

3. GOALS

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We have just seen in the two chapters before that related with the carrying capacity and, more concretely, agricultural food security issue there are a lot of controversial, point of views, debates, approach, etc.

But we also have insisted on the extreme importance of the issue, by itself, and also because it is interrelated as a driver with the most important global human/earth issues in the change of the century.

So, if someone wants to resume the goals of this study, then we will tell that we tried to make some steps in the direction of the understanding and the treatment of this issue itself.

Few pages before we have written: **“Sub-Saharan Africa is one of the two regions of the world (with South Asia) in which food security and undernutrition problems seem relatively intractable. In spite of this, many studies generally support the FAO forecast that production increases can accommodate effective demand and rising world population”**.

And thus we want, not basically to be involved in the theoretical understanding of the issue. More concretely and more practically we are engaged at this level of real food security problematique. But closing the loop, under the umbrella of carrying capacity vision discussed in chapter 1, do not, for example, get engaged in the food trade or commodities aspects.

Indeed for the shake of concretion we also need to be precise about the framework, the most general conception or “philosophy”, under which we did this work. Answering this we have also written in chapter 1:

“The direction that we are taking here is to try to define policies or line of policies in order to affront this kind of problems in the context of sustainable development background. In spite of the tropical and subtropical areas of the world are not the most productive for agriculture, the opinion [B.2.3.] that everything may be solved by importing food from other more productive countries is not accurate, or indeed false, and impossible for their local

economies. Finally this solution is, at least for short and medium term, clearly not sustainable, because it implies, for example, a very high use of energy, at the moment, not renewable, and with many CO₂ emissions related. The problem of the internalization of externalities mentioned before. Or forget the sustainability goal to keep all the natural capitals.

Thus, we insist again that sustainability is a very related view of local and global approaches of the world problematiques. And if the real goal of sustainable development is to realize it in the global sense, it is also obvious that it means, in the majority (not in always but) occasions, local and/or sector sustainability as a necessary condition, if not as a sufficient condition.

Then the question is whether or not Africa and others regions of the world, provide the food for themselves. And it is not easy to find the answer in a yes or no sense, but it is very easy if you think in a sustainable way to develop the world. Africa, like every other place in the world, must do, with the real help of developed world, all the efforts that are possible in order to obtain the maximum capacities of his own resources, in a, obviously, sustainable own way”.

So, finally, we can try to resume the first and most general goal of this study: we want to make some steps forward the approach direction to the agricultural food security problem of the Case Study Region delimited in earlier chapter (we have chosen this region for many reasons explained in the foreword and in this chapter 2; but anyway, in order to achieve this goal we needed to choose one study region), from the point of view of the carrying capacity of this region in a conceptual framework of sustainable development local approach in a global view.

We do not start from zero. Never, but specially in our case.

First of all we have a team, under the leadership of the advisor, Professor Mihajlo D. Mesarovic, of this study, that has been working for many years, generally speaking, and from 90's, concretely speaking, on one type of methodological approach to the global human/earth issues that is giving us such good “results” in two concrete research directions:

a) the deeper knowledge of these issues themselves and, basically, of their interrelations

b) the policy analysis for the decisionmaking support. We talk about this in the following chapter as "integrated assessment with reasoning support tools for policy analysis".

Both have, furthermore, educational, at least and as a sine qua non condition for a better future, and practical applications in helping the decisionmakers; the precedents international UNESCO workshops that our UNITWIN UNESCO GENie (Global-problematique Education Network Initiative) has directed, organized and realized have been the best proof of this.

Thus, in this context we are trying to develop a set of models, according to our specific philosophy and tools, that, always in our methodological approach, allows us to take into account the key relationships between the most important and characteristics global human/earth issues, in order to contribute arriving the precedent cited a) and b) objectives.

This study try to be, as another main goal, one link on the carrying capacity, in the chain of the links (population, water scarcity, global warming, economical globalization, etc.) of our integrated assessment methodology for future world vision or foresight. So, in the next chapter, we study in depth and analyze this methodology. But, in fact, the whole study itself is, and has the goal of, the construction of this new carrying capacity model, in this methodology, in order to take into account the issue itself.

But when we said that we did not start from zero, we were also saying that we have a clear key reference, that allows us two things: one, to have one reference and not tot work in some "absolute vacuum"; second, which is very crucial, it will play in our development the role of the high level model, which interrelation with our model will be the crucial point, in order to test and to establish it in a definitive way. We have cited before this reference; it is the reference [B.3.7.], the FAO/IIASA/UN study specifically considered in chapter 6.

But the particular characteristics of our methodology, has another power which allows us to speak about another goal of our work. At the same time that this reference help us to test and to establish our definitive model, the procedure itself for doing this allows us to test the results given in the reference. So we can try to do this as a subsequent, and not less important, goal of our work.

But without the following probably nothing would have meaning; or better, finally everything might look as inconsistent. Trying again to close the loop, and very similar, but different, of the first main goal cited in this section, we want to emphasize and clarify the, probably, last goal of this Doctoral Thesis.

Obviously our Case Study Region itself is one main goal of our study. We needed one study region. But sometimes (and here we can find some contact points with the ideas of the modern physique) it is impossible to separate the system from the analysis system tool. It is this case. First because, we insist as in the foreword chapter, personals constraints: “I cannot make anything without “sense or purpose” in “my life” or, at least, without trying to find this sense”. And we only find the sense in this study if we can increase our knowledge, comprehension and capacity to propose policies for our region. Secondly because if we try to apply some methodology to a very stressful, limited, system, then, the way in which this is finally done is also related with the limit or stressful situation of the system analyzed.

So, anyway, we clearly have this other goal in our study: to increase the knowledge, the comprehension and the capacity to propose policies for our Case Study Region in the food security aspects and in the framework specified before.

So this means to search, from as many sources as possible, the accurate data and information about the region, to take the consistent conclusions about the present situation, and looking at the past, to foresight some, between infinite, future feasible scenarios for the region than help us, really, to propose policies for the region.

Again, we can see that methodology aspects (take into account the present situation, and looking at the past, to foresight some feasible future scenarios) and goals are also many times very difficult to separate.