The report on the State of Science in Colombia, recently published by Colciencias (2015) presents the execution in Science, Technology and Innovation activities (ACTI), as well as the main areas of Research and development (I+D). This document is part of the results analysis of the last call for evaluation and measuring of research groups, held between October 2014 and March 2015.

The report mentions that during 2013 the country invested 0,5% from the PIB in ACTI, and 0,2% in I+D, which is important, taking into account that the average in Latin America for the same year was 0,84%. We may highlight that according to reports from the World Bank, in 2012 Colombia was investing approximately 0,17% from its PIB in scientific and technological development, while during this very same period countries such as Brazil, Argentina and Chile were investing 1,21%, 0,65% and 0,42% respectively, and the United States, 2,79%.

With the increase of the evaluation requirements for research groups, we can observe a reduction in the amount of recognized and classified groups in the SCIENTI system. The report shows that out of the 3.970 research groups supported by Colciencias, 30,8% is aimed at Social Sciences, while 21,5% at Natural Sciences, 17,7% at engineering and technology topics, and the other 30% at Health Sciences, humanities and agriculture, mainly.

We call the attention on the low percentage of groups focused on research in engineering and technology, understanding those as one of the most important pillars for the economical growth and the development of a country. It is known that this sector provides the tools for the generation of industrial processes which add value to basic products and that allow bigger economical benefits, while generating employment in wider production chains. Out of the groups studying engineering and technology activities, those working in electric, electronic and systems engineering topics take the biggest percentage (28,55%). Topics related to civil engineering only take 8,81% of the groups, and materials engineering take 3,98%. These areas have special interest for the country and show that there is a wide range of action to explode.

In terms of the products generated by the research groups, we can notice they are focused mainly on human resources training (40%), and social appropriation of the knowledge (38%). Only 18% of these groups generate new knowledge, and a minimum 4% is devoted to technological and innovation development. The main reason for this can be understood as most research projects and the activities held for their development are short or very short term (weeks or months), which makes them easier to execute and, thus, easier to supervise and certify, while producing and testing innovative technological developments usually requires a bigger economical and organizational effort, as well as longer periods of time (years); just like new knowledge generation. This aspect must be taken into account in the design of future calls, which should lead to important changes in terms of the periods of validity of the resources aimed at funding the projects.

Finally, we have to mention that though the presented report states that the country is focusing on consolidating its research activity, it only shows some indicators like a statement of accounts. There is a need for a deeper review that allows to noticing that all the invested money and efforts in C&T contribute to the generation of solutions that add to the well being of the general society. All this, understanding that the generation of knowledge must not be valued from the utilitarian point of view, based on the relation of cost versus economical benefit; but among the considerations of time and investment. Likewise, the coherence of the process, form the technical and economical point of view, must be aimed at the improvement of the social and well being conditions required by our regions. In this sense, this Colciencias report lacks this element of analysis in the information it presents.

The impact and pertinence in social aspects must be seen and visualized as an important factor

among the processes of evaluation held by Colciencias. It would be very important for future reports if they took it into account, as well as having a variable of grading for the research groups and projects funded with Colciencias resources.

> César Augusto García-Ubaque Director