THE CRAWFORD FUND
For a Food Secure World

The Crawford Fund
Wetlands House
Unit 7, 1 Dairy Road
Fyshwick ACT 2609
www.crawfordfund.org
Contact: Cathy Reade | 0413 575 934

MEDIA RELEASE

Media are welcome to attend 7 August 2017

THE GREAT UNREALISED POTENTIAL OF BIG DATA IN AGRICULTURE

Agriculture is still at the early stage of modern "big data." Other sectors, like energy, banking and transportation are ahead but have many lessons to teach the sector.

This will be the message of Steve Mathews, Head of Strategy at Gro Intelligence, a data analytics firm serving the needs of rural industries as far away from each other as modern farms in USA and smallholder farms in Africa. Mathews is speaking at '*Transforming Lives and Livelihoods: The Digital Revolution in Agriculture',* the 2017 Crawford Fund annual conference in Canberra on 07-08 August at Parliament House. It will be opened by The Hon Barnaby Joyce, Deputy Prime Minister, at 9am on 8 August in Parliament House.

"Agriculture is only just starting to take advantage of large scale, low-cost parallel processing and distributed storage of big data," said Mathews, who has worked in the development of extensive commodities analysis software and conducted practical study of agriculture, energy, and metals in his previous careers.

"Access to better data, from private satellites, point-of-sale systems, land-based sensors, aerial drones or individual farmer's smart-phones, can be transformational in the long-term, encouraging private sector activity and attracting the types of agricultural investments that can help make the sector more resilient."

"Poor farmers in Africa know a lot about their farms, just like Australian farmers. It is those around the farmer - policymakers, investors, corporates, the non-profit sector - that need to be far better informed to solve food insecurity and that's where big data can help," said Mathews, who also teaches agricultural hedging at the University of Memphis.

"Technology means we can pool and analyze trillions of agricultural data points from a variety of sources such as government reports, satellite imagery, and weather forecasts to give them universal meaning and to give users insight. Big data also allows us to run computations to predict the future based on the past."

"Tracking environmental indicators as they arise and evolve is critical in developing countries, where subsistence farming prevails and farming families are vulnerable to even slight or short-term weather or other changes that can have devastating effects."

"Advances in information technology allow us to disseminate quality yield, drought, and other analyses at a much lower cost than previously possible so we can bring the established benefits of modern modelling expertise to a hugely broader and more diverse audience," said Mathews

"Fundamentally, agricultural data is like any other form of critical infrastructure: it should be robust, meticulous, and well maintained. And while that will require effort and investment, good data, like good infrastructure, helps societies thrive," he said.

Mathews explained that Gro Intelligence is trying to do for agriculture what their founder used to do as an energy trader. Instead of accounting for the flow of nearly every molecule of natural gas, they now work to get more data of precision for more of agriculture.