The Precision Farming Connection

c21-virtual: Connected World Series

Virtual Conference. June 15th. 14:00 (UK Time)

Opening Remarks

Paul Stahl, Executive, c21-virtual

Good day to you all - and welcome to the Precision Farming Connection, a programme that we introduced to the "Connected World Series" back in 2020, so this is the fourth annual edition. Fast-forwarding into next year, we will be looking to expand on this with a bi-annual agenda, reflective of the growing complexity of the global agricultural environment. We are also keen to explore more thoroughly, and in addition to crop monitoring, livestock and fisheries welfare and management, all of which are areas that we have touched on in previous iterations of this programme and as I say, areas that we intend to expand upon and increase our activity in - and you'll be hearing more about that going forward.

So - what are the challenges? Extreme weather events, droughts, floods, violent storms, wildfires and more, all of which are growing in number and becoming more geographically dispersed, high CapEx and OpEx associated with increasingly sophisticated machinery and management solutions and a continually expanding world population set to hit 10 billion (or thereabouts) my mid-century... making food production, a major global, societal imperative. Now, this is interesting... currently, worldwide food production exceeds 2,750 calories, per capita, per day. The average adult, across both genders, requires 2,250 calories per day, with the average woman requiring 2,000 and the average male 2,500. Younger age groups of course require less so the point is, we are already producing more than enough to provide every human being with certainly an adequate, if not excessive, calory intake. The challenge is establishing a viable economic model to enable food production where it is needed, and if we can't do that, to establish a distribution network to get it there. I appreciate that that's another subject... but just the same worth a mention as an integral component of this overall conundrum.

So... what is Precision Farming?

It took a few revisions to finalise this paragraph but I think I've managed to put a wrap on it... Precision Farming, or Farming 3.0, is an agricultural operational strategy and support system, which leverages New Age technologies in both crop and livestock management scenarios, which can generate data that informs critical decision making and enhances predictive capability, resulting in improved and increased food production through reduced waste of valuable resources and significantly enhanced operational efficiencies and the enablement of a robust, sustainable agricultural production model.

Now... we've previously talked about exponentially rising data volumes being generated, not just in the Agricultural space but across pretty much all industries, certainly the ones that we cover, as we advance into an ever more automated, software driven and IoT networked future. Today we're going to be hearing a lot about exactly what data is being generated and how the tools that generate it have to integrate, and inter-operate across multiple platforms, to produce meaningful outcomes that maximise its impact. Both Syngenta and Varda are providing unique insights in this respect... and we also have BASF giving us a forward look at how data processing will evolve between now and the end of the decade.

And that’s all great… but of course, all of this is dependent on connectivity... and with farming operations almost always located in remote, rural areas... multi earth orbit satellite play deployed in converged hybrid scenarios with 5G, LTE and other terrestrial communications technologies and media, in an overall TMT mega-mix, is the only feasible way to achieve this. Today, we have two of the space industry's heavyweights in Intelsat and ST Engineering iDirect, who for as long as I can remember have been working miracles in connecting that which is seemingly unconnectable. Whether its a boat, a plane, a train, rural locations with impossible terrain or in this context - remote farming operations which in places like China, Brazil, Australia and the USA are often huge, they'll figure out some way to do it so its great to have them involved and to hear what they have to say. It's also a unique pleasure to see major satcoms players on the same programme as key actors within the industries that they are positioning themselves to impact - because it is that bringing together of multi-sector expertise and diversity that characterises everything we set out to achieve when we launched the connected world series back in 2020.