

Keynote Address

Machinery End-user Support Groups: A Global Path Forward Explained using Flexiseeder examples

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The central theme of this IAMFE¹ 2022 virtual conference is, Smart Field Experiments, and Smart Agriculture.

The conference aims to provide a platform, for:

- 1. The exchange of scientific ideas;
- 2. Public consideration of methods and instrument support for agrobiological field studies;
- 3. Cooperation in field methods of experimentation and technology; plus,
- 4. The synthesis of new ideas, and the emergence of technological solutions, which meet the needs of end users.

¹International Association for the Mechanization of Field Experiments.



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It is a meeting on-line, of scientists, scholars, engineers, and plant breeders, in agriculture and agricultural engineering.

This forum will contribute to progress with the production of agricultural and horticultural products, and food security, on a global scale. That is, *after targeted technologies reach the end user, and become integrated into production systems, in economically viable and environmentally acceptable ways*.



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In these respects, machinery end-user support groups were proposed in 2000, as a "new millennium" global path forward for IAMFE. Within Flexiseeder, this has proven very successful. How has this become possible? By providing our end users with core matrices² for targeting:

- Disaster preparedness and emergency relief;
- Rehabilitation and, reconciliation support, plus assistance for;
- re-development, normal development, and routine production <u>all, as a continuum, which cannot, be over</u> <u>emphasized.</u>

²A matrix is a situation or a set of conditions within which, something else develops or forms.



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Our Flexiseeder approach has been especially effective, when applied globally, in team settings, on the basis of overlapping agro-ecologies.

This has been achieved by overlaying our interventions on to the pre-existing year-round seed value chain which operates between developed economies, in the Northern and Southern hemispheres. Such as our fodder oats program for example, reaching out to lesser developed economies, on the basis of overlapping agroecologies.

This is a model conceived to be implemented as private – public sector joint ventures. Suitable for preparing for and mitigating, the effects of man-made as well as natural disasters, including climate change. Also for, "normal situations", of course. Applying equally to developed and developing economies.



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The response from our end users, to our request for feed-back, to prepare this presentation, has been incredible, overwhelming, and humbling. So much so, that in addition to this inaugural presentation, enough material came in, for a portfolio of exemplary presentations, to be made.

Each presentation, invaluable in its own right, has been transformed, and combined, by our voluntary team of authors, into a suite of training materials. These will be placed, on the IAMFE website, for a period, during and after the Conference. Later, they will be moved permanently, onto a dedicated site, as a lasting reference, possibly hosted at Lincoln University.



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So far, our team of authors have prepared the following Flexiseeder presentations.

- Nordic-New Zealand Industry Interface Support Initiative, including end-user help groups
- Year-round seed chain: breeding, early generation seed & machinery interface
- Lincoln University Interface, and Farmer Outreach.
- Outreach to Nepal, a historic example
- Outreach to Balkans, a new initiative



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Through these presentations, you with obtain a working glimpse into our operation, through the eyes of typical end users, as case studies. This includes contributions by, leading industry people, farmers, university professors, researchers, lecturers and post graduate students.

A special focus has been given to the younger generation. Achieved by, highlighting several students that have, over the past 20 years, been an integral, inspirational, and essential part of our global initiative. First as graduate students, then going on to become leaders, within their respective fields of expertise.



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By profiling their efforts, we hope it will inspire others, within and beyond, the "IAMFE Family", as our Founder and Patron, Dr Egil Øyjord, used to say. Starting with South Korea, as our newest contact, plus, Latvia, and Turkey, who also joined, recently.

This suite of presentations, would not have been possible, without the additional philanthropic and other support of Mrs. S. Stevens, Messer's G. Gray, N. Collins, I. Close, R. Zürrer, M. Warin, D. Fastier, and, Ms. J. Stevenson.





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I would not, have been able, to play my part in supporting, IAMFE 2022, had it not been, for the amazing services and support, of my hip surgeon, Mr T. Ingles, and his incredible team.

This included, Tom's Father, Mr G. Ingles, a distinguished orthopedic surgeon (now retired), who started his professional career, at Lincoln University, at the same time, that Professor Hampton and I, enrolled. From here Mr Ingles moved on to study, at Otago Medical School, at the University of Otago, taking with him, a lasting interest in agriculture.

Sue, my wife, played a pivotal role throughout, plus, support from my regular doctor, Dr Juno Pyun. Collectively, they gave me, a new lease of life, including six weeks of pain-free "enforced down time", from my normal work schedule. Time that I devoted to this task, for IAMFE.



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We would like to thank the Qingdao Agricultural University, Dean Shang Shuqi who is President of IAMFE, and the Conference organizing team as a whole, for their invitation and support.

IAMFE International Conferences held in 2000, 2004, 2008, 2012 and this year, have provided significant stepping stones.

Advancing our Flexiseeder initiative further, will, however, require donor funding.



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Our take home messages are:

- Through our network, your everyday activities can help globally, collectively, no matter how small, in ways that you never previously thought possible on the basis of agro-ecological overlap.
- Smart technologies, no matter "how smart they may be", only begin to help humanity, after they reach the end user and become integrated into production systems, in economically viable and environmentally acceptable ways.
- Here lies the value of joining our network.



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