Questions for the interview with Matthias Dieter (Johann Heinrich von Thünen Institute, Federal Research Institute for Rural Areas, Forestry and Fisheries):

Questions for the interview.

A great number of forestry data in Romania is being published nowadays. And this data often contradicts each other. Some data indicates that Romanian forest has drastically reduced, other data suggests that forest cover is increasing. There is practically a war around this issue in Romanian media. Probably, there was a similar situation in Germany, until you initiated your project of forest inventory?

- How to organize state monitoring of national forests in a right way? Would it be possible in Romania, considering its geographical features?

Basically a nationwide forest inventory would also be possible in Romania. It requires a scientifically well-founded sample concept and a formal regulation to warrant implementation. The German concept of National Forest Inventory could be used as a blueprint, but certainly would need adaptation to geographical features, forest distribution and societal demands in Romania. In Germany the National Forest Inventory is ruled in the Federal Forest Law and is going to be conducted very ten years.

- They say that you can predict the future. At least for the German forests. What is WEHAM? Tell us please about this tool. Could it be used in Romania for an objective assessment of the state of forests and forestry development forecasting?

We can't predict the future – we are scientists but no clairvoyants. However, what we can perform is to simulate forest development and timber supply under certain framework conditions. To do so we need assumptions, in particular on the behaviour of the different forest owners, on market trends and societal needs like nature conservation. We gain this information by means of stakeholder workshops. With the gained framework data we feed our WEHAM model and show the consequences of different scenarios - e. g. higher level of wood use in Germany or increase in forest area set aside to enrich forests with biodiversity – on forest core features like timber and carbon stock, age and tree species distribution, and the available timber supply for forest industry by tree species, diameter classes and regions of origin. Our model results provide helpful facts for sound forest policy decisions.

- In Romania, the theme of forests usage is very painful for the society. Many of people are calling on to prohibit any logging at all. Can you as a scientist support this point of view?

In Germany the use of timber contributes to a variety of national goals, stipulated in the National Sustainability Strategy, as e. g. increased use of renewable energy sources, combating climate change, increase of gross domestic product per capita, decrease of public debt, to mention just the most prominent examples. I would assume that the situation in Romania is comparable. It hence could be worthwhile to launch a scientific project aimed at quantifying these benefits of timber usage also for the Romanian society.

- There is a belief in a society that a complex legislation can prevent illegal logging. What is your opinion on this statement?

Legislation is a necessary but not sufficient prerequisite. It needs to be complemented by law enforcement. This seems to be the crucial point for me! By the way: legislation doesn't need to be complex but clear.

- Is forest nowadays a renewable or non-renewable resource?

Basically forest is a renewable resource of fibre and fuel but the level of potential sustainable use is subject to the quality of forest management.

- How could you comment a statement that harvesting damages the forest? Is that true that forests prosper only when they are left alone?

Harvesting is an integral part of forest management. As long as harvesting is conducted sustainably forests persist with their main features like forest area, timber stock, tree species and age distribution remaining unchanged. The quintessential code of sustainable forest management is to harvest just as much as has grown in a certain period.

- Whose responsibility is it to take care of afforestation?

In Germany the responsibility to reforest harvested areas is with the respective forest owners. Regeneration by nature is on a par with artificial regeneration through planting or seeding. This responsibility is stipulated in the Federal Forest Law.

- Can you make a brief forecast for Europe's forests? In particular, for Germany and Romania?

Generally I see forests in Europe strongly between nature conservation initiatives which impede forestry and bio-economy initiatives which stipulate

sustainable use of wood. It is hard to conceive how to reach the UN sustainability development goals without sustainable use of forests. However, it could also happen that timber production will move from Europe to more competitive regions, owing more favourable climate conditions and lower labour costs there.

- In Germany, the forest sector actively follows the aim to rebuild the forest to be more climate-resistant. What are the reasons for this and what could happen to Romania if it doesn't make its forests fit for higher temperatures?

There is still high uncertainty about the future climate and hence forest growth conditions in Europe. It seems unanimously agreed among climate experts that temperature will increase, but to which extend precipitation and its distribution, growing season or extreme weather conditions will change is not yet found out. Under these uncertain framework conditions forest owners have to make the right decisions on appropriate future tree species. There is no superior strategy for adapting forests to climate change. Forest owners should hence be supported by science with the latest state of knowledge but the decision on specific adaptation measures should be left to the forest owners since they in particular also bear the risk. It should be highlighted that potential future climate conditions might require the introduction of tree species not yet native but most climate-resistant to the expected future climate.

- Romania is among the countries with the highest share of unproductive forest areas. Though, there is still a belief among people that we must not cut trees in order to protect the wildlife. What is your point of view?

As I mentioned above, the use of timber has the potential to contribute to several highly relevant societal goals. Harvesting, processing and manufacturing of wood create employment, income and tax revenues, and foster higher educational achievements when going to be integrated in highly competitive world markets.

- Do you think, the Romanian forest would be prepared for a large-scale calamity due to storm or beetles?

Unfortunately I am not familiar enough with the Romanian forests to give you a qualified answer to this question.