

### **Third Party Evaluator's Opinion on (Catarama River Basin Irrigation Project)**

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#### **Criteria-1 (Effectiveness)**

Catarama River basin irrigation project is part of the irrigation plans for the lower Guayas River Basin. According with Holdridge, life zone correspond to Tropical Dry Forest, with a medium temperature of 25 degrees Celsius. Along the project area the soils colour is grey, having in general terms a loamy-clay texture. The agriculture and fish production are the main activities in the area. Crops like banana, cocoa, coffee, maize, soybean and rice are the main ones, specially the last one with more than 2.500 hectares. Raising tilapia roja (*Oreocromis sp*) and fishing in the rivers high commercial fish like chame (*Dormitator latifrons*), bagre de río (*Hexanemaichthys sp*) and bocachico helps to diversify farmers income. The Catarama project provides in total an irrigation canal of 68.8 Km, drainage canal of 71.3 Km and embankments in lower basin of 13.7 Km. However, in spite of all this infrastructure the project has not been highly effective. One of the main reasons is that there isn't a significant increase in the productivity of the main crops, therefore, the small farmers are not motivated to pay the annual water fees and be part of the irrigation association. On the other hand, I suppose what was said in the ex-post evaluation about the executing agency was that it did not make an effective farming extension plan for the beneficiaries in order to improve their productivity. These two reasons are closely related. Still, there is space to improve through the development of a solid plan, organized scheme, in which the technical assistance will focus on yields improvement by the use of irrigation facilities. This technical assistance has to be addressed to the farmers with low crop production in the project area. The crop improvement of these farmers will create the interest from others who will like to be part of the irrigation association.

#### **Criteria-2 (Sustainability)**

The objective of the project is to increase agricultural production and improve agricultural productivity by building irrigation and drainage facilities in Catarama River Basin, and thereby contribute with farmers' food security. In order to achieve this objective and specially to give sustainability it was necessary to make a strong bottom up work. This means to have worked with the direct beneficiaries (small farmers) in the construction, implementation, and execution of the project which would have helped to create a solid base for the long term.

This project shows some inconveniences during its development, starting from political instability to natural disasters (El Niño). But also it showed not enough work made with the direct beneficiaries which was reflected in the low productivity, lack of irrigation knowledge, opposition from farmers to sell land, rejection from farmer to pay the annual water fees and not significant increment in terms of farmer income. However, it is possible to enhance what has been done until now by the empowerment of the small farmers association (comunas o recintos) and the irrigation association. This work can be done with the cooperation of national and international NGO's who work in the project area. The training will include topics like leadership, team working, management, and group trading, which helps the farmers also in a better management of the irrigation system and to get better prices for their products because they sell in group. Also, It is necessary to make a proper dissemination of information on the advantage of using and maintaining the irrigation facilities (through Farmers Field Schools, for example), the implementation of good agronomic practices (specially in rice), the increase of organic cocoa production mainly the "National" type which has high prices in Europe, and the promotion of Agroecoturism (Organic mixfarming) which generate and improve farmers income. Finally, it is important to mention that the limited access of small farmers to small-scale loans is one of the main problems for the agricultural sector in Ecuador. There are good experiences in the implementation of community saving systems "Cajas de Ahorro Comunales" where the main requirements is to be associated, helping in this way for an active participation of beneficiaries in projects activities.