# Workshop Report "Database as a Thinking Tool"

Following the July 1997 AAI workshop, "Root Designing", on 20th February 1999 AAI organized another workshop on databases and GIS, titled "Database as a Thinking Tool". (See AAINews Vol.12 for the report on the previous workshop.) This time we had a total of 20 participants from universities and development consultancies. The workshop was divided into two sections: in the first half we introduced the participants to various uses of database / GIS in a lecture format, and the second half was devoted to a practice session where the participants were divided into four groups to engage in small group discussions while actually using computers.

At the beginning of the first session a representative of the Applied Knowledge Co. Ltd., which provided us with the space for the workshop, gave a talk on the current use of databases in general. Following this, AAI staff introduced various databases we have used to date, categorizing them as statistical types, data search types and data mapping types. Here we titled the lecture, "The Growing Database", and explained in detail the process of development from simple databases to more user-friendly databases. Then, at the end of the first session, we introduced some examples of actual databases used as a tool, and discussed a few points regarding the future orientation of our database use.

In the second practice session, we had first anticipated that the participants, divided into four groups under the subjects of 'general database', 'card-format database', 'grid map', and 'GIS' respectively, would have discussions while actually operating databases and even adding modifications themselves. However, partly because the participants had different levels of experience with the software programmes used on this occasion, unfortunately we could not foster discussions that were quite as active as we would have wanted.

During the final summing-up stage, we came to discuss the concept of the 'thinking tool'. Picture the concept in terms of carpenters' tools: the work of different carpenters would differ even if they were using exactly the same tools from the same toolbox. It is the technique applied by those who use the tool that matters. The 'thinking tool' can also be compared with additional lines used for solving geometric problems. They are useful in contemplating the solution, and in this sense they are meant to assist in problem solving by showing the trial-and-error process. If one's trial-and-error process to reach a certain point could be replayed on a computer screen, it would be very useful as a 'thinking tool'. When a database is used as a 'thinking tool', the data can be displayed in various forms and from various angles, and it also enables one to make comparisons with other data sets. Results are to be found out through such processes of trial-and-error, and not simply from the raw data itself. We hope to carry on using our databases as 'thinking tools', by further improving and modifying their structures and display methods.
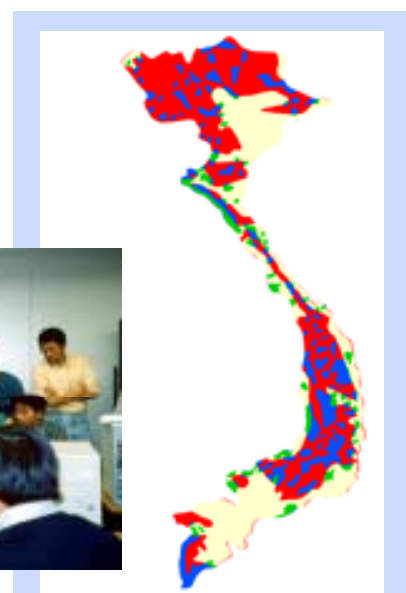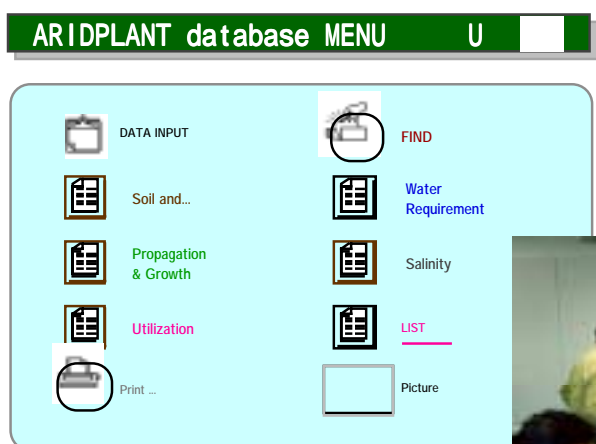
A computer screen showing changes in forested areas in Vietnam