ATP in Sustainable Efficient Food Production

Focus: Extensive agricultural production

Goal: Increasing Efficiency and Reducing Impact.

IBERS
Institute of Biological, Environmental and Rural Sciences

PRIFYSGOL BANGOR UNIVERSITY

NIAB

Pasture based agriculture

- 60% agricultural area
- £6Bn plus industry
- Large and diverse sector - challenges in introducing innovation.
- Reduction in availability of government-funded farm advice - technical information via:
  - farm managers
  - agricultural suppliers’ technical teams
  - Vets
  - advisors for environmental schemes; and
  - supply chains attached to large retailers.

An acadmic partnership between leading UK agricultural institutes

Bangor University *(agri environment, silvopasture, social science, carbon foot printing)*

NIAB-TAG *(focused on arable and field crops)*

IBERS/Aberystwyth University
(focused on grass, livestock)

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fuelled by research but driven by industry

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Management Partners :

Waitrose Ltd
Leading supermarket with dedicated supply chain
Castell Howell Foods Ltd
A leading independent food wholesalers
BioTal Ltd
One of the UK's leading animal nutrition companies.
Biosciences KTN
Driving the conversion of the UK's bioscience knowledge into innovative agricultural, food and industrial bioscience products and processes
XL Vets
A group of independently owned, progressive veterinary practices committed to the future of the UK livestock industry
Lantra
The Sector Skills Council for land-based and environmental industries
British Seed Houses
A Complete Grass Seed Development and Marketing Operation

Research Led Training

Sustainable Beef, Sheep and Dairy

Immunology, Parasitology, Bacteriology

Endocrinology, Growth and Development

Animal Breeding and Genetics

Emerging technologies in Vet. Science

Ruminant Nutrition

Improving Animal Production

Upland Farming Systems

Forage and Feed

Agronomy – includes improving fertilizer use, rotations

Sustainable Grassland Systems

Weed, Pest and Disease Control in Feed and Forage

Soil Management

Improved Forages and Feeds – plant breeding / re-seeding/seed production/clover management

Improved Silage

Risk Assessment of GM Technologies

Optimising Landuse Management

Maintaining Biodiversity

Mitigating Environmental Change

Natural Resource Economics & Policy

Silvo-Pastoral Production Systems

Efficient Use of Resources and Utilising Waste

Assessment of Management Alternatives

Complementary & Wider Issues

Market Identification

Agri-business Risk Assessment

Product Distribution Logistics

Issues and Threats to Food Security

Carbon Foot-printing and Lifecycle Analysis

Microbial Pollution/Health Risk

Changing Patterns of Food Production/Consumption

All above identified by target audience as needed.

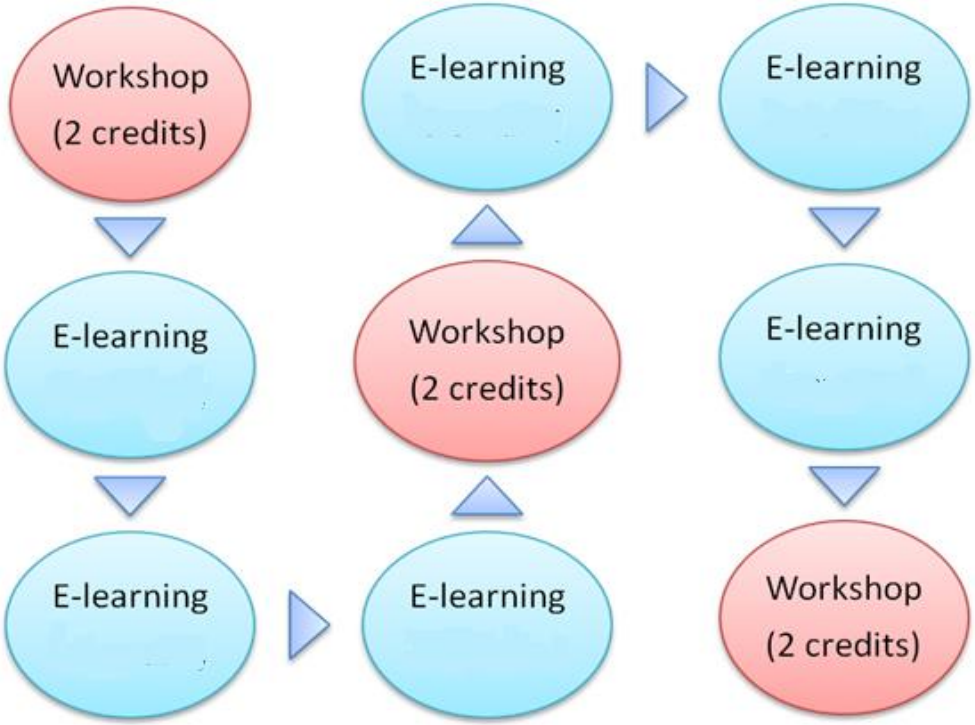
-Highest demand to be developed in 1st 6-months **-To be developed in 2nd 6-months**

Responsive development will continue throughout.

Delivery Model

Loss of **TIME** rather than **COST** limits training uptake for this group. therefore:

- Stand alone two day workshops;
- PLUS: E-learning



(1 credit =
10 learning Hrs)

	Ruminant nutrition	Improved silage
Workshop	Rumen/ Energy metabolism/Greenhouse gases	Production/ Evaluation/ Feeding
E learning 1	Rumen: Microbiology Importance Manipulation	Production Forages Inoculants Ensilage
E learning 2	Energy systems: Energy requirements Energy supply Rationing systems	Evaluation: Chemical analysis NIRS Animal trials
E learning 3	Greenhouse gases: Importance Measurement Manipulation	Feeding Value Total mixed rations Supplementation
Workshop	Protein metabolism/ Ruminant products and human health/Mineral and vitamin metabolism	
E learning 1	Protein metabolism	
E learning 2	Ruminant products and human health	
E learning 3	Mineral and vitamin metabolism	
Total credits	20	10

Flexible, Accredited CPD

- All at post-graduate level
- Simultaneous accreditation by University AND Lantra Awards (at level 7) allows trainees to:
  - utilise only components most pertinent to them and accumulate CPD credits; **OR**
  - Use taught components to work towards postgraduate certificate or diploma; or Lantra Award; **OR**
  - Complete work-based theses towards MSc or Professional Doctorates.
- Extended period for completion (MSc up to 5 yrs, Prof. Doc up to 7 yrs)