



SCIENZA PER L'AMORE



HISTORY OF THE HUMANITARIAN PROJECT

Bits of Future: food for all

The BIOHYST company has been working thanks to contributions offered by the Association Scienza per l'Amore (Science for Love). This association is formed by people who are driven by the common objective to promote scientific and technological research, placing it at the service of humanity in order to resolve some of the most dire problems of mankind. First and foremost, world hunger.

HYST technology is the result of a funding project that has lasted for over 15 years and the BIOHYST company is the sole holder of all future and present industrial developments.

BIOHYST and Umberto Manola met thanks to a shared intent. An intent based on the will to intervene in problems concerning world hunger: one of the most urgent issues placed by international political communities in the agenda of the so called "Millennium Goals".

In fact, several applications of the HYST technology could be used effectively toward solving this problem.

A year ago BIOHYST was invited to Dakar to illustrate its project to the Government. This meeting was followed by a visit to Italy, in April 2010, of a delegation of Senegalese President Abdoulaye Wade. After having examined a plant realized by Eng. Manola, the delegation showed its complete approval and declared its interest in setting up experiments on local products.

During the past year BIOHYST has focused its efforts in the use of by-products from milling industries (bran), which are widely available and rich in essential macro and micro nutrients.

Results were far beyond those expected. From bran we have flour with a high content of protein, vitamin and minerals: its use is therefore particularly suitable in contexts of undernutrition and malnutrition.

The World Food Program has estimated that improved access to vitamins and zinc is all that is needed to save 680,000 children every year. The flour obtained with the HYST system contains significant quantities of vitamins of the B-group, vitamins E and A as well as important micro-nutrients such as iron and zinc.

The characteristics of this product are such that it is particularly desirable even in the markets of industrialized countries. In the European Union it could be labelled as having "high protein content", "high vitamin B3 content", "high iron and zinc content", as well as being a "source of vitamin B1, B5, B9, E".



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Just to give an idea of its added value, the HYST treatment of €100's worth of raw material produces flour with a market value of about €500.

A great effort was also made in improving the nutritional features of cereal straw. These biomasses, of no value to us, are important fodder in many African countries because they are the only available feed during the dry season. The HYST process increased the nutrients and improved the digestibility thus obtaining feed with characteristics similar to those of top quality hay.

As far as food for human consumption is concerned, by only using the waste from wheat milling it is possible to get about 20 million tons of flour with the above mentioned characteristics: sufficient to feed over 100 million people.

The project that BioHYST intends to carry out, created and promoted by the Scienza per l'Amore Association, is not limited to mere food aid: the objective is to give the African countries involved access to HYST plants so that they may enhance their local agricultural resources (food and not food) and provide its people with tools for a dignified human existence, freeing themselves from dependence on industrialized countries.

The first step in this direction will be to finalize agreements with the African governments interested in experimenting this technology on native biomasses.

International organisations such as UNIDO and IFAD have indicated their interest in the BioHYST project. ENEA, through its representative Dr. Pignatelli, has highlighted how HYST technology is suited to solving the conflict between meeting the energy needs of the industrialized world and the need for food of poor countries.

In view of the scientific and humanitarian scope of the research carried out by the inventor Eng. Umberto Manola – research that could be “potentially the best solution to the problem of world hunger” – the Scienza per l'Amore Association has launched a signature gathering campaign to nominate Umberto Manola, inventor and researcher, for a Nobel Prize. The initiative was received with enthusiasm by the diplomatic representatives at the meeting.