

# Machinery

## for big ag

### – IN A NUTSHELL –



**MACHINERY FOR BIG AG** refers to manufactured equipment used for agriculture. This includes tractors, haying and harvesting machinery as well as equipment used for planting, fertilizing, ploughing, cultivating, irrigating and spraying. Now the world's largest farm equipment companies are gearing up to control digital ag technologies and farm data as their number one strategy for expanding market share. Digitalized agriculture implies other machinery used on the farm, including drones, sensors and devices that run apps, as well as internet connectivity.



SALES OF THE LEADING FARM MACHINERY COMPANIES, 2020

### **Highlights from the full report:**

In the US just three companies – Deere, CNH and AGCO – account for more than 90% of high-horsepower tractor sales. In India, Mahindra & Mahindra controls more than 40% of the country’s farm equipment market.

Digitalization is driving the growth strategies of all major farm machinery companies. IHS Markit estimates that the global digital farming market was worth US\$5-7 billion in 2020 – less than 5% of the total farm equipment market – but it is forecast to increase to US\$15 billion by 2027. Ag machinery companies claim that precision agriculture is the key to productivity, sustainability and climate resilience. Multiple software companies sell programs that analyse agricultural data to provide input recommendations to farmers.

Lockdowns and restriction on cross-border movement during the pandemic led to farm labour shortages, which turbo-charged the sector’s move towards automation. Contrary to companies’ claims, the push to automate threatens to amplify farmworker exploitation.

Some Big Ag companies, many national governments, and philanthro-capitalists have embraced the drive to digitalize the global South and peasant agriculture. This ability to “harvest new data sources” from peasant farmers looks set to amplify the global land grab.

Deere has argued that when a farmer buys one of the company’s tractors, they receive a “license to operate the vehicle” but they are not the owner of the equipment or the embedded software, or the data it generates. “Right to Repair” movements across the world are fighting to ensure that farmers can control the equipment they’ve bought.

### **Chew on this**

Rising partnerships between the big agrochemical/seed companies and farm equipment manufacturers involve the sale or exchange of data, which are analysed in order to deliver prescriptions to the farmer. Ultimately these will lead to usurping farmer autonomy and decision making and create technology lock-ins.

Big Tech is getting entangled in digital agriculture by providing cloud services to Big Ag companies for data storage and processing for their digital ag platforms and internet connectivity. Telecom companies are also championing the role of 5G in the future of farming. China, with more than 500 million 5G users, has the world’s largest 5G network and is promoting “smart farms” running on the 5G network.