

Evaluation of Map Deliverable, by Morad Ouasti

Risk from disturbance on ancient woodland can be modelled using ArcGIS. This method uses a multi-criteria based approach using layers of spatial data to represent the elements and zones of interest. One of the advantages of producing a model can be to show the location of disturbance prevention in order to implement new policies to protect the environment. However, it is legitimate to put forward some reserves as for the method of process and analysis of such a work.

This analysis is reliable in the sense that the process undertaken is consistent as well as the data. It can not be perfect at 100% but it still give a representation of the reality and help having a better understanding and overall view of the problems and its consequences.

This type of analysis can obviously be criticised and improved. The first point that can be raised is the philosophical theory that supports GIS-based process and analysis work which is, Empiricism. The latter supports development of knowledge based on experience and History cycles. It means that science validates events that are empirically observed, for example whenever X happens it will bring about Y in the future. Therefore there will always be a part of uncertainty in any project carried out.

The process can be discussed. In fact the procedure has to be well understood and carefully studied before data processing. Creating a flowchart before conducting this type of work can help having an overview of the different stages that the analyst will go through, and it will also help in identifying possible gaps of the process.

Such a method can be criticized. The risk assessment map can be easily derived by altering the data used, or some aspects of their nature. For example the maximum disturbance likely to happen within 500m of the source with no effects after 1km is, above all just an assumption, and can be amended to another distance, and that will have an impact on the map.

Furthermore a large set of assumptions have been tolerated as for the disturbance created by motorways, railways and roads. Also the valuable tracts of ancient woodland habitat are assumed to be the way they are presented. This is why a model has to be confronted to tests carried out during a field work. It will also give more credibility to the process methodology and it will improve the analysis.

We must be careful about the data that is used. Any type of error can happen during the collection of data, for example in size, accuracy, location, time (when was the data collected? When were the process and analysis carried out? There is a risk for some of the data to be obsolete), redundancy of data can also have a negative effect on the work analysis, as well as a lack of appropriate spatial data. This is why a more detailed metadata would have helped in the selection of data. The metadata in this study offers only a description and the source of the data layers. For instance, it is unknown when the data was collected.

Finally, it is very important that attention and is paid to the collection and treatment of data as they will be used in the process of producing layers and that will have a direct impact on the output, the final map and therefore can enhance or bias the analysis.