

57th SESSION OF THE WORKING GROUP ON STRATEGIES AND REVIEW



REPORTING ON STRATEGIES AND POLICIES

21-24 May 2019, Geneva

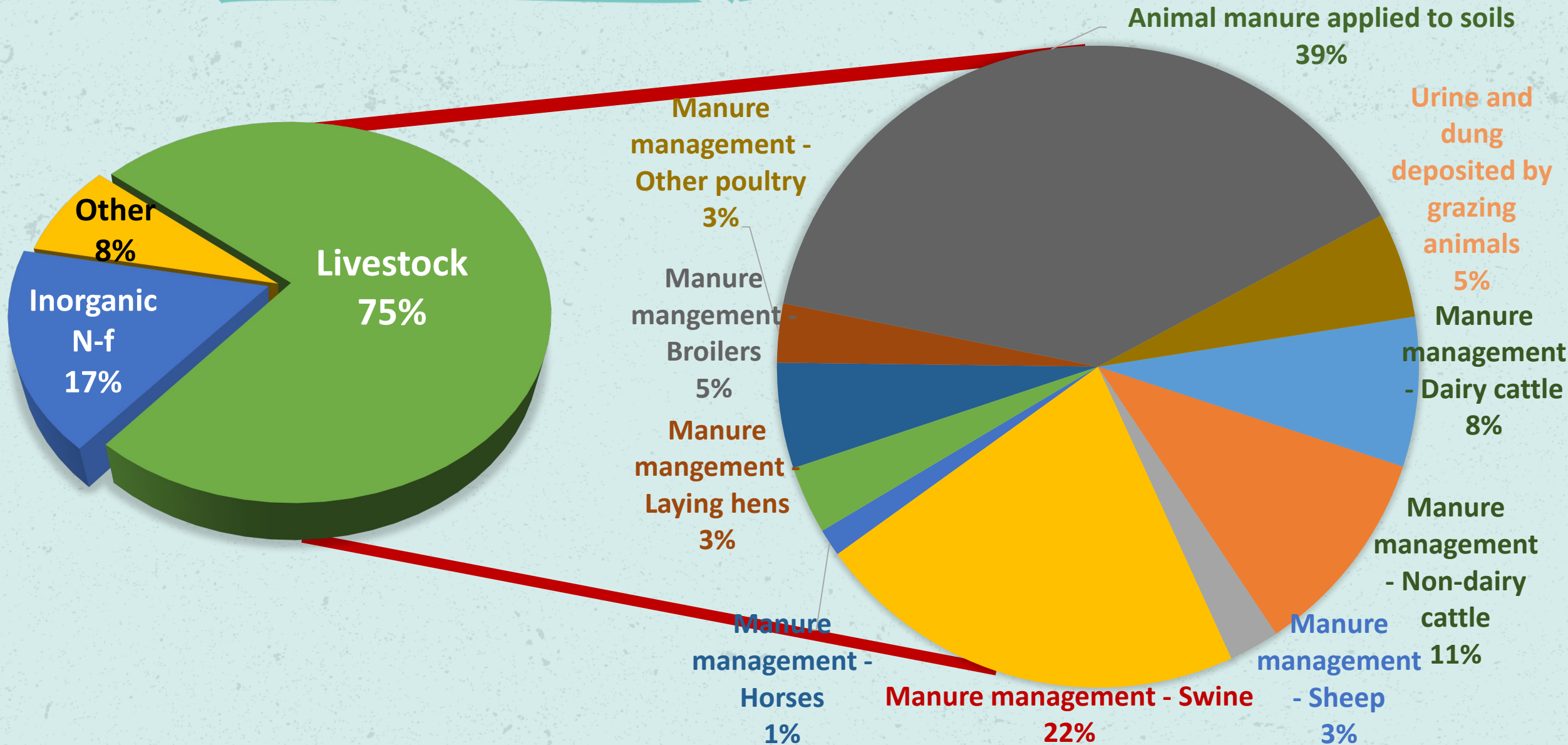
Odón J. Sobrino

SPAIN (Ministry of Agriculture, Fisheries and Food)

SPANISH FACTS

- **Agriculture and livestock; economic and social relevance**
- **During last decades, Spain has made a huge effort to improve on farm modernization and has undergone technological investments**
- **Agriculture, food and livestock sector strategic pillar for foreign trade (~20% Total export value)**
- **Large number of species and a great diversity of production systems**

AMMONIA SOURCES IN SPAIN (2017)



Policies and measures to reduce ammonia emissions

- **Improving Emissions Estimation (N balance)**
- **Formative/Informative Measures**
 - **A Guide to the Best Available Techniques for Reducing the Environmental Impact of Livestock**
 - **Code of Good Agricultural Practice**
- **Integrated Regulatory Measures**
 - **On farm**
 - **Manure storage**
 - **Manure application**
 - **Inorganic fertilizers application**

Improving Emissions Estimation

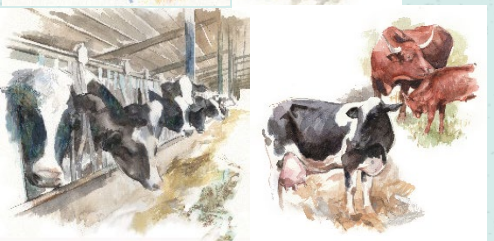
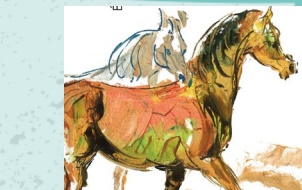
TIER II approach; FIRST STEP FOR STRATEGIES AND POLICIES

TIER I



TIER II

- Zootechnical bases for the calculation of the feed balance for nitrogen and phosphorus (including enteric fermentation)
- Tier II (IPCC 2006 & EMEP/EEA 2016) for ALL (9) relevant species (*start-up 2014*)
- Published, public and open for comments
- Available on the website of the Ministry of Agriculture, Fisheries and Food



TIER II approach; Challenges

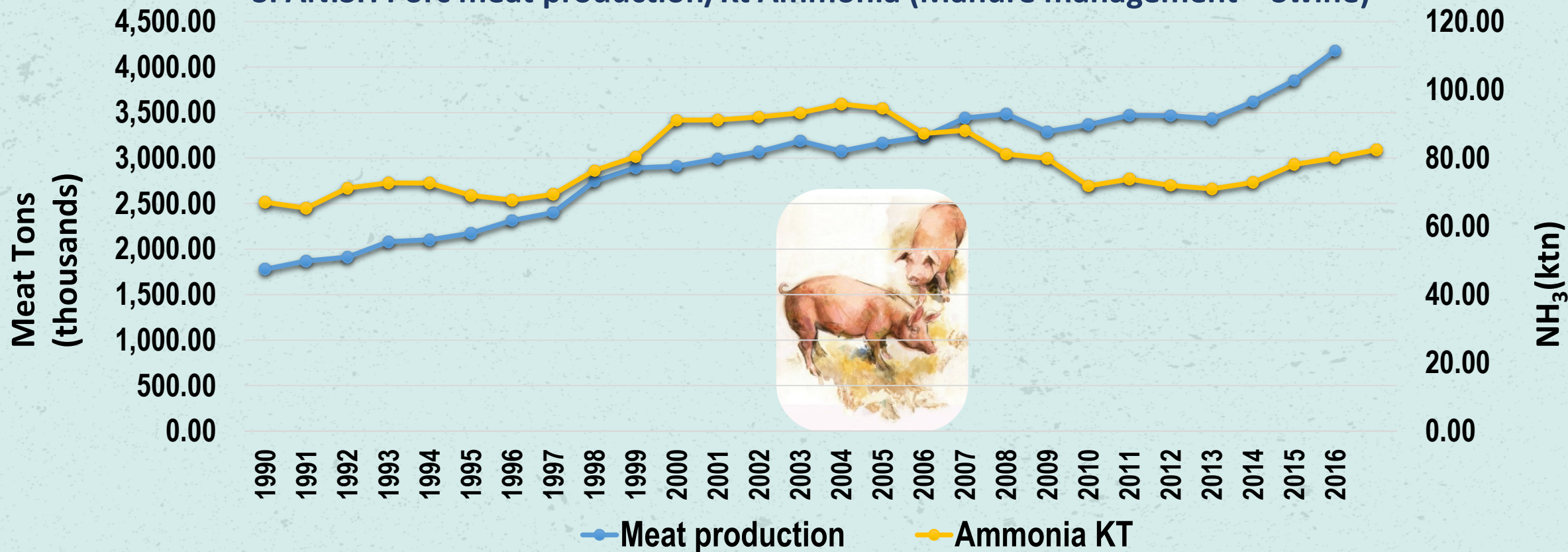
- **Data:**
 - Covered from 1990 (despite difficulties to obtain data for first years)
 - Production data
 - Nutrition data
 - Representativeness and robustness.
 - Sources (scientific, public, private)
- fill in the gaps of the past, the role of the experts

Improving Emissions Estimation

TIER II approach; Findings

Lower emission per kg of product -> Higher efficiency

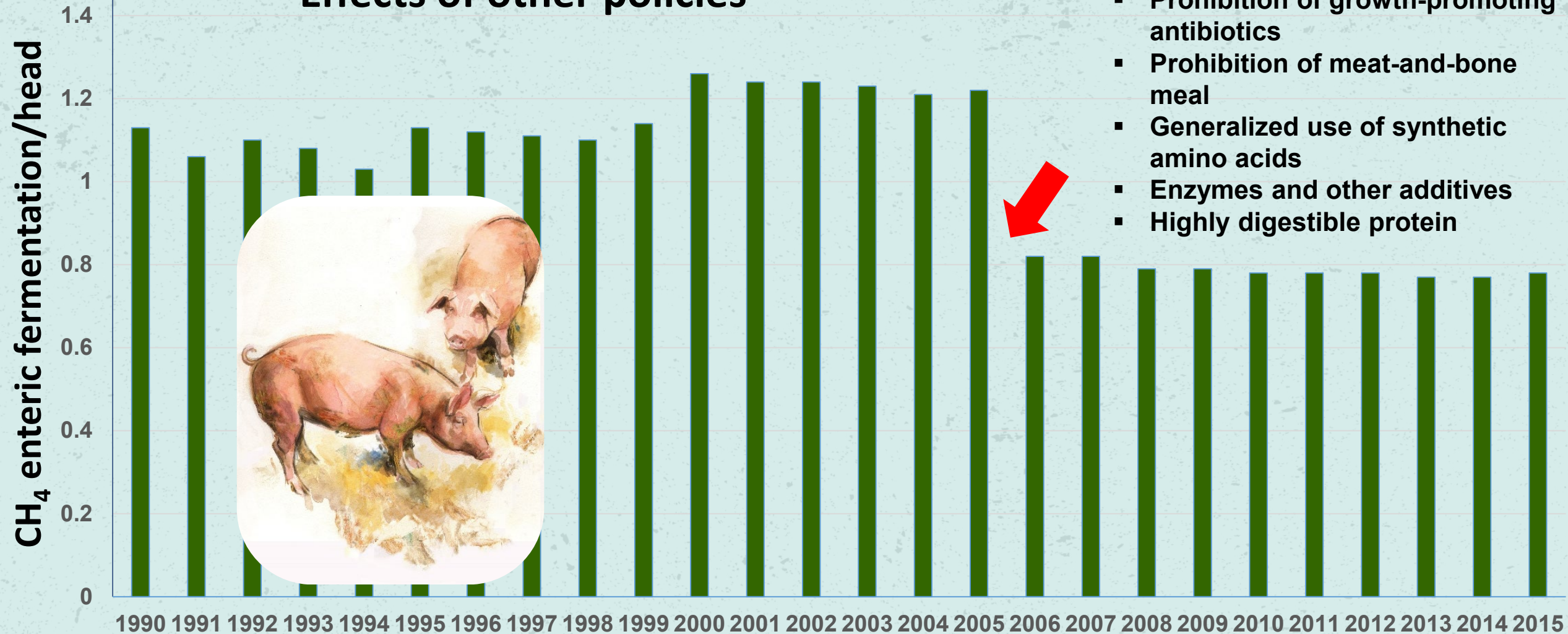
SPANISH Porc meat production/Kt Ammonia (Manure management – Swine)



Improving Emissions Estimation

TIER II approach; Findings

Effects of other policies

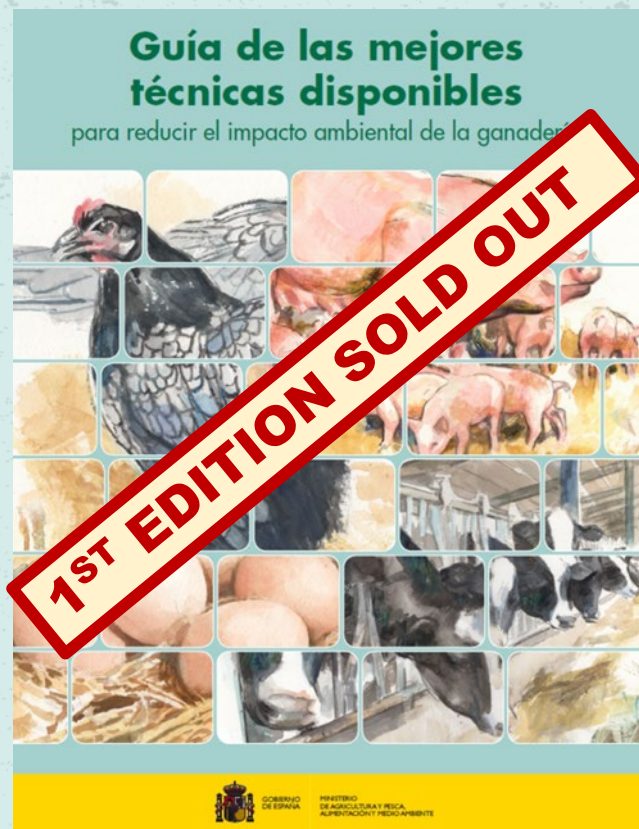


Policies and measures to reduce ammonia emissions

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Formative/Informative Measures

Guide to the best available techniques to reduce the environmental impact of livestock farming is available for public use



Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions has been translated into Spanish

Traducción documento ECE/EB.AIR/120

Distr.: General
7 de febrero de 2014

Original: inglés

Traducción realizada por el Ministerio de Agricultura y Pesca, Alimentación y Medio Ambiente. A efectos legales solo tendrá validez la versión original en inglés.

Órgano Ejecutivo para el Convenio sobre Contaminación Atmosférica Transfronteriza a Gran Distancia

Documento orientativo sobre la prevención y reducción de las emisiones de amoníaco de origen agropecuario

Resumen

En su primera sesión (Ginebra, 11-13 de diciembre de 2012), el órgano ejecutivo para el Convenio sobre Contaminación Atmosférica Transfronteriza a Gran Distancia adoptó un documento orientativo sobre la prevención y reducción de las emisiones de amoníaco de fuentes agropecuarias, y decidió que este sería el documento orientativo al que se hace referencia en el artículo 3, párrafos 8 (b) y 6, del anexo IX del Protocolo para la Reducción de la Acidificación, de la Eutrofización y del Ozono en la Troposfera de 1999 (el Protocolo de Gotemburgo), según enmienda (ECE/EB.AIR/113/Add.1, decisión 2012/11).

El documento orientativo adoptado que presentamos aquí se ha preparado para ayudar a las Partes a aplicar, cuando sea adecuado, las mejores técnicas disponibles para evitar y reducir las emisiones de amoníaco, en particular para reducir las emisiones de amoníaco de las fuentes significativas. También expone técnicas de baja emisión para la aplicación de purines a emplear, según corresponda, teniendo en cuenta el suelo y las condiciones geomorfológicas locales, el tipo de purín y la estructura de la explotación.

https://www.mapa.gob.es/es/ganaderia/temas/ganaderia-y-medio-ambiente/mejorestecnicasdisponiblesparareducirelimpactoambientaldelaganaderia_tcm30-436663.pdf


https://www.mapa.gob.es/es/ganaderia/temas/ganaderia-y-medio-ambiente/ece_ebair_120_espdocumentoorientativosobreelamoníaco_tcm30-436094.pdf

Formative/Informative Measures

An on-farm emissions estimation "on-line tool" is also available

ESTIMADOR DE EMISIONES DE AMONIACO Y DE NITRÓGENO RETENIDO EN EXPLOTACIONES GANADERAS

2018 GANADO PORCINO



IR A PRESENTACIÓN

IR A GUÍA

IR A ENTRADA DE DATOS

IR A RESULTADOS

Consistency between
Greenhouse/contaminant
gases inventory
methodology
&
Pollutant Release and
Transfer Register (PRTR)

<http://prtr-es.es/documentos/metodos-medicion-calculo>

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Integrated Regulatory Measures

- **Obligation of band spreader for slurry application linked to CAP aids**
- **Plan “Renove” of agricultural machinery for slurry band spreading (*Ministry of Agriculture, Fisheries and Food funds; 2018, 2019*)**
- **On farm measures to reduce ammonia emissions in specific livestock sector regulations (regulations being drawn up)**
 - **Nutritional management (FULLY IMPLEMENTED IN SPAIN and included in TIER II approach)**
 - **Frequent removal of manure**
 - **Fully/partially covered manure storage (new/old farms)**

Integrated Regulatory Measures

- **Measures for the proper application of nutrients (regulations being drawn up)**
 - **Band spreading/injection of slurry.**
 - **Immediate covering of manure.**
 - **Measures for inorganic N fertilizers**
- **Complementary measures based in mandatory implementation of BATs and direct monitoring of reduction achieved**

CONCLUSIONS

- **TIER II is a very valuable and recommended approach for countries with high livestock production**
- **Spain has made a great effort to reach TIER II in the most relevant livestock species**
- **Main challenges are to obtain data from the past, which should be taken into account when drafting new guidelines**
- **Productive efficiency should be positively valued as a factor in reducing and controlling emissions (results show that productivity has increased while emissions remain stagnated)**

CONCLUSIONS

- **Training and information of stakeholders represents a very important task in environmental policies**
- **It is advisable to adopt a holistic approach to environmental policies in order to reach all the objectives (i.e. Ammonia, GHG and Nitrates)**
- **The influence of other policies on environmental impact, such as animal nutrition, international trade or animal health, must be taken into account**