

BASIC CASE INFO

5

Inspiring Initiative: Responsible Soy Bean Management

Land: Bolivia

Land degradation: Soil degradation by chemical contamination and monocropping

Initiative by: PROBIOMA and farmers associations



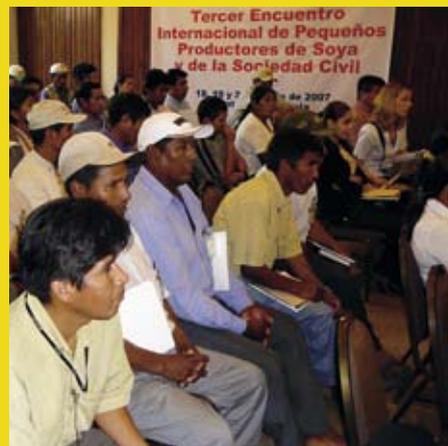
A Greener Approach to Cultivating the 'Golden Grain'



"Our objective is to produce at the lowest costs and to use less toxins"

Juan Patzi (sugar cane farmer)

"We want to raise consciousness about taking care of our health and that of our people" (soy farmer)



SETTING THE INITIATIVE

In the past 15 years soy has become Bolivia's major export crop. Almost one million hectares of land, mostly in the Department of Santa Cruz, is now dedicated to soy production, which has grown exponentially in recent years. Some 70% of this land was previously virgin forest. According to the National Soil Usage Plan (based on FAO criteria and adopted by law in 1996) 30% of this land was unsuitable for conversion to agriculture. In 2005 alone more than 100,000 hectares of land was deforested for soy cultivation. But while more land is being brought into production, large tracts of land - some 300,000 hectares - have been abandoned in an advanced state of desertification, as soy cultivation has rapidly depleted the fertility and structure of these fragile forest soils. Worryingly, this destructive production model continues to advance on virgin lands, threatening to leave even larger tracts of desertified land in its wake.

The majority of farmers in this region are smallholders with less than 50 hectares and their livelihoods are as fragile as the soils they work. Soy, and particularly genetically modified varieties, is a capital-intensive crop, requiring farmers to buy seed and agrochemicals. Yet most farmers have limited financial reserves and can only finance each year's planting by using their machinery, land or homes as collateral. If the crop fails the farmers face losing their assets and their livelihoods and being bought out by bigger players.

In response to this situation PROBIOMA established a multi-stakeholder forum to identify ways to control the environmental impacts of soybean production and to strengthen the position of small-scale farmers. This forum led to the launch of the Programme for the Responsible Management of Soybeans in 2005. The programme involves changing farming practices and the social and economic environment in which farming is carried out. This two-pronged approach is helping small-scale farmers step off the treadmill of mono-cropping, to reduce their dependency on external inputs and reverse environmental degradation.

MAKING THE DIFFERENCE

At the farm level these changes involve establishing standards for ecological cultivation on small plots which incorporate windbreaks, encourage crop rotation and diversification, discourage the use of artificial agrochemicals and avoid the use of genetically modified varieties. This has been backed up by developing a training programme on organic and low external input soy production, establishing demonstration plots, distributing biological control agents and providing technical assistance for participating farmers.

At the policy level the programme works to establish policy standards which respect designated natural areas, indigenous territories and the recommendations of the National Soil Usage Plan. At the organisational level it involves building the capacity of agricultural cooperatives and syndicates, so they can exert more influence on decision making, and building a multi-stakeholder alliance to increase transparency and improve governance. Other aspects of the programme include establishing a broadcasting and advocacy campaign to raise awareness about agricultural issues and developing a certification and marketing system that rewards responsible soy production.

Within three and half years the programme has attracted almost 1,500 individual farmers and ten farmers' associations and has led to almost 60,000 hectares of land being farmed in a more ecological manner. Many farmers now realise the benefits of responsible soy production and farmers' experiences demonstrate that one of the biological micro-organisms used to treat seeds also shows signs of improving the soils degraded by the use of agrochemicals.

The programme shows that it is possible to engage with a form of agriculture that causes widespread environmental and social damage and to 'reform it from within'. Aspects of this model, in particular the development of social and environmental criteria, are now being adapted by Quinoa farmers' associations in the Bolivian highlands.