

SCIENCE AND TECHNOLOGY... WHAT FOR?

Very likely there is no country where there is not a secretariat, department or some other high government dependency in charge of the promotion and the financing of science and technology. In parallel, government officers and legislators discuss and establish budgetary allocations to these ends, which are always considered as insufficient by researchers and by those in charge of higher education.

The economic and military hegemony of the central countries, which in other times was dependent upon their availability of natural resources (the reason for it being essential to conquer new territories) is currently based on the capacity to develop and utilize the scientific and technological knowledge. We speak about the knowledge society, being the utilization of the latter that which determines such hegemony of central countries. Those which are peripheral (or marginal), previously called developing countries, or in the course of development, have as a characteristic, among others that are the result of this fact, that of having reduced capacities for knowledge generation and utilization. In this scenario, it is appropriate to ask ourselves for what do we need or want to promote science and technology in the latter countries. The answer, or the answers, encompass two spheres: the practical one and the conceptual one.

In the practical realm, it is clear that the incorporation of knowledge and processes created and developed in advanced countries is easier, cheaper and more efficient. Nonetheless, the decision capacity about the convenience of incorporating one or another solution and the possibility to manage the imported elements in an autonomous manner and not in a dependent one, will require trained personnel able to carry on such processes and the production plans without the need of permanent assistance by the provider and, as a result, to be subjected to its interests.

On the other hand, there will always be local problems that will require of studies and solutions implemented

through endogenous mechanisms, those which nobody will do for you. Such are, for example, the knowledge and exploitation of species of local presence and interest, the study and treatment of endemic diseases, the history and the own characteristics of the social behavior of the population, its problems and solutions, etc.

In the conceptual realm, it becomes evident that, as an integral element of the culture of each society, the scientific and technological knowledge, and its propagation through the educational system, require the training of teachers that are fully enabled to transmit to the students the needed information about the state of the art in their respective fields, a process that in turn demands an adequate training from the elementary school to higher education. If there is not the capacity to adequately train the trainers, the population will not have the possibility to integrate itself in the knowledge society.

It is not a matter of big or small science. It is not the matter of traditions and popular wisdom, which should be preserved and made the most of it. It has to do with insuring that the population acquire the needed abilities to fully integrate itself in contemporary life and prepare itself for the future, to understand matters like global change and the importance of immunizations and of informatics. It has to do with enjoying the benefits that civilization offers and doing it with enough discernment and capacity in order to be totally autonomous and reduce the dependence from foreign domination. It is science for independence, for self-determination and for governance capacity.

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