## Main conclusions of the seminar

The variety and broad scope of the topics covered, the different and rather unique species which are autochthonous to many different parts of the world, reflected also by the wide range of countries of origin of the authors and other participants of the workshop, make the consolidation of the conclusions of the workshop a difficult task. The listing of the main conclusions follows.

- The general impression persisted that the level of research in camelids lags behind the needs and that it is less than what these species deserve, given their importance for food security and sustainable livelihoods of communities living mainly in harsh and difficult environments.
- More needs to be known about the physiology of lactation, the relation of milk production to dry matter intake, lactation curves and the causes of the large variations observed in milk composition.
- Meat production is largely not a market oriented activity and more information is needed on precision and accuracy of weighing, factors affecting live animal and carcass weights, growth curves, performance measurements and carcass and meat evaluation.
- Unusually large variations in performance are observed among individuals of the same ecotype especially under harsh conditions. The degree to which emphasis should be put on genetic changes by selection and on improvement of the environmental conditions is still not known, since parameters like heritability and genetic correlations in general have not been estimated, and cost analyses of inputs relative to outputs have not been done.
- From the point of view of camelid genetic resources, breed definitions and the corresponding characterizations should be started as a first step in defining guidelines for genetic improvement.
- Although conscious that it will be hard for camelids to compete with other species for attention in a global organization such as ICAR, it was recommended that in the near or at least mid-term future camelids are considered of interest by ICAR.
- Also FAO is encouraged to enhance efforts in camelid development, recognizing though, that important publications have been produced by FAO in particular in camel reproduction and dairy products and that some important field projects have been conducted;
- Individual identification is not common and not at all standardized, and the evaluation and development of suitable identification systems for camelids should be the first step to consider by ICAR.
- Dairy recording in camelids is still very rudimentary. In order to develop reasonable recording systems, even the most simple ones, much more basic information than is available today has to be produced.

- Meat recording systems depend on the knowledge of growth curves and factors affecting growth, genetic variability, and the development of practical methods to estimate carcass quality and meat quality, and research in these topics should be encouraged.
- Fiber recording systems are more developed in South American camelids but their use is limited, among other factors, by the need to have laboratories to measure fiber quality.
- The need to raise awareness of issues affecting camelid production at academic, research and policy levels was widely recognized and it was felt that this workshop has contributed towards that goal.
- Finally, supporting networking among researchers, teachers, extensionists, veterinarians, agronomists and other professionals, producers, administrators, market people and the whole range of stakeholders should enhance attention towards these camelid species and improve the chances of directing research more efficiently.