

Poultry Research Challenges beyond 2010

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- Is there need for poultry research?
 - Is the right research being done?
 - How should this research be funded?
 - What are the limitations to successful research?
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Is there need for poultry research?

Substantial investment by the State in poultry research and development is justified on the grounds of cost-effectiveness

Is there need for poultry research?

Arguments against this:

- ❑ Poultry Industry should do its own research
 - ❑ Poultry Industry gets no technical benefit from state-supported research
 - ❑ Technical improvements resulting from research lead to increased output, which depress prices so there is no economic benefit from research investment
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Is there need for poultry research?

Arguments against this:

- Poultry Industry gets no technical benefit from state-supported research
 - Many discoveries essential to the modern poultry Industry show how false this statement is:
 - Identification and synthesis of vitamins
 - Viral origin of Marek's disease
 - High temperatures reduce feed costs in laying hens
 - Short daylengths improve broiler breeder performance
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Is there need for poultry research?

Arguments against this:

- Technical improvements resulting from research lead to increased output, which depress prices so there is no economic benefit from research investment
 - The real beneficiary of agricultural research is the consumer. However, those producers who keep up with, and implement, the latest research are at a competitive advantage over those who ignore this
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Who is doing the research?

- ❑ State funding through ARC (UK) and USDA (USA) was designed to do mission-orientated research, but they ended up doing speculative research instead
 - ❑ Universities did the applied research
 - ❑ Few large companies do their own research
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Is the right research being done?

□ Too much repetition

- In Google, the key words 'poultry methionine supplementation soybeans benefits' yields 49000 hits.
- Assume half are not relevant, and each paper is referred to ten times, this is still 2500 papers on subject
- We only needed one!

□ Too little thought and planning

□ 'Am I asking the right question?'

Where does funding come from?

- ❑ The State funds research through scientific bodies:
NRF, THRIP
 - ❑ Protein Research Foundation
 - ❑ Pharmaceutical companies
 - ❑ Pork Industry uses a statutory levy to fund generic research

 - ❑ Individual poultry producers generally cannot afford to fund research
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How should poultry research be funded?

- ❑ Generic funding is of value if the right research is done, but there is little economic benefit to producers if implemented by everyone in the Industry
 - ❑ Mission-orientated research should be funded by the State because it is the consumer who benefits from such research
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What are the limitations to successful research?

- Funding
 - Facilities
 - Researchers
 - Training
 - Ideas
 - Enthusiasm
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What are the limitations to successful research?

□ Facilities

- Good facilities are not essential, but they certainly make research easier
 - Quality control must be of highest standard to reduce variation within pens
 - Implement a culture of continual improvement
 - Spend time training the technicians
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What are the limitations to successful research?

□ Researchers

- Too few researchers (emigration, competition from Industry, lack of interest in agriculture)
 - Academics are expected to do too much teaching and administration
 - Bureaucracy undermines creativity
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What are the limitations to successful research?

- ❑ Training of researchers
 - ❑ basic husbandry
 - ❑ experimental techniques
 - ❑ statistics
 - ❑ analytical and reasoning skills
 - ❑ writing skills
 - ❑ publishing skills
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Experimental Design and Analysis
In Animal Sciences

T.R.Morris

CABI Publishing

What are the limitations to successful research?

□ Ideas

- Too often, overseas research is duplicated
Sometimes this is necessary (e.g. agronomic differences)
 - Industry problems lend themselves to investigation
Don't expect Industry to identify ideas for research
 - Stimulating, creative, enriched environment
 - Never conduct experiments hoping for a theory
 - Develop a theory and gaps will emerge
 - Am I asking the right question?
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What are the limitations to successful research?

□ Enthusiasm

- Set and achieve goals
 - Publish, publish, publish
 - Attend overseas conferences and meet people
 - Get involved with the Industry
 - Compete with other researchers
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What of the future?

- Literature searches are becoming easier
 - Software is becoming more powerful and useful
 - Data mining and processing
 - Statistical packages
 - Modelling
 - Word processing
 - Reference handling
 - Universities are recognising the importance of research
 - There are still gaps in our knowledge!
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