Report of the meeting with the Greek stakeholders for the Farm Animal Breeding and Reproduction Technology Platform

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The meeting with the Greek stakeholders of the Farm Animal Breeding and Reproduction Technology Platform was held in Thessalonica on February 10th, 2007. The venue was the annual "Zootechnical National Fair". George Zervas, Professor at the Agricultural Science University of Athens, chaired the meeting.

Representatives of the major animal industries and breeders organizations, of all the Animal Science Institutes of the Greek universities and of public research institutions, like the Ministry of Agriculture, were invited to attend the meeting. A total of 30 people participated in the meeting.

After a short presentation explaining the role and functioning of technology platforms in the EU policy, the FABRE TP was presented in detail. The presentation was intended to explain the reason of the creation of the platform and its activities so far. Finally, the first draft of the Strategic Research Agenda was discussed. The people attending the meeting were then stimulated to express their view on the FABRE technology platform in general, and more specifically to express their comments, suggestions and criticisms about the first draft of the Strategic Research Agenda.

During the meeting, the importance of the mirror group role was explained.

After collecting the comments, the list was sent back to those who attended the meeting for possible corrections and additions. The final list is as follows:

1. The attendants explained that much more emphasis should be given to improve the longevity, reproduction traits and fitness. There was a discussion on the influence of genetic improvement in increasing the production quantity and quality and at the same time the average inbreeding level, causing, therefore, reduction in fitness and reproductive traits.
2. More emphasis in the SRA should be given to growth and production traits in order to enhance economic efficiency in the aquaculture industry.
3. The small ruminants reproduction system is heavily influenced by the season. The productivity of small ruminant industry, very important in the Mediterranean area, can be enhanced by research on this subject. The possibility to manage the reproduction season will give the possibility to better handle the flock.
4. It was also discussed the importance of research on genetics of micro-organisms in the rumen and in all the digestive tract.
5. One comment shared by most of the participants was the need to prioritize, as there is the risk that such a large number of items in the SRA could weaken the research strategy.
6. There is also a need to improve research on the correlation of animal traits and food quality and healthy food. Further research on the genetic background of traits related with food quality is needed.
7. The aspects of welfare should be tackled for all species.
8. The breeding schemes for small ruminants must be properly identified. The breeding schemes for small ruminants have been mainly taken from the broadly utilized cattle schemes. Those schemes, although being of some use, were not quite appropriate for small ruminants due to the many differences between cattle and sheep and goat production and reproduction systems. The survival of sustainable livestock systems in

the Mediterranean area is possible only with proper studies and with the application of breeding schemes for small ruminants.

9. For Southern Europe, the effect of heat stress should be deeply analyzed. The heat stress on reproduction must be considered seriously, because it plays an important role in the problem of low efficiency in part of the continent.
10. The reproduction physiology of small ruminants is also very important to study. Small ruminants genetic improvement and overall production are largely influenced by the poor technology of the reproduction techniques. In sheep breeding, for instance, artificial insemination is almost never applied for technical and physiologic difficulties. More studies and applied research on semen quality after freezing and on technical procedures of artificial insemination would increase productivity and facilitate the genetic improvement of the sheep population.
11. The marginal areas are common in Greece. In those areas, livestock breeding is one of the few remaining human activities. Livestock systems in marginal areas have a high environmental interest, but they are also characterized by low economic efficiency. Especially the breeding schemes are quite inefficient in marginal areas, as they have always been studied in more productive environments. For this reason, the Greek animal science and industrial community require sound studies and applied research of application to be planned for breeding schemes in marginal areas.
12. The wild animal farming model should be also considered as an example of how to improve the domestic animal reproduction traits.
13. Heat stress tolerance has also a genetic influence. There is a need to analyse the genetic influence on heat stress, and how to apply research results to improve tolerance to high temperatures.
14. Goat breeding is a great resource for animal agriculture in Greece. The attendants noted that goat breeding and reproduction does not receive a sufficient level of EU support for research. There is a strong request to increase the level of supported research for goat breeding, which is of great importance in the Mediterranean and in the mountain areas of Europe.
15. Deeper studies on hormones influencing the physiology of reproduction of small ruminants are required. It is necessary to get the complete picture of the entire metabolism affecting reproduction activities for sheep and goats.
16. The economic efficiency of an animal farm is influenced by the longevity of the reared animals. Many studies have been carried on longevity for the bovine species, while very few focus on small ruminants. Studying the genetic and environmental effects of longevity in small ruminants would help to increase the economic efficiency of small ruminant farming.
17. There was criticism regarding the poor representation of Southern European livestock systems in the Technology Platform. In the Steering Committee and in the main working group there is no representative from South Europe. The audience is concerned that this might lead to inadequate representation of the overall needs of animal breeding and reproduction within the continent.
18. Another area of research that was mentioned was to determine the role of major genes and QTLs on various traits of economic importance to animal production.
19. There is a need to evaluate, monitoring and tracing the origin of local animal genetic resources and their products.
20. There is need of research on the diversification of breeding objectives in connection with livestock production systems. Integrate sustainability principle in breeding programs.- Improve performance and utilisation of local animal genetic resources.
21. Use of automatic identification, monitoring and recording in animal breeding.

22. Develop molecular approaches for the management of genetic diversity between and within populations.