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## Alternatives for the Transformation of Drug Production Areas in Bolivia — Results from the Region Chapare for Farming Systems

JUAN CARLOS TORRICO<sup>1</sup>, JÜRGEN POHLAN<sup>2</sup>, MARC J. J. JANSSENS<sup>1</sup>

<sup>1</sup>University of Bonn, Department of Tropical Agriculture, Germany

<sup>2</sup>El Colegio de la Frontera Sur (ECOSUR), Manejo Integrado de Plagas, Mexico

### Abstract

The region of Chapare in Bolivia is classified as “humid sub tropic”, where 35,000 families live. Ninety two percent of inhabitants are agriculturists. Until now, 93 % of the coca cultivation (*Erythroxylon coca* L.) has been eradicated leading to serious social, economic and ecological problems.

Based on cultural concepts of the population and their commercial interests, the most important agricultural crops grown in Chapare region are Citrus and Banana, which occupy 20,8 % and 18,8 % of the total area, respectively. Both crops are intended for the market and therefore play an important role in the economy of the region. Cassava (7,3 %) and rice (7,2 %) are cultivated for growers’ consumption and their self-sufficiency. The average agricultural land possessed by a family amounts to 10.4 ha, but, due to lack of capital and high labour cost, only 2.6 ha is cultivated. The remaining (74 %) of the land is under forests and fallow. Generally, seeds of bad quality are frequently used. Intensive use of agri-chemicals in terms of amounts and levels is a common practice in the area. The crops are raised as small households in small farms and the labor force engaged in crop husbandry and various agricultural activities originates from the local families living in the surroundings of the fields. The family from which workers come earns an approximate disposition of 460 daily-wage/year per hectare in average.

Altogether 65 % belongs to the Subsistence economy. They have a capacity on the average for investment of 400–800 US\$/ha (in 89 % of the cases). The alternative cultivation products (banana, pepper, maracuya, ananas and palmito) result in small income and yield 600 to 2400 US\$, which is a third to a sixth of hectare proceeds with coca. The initial investments for alternative crops are as high as \$ 1800–5000 provided that proper management and good technical knowledge is made available.

Actually the alternative crops do not provide a real opportunity for the families of this region. Investigation should be focused on other crop alternatives to obtain sustainable production resulting in better agricultural industrialization, to reinforce the national market. The social aspect of the present problem needs more attention.

**Keywords:** Farming systems, coca, alternative crops, drugs