

The Bolivian System for Agricultural Technology (SIBTA)

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Bolivia has opted for a largely privately organised system of agricultural research and extension with the Bolivian System for Agricultural Technology (SIBTA, Sistema Boliviana de Tecnología Agropecuaria, <http://www.sibta.gov.bo>), created in the year 2000. The objective was to promote and support modernisation of agricultural technology and sustainable development of agriculture, forestry and agro industry. SIBTA aims mainly to improve the competitiveness of the sector, increase rural incomes and food security and so reduce poverty.

The system involves four foundations for each of the country's four agroecological regions – High Andes Plains, Valleys, Humid Tropics, Chaco. The government has delegated to them the function to organise agricultural research and extension at producer level. About 70% of the members of the foundations are private organisations (farmer unions, producer organisations etc.) and the other 30% public institutions (municipalities, public universities etc.). The foundations act as brokers and have technical and administrative autonomy to manage public funds as well as to organise a market between demand for and supply of agricultural technology. The system depends completely on the demand of farmer groups who propose project profiles. These profiles are standardised and put out for tender by appropriate public or private service providers to develop these profiles into projects and to compete for execution of the projects. The

foundations do not implement projects. The projects may take up to three years and cost between US \$ 20'000 and \$ 100'000. The requirement for the beneficiaries to contribute a minimum of 15% of the value of the project to the foundation is critical for approval.

The foundations define the most promising commodities for agricultural development within their regions. Analysis of the corresponding value chains and production bottlenecks are the guiding principles for the demand-based projects of technical innovations. The projects are financed by a competitive fund to which the Bolivian government contributes through a loan of the Interamerican Development Bank (IDB) and the major international donor agencies (Denmark, Germany, Great Britain, Japan, The Netherlands, Switzerland, USA). The donor community has supported the development of this model by pooling and focusing their resources into the common channel of the SIBTA model. Besides the demand-oriented projects on farmer level, the system includes strategic research on projects of national interest. These are implemented by the Ministry of Agriculture through public or private service providers as well.

The GTZ Programme for Sustainable Agricultural Development (PROAGRO) in Bolivia participates together with representatives of the government and the other donors in the Accompanying Committee of SIBTA. The committee discusses and defines procedures and guidelines for the functioning of the system. On the other hand, PROAGRO is financing to a minor extend projects in the Chaco Region of Bolivia and provides technical assistance to the Chaco Foundation. Working presence of PROAGRO at both the national and local levels of SIBTA helps to link the system with the reality on the ground through feed-back mechanisms on local experience with the application on farmer level.

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- SIBTA has so far been a successful example of a national programme bringing together the major donor agencies with basket and parallel funding into a system with common procedures under the umbrella of foundations.
- The strong participation of the private sector in the foundations by defining development aims within the regions strengthens the efficiency of the whole system.
- The structure of the system involves the government, the donor community and the private sector in a sector-wide approach to agricultural development in a rather unique way. The design process behind the development of projects ensures broad-based participation of the civil society — or private sector — involved in agriculture. The civil society approach is open to the entire community to develop proposals that become projects.
- The requirement of the 15% contribution ensures the "buy-in" of the private sector into the process and is taken as guarantee that the demand is real. However, this point is a permanent matter of discussion in a country with a high level of rural poverty.
- The use of public funds ensures the attention and participation of the government of Bolivia.
- The commitment of the donor community provides a focused system whereby donor resources work together toward common goals.
- On the other hand, the multi-institutional system and the presence of a developing bank have created a rather high level of bureaucracy. Initially, a time gap of nearly one year on average instead of an originally planned 176 days were needed from the expression of demand to the beginning of implementation of the project. Only after a profound change in the procedure the system now works faster and more efficiently.

SIBTA is one of the very rare examples of a national system for agricultural research and extension where competitive funding goes together with farmer demands for technology. It is an interesting concept to gain more relevance for agricultural practice and impact with scarce funds for agricultural development in a poor country. The orientation to farmers' demand leads to better technology adoption. First experiences of some completed projects showed noticeable increases of production and income of the participating farmers. The high satisfaction of benefiting farmers was also noticed.

Opportunities are created so that non-state service providers gain significance in service provision, which contributes to both food security and creation of wealth. Finally a quote from a stakeholder:

"Always remember that the private sector creates wealth and the public sector consumes wealth."

The main demand was expressed for production technology of traditional commodities, especially in marginal regions like the Chaco. In this remote area, far from markets, the predominantly small-scale farmers have low education, technology levels and low financial capacity. Searching for real innovations and new technologies therefore has its limits, as does the demand for more market-oriented production. Only a few projects include the orientation on market or consumer-demands and focus on marketing or product quality for improved market chances.