Swamp buffaloes in Viet Nam are mainly raised by smallholder farmers with small herds (four to eight heads) partly for draught power and partly for meat. Traditional management dominates the buffalo production systems. Buffaloes are freely grazed on natural grassland, forests, roadsides, canal banks, rice fields after harvesting, dikes, etc. They are also fed rice straw or other crop residues in the dry season and working season. Observations and recordings on swamp buffalo performance are therefore, very limited. Farmers usually manage their buffalo herds based on their own experiences. Breeding selection of swamp buffaloes is almost neglected, except that farmers mate cows to good bulls, regardless of inbreeding, usually a field master bull is mated with all cows in a given area. The swamp buffalo performances are mainly observed and recorded from station experiments or on-farm trials. Murrah buffaloes and cross-breeds (Murrah x swamp) are mainly raised in the research station in small numbers, consequently, their performances are recorded and documented accurately. They are distributed in the north, central and south provinces of Viet Nam. There are some good demonstrations of raising Murrah buffaloes for work and milk in village conditions in the northern provinces. Diluted semen and frozen semen of Murrah bulls were successfully produced for artificial inseminations (AI) through financial and technical support from the Government of India, but they were poorly developed. In contrast, the AI services for cattle in villages are widely developed due to many acting projects for improving cattle productivity. In recent years there have been some difficulties with Murrah buffalo developments. The national indexes of buffalo performance have been updated in recent years. In general, buffalo productivity and reproductivity are less improved due to the limited resources of research and development. There is a need for international, technical and financial support to improve the performance recording systems and the productivity of both Murrah and Swamp buffaloes.
Approximate number of recorded buffaloes. There are four Murrah buffalo herds; one in the South, one in Central and two in North Viet Nam. They make up 90 percent of the total number of Murrah buffalo herds in Viet Nam.

Approximate number of recorded buffaloes. There are approximately 500 recorded Murrah buffaloes.

Animal categories involved in the recording process. The categories of Murrah buffaloes recorded included offspring, males, females, parents, etc.

Purposes of the system. The purposes of the system are to improve the productivity and reproductivity of buffaloes, which are decided by the farms, projects and other studies.

Type of animal identification employed. The Murrah buffaloes are identified by the ear-cutting system.

Traits measured, frequency, etc. The traits measured are milk yield, milk fat, growth rate, meat production, feed conversion ratios, reproductivity and health care. In the research centres or experimental farms data were collected daily, weekly or monthly depending on types of traits or times necessary to measure.

Other information collected. Other data on buffaloes were also collected such as nutrition, feeding conditions, diets and health conditions.

Types of analyses of crude data. Data have been analysed in the experimental farms, research centres or institutes (projects).

Are data computerised and stored? Almost all data have been computerised and stored but some data have just been hand-written.

Who pays the recording; has this changed over time and if so why? The farms and projects mainly pay the recording. This has changed over time depending on the production development and research project funded.

Some projects relating to performance recording of the Murrah buffaloes received financial support from the Government. However, almost all the data recording was funded by the research projects or farms. The levels of acceptance of the scheme were average and it is necessary to improve the scheme.
We do not have any genetic improvement programme for buffalo. However, we have had some other projects relating to the productivity improvement of the Murrah buffaloes such as nutrition, supplementation, reproductivity, etc.

*Are there buffaloes that are officially recognised as being of higher genetic merit?*
Yes, there are Murrah buffaloes, which are officially recognised as being of higher merit. There are about fifteen Murrah bulls and fifty Murrah cows. They are observed every year in productivity. In the past (1978-1990) these numbers were higher, however, in recent years they have gradually reduced due to some difficulties of the Murrah buffalo development in Viet Nam.

*How is their genetic merit established?* The animals are individually observed in productivity.

*The organization responsible for genetic evaluation.* We have not yet had an organization responsible for genetic evaluation of buffaloes.

*How is genetic improvement distributed all over the country?* Mainly by natural breeding stations and limited AI activities.

In both Murrah and swamp buffaloes, we have not yet had a genetic improvement programme. However, in the past we had some Murrah development programmes funded by India relating to the improvement of productivity. Therefore, some selection programmes were realised in some Murrah buffalo farms. These programmes were finished for some reason which included lack of research and development funds, difficult development of Murrah buffaloes compared to dairy cattle, etc.