Potentials identified for profitable, sustainable beef production

There are options and solutions to successfully adjust and optimise cattle production in regions which are strongly affected by climate change, prolonged droughts and extreme heat.

This was one of the main conclusions of the *agri benchmark* Beef and Sheep Conference 2015 hosted by the Colombian Cattle Ranchers Federation (FEDEGAN) and the Research Centre for Sustainable Agricultural Production Systems (CIPAV) in Valledupar, Colombia, from June 11-17.

Profitability in sheep production increased in most of the countries in 2014 on the previous year, but in many cases not reaching 2012 levels. Tunisia and South Africa were the countries with decreasing profits. However, overall perspectives for sheep production in most of the countries are positive.

With the exception of USA, Argentina, Brazil, China, Kazakhstan, Australia and South Africa, profitability of beef production was lower in 2014 compared to the previous year. However, prospects for 2015 are reasonable given relatively low feed prices and further increases in beef expected short-term. Political framework conditions remain important, but single policy measures, for example in the field of environment, food safety and animal welfare seem to have less impact on profitability than macroeconomic conditions such as tariffs, exchange rates, oil prices and interest rates.

"Colombia is a low-cost beef producer but also receives low beef prices which means that overall profitability is not better than elsewhere", Claus Deblitz, coordinator of the *agri benchmark* Beef and Sheep Network, concluded from the international benchmarking exercise of typical cow-calf and beef finishing farms: "There is significant potential to improve on weaning percentage, daily weight gains, mortality rates, feed quality and labour productivity".

Apart from the exchange of results on the economics and latest developments in the global sheep and beef sectors and farms, sustainability was the leading topic of this year’s conference. The need for, but also examples of achieving sustainability were illustrated in fieldtrips to sheep and beef farms.

Several speakers presented the concept, the implementation and the potential of so-called ‘intensive silvopastoral systems’ which are rotational grazing systems using several layers of highly productive pastures, fodder and legume shrubs and trees. Enrique Murgueitio, director of CIPAV, showed numerous examples of silvopastoral systems which are not restricted to the tropics but are also found in many countries with subtropical or even moderate climates.

Ernesto Reyes, international livestock manager of *agri benchmark*, reported on the first results of an ongoing project analysing silvopastoral systems in Colombia with the *agri benchmark* approach. The results highlight that these systems can deliver triple wins in terms of productivity increases, profitability gains, improvement of the environment as well as animal welfare status. Relatively high capital requirements, limited access to capital, lack of knowledge, management skills as well as advisory services, especially for small farmers, are reasons why silvopastoral systems are not spread further yet.
José Felix Lafaurie, FEDEGAN'S president, stressed that the strategy for the Colombian cattle sector development in the next 10 years is based on these systems. The objective is to produce significantly higher quantities of beef more sustainably and at the same time re-transfer land presently used for production into natural vegetation. With this, Colombia could become an important exporter of ‘green’ beef. Ben Thomas (Meat and Livestock Australia) explained the ingredients required to become a successful exporter based on strong quality programs and marketing messages. Anne Kinsella (TEAGASC, Ireland) added the Irish experience, being a successful exporter of pasture-based beef with a green image and despite relatively high costs of production.

Hsin Huang, Secretary General of the International Meat Secretariat, reported on IMS' involvement in various high-level activities on sustainability of livestock production, among them the two FAO-led initiatives of LEAP (Livestock Environmental Assessment and Performance) and the Global Agenda for Sustainable Livestock but also the Global Roundtable for Sustainable Beef. He stressed that "... the benefits of meat like high nutritional value and multi-use of animal products are often ignored. According to FAO-statistics, about 80 % of feed is not suitable for human consumption. Particularly ruminants like sheep and cattle use mainly grassland which does not compete with human food production”.

"Sustainability concepts must include animal welfare. Indicators must be science-based and should be a mix of management and result-oriented", said Lesley Mitchell, head of policy analysis with the global NGO World Animal Protection. She further showed that achievements in animal welfare can be best obtained by working with industry and not against it – illustrated by their humane slaughter projects in Brazil and China.

agri benchmark will follow up on extending its analysis framework by sustainability indicators and engage in further projects complementing agri benchmark’s core competence of production systems and their economics with analysis of resource management, land use change and animal welfare.

Participants of the agri benchmark Beef and Sheep Conference 2015

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For information about the network see the agri benchmark website www.agribenchmark.org
Traditional grazing and intensive silvopastoral system in dry conditions (June 2015)

Traditional grazing system
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Intensive silvopastoral system
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