21 September 2020

Presentation by Dr. Daniel Bercovici, Chairman, International Feed Industry Federation (IFIF) at the FAO LEAP outreach event on “Innovation to tackle climate change. Generating facts about feed additives and livestock production” on the occasion of the launch of the LEAP guidelines on the environmental performance of feed additives in livestock supply chains.


During my career, I had the chance to contribute to several regional Private sector Feed and feed additive associations, as a representative of the amino acid industry; in Europe in the 90’s, in Brazil in the 2000’s, in the USA between 2007 and 2014 and back to Europe since 2014.

From the excellent work initiated by FEFANA in the early 90’s, the concept of using feed additives such as Amino acids and enzymes to reduce Nitrogen and Phosphorus excretion from livestock production has been successfully put in practice in Europe under the pressure of the European regulation. Same concept was spread positively since then, as for example the industrial award obtained by the Brazilian Feed association in 2007. Other cases of success exist around the world.

Since 2008, the environmental sustainability topic has been on the agenda of the discussions between FAO and IFIF executives. It has contributed to the elaboration of two key concepts:

(1) The creation of the Global Feed Life Cycle Assessment method « GFLI » to evaluate each raw material entering as a feedstuff in the animal diets
(2) The creation of Specialty Feed additives sustainability « SFIS » project to evaluate the impact of using Feed additives on the environmental footprint of animal products,

Feed additives can partially substitute agricultural raw materials or feedstuffs in general or maximize their nutritional availability.

Essential nutrients such as amino acids, vitamins and minerals are today part of the feed formulation.

By doing so, Feed additives allow nutritionists to formulate animal diets with accuracy and precision, resulting in a significant reduction of Nitrogen and Phosphorus output under solid, liquid or gaseous dejections such as Ammonia or Nitrous oxide. Feed additives also can reduce methane emissions of ruminants.

Impact on GHG emissions, but also on eutrophication and acidification are well documented together with the Land Use change.

Two key projects worked by the private sector are GFLI and SFIS, as presented earlier.

Integration of the science-based standard methodologies under the LEAP guidelines is key to engrave in the stone these key scientific advances.
GLFI allow to select feedstuffs to minimize the feed environmental footprint and SFIS offer the nutritional intelligence though the use of Feed additives to minimize the environmental footprint of each kg of animal-based food product.

I believe LEAP can speed up the adoption of good nutrition practice over the world to implement what I call a LIFE formulation, in parallel to the LCF formulation known as « Least Cost Formulation ». LIFE formulation is « Less Impact Formulation for the Environment ».

In addition to the first mission of releasing high level information and guidance’s, I invite all of us to reflect how we can deliver results to the entire world as soon as possible.

Regarding innovation, IFIF has launched in 2018 a new activity called the « Nutritional Innovation to Improve animal health » as a response to AMR, and the growing concerns on the use of growth promoters in Animal nutrition. Our concept is to continue to produce More with Less and Even better (environment, animal health and animal welfare).

To boost innovation and implementation of the existing solutions, I propose 3 things:

(1) To ally forces to set up a guide of good practices for feeding animals by highest respect to the Environment based on LEAP, IPPC and other global works. I believe there are now science-based documentation that can allow to work on such manual of good practices and why not between FAO and IFIF, like we did for the Feed safety manual many years ago.

(2) To support scientific work to level up scientific data for regulators and policy makers to authorize new products and claims, and

(3) To offer a clear horizon to the private sector to further invest in animal nutrition research and product development, from the perspectives of product regulation, claim recognition and also from another point of societal concern, the animal testing.

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