. "Here I find what I missed for five years at the University: workshops and lots of practice. We technicians are looked for, not the academicians!"

Since 2006, the Government of Bolivia promotes professional education with

**ROLANDO FERNANDEZ, ELECTRONIC CREATOR**

"I always wanted to prove, that we Bolivians are capable to develop high technology products", says Rolando Fernandez, founder of Tino Electrónica Company in El Alto and formed in Santo Toribio Institute. The born creator developed LED-lights for dental practices, fluorescent signs for taxis and a complete system of traffic lights for the most important crossroads in his city. Fernandez, 36 years old, had to struggle for his education. Only at the age of 28 years he could afford to begin his training as IT manufacturer in the Santo Toribio Institute. Those were hard times, remembers the young entrepreneur. Every morning and every evening he had to walk an hour across El Alto to get to the institute.



**Rolando Fernández : "We technicians are wanted, not the academicians!"**

emphasis on the practical and productive aspects. "Santo Toribio is aligned to this new concept", says the head of the institute and explains: "The new law of education proposes a model on four pillars: Knowing, producing, being and deciding. We provide our students with the technical capacities that respond to the demand of labor market. At the same time we teach them administrative and entrepreneurial skills so they are prepared to handle their own workshop or business."

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## REPLICATE THE GOOD EXPERIENCES

Switzerland is known for its professional education system that responds to the needs and demands of the productive sector. In Bolivia, Swiss cooperation has a long track record in the field of professional education. Since 2006 the Switzerland improves the quality of the Alternative Education Centers in the hands of the public education system. 18,000 young people and adults – women are more than half of them – were trained, mainly in the rural area. Now the focus will shift to the cities where the coverage of quality professional education shall be extended. Until 2017 a further 25,000 students shall directly benefit from Swiss support: new textbooks and didactic materials are produced, curricula and teachers trainings are updated. If the replication of good practices is achieved across the country, every year 200,000 Bolivians will benefit from improved professional education and training programs.



**With the support of Swiss Cooperation the Alternate Education Centers trained more than 18 000 young people and adults since 2006 – more than half of them women.**



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