

MATA AEROTECH LAUNCHES SMART AGRICULTURE MODEL WITH FELCRA

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- *Use of drone and robotics technology in plantation management and conduct R&D*
- *Run analytics to monitor growth and health of paddy crop, adopt Precision Agriculture*



ATP trainees from the FELCRA community performing the pre-flight checks for the Alpas II drone.

MATA Aerotech has been appointed by FELCRA Bhd to carry out agriculture spraying for paddy crop using drone technology at the paddy estate in FELCRA Seberang Perak, beginning end of November 2019.

The appointment is in line with FELCRA's aspiration to pioneer the Smart Agriculture Model in its effort to increase the organisation's achievement and improve the quality of lives for more than 100,000 FELCRA settlers.

This followed the signing of a Memorandum of Understanding (MoU) between FELCRA Bhd and MATA Aerotech on 22 July 2019, at FELCRA's Paddy Centre in Seberang Perak. The ceremony was witnessed by Mohamed Azmin Ali, Minister of Economic Affairs.

The MoU outlined three main aspects of collaboration namely: the use of drone and robotics technology in plantation management and operations, research and development (R&D) to increase innovation in the agricultural sector and developing human capital for drone and robotics industry.

MATA Aerotech is a premier drone and robotics technology organisation which is a joint venture between Malaysian and Taiwanese companies, namely SWS Capital Bhd, Nexus Union, and GEOSAT Aerospace & Technology Inc. It is a result of a facilitation and matching exercise by Taiwan's Ministry of Economic Affairs, via the Industrial Development Bureau (IDB) of Taiwan and the Institute for Information Industry (III) of Taiwan.

Under this appointment, MATA Aerotech will use drone technology for agriculture spraying for 1,557 hectares of paddy area, which is more than 45% of the overall paddy estate of FELCRA Seberang Perak. With this, FELCRA Seberang Perak which is the first and largest paddy estate in Malaysia, will create history with its large scale use of drone technology for paddy crop spraying.

Agriculture spraying using drone technology will eventually replace manual spraying which involves a high number of workers and is very time consuming. This allows for the human labour to be deployed for more productive activities. Agricultural spraying using drone technology is more uniform and effective and contributes to less wastage of spraying materials. It will also reduce human labour and the environment to harmful spraying materials.

Additionally, MATA Aerotech and FELCRA will be using drone technology and Artificial Intelligence (AI) to run analytics to monitor the growth and health of paddy crop. Fast and accurate data analytics will help FELCRA to improve the management and operations of the paddy estate.

This data analytics is the first step towards Precision Agriculture, which involves targeted crop spraying on only problematic and infected areas of the paddy estate.

The use of drone technology for agricultural spraying and monitoring of growth and health of paddy crop are measures that will position FELCRA as the leader of Smart Agriculture Model driven by the IR 4.0.

From a human capital point, in collaboration with FELCRA, MATA Aerotech will conduct the Aviator Training Programme (ATP) to train youths from the FELCRA community to become drone pilots. ATP aims to build a competent workforce for drone technology and will help uphold FELCRA's agenda to build a sustainable Smart Agriculture Model.

The first ATP started in early November 2019 in FELCRA Seberang Perak, involving 9 male and female trainees. ATP is a 3-month training programme which combines classroom learning and practical on-the-job training. Trainees who complete the programme successfully stand a chance to get employed by MATA Aerotech as drone pilots. This will generate interest among Malaysian youths to join the agricultural sector and help reduce dependency on foreign labour.