

REPORT OF THE ADVISORY COMMITTEE TO THE CENTRE FOR THE RESEARCH AND TECHNOLOGY OF AGRO-ENVIRONMENT AND BIOLOGICAL SCIENCES (CITAB)

Vila Real

15th January 2010

INTRODUCTION

CITAB is currently organised into three main research units. They are the:

1. Integrative Biology & Quality Group
2. EcoinTEGRITY Group; and
3. Biosystems Engineering Group

Each of these main groups is structured into 3, 5 and 3 sub-areas respectively.

Previously a fourth main research unit (Climate & Atmospheric Modelling, CAM) existed but this was integrated into the Integrative Biology & Quality Group (IBQG) following a report of the FTC Visiting Group in 2008. The FTC Visiting Group commented on the limited impact that a unit consisting of two integrated members would have and made the recommendation to integrate CAM into the IBQG. We fully endorse this decision.

Overall CITAB consists of 160 members, 64 of whom are integrated members. It is noted that only 30% of the person days are devoted to research as there is a heavy teaching and administrative load.

FUTURE POLICY DRIVERS

The focus and impact of a European scientific and technological group in the area of environment and agro-food production must take into account present and future policy developments thus ensuring that the research undertaken will have the best opportunity to secure funding. These developments are research which will lead to:

1. Improved production that leads to fair prices, choice, access to food and food security through promotion of open and competitive markets;
2. Continuous improvement in food safety;

3. The delivery of healthier diets; and
4. A more environmentally sustainable food and non-food chain.

Europe will have to compete internationally through the production of unique, added value products that can justify the maintenance of the prices necessary to ensure market growth. Food demand is expected to increase significantly in the next decades driven by developing countries. Such pressures on the food supply are a result of high population growth rates, improving economies and limited agro-resources to feed their populations. These pressures will require innovation in the European sector that will ensure that raw material costs do not rise unacceptably. Locally produced, high quality and manufactured goods will also need innovation to maintain, or improve quality, and meet increasing environmental and safety standards to remain competitive and affordable.

The research needed in the sector is frequently complex, inter-connected and multi-faceted. Success must take account of this complexity and draw on the breadth of knowledge and understanding that is available from many disciplines, organisations and sectors in a more coordinated and collaborative approach. A joined-up approach on agro-food research and innovation is vital. Multi-disciplinary research will be needed to ensure a sustainable and secure food system. Awareness of the policy trends developing in Member States and the EU framework Programme should also influence the focus and priorities of the CITAB.

Despite policies to mitigate climate change and adapt to its impacts, an increasing dominance of negative over positive impacts can be expected in all regions over time, such as through droughts, chronic water scarcity, increasing temperatures, changes in prevalence of animal and plant diseases, and frequency of extreme events such as floods. The Tras-Os-Montes region should anticipate what are likely to be the biggest threats to the local production networks and focus in part on these. Also, some climate changes may lead to transform the actual agro- production profile to a new one.

Increasingly important sources of funding come from the European Framework Programmes. CITAB needs to organise an effective mechanism to track the opportunities for them and to ensure that they can take advantage of any calls made within the context of the European RTD programmes. Strategic collaboration with other complimentary groups in Europe is of utmost importance.

PRESENTATIONS OF CITAB

A general presentation of the history of the CITAB and of its aims was followed by presentations for each of the three main groups. The members of the CITAB also left sufficient time for an open and honest discussion during the meeting. This was very much appreciated.

The common template for the group presentations was very useful to make an easy comparison of the maturity level and of the internal bonds created by shared research activities.

The presentations highlighted for all the groups showed the following very positive aspects.

Despite the limited amount of time dedicated to research activities, the number of publications within the groups is quite high and the CITAB encourages a high level of publication in peer review articles.

Individual members of the CITAB try to do their best to initiate and participate in collaborative research projects, at different levels of funding - from regional to European ones.

The group clearly established their good links with local industries and public bodies.

POTENTIAL FOR IMPROVEMENT

Following the presentations by individual Group Leaders it was possible to identify that:

- There were different degrees of maturity between the three groups which is possibly due to the situation before they were integrated into the CITAB framework. The EcoinTEGRITY Group was the most mature.
- The number of individual topics and themes covered by the groups and sub-groups was large and could create a situation where few of these groups had a sufficient critical mass to ensure national and global competitiveness.
- There was insufficient evidence given to demonstrate that there was a close interaction and collaboration between the major groups and sub-groups. This evidence needs to be presented. A team-building exercise between the scientists should be considered leading to the pooling of competencies and a focus on some integrated projects.
- The CITAB lacks a clear rationale that relates to the priorities for research at the local, national, European and international level. It will be necessary to demonstrate a unique character that can be identified by these communities and to the user community in general. Taking into consideration that the competition for funding is very fierce, CITAB would be more successful if it collaborated internally on key strategic themes. This would help to increase a wider visibility of CITAB and improve its success in attracting funding. A more

detailed analysis of the Centre's strengths and weaknesses, in the context of these strategic themes, should be undertaken.

- The heavy teaching commitments of the Members results in a constriction on the amount of effort that can be given to research. With this in mind it is important to analyse how best to utilise the resources but also how to ensure that the Centre's impact is maximised. This will require attention to valorisation of the resources, effective communication with the outside both in terms of users of the research and the reputation that the Centre projects to potential students. More focus on training that would engage the SME community is a vital need for all centres of scientific research in Europe.

RECOMMENDATIONS FOR CITAB's FUTURE SUCCESS

The Advisory Committee consider that the Centre should undertake a discussion amongst the Members which is focussed on how to improve the issues identified by the Advisory Committee. A SWOT analysis will help structure the debate. In particular the Members should:

- Reconsider the Centre's title since it is not really clear what the focus of the Centre is. This also applies to the titles of the main Groups in order that communication with outside customers clearly indicates the main purpose of the Centre and the unique character of each group. The titles should reflect the same level of challenge but provide flexibility for new opportunities.
- Analyse present and future activities for each team and analyse where overlaps occur or synergies can be built. Take into account the economic and social impact of the proposed activities or sub-themes in order to establish common criteria to evaluate their suitability at local, national or international level.
- Consider what purpose is served by the present number of groups and sub-groups and how they might be better balanced.
- How best to ensure the names reflect the interaction and continuum between the groups
- Analyse the debate and construct a roadmap according to the scheme outlined in the table below.

ACTION	OBJECTIVE	WHO	WHEN	DELIVERABLE
1. SWOT analysis within each group.	a. Identify the "hot topics". b. Identify activities likely to be well regarded by peers. c. Identify the topics likely to attract funding. d. Identify activities most likely to unite CITAB's groups.	All scientists and group leaders	Month 3	Table of all individual SWOT analysis and group SWOT analysis
2. Mapping of the actual activities.	a. Propose integrative activities taking into account trends for the future. b. Analyse where sub groups overlap. c. Identify single or marginal activities.	All scientists and group leaders	Month 4	Outline map showing evidently linked groups of activities that should be integrated.
3. Bringing together the SWOT analysis of each group and the mapping exercise.	Bringing together the SWOT analysis of each group and the mapping exercise	Group leaders. Feed back from the scientists and further discussion	Month 5	Short report of the list of 5 sub-themes and the justification for each (showing why, who, how, background,...)
4. Short report of the list of 5 sub-themes and the justification for each (showing why, who, how, background,...)	a. Identify overlaps and complementarities, b. propose some regroupings of activities or competencies. c. Propose names for the groups followed by reduction of the number of sub-themes to a maximum of 3 per group.	Group leaders and Director	Month 6	Names for the group and roadmap for each group.

5. Implementation	a. Prepare new presentations for each subgroup and activities. b. Update Website pages. c. Initiate "marketing activities" for the sub-groups	Team leaders	Month 8	Website revised. New leaflets for customers. Presentations to potential customers.
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ACKNOWLEDGEMENT

We would like to thank the CITAB team for the high quality of their presentations, their willingness to openly discuss with us their organisational efficiency, and their kind hospitality during our stay in Vila Real. The Committee were particularly impressed by the way the all the leaders of the main groups and sub-groups and other research workers were directly involved in the discussions with the Advisory Committee.

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