

## Sustainable Industrial Production Success Stories 2005 Agrofrut



Agrofrut is a medium food processor company located in Medellín, Colombia with a personal of 221 workers and near 9.8 million USD in assets. The company receives and transforms the fresh fruit into simple juice and concentrated for the national and international market, the credit of 330.000 USD was used to mount an installation for the transformation of the originating solid of

the remainders of fruits into concentrated food for animals. The company is being certificate in ISO 14' 000. In 2004 the company applied to the GCT to the Colombian bank Corfinsura and to the Center of Cleaner Production of Colombia. The credit was approved and the company finished the implementation at the middle of 2005.

### Sustainable Production at Agrofrut



*The old installations stored the remainders to take them to the sanitary filling.*

The project has like objective to avoid the disposition of the remainders produced in the processing of the fruits and to make a valuation through the transformation of the originating solid remainders of the fruits in to concentrated food for animals like a commercial product. Reducing the more significant environmental impact that generates the production process of the company due to the disposition of the solid remainders



The installation to make the transformation requires of the star up of the equipment for the drying, crushed, mixes of the remainders with other materials, pellets and packing.

*The new installations transform the material into concentrated food for animals.*

## Results

The analysis of the impacts for AGROFRUIT company, was made by the methodology of environmental evaluation performance of enterprise through a specialized software call Regis, developed by the Swiss company Sinum AG.

This methodology selects the environmental impacts and it takes them to a common unit of measurement of such form that can compare with others to define as impacts are more important within the activities of any organization. The measures that are handled are called Kilo environmental points of impact (KPIA) and are the result of investigations carried out by many years in which it analyzes the service life of the raw materials, energies, transport and supplies and resources that are gotten up to the productive processes, on this form to find environmental impact accumulated of all these factors and thus to give a final idea of the value of the environmental impact.

The high environmental impact generated by the disposition of the solid remainders is because of the impact of the generated leached in the ground in the disposition of these solids, which finally contaminates superficial and underground waters in the disposition site.

The remainders that are generated in the processing of the fruits were arranged in the sanitary fillings before the implementation of the project. After implemented the plant for the advantage of these remainders for the production of concentrated food for animals, solely the remainders originated in the processing of the guanábana continue being taken to the sanitary filling for their final disposition, these generate digestion problems in the animals which prevents its advantage.

The results of the main indicator selected for the calculation of the reimbursement, reduction of remainders sent to filling report a reduction of 73%, ratifies the good environmental performance with the reduction in the secondary indicators, in where a reduction of 25% in the water pouring is observed, 39% in value of the chemical demand of oxygen, 21% in the biological demand of oxygen, and 30% in total solids. Additionally the company obtained a reduction of 66% of the KPIA in the analysis of the enterprise environmental impact.

In addition to the reduction in the indicators, the economic benefits, environmental and social were verified.

## Contacts

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