



WP7: REPORT ON THE FIRST 4F CROPS PROJECT WORKSHOP



Market needs of non-food crops (fiber and fuel crops) and how they can fit the available agricultural land in EU27

1st Report of the University of Bologna (partner UNIBO).

Andrea Monti (Scientific Responsible for UNIBO)
Bologna, 05 November 2008

1. Organization and advertising actions

As part of Work Package 7 "Dissemination and Support Action", the first workshop of the Project has been held at the Department of Agroenvironmental Science and Technology (DiSTA) of the University of Bologna (UNIBO) on September 17th, 2008.

The scientific consortium scheduled the first workshop of the 4F CROPS Project parallel with the X Congress of the European Society of Agronomy (ESA) hosted by the Faculty of Agriculture, University of Bologna. This strategic decision aimed at attracting a wide audience among the Conference participants. The workshop was scheduled following the Conference "Bioenergy" session, during which the 4F CROPS Coordinator introduced the workshop agenda. This fact notably contributed to enlarge the number of participants to the workshop at the same time targeting the audience to relevant stakeholders in the project area of interest.

While CRES – the WP7 coordinator – provided precious support in inviting relevant speakers and outlining the workshop schedule, UNIBO took care of the whole workshop organization.

With the main goal of the project workshops being the dissemination of information regarding the key project areas, UNIBO activities aimed at reaching the widest target audience for the event. This has been achieved through a number of advertising and targeted actions.

In the first phase dissemination material has been prepared and printed when hardcopies were necessities. A workshop program layout was prepared together with an advertising poster (Annexes I and II).

Once the dissemination material was ready, UNIBO proceeded with the media dissemination. An advertisement has been published on the University of Bologna website and on the Department website ([http://www.eng.unibo.it/PortaleEn/Research/4FCROPS .htm](http://www.eng.unibo.it/PortaleEn/Research/4FCROPS.htm)). Together with the workshop announcement an electronic registration form was provided.

The workshop program was also distributed to a mailing list of targeted stakeholders including University researchers and technicians, Public Agencies,

Farmers Associations, and other potentially interested individuals operating in the agro-food market. Web distribution also included an article published on *Agricoltura-on-web*, a news website specialized in the agriculture sector:

<http://agricolturaonweb.imagelinetwork.com/bioenergy-world/progetto-europeo-4f-crops-future-crops-for-food-feed-fiber-and-fuel-05869.cfm>.

Poster copies, in Italian and English, have been SPREAD throughout the Faculty of Agriculture to attract the Conference participants.

These actions have contributed to the success of the workshop which attracted about 150 participants as it is in part testified by the filled registration forms (112 names).

2. The workshop

The invited speakers varied from members of Institutions (P. Venturi, European Commission) and Project partners (E. Alexopoulou, CRES; H. Bos, A&F; R. Kozlowsky, INF; E. Ganko, EC BREC), to representatives of private Companies operating in the non-food crops industry (A. Franco, KEFI; R. Janssen, WIP; E. Athanasiadou, Chimar Ellas; N. Chatzyiannis, Hellenic Pellets).

Mr. Venturi opened the workshop with a panoramic introduction on the EU targets for renewable energies and biofuels, the EC commitment for non-food crops projects development and the open calls for proposal submissions. The Project Coordinator, Ms. Alexopoulou, gave the audience a presentation on the Project consortium, objectives and expected results.

After the introducing speeches, **Ms. Bos** from A&F – Wageningen University – described the origins and the magnitude of the so called knowledge bio-based economy (KBBE), on which her Institution has been working for decades. A strategic issue for enhancing non-food crops market is to understand the market needs and potentials for new bio-based products, starting from the existing ones and analyzing the rising needs of our society for such products. This aspect also determines a choice criteria for selecting specific non-food crops as bio-based products feedstock to be studied as part of the 4F CROPS Project.



Registration desk before the workshop

Prof. Kozlowski, with his recognized experience on fiber crops, discussed about directions in fiber degumming and treatment, the role of nanolignin for UV blocking, new trends in natural cellulosic fibers finishing processes, natural fiber non-woven with reduced flammability and the areas of application of bast fibrous plants.

In the contest of fiber crops production, a relevant speaker from the fiber industry has been invited to share his Company's experience on kenaf based products. **Mr. Franco** from KEFI introduced kenaf (*Hibiscus cannibinus*) as a fiber crop and its potentials for producing a wide range of products such as car panel, chipboards, horse bedding, yarn, paper pulp, etc. He focused on the benefits of kenaf insulation panels as an eco-sustainable material capable to substitute synthetic materials for energy saving through insulation.

Mr. Janssen from WIP – Renewable Energies, revisited the biofuels and their market in Europe. He summarized the legislative framework in which the biofuel market has to operate, analyzed the new EU energy policy (draft RE directive) and the global biofuels production. He brought example of the biofuel market in selected EU countries, stressing strengths and weaknesses of this new developing market.

Ms. Athanassiadou represented a global technology provider for the resin & panel industries. The are opportunities for "green" wood adhesives to replace petrochemical raw materials by using others of natural origins and for developing 100% natural binder systems. Resins can be cost-effectively produced based on regional plant species in each continent, offering significant competitive advantage to the resin and panel industries and helping to increase the positive environmental impact.

Mr. Chatzyiannis reported on the situation of the pellets market in Europe, identifying drivers and barriers to its development. After outlining the current market situation he drew overall positive conclusions on the future pellets market: there are clear signs of market recovery for pellets in the heat market, a sharp increase of pellets use in commercial applications must be expected as well as a further boom in residential use of pellets resulting from price advantage and stability



against heating oil. Nevertheless, further temporary disequilibrium at pellets market are to be expected according to the speaker.

Finally, **Ms. Ganko** showed her findings on agriculture land availability for non-food crops as resulted from previous Projects and her commitment for the 4F CROPS Project. Analyzing the mid-term prospects for EU agriculture and land use changes over the last decades, it is possible to identify structural drivers for land use allocation, such as: the steady rise in global food demand, the emergence of the biofuel market, the significant slow-down in cereal-yield growth in the EU, direct payment decoupling in the EU and other CAP regulations. Other factors include adverse climatic conditions, nature conservation, GMO authorization.

From this assumptions a territorial model on the potential availability of land for energy crops production will be built based on agro-ecological zones. The Project partners discussed on the methodology to be used for attributing a series of food and non-food crops to specific European regions during the Meeting preceding the workshop, on September 16th, 2008.

3. Workshop results

Overall, the workshop "Market needs of non-food crops (fiber and fuel crops) and how they can fit the available agricultural land in EU27" yielded a good success.

The organization team in conjunction between CRES and UNIBO brought a wide and multidisciplinary audience, which paid a great interest as testified by the number of participants and questions, the enthusiasm in the Q&A session and the networking among the relevant stakeholders that generated thanks to the workshop.

The first 4F CROPS workshop succeeded in introducing the project and sharing its objectives with a number of relevant stakeholders ranging from scientists to farmers and Institutions representatives.

Annex I: Workshop Program



Bologna, September 17th, 2008

Room 13 (1° floor, North wing)

Faculty of Agriculture

First Workshop of the EU Project:

4F CROPS – Future Crops for Food, Feed, Fiber and Fuel



Market needs of non-food crops (fiber and fuel crops) and how they can fit the available agricultural land in EU27

1:30 pm Registration

- 2:00 Biofuels and biomaterials in FP7: a European perspective. Review on Biotech Market expectation for biomaterials
(Dr. **Piero Venturi**, EU Commission, DG Agriculture)
- 2:30 4F CROPS: a brief introduction to the Project
(Dr. **E. Alexopoulou**, CRES)
- 2:50 25 years R&D for non-food products: towards present market demands
(Dr. **Harriette Bos**, Agrotechnology & Food Science Group - Wageningen University)
- 3:20 The state-of-art in fibrous plants production and their application
(Prof. **Ryszard Kozlowski**, INF – Institute of Natural Fibres, Poland)
- 3:40 Kenaf potentials for industrial products (KEFI ITALIA)

4:00 pm Coffee break

- 4:10 The bioethanol market situation in EU27
(Dr. **Rainer Janssen**, WIP Renewable Energies, Munich)
- 4:40 “Innovative Biodiesel” dealing with the ideal (and not yet existing) oil for biodiesel production
(Dr. **Werner Koerbitz**, Austrian Biofuels Institute)
- 5:00 4F crops potentials for resins production
(Dr. **Eletra Papadopoulou**, CHIMAR HELLAS, Greece)
- 5:20 4F crops potentials for pellets production
(Mr. **N. Hatziannis** Pellets Company, Greece)
- 5:40 Agriculture land availability in Europe – land use drivers
(Dr. **Ewa Ganko**, EC BREC - Baltic Renewable Energy Centre)

This workshop schedule may be subject to variations

Organised by:

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Annex II: Workshop Advertising Poster



**Market needs of non-food
crops (fiber and fuel crops)
and how they can fit the
available agricultural land in
EU27**



**17 September 2008 – h. 13.30
Faculty of Agriculture, Room 13
first floor - north wing**

FIRST WORKSHOP OF THE EUROPEAN PROJECT:
4F CROPS – FUTURE CROPS FOR FOOD, FEED,
FIBER AND FUEL



The participation is free of charge,
to register please write an
email to:
comunicazione.aric@unibo.it

