



# Expectation from the Industry in term of R&I

Afternoon Workshop in Brussels, 18 Nov. 2021

**FEED VERSUS FOOD Crops and animals together** to address food and nutrition security

Karine Tanan, Scientific and Regulatory Affairs, Cargill







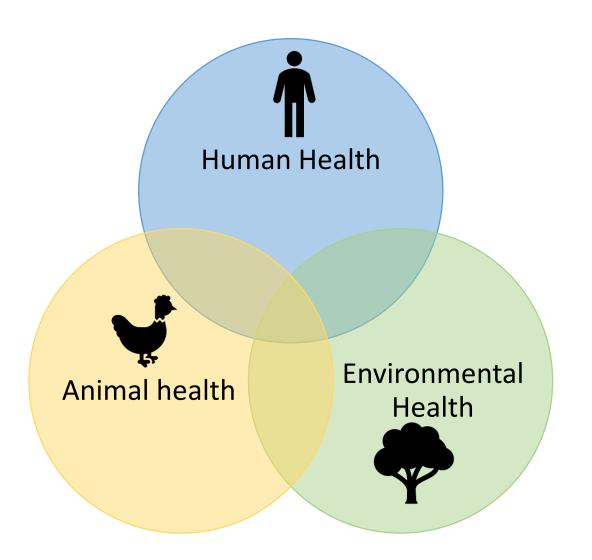
## A quick historical perspective in R&I

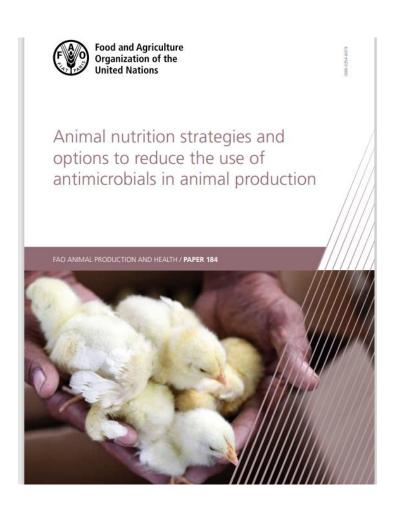
			Sustainability
		Safety	Safety
	Quality	Quality	Quality
Efficiency	Efficiency	Efficiency	Efficiency
Quantity	Quantity	Quantity	Quantity
60-70s	80-90s	2000-2010s	2020s





## Animal Nutrition and One Health Approach









## Animal Nutrition strategies are part of TERTIARY PREVENTION

#### SCIENTIFIC OPINION



ADOPTED: 1 December 2016 (EFSA BIOHAZ Panel), 8 December 2016 (EMA CVMP) doi: 10.2903/j.efsa.2017.4666

## EMA and EFSA Joint Scientific Opinion on measures to reduce the need to use antimicrobial agents in animal husbandry in the European Union, and the resulting impacts on food safety (RONAFA)

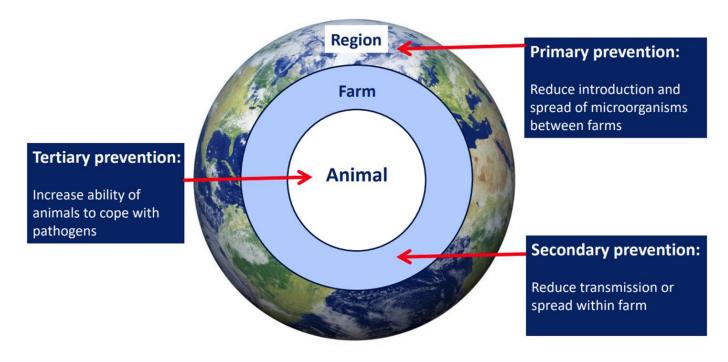
EMA Committee for Medicinal Products for Veterinary Use (CVMP) and EFSA Panel on Biological Hazards (BIOHAZ).

David Murphy, Antonia Ricci, Zanda Auce, J. Gabriel Beechinor, Hanne Bergendahl, Rory Breathnach, Jiří Bureš, João Pedro Duarte Da Silva, Judita Hederová, Peter Hekman, Cornelia Ibrahim, Emil Kozhuharov, Gábor Kulcsár, Eva Lander Persson, Johann M. Lenhardsson, Petras Maciulskis, Ioannis Malemis, Ljiljana Markus-Cizelj, Alia Michaelidou-Patsia, Martti Nevalainen, Paolo Pasquali, Jean-Claude Rouby, Johan Schefferlie, Wilhelm Schlumbohm, Marc Schmit, Stephen Spiteri, Stanko Srčič, Lollita Taban, Toomas Tiirats, Bruno Urbain, Ellen-Margrethe Vestergaard, Anna Wachnik-Święcicka, Jason Weeks, Barbara Zemann, Ana Allende, Declan Bolton, Marianne Chemaly, Pablo Salvador Fernandez Escamez, Rosina Girones, Lieve Herman, Kostas Koutsoumanis, Roland Lindqvist, Birgit Nørrung, Lucy Robertson, Giuseppe Ru, Moez Sanaa, Marion Simmons, Panagiotis Skandamis, Emma Snary, Niko Speybroeck, Benno Ter Kuile, Helene Wahlström, Keith Baptiste, Boudewijn Catry, Pier Sandro Cocconcelli, Robert Davies, Christian Ducrot, Christian Friis, Gregers Jungersen, Simon More, Cristina Munoz Madero, Pascal Sanders, Marian Bos, Zoltan Kunsagi, Jordi Torren Edo, Rosella Brozzi, Denise Candiani, Beatriz Guerra, Ernesto Liebana, Pietro Stella, John Threlfall and Helen Jukes

#### **Abstract**

EFSA and EMA have jointly reviewed measures taken in the EU to reduce the need for and use of antimicrobials in food-producing animals, and the resultant impacts on antimicrobial resistance (AMR). Reduction strategies have been implemented successfully in some Member States. Such strategies include national reduction targets, benchmarking of antimicrobial use, controls on prescribing and restrictions on use of specific critically important antimicrobials, together with improvements to animal husbandry and disease prevention and control measures. Due to the multiplicity of factors contributing to AMR, the impact of any single measure is difficult to quantify, although there is evidence of an association between reduction in antimicrobial use and reduced AMR. To minimise antimicrobial use, a multifaceted integrated approach should be implemented, adapted to local circumstances. Recommended options (non-prioritised) include: development of national strategies; harmonised systems for monitoring antimicrobial use and AMR development; establishing national targets for antimicrobial prescribing; training, education and raising public awareness; increasing the availability of rapid and reliable diagnostics; improving husbandry and management procedures for disease prevention and control; rethinking livestock production systems to reduce inherent disease

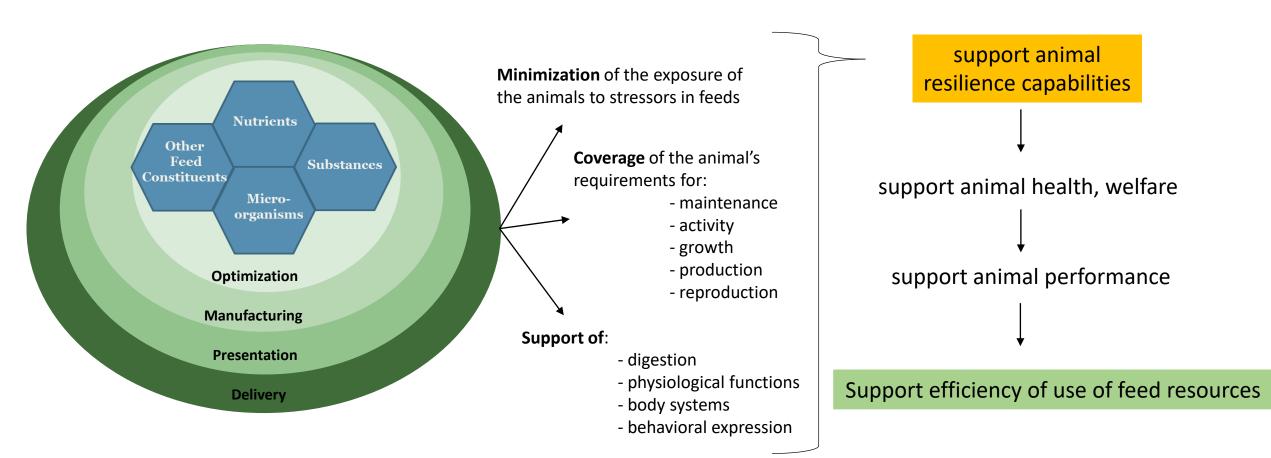
#### **EFSA-EMA:** Strategies to reduce the need to use antibiotics







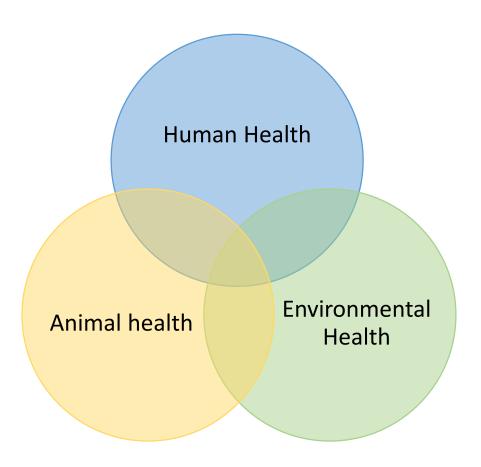
## Animal Nutrition strategies and efficiency of use of feed resources



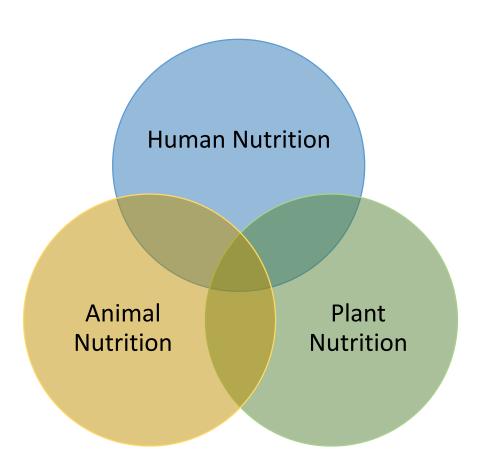




#### R&I in a context of One Health and One Nutrition



To achieve optimal health and well being outcomes



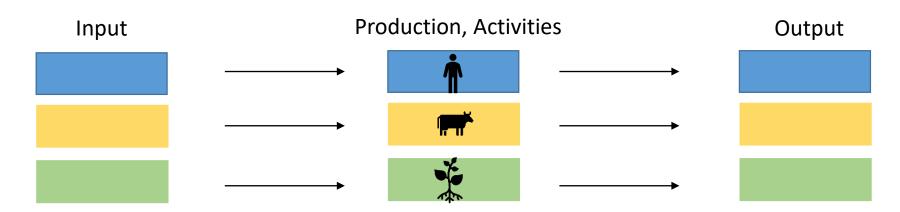
To achieve optimal nutrition among all living organisms





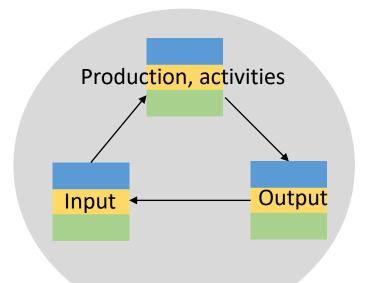
### **Environmental Footprint Assessment of food systems**

From a linear approach.....



....to a circular, integrated approach





How and what to measure 'on farm'?

Methodologies, technologies are required





## Industry Expectations in term and R&I

Fullfill market demands and to maintain competitive advantage

Competition must happen in a fair level playing field, should not mislead

#### Research at International level is to promote pre-competitive environment:

- develop methods for evaluation, measurements (for national inventories, for private standards..)
- generate 'new knowledge', have it recognized by the scientific community

#### Research must be transformed into innovation:

- to support livestock production systems
- that are technically adapted and economically viable for farmers

#### **Key to success:**

- Proper legal frameworks to unlock Innovation potential