

CITAB External Advisory Committee (EAC)

Activity Reports for 2013-2014

Overview

The conclusions of the 2012 EAC's report were that it was important for CITAB to work towards a greater scientific coherence within the research groups and that it was important to attain a critical mass in all areas. These recommendations were responded to in 2014 through the development of a more strategic focus. The Centre developed the concept of 2 Thematic Areas and 6 interacting multidisciplinary project areas. Notwithstanding the flow diagram shown on page 5 and 6 in the 2013 and 2014 CITAB Activities Reports, the EAC is of the opinion that management should make a further effort to improve coherence.

The Activity Reports should place more emphasis on defining key measures of achievement (KMA) and impact at the outset of the programmes and projects in order that the EAC can fully assess outputs and achievements.

As mentioned in the 2012 AC Report it is evident that the teaching load for CITAB permanent staff is very heavy and this must limit the time that staff are able to devote to RTD.

Income

During a period of public expenditure constraint CITAB's overall income in the years 2012-2014 remained constant at around 3,7 million €. Income from the FCT saw a notable fall in 2014 but this was compensated for by an increased income from other national and international sources. Income from the industrial sector fell in 2014. The involvement of CITAB as Project Co-ordinator for two EU FP7 projects in 2014 is a major achievement.

CITAB staff are to be congratulated for maintaining income during a very difficult period.

Sustainable Agri- food Chains (SAC)

The SAC group saw a decrease in FCT-supported projects but this was well compensated for by a significant increase in national research support in 2013 and again in 2014. There was also a notable rise in international R&D support in 2014.

The focus on developing models for climatic change in Portugal continues with important implications for varietal selection and real-time monitoring of quality

Research on safeguarding genetic resources of important tree crops in the face of climatic change in the region is of high priority.

An important development is the application of omic technologies in the characterisation of the impact of climate change on crop quality.

Whilst much of the R&D focus of this Group is not one that can result in direct commercial exploitation, this is not the situation with the work on added value food constituents. This area of research should be capable of attracting industrial funding, at least in part. More evidence of exploitation potential is necessary.

Ecointegrity (EI)

The EI Group saw a sharp fall in income from national projects in 2013 but this was compensated for by a very successful increase in the income stream from industry compared to 2012. This declined somewhat in 2014. In 2014 the overall income stream for the group remained roughly the same as in previous years. The large increase in national projects balanced the loss of income from FCT projects and industry. The Group are to be congratulated for ensuring the maintenance of income during a period of rapid change

Some of the notable achievements of the Group during the period of this review are:

- the development of knowledge of the main ecosystem groups of flora and fauna that define the ecosystem in the Duoro region;
- modelling the impact of human involvement , climate change and storm impacts on aquifers, river flows and land use; and

- determination of best practice in native forests to prevent fire devastation.

The EI group participated in four international projects and 15 national projects in 2014. Some of these projects were on-going from previous years. It obtained 12 contracts with industry were on going in the period 2013- 2014.

The group highlights the need to continue in the future with multidisciplinary research for monitoring, modelling, and restoring ecosystems. Co-operation is sought with regional and national stakeholders in the public and private sector and this provides an exemplary mechanism for deciding on the priorities for the future. It would be helpful for evaluation purposes if the future work programme were to be more specific and qualitative and quantitative measures of achievement were developed.

It is hoped to increase the critical mass of the Group through permanent appointments, and pre- and post-doctoral workers. It participates widely in EU research activities and COST.

Biosystems Engineering (BE)

The BE group increased its overall income somewhat in 2013 but this declined significantly in 2014. It is still unable to attract significant, new industrial or international support for its research. Given the applied nature of the research on wood mechanical and quality evaluation, the lack of any industrial exploitation, or joint industry research activities, is a cause for concern. It is hard to see an overall strategic focus for the research work of this group, which is characterised by a very diverse range of topics.

The Group participated in 3 international projects but none of these were contracted in the period 2013-2014. The Group were involved in a total of 13 national projects in 2014. Only one new contract was obtained for work beginning in 2014.

The future work of the Group will concentrate on similar lines to those undertaken in the past. The proposed work on bio-based materials is, in part, outside of the main focus of the Centre's work and is a field where research should attract industrial support if it is to be fully exploitable.

The image systems development work provides a skill that is crucial to future inter-disciplinary ecological and environmental research elsewhere in CITAB. Further integration would be beneficial.

International collaboration.

Apart from the international projects CITAB successfully competed for and that are reported above, 2014 saw the initiation of a PH.D programme in Agricultural Production Chains – Fork to Farm with Wageningen University, Valencia Polytechnic University and Portuguese universities. This is a very important development and will ensure that the R&D in CITAB is interacting with some of the best groups in Europe.

There is an active collaboration with Spanish universities. More bilateral R&D work would be of benefit .

Output

More research students graduated in 2013 than in the previous year but the number of research workers remained similar. 2014 saw a substantial increase in the number of CITAB researchers and of Master's degrees completed. This is an excellent achievement.

Peer-reviewed publications

All three research groups had a roughly similar output which amounted to 1 peer-reviewed paper published during the period if the permanent and PH.D non-permanent staff are counted as the principal authors. This is similar to the output in 2012. However this is not a true measure of output since there are some authors with multiple papers published in the period. Future reports should use more effective measures of output.

Other publications

An extensive list of presentations, book chapters and Ph.D. and Master thesis has been generated showing an effective interaction with stakeholders and an excellent teaching output.

Dissemination and Outreach.

The Centre has made significant progress in developing its interaction with Stakeholders both in terms of locally based industries, local government and outreach activities in local schools. During this period a Press Officer was appointed and a newsletter with wide circulation was launched. These are very notable developments.

Future objectives

Further implementation of the CITAB Strategic Project is promised in the years ahead with a focus on aligning the work of the Centre to the priorities set down in the EU RTD Horizon 2020 programme.

An important objective of the future is stated to be an increase in the number of integrated members of the Centre. In meeting this objective the focus should be of filling gaps in skills that are inhibiting the full implementation of the Strategic Project. The Management should draw on the advice of its Advisory Committees in seeking to plug these gaps.



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Jan 2015