

BAZDREAM – A New Network on Sugar Biomass for Food, Energy By-products and Environment Protection

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A new thematic network BAZDREAM has been launched, focussing on 'Sugar Biomass for Food, Energy, By-products and Environment Protection' within Subprogram IV on 'Biomass as a Source of Chemical Products and Energy' of the Ibero-american cooperation program CYTED. The main objective of this network is an exchange of experience in the fields of sugar cane biomass production and research with the aim of reducing production costs and giving rise to new employment opportunities in Latin American countries.

The Ibero-american program CYTED (Ciencia y Tecnología para el Desarrollo) is an international and multilateral program created in 1984, bringing together Spanish and Portuguese speaking countries from both sides of the Atlantic. CYTED involves various international institutions, acting as observers, such as the Economic Commission for Latin America of the UN, the United Nations Organisation for Education, Science and Culture as well as the Interamerican Development Bank. The main aim of CYTED is to be an instrument to foster the technological development and innovation by means of coordination and cooperation among universities, investigation and development centres and innovative companies in the Ibero-american region. CYTED is engaged in the modernization of production processes and the improvement of life quality in Ibero-american countries and finally, it stimulates collaboration between Europe and Latin America.

Until today, CYTED has initiated 76 thematic networks and more than 250 research and innovation projects with participation of about 10.000 scientists and engineers from Ibero-american countries. The CYTED program hosts 19 sub-programs of which Subprogram IV is concerned with 'Biomass as a Source of Chemical Products and Energy'. Within Subprogram IV the Thematic Network '**Empleo de la Biomasa Azucarera como fuente de Alimento, Energía, Derivados y su Relación con la Preservación del Medio Ambiente – BAZDREAM**' has been launched in late 2003, focussing on the importance of sugar cane biomass for a large variety of Latin American countries. This thematic network has a duration of four years and it will bring together 17 investigation groups and 176 researchers from a total of twelve countries.

The general objective of BAZDREAM is to improve the economics of food, energy and by-products derived from sugar cane in order to generate fully competitive commodities for Ibero-american markets. This will be realised through significant cost reductions achieved with due reference to environmental protection concerns. The following specific objectives will be tackled by the BAZDREAM network:

- efficient use of energy and fuels in different technological processes
- cogeneration and generation of energy from different sugar cane biomass resources such as bagasse and harvest waste
- use of sugar cane with high fibre concentration
- production technologies for different forms and qualities of sugar cane and for the transformation of sugar cane biomass to products of higher value such as animal food and alcohol
- development and application of technologies for the transformation of bagasse to products of higher value such as paper, boards, furfural, animal food, biocides and filter materials
- development and application of technologies using cellulose and lignin for the production of very high value products such as human and animal medication and human food
- use of agricultural residues for environment protection and income generation
- reduction of water consumption and liquid waste emissions related to sugar cane production and processing
- development of models and computer programmes for the control and supervision of technological and auxiliary processes
- results dissemination by means of publications and the organisation of specialized workshops and thematic courses

The BAZDREAM network will thereby promote information exchange, qualification activities and the identification of project opportunities which have the perspective to improve sugar cane production processes, to increase technological and energetic efficiencies and to reduce production costs. Moreover, the sound use of residues of all sugar cane industries involved will contribute to an improvement of the environment and the quality of life in Ibero-american countries.

More information on CYTED and the activities of its Sub-program IV is available under www.cytel.org.

