



EDITORIAL

Published three times yearly, the Latin Brief highlights SDC and partner achievements and discusses development cooperation trends. The Latin Brief focuses on topics relating to poverty reduction and the promotion of human security. The publication is intended for a wide public in Switzerland as well as for development practitioners. We hope you enjoy the reading!

SDC Latin America Section

Roughly forty percent of the working age population in Central America are either unemployed or underemployed. Poverty and unemployment are extreme in rural areas and the lack of food security is a symptom of this. Since 1980, the SDC has sponsored a programme with lasting impact: the manufacture and use of metal silos to store maize and beans, the main staples. The massive spread of simple metal silos manufactured by local tin-smiths has enabled smallholder farmers to considerably reduce crop loss and enjoy much greater food security. At the same time, the activity created rural businesses, which in turn have generated employment.

Whether it be in Honduras or Guatemala, Nicaragua or El Salvador: the silver grey cylindrical silos sponsored by the SDC's POSTCOSECHA Programme are dotting the Central American landscape. POSTCOSECHA, the Spanish term for "post-harvest", means any approach that helps to ensure that agricultural products can be stored for personal consumption or later sale.

THE TRIUMPHAL ADVANCE OF METAL SILOS

For years, the metal silo has been POSTCOSECHA's flagship product. Metal silos are easy to handle and come in various sizes. Any farmer who has a silo on his farm can eat maize or beans all year round and is free to decide when to bring his surplus harvest to market. POSTCOSECHA introduced and massively up scaled the new storage technique in four countries from 1980 to 2003. By 2007, there were over half a million silos being used in these four countries. Moreover, the silo manufacturing activity is a welcome additional source of income for nearly 900 farmer tinsmiths: when they are not working in the fields, they spend their time producing silos.

"If I could set up 100 silos on my farm, I'd do it in an instant," explains a smallholder farmer in a survey. He is not the only person who thinks this way. The vast majority of Central American farmers have had positive experiences with silos. They are now ready to increase storage



capacity by purchasing a second or even third silo. The silos introduced at the start of the Programme twenty-five years ago today are considered family heirlooms to be passed on to sons and daughters.

Thanks to the massive spread of metal silos, POSTCOSECHA has made a major contribution to food security in Central America.

Studies from Central America show that storing maize and beans in metal silos can prevent the 10-15% crop loss that normally occurs as a result of improper storage. When the new silos are used properly, crop loss can be eliminated almost entirely. Since the time metal silo storage technique was introduced in Central America 25 years ago, the number of silos has increased steadily to over half a million silos. Farmers nowadays are able to save an estimated 50,000 tonnes of agricultural products from crop loss each year, which amounts to about USD 12 million in preserved value.

Improved storage ensures good nutrition for the entire family.

Empowering smallholder farmers

In Central America, silos are becoming to farmers what refrigerators mean to urban dwellers. The metal cylinder often stands, fittingly, in the family living room or beneath a roof directly next to the farmhouse. The sacks that used to lie strewn all over, drawing mice and rats and gathering rot and mould are a thing of the past. The POSTCOSECHA Programme has brought silos directly to some 2.35 million rural inhabitants. For them, silos are the equivalent of money in the bank. Secure storage enables them to sell their products when market prices are the most advantageous. They are no longer forced to sell their harvest at times when supply is at its highest and prices at their lowest. They are also able to supply distributors and consumers with agricultural products all year round without any deterioration in quality.

EMPOWERING SMALLHOLDER FARMERS

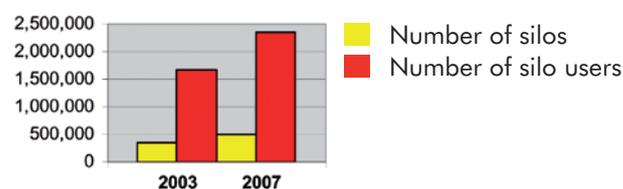
Many farmer families only learnt to systematically monitor the market and time their sales accordingly when they began using silos. In many cases, silo owners were able to double their annual income by simply holding onto their stocks until market conditions were right for them. Secure storage empowers smallholder farmers. Gone are the days when market forces and natural disasters left them vulnerable and exposed. The additional income improves the standard of living of rural inhabitants and gives farmer families the possibility of investing in their farms and developing new products.

Silos have improved the status and self-esteem of farmer women. This is because farmer women are the ones who manage silo content. Generally speaking, they are the ones who decide when and how much maize is needed for household consumption or sale on the market. They are better at saving than men and are more likely to look after the children. Since silos are usually built near or inside the house, no man would dare go against the wishes of the entire family and jeopardise the food stock for quick cash.



Silos create harmony and prevent stress in low-income families. "The endless bickering over food is over," says Margarita Potosme, the wife of a farmer who owns 11 silos. "Before, we used to argue all the time. Now, our lives are much calmer." Women are also able to earn extra income for the family. Throughout the year, they sell cakes and other products made from maize and beans in the local neighbourhood or at roadside stands between towns. Previously, this was only possible during the post-harvest period.

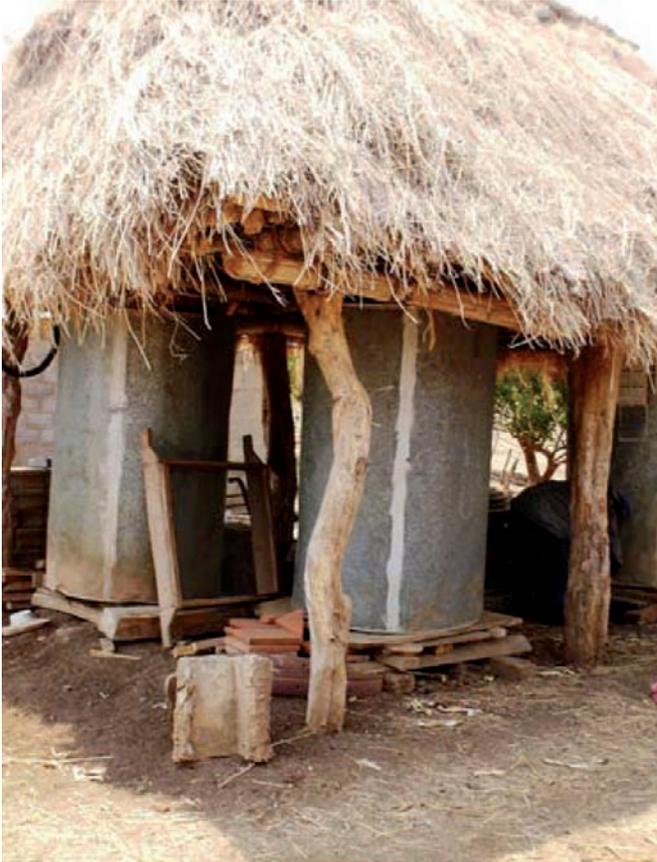
Greater food security in Central America thanks to silos



Maize and beans can be stored in robust silos for up to three years. This helps families set aside the reserves needed when changing climate conditions or natural disasters lead to crop failure. Farmers are also less dependant on the availability of fertiliser inputs since they are able to select the best sorts and store them locally. Today, 16% of the 15 million farmers in Nicaragua, El Salvador, Honduras and Guatemala are silo users. In Honduras, where silos have been around for a long time, the percentage stands at 24%. In Guatemala the percentage is 13%.

The popularity of silos among farmers, the institutional anchoring of the POSTCOSECHA Programme with agricultural authorities in each country and the active involvement of a large number of non-governmental organisations (NGOs) have accelerated the spread of silos in Central America since the year 2000. And this, despite the fact that the SDC is no longer the main sponsor.

Between 1980 and 2000, a total of 283,000 silos were manufactured and sold to farmers. In the past seven years alone, this figure has jumped to about 500,000. This corresponds to an annual growth rate of 11%.



NGOS TRANSFER THE KNOWLEDGE

For the massive roll-out of silos, the Programme relied on two actors: non-governmental organisations (NGOs) and self-employed farmer tinsmiths. The boom in silo production witnessed over the past few years would never have been possible had NGOs not introduced farmers to the new technique. In 2007, there were one hundred and seventy NGOs in the region marketing silos and providing technical advice to farmers wishing to use them.

The uninterrupted demand shows that the silos are ideally suited for smallholder farmers with up to 10 hectares of agricultural land. Now that people are familiar with silos and their use is so widespread, many NGOs have shifted their focus away from promoting the POSTCOSECHA technique to providing credit facilities to farmers wishing to buy silos.

STATE PROMOTES THE INITIATIVE

National coordinating bodies were established in each of the four Central American countries where POSTCOSECHA silo storage techniques were introduced. Working through national institutions or ministries in their respective countries, these coordinating bodies are responsible for promoting silo storage techniques and maintaining contacts with NGOs and silo manufacturers.

FIVE REASONS WHY THE POSTCOSECHA PROGRAMME HAS BEEN SO SUCCESSFUL

1. With the introduction of silos, the Programme focuses exclusively on one theme: food security, which is a major problem faced by the poor in rural regions of Central America.
2. Smallholder farmers were offered a technique that matched their needs, was easy to handle and cost-efficient.
3. Silo manufacturers are able to give advice and guidance to farmers because of their geographic proximity. Without exception, silo manufacturers are farmers themselves and have a clear understanding of the intrinsic benefits: everyone wants the silo technique to be successful.
4. Tinsmiths manufacture silos in the immediate vicinity of customers. Often, particularly when road access is difficult, manufacturers build the silos directly on the purchaser's farm.
5. No subsidies are used to produce and sell silos. Private entrepreneurship is stimulated when silo manufacturers and customers are placed at the heart of business dealings. Subsidies did, however, play a role in the early days of the Programme.



Silo manufacturers: unsung heroes

SILO MANUFACTURERS: UNSUNG HEROES

The POSTCOSECHA Programme relied on a large number of local tinsmiths for the production of metal silos. In 2007, there were 892 silo manufacturers working in El Salvador, Guatemala, Honduras and Nicaragua. In recent years, each workshop produced an average of 34 silos per year. From the production of silos alone, tinsmiths earn a net annual income of about USD 470. In addition, they also earn from the sale of other tinplate products such as watering cans or kitchen stovepipes.

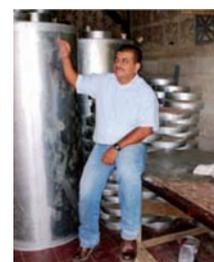
Tinsmiths from the various countries attended regular training courses at workshops to learn how to manufacture metal silos. At the same time, they were given the skills needed to run a small-scale business and shown how to market and sell their products. POSTCOSECHA's decentralised structure was uniquely helpful in this respect. The proximity to consumers enabled tinsmiths to immediately respond to their needs and wishes.

Attempts by silo manufacturers to organise themselves into cooperatives were met with mixed results. It was hoped that by joining forces, they would gain easier access to lending facilities for their businesses, which would have set the stage for the mass production of silos. Because of the programme's strong market bias, however, common interests of tinsmiths were weak and competition between them intensified. In Nicaragua, none of the two cooperatives survived. In Honduras, the cooperative established in the Town of Lempira is the only one of originally seven still working. In El Salvador, there are two and in Guatemala ten.

Most farmer tinsmiths welcome the extra seasonal income that they are able to earn by manufacturing silos when they are not working in the field. They have learnt to stand on their own two feet and successfully manage their small workshops. "Nowadays, this activity is the sole source of income for my wife, seven children and me – and we are doing quite well," says Alexis Mejía, a small scale entrepreneur from the rural town of Nacaome in Honduras. He owns a 500 m² workshop and has six employees working for him. "I trained most of them myself, who else?" Mejía proudly explains.



Alexis Mejía,
Manufacturer from
Nacaome, Honduras



Marvín Rodríguez,
Manufacturer from
Quilalí, Nicaragua



Isaac Zeledón,
Manufacturer from
Wiwilí, Nicaragua

Production and spread of metal silos in Central America

Year	Country								Total	
	HONDURAS		NICARAGUA		GUATEMALA		EL SALVADOR			
	Silos	Tinsmiths	Silos	Tin-smiths	Silos	Tin-smiths	Silos	Tin-smiths	Silos	Tin-smiths
1995	70,000	130	4,470	92	5,556	51	459	8	80,485	281
2001	123,706	151	33,176	175	67,813	344	27817	111	252,512	781
2003	145,931	184	53,007	132	103,364	386	46,920	103	349,222	805
2007	185,000	200	80,796	175	176,468	410	57,879	107	500,143	892

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