

Geoscience Seminar 19th April

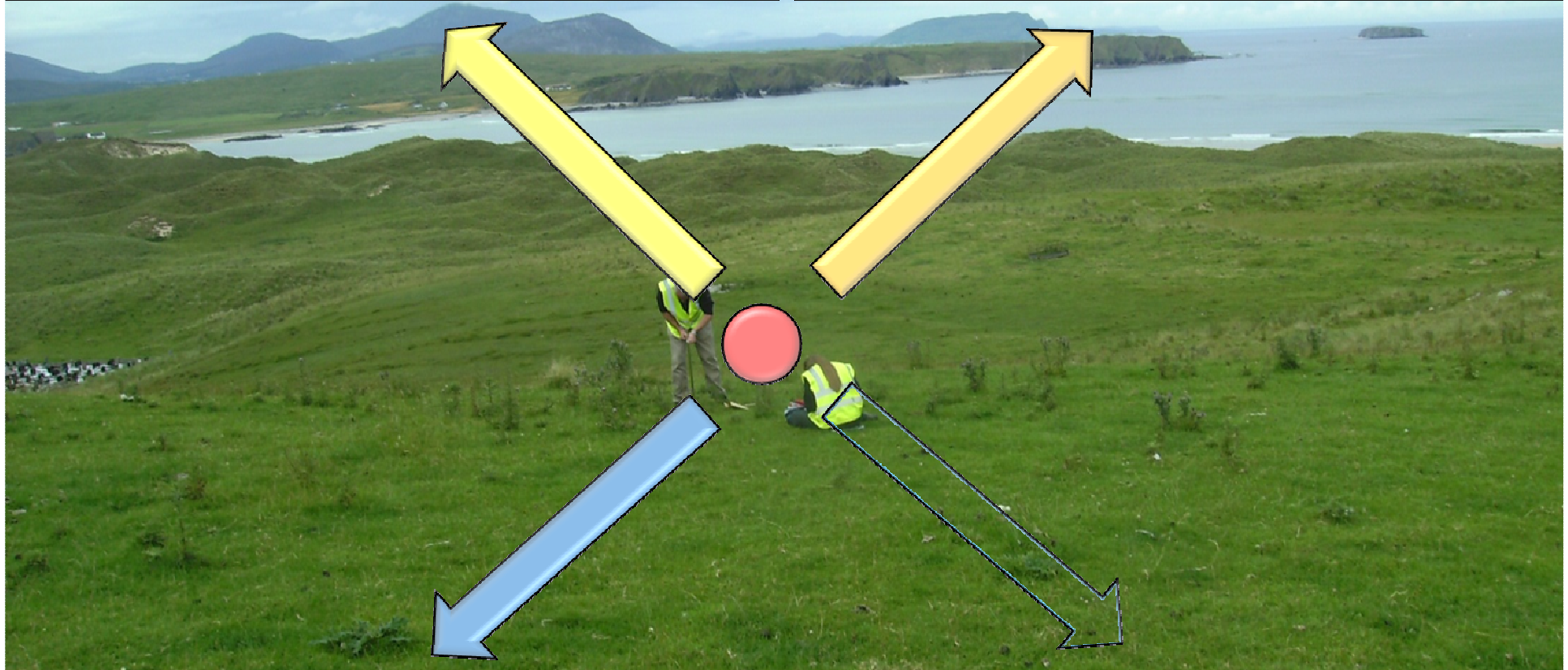
***Gerry Bird
Associate Agronomist***

***OCAE Consultants
Ballinderry
Enfield
Co.Meath***



Sheep Numbers
702,022
22.5% of National Flock

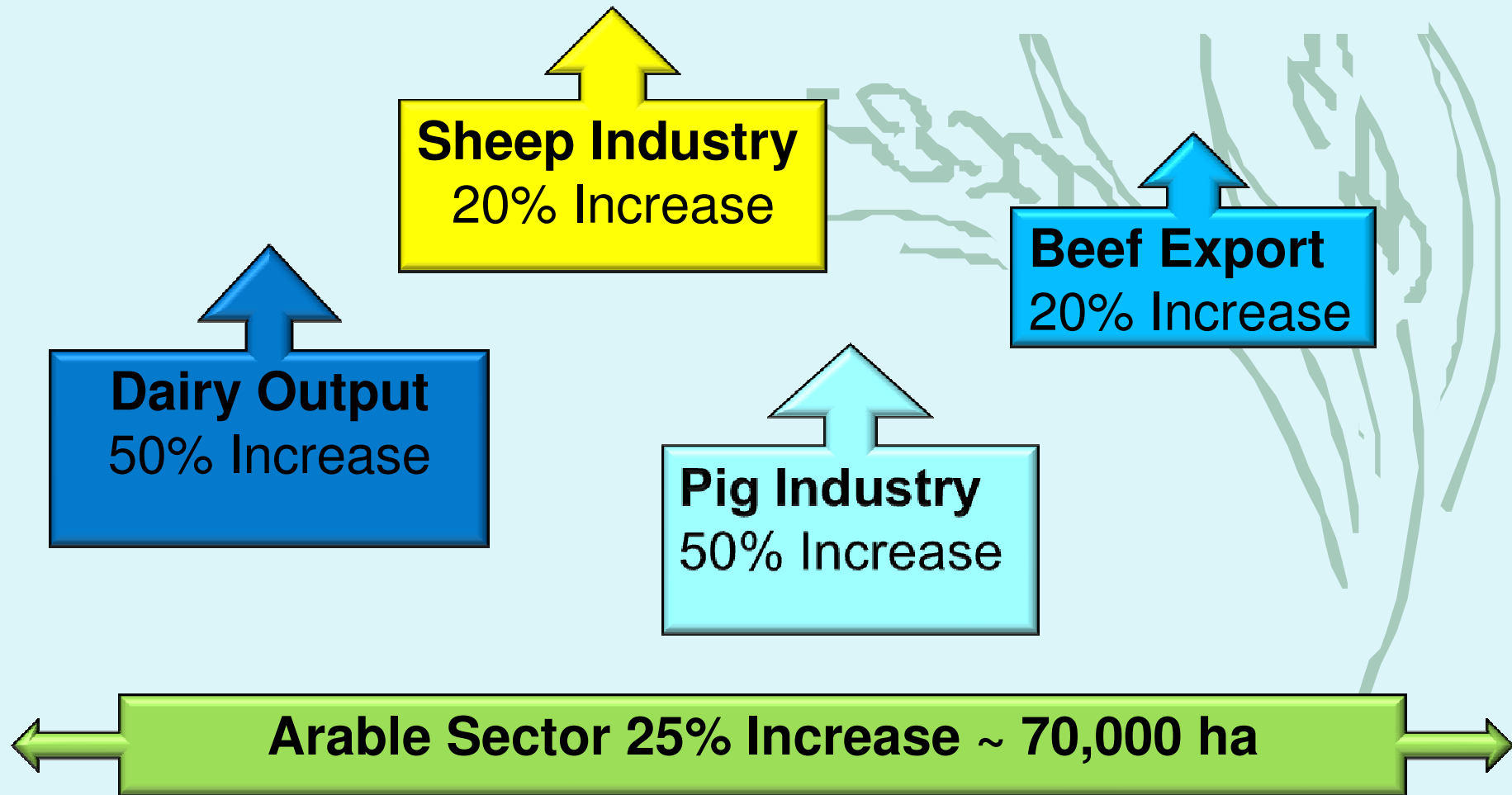
Arable Area
30,589 Ha
9.5% of National Arable Area



Dairy Herds
2,124
11.5% of National Herd

Beef Herds
21,294
19.6% of National Herd

Food Harvest 2020



Challenges

Output targets Vs Environmental Policy

- Water Framework Directive
 - Nitrates Directive
- Climate Change Policy
 - GHG emissions
- Soils Framework Directive
- CAP Reform
 - Biodiversity Plan



Strategies

- **Understand the Soil Processes**
 - Soil nutrient levels & interactions
 - Climatic impact on soils
 - Water movement in soils
 - Soil Biodiversity
 - Impact of Farm management



Geochemical Survey Data

➤ Soils

- Nutrient profile of major & minor nutrients
- Soil pH levels
- Mineral interactions
- Soil structure status
- Soil stability
- Soil Biodiversity



Livestock sector

- Mineral Interactions
- Fertiliser & Lime Application Management
- Forage Mineral Composition
 - Grass sward selection
 - Herd health
 - Food composition
- Grassland Management



Arable Sector

- Nutrient Profile
 - Fertiliser management
 - Trace element status
 - Disease susceptibility
 - Grain & tuber quality
- Soil Management
 - Soil structure
 - Crop rotation



Agricultural Services

➤ Fertiliser Industry

- Specific regional advisory service
- Targeted fertiliser production

➤ Compound Feed Industry

- Balanced ration based on regional data
- Mineral supplementation



Agricultural Services

➤ Veterinary

- Herd health
- Optimise output

➤ Advisory Services

- Farm Management data
- Production capacity
- Farm Enterprise potential



Data Analysis

- Comparative Farm Management Analysis
 - Fertiliser application comparisons
 - Farming systems analysis
 - Food Quality
- Base Line Data
 - Environmental Impacts
 - Carbon sink data



Next Steps

- Research to utilise soil nutrients more efficiently and optimise uptake.
- Establish regional output potential.
- Quality food production in line with environmental standards.
- Soil structure stability research
- Planned format for information transfer





Thank You

*Gerry Bird
Agronomist*