Bioregions Cosmocaixa, 13/11/18

Glad to be here!

As I'm told, one can define "bioeconomy" as the economic activities centered in the usage of renewable natural resources to produce goods and services in the different economic sectors".

Obviously, this is not enough. The resources not only have to be "renewable" but actually renewed.

More generally, modern economic policy, and the thinking of economists, has accepted, as a principle, that the preservation of the natural environment is a high-priority objective.

Why?

1.- A first reason, not negligible, is that we value the environment - the forests, say - as a consumption good. A hundred years ago the hill of Collserola, in front of us, was totally bare, today it is forested: this is in part because we have become more prosperous and we like our hills green.

2.- The second is the increasing awareness that the natural environment is also an economic resource. That is, and speaking plainly, that it can be exploited as a production input. But if so then we understand now that this should be coupled with an imperative: that of sustainability. Because of the consumption purposes I have just mentioned but also for an efficient implementation of the economic exploitation. Fortunately, very often the two purposes jibe together very conveniently: the hills of Collserola become bare because they were exploited, in a disorderly way, for grazing and for household heating, with the consequence that it become, not only unattractive as an object of leisure enjoyment, but also of low productivity as an economic resource.

In more globally significant matters, such us the minimization of CO2 emissions, the two purposes, consumption and production, also coincide: the greener the better. It is worth to emphasize that here we are in the domain of externalities: trees impact positively on climate change and therefore on the production functions of the world.

Yet, I cannot pretend that there cannot be any conflict. There can be. But those are not cast in stone. The available technological frontier is, to some extent, man-made. Research and the market shapes it. Actually, the latest Nobel award, to Paul Romer, was on that topic: how (public and private) investment in research shapes the productivity of different factors and the overall rate of growth of economies. It follows that research resources invested in seeking the compatibility (usually described as green this, or green that), or better the complementarity, of the different usages of the natural environment is money well-spent. The name of the game is maximum economic and social return subject to the renewal of resources and the preservation of the environment. Let me elaborate a bit. In contrast to (especially protectionist) legislation, research never shrinks the technological frontier, it may leave it unaltered or it may expand it. But research most certainly can affect the "slopes" of the frontier, and in particular can impact in a different degree the productivity of bio-economical vs. non-bio-economical inputs. With possibly dramatic market consequences. Think on the fate of the cities of Manaus or Iquitos when synthetic rubber was discovered. It follows that it is necessary to maintain a sustained research effort, public and private, for the constant productivity improvements of the bio-economical inputs.

I should say that in preparing for today, and reading some of the material that Professor Trasobares has kindly provided me I have been quite taken by some of the examples that illustrates the challenges of bio-economics. Thus, in Catalonia,

can we reintroduce wood as a housing construction material?. This is actually a demand side issue. There is correlative supply side issue: is our wood of sufficient quality and economical enough to be sold in the construction markets, or it can be made so? Note that those are, in the context of the EU and of the world, open markets. It does not follow that, automatically, our demand for wood will be served by our supply of wood. In fact this is not the important issue. What is important for our (catalan) competitiveness is that our wood has a market somewhere for quality uses, that is, uses that add value in significant amounts. No doubt, if this is so the local demand and the local supply will also, to some extent, intersect locally.

Today we are going to see some examples and experiences of successful wood and cork management.

But a final word. The impact of a successful industry can be broad and have unexpected spillovers. Recently I was in Seattle, and read a bit about its economic history. As you know Boeing is there and, in a sense, it was the first technological advanced industry to settle there. Aeronautics is still very strong, although now Seattle is better known for Microsoft and Amazon. Why is Boeing there? Well, because at the beginning of aviation there was a gentleman from the East, a graduate from Yale, Mr. William Boeing, that moved west to manufacture airplanes. And, you know, airplanes were made of wood at that time and in Seattle they had wood and knew how to work the wood…