

## What we can deliver, through collaboration

Paul Miller (Trustee/ex-Secretary)



"What we do now, how do we do it, and why we do it the way we do."

#### We aim to:

Use the available funds effectively to make a 'value for money' contribution to UK agricultural engineering.
 Invest in the right people and projects.
 Identify (and now initiate) suitable projects.
 Monitor people and project progress - ensuring and encouraging effective delivery.
 via Trustee mentors.
 Enable and encourage collaboration.



## **Role of the Trust**

# The Trust provides funding primarily for:

## Research and innovation Education and training Travel Personal development





**Scope of The Trust** 

## The Douglas Bomford Trust is:

## ➤ A <u>charity</u>

Concerned with all aspects of engineering to support agriculture (food production, energy crops and environmental cropping schemes), horticulture (food production and ornamentals), and forestry.

#### The DOUGLAS BOMFORD, Trust

## Resources

- Circa £6mill invested (ethical focus).
- Income provides annual disbursement of circa £150k.
- Part-time Secretary and Administrator.
- Office in IAgrE HQ at Cranfield University but much business conducted remotely. (Long and close association with the Institution)
- •8 (volunteer) trustees with wide range of expertise and experience.







## Our activities (1)

#### Supporting projects

- Mainly (but not exclusively) as PhD projects with Universities and other sponsors
  - Identifying research topics
  - Recruiting students
  - Shared costs with other funders
  - >Working together (mentoring)

# Collaboratively

#### Supporting students

- Undergraduate studentships
- "A" level students via The Arkwright/Smallpeice scheme
- Awarding prizes
- Student membership of IAgrE
- Travel and conference attendance
- Other student activities





#### Supporting professionals

- > Through:
  - ➤ Training
  - Travel and conference attendance

#### Contributing to and supporting events with others

> e.g. Through the AgriFood Charities Partnership & AgriEpi Centre





## Why develop a new Strategy?

- The desire of Trustees to have some input to subjects included in proposals and topics funded.
- Project work at Cranfield University that has involved "horizon scanning", the definition of current and future scenarios and identifying components that could be included in our strategy.
- The industry and government research in the UK is now very different from when the Trust was established.
- A need to recognise that the Trust cannot do everything with our (limited) available resources.
  - Our budget is small in the context of national research funding.
  - Recruiting UK students to undertake higher degree studies at UK universities is difficult.
  - Use trustees with a range of expertise and use external opinions when necessary.

#### (We need to do what we do well – and not over-stretch!)

#### DOUGLAS BOMFORD Trust Three-year Strategy 2023-2026



#### VISION

The

"To make a difference for UK agricultural engineering for the sustainable benefit of the environment and society."

#### **MISSION**

"To provide resources to help advance the application of engineering and technology to achieve sustainable agricultural, food, and biological systems for the benefit of the environment and mankind." A framework for the next 3 years by fostering:

> Skills Technology Education Collaboration

Goals	Â Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î Î				
	Professional Development	Engagement	Quality	Impact	
Objectives	Provide professional development opportunities	Promote collaborative resources	Encouraging interdisciplinary research	Support and Invest in priority areas	
Activities	<ul> <li>IAgrE student support</li> <li>Community engagement</li> </ul>	<ul> <li>Long-term partnerships</li> <li>Networks &amp; Universities</li> </ul>	<ul> <li>Interdisciplinary research</li> <li>Conferences &amp; meetings</li> </ul>	<ul> <li>Emerging Technologies</li> <li>" Commercial Potential" ideas</li> </ul>	
Key performance indicators	<ul> <li>Number of studentships &amp; IAgrE memberships</li> <li>Type &amp; Number of Knowledge Exchange activities</li> </ul>	• Number of partners & collaborative projects	<ul> <li>Return on investment</li> <li>TRL &amp; innovation</li> </ul>	<ul> <li>Milestone monitoring</li> <li>Contribution to Science</li> </ul>	Cranfield University



## **New Strategy**

Based on Horizon Scanning

(by Cranfield MSc Group Projects)



## Workshops

The

**DOUGLAS BOMFORD** 







## Plans for the future (1)

- Move from a mainly responsive mode to include an element of initiation and steering.
- For the period 2023 2026, allocate up to 50% of the total funding provided for research, to 'priority' topics:
  - Developing technologies, control systems and strategies that directly improve the performance of sustainable agricultural production systems
  - Improving the use of energy sources in agricultural situations, particularly in relation to climate change objectives (Net Zero)
  - Developing innovative food production methods in controlled environments.





## Plans for the future (2)

#### The Trust will:

#### >Review and update the identified priority topic areas at regular intervals

Building on outputs from todays discussions

#### > Seek to identify (with partners) projects that will:

- Provide a strong training and personal development component
- ✤ A link to UK agriculture
- A relevant and practical component

#### > Seek to develop further the way in which we work with funded projects

- To build a team approach with The Trust represented by project mentors (with implications for the ways in which we use Trustees time)
- To achieve the best possible outputs in terms of personal development for the student/participant and the delivery of technical objectives

## To identify projects and partners that will address priority areas, if these are not being met by submitted proposals.



## Conclusions

Looking to the future, The Trust will:

- Support projects and people
  - > With a lower emphasis on facilities and equipment
- Define a strategy for support and allocate 50% of funding spend to support this defined projects as part of this Strategy
  - > Identify key topics for support using information from todays meeting
- Continue to support travel, attendance at technical events and training
- Continue to support professional qualifications and the image of agricultural engineers in the UK.