Challenges faced by the agricultural machinery market

Business, Management



Agricultural machinery finds its application during different processes of farming such as soil cultivation, planting, irrigation, fertilizer and pest management, harvesting, hay making and some other. Various types of machinery are present in market for example tractor, plough, spreader, grain cart etc. With rapid increase in population, the demand for food is also growing. In order to fulfil the food demand various companies are coming up with certain new tools to improve the quality and quantity of crop. Top manufacturer of this market are Deere & co., Kubota Corporation, CNH Industrial NV, AGCO and CLAAS.

The biggest challenge with agricultural machinery market is that reduction in number of skilled labor. With rise in population, there is exponential rise in urbanization also. It impacts the availability of skilled labor near agricultural area. Those who are skilled and available are asking for higher wages. Increased machinery cost as well as labor wages highly affect the overall cost of crop. Another bigger challenge is use of non-selective herbicides which can harm the crop as well as soil. Furthermore excessive usage of herbicide can turn regular weed vegetation into herbicide tolerant vegetation.

In order to improve sales of agricultural machinery market, regular machines need to be replaced by agricultural robots. Agriculture robots (Agbot) can play very important role in picking herbicide tolerant weed as well as selective herbicide spraying. Agbots are serving other purposes also such as fruit harvesting, milking and identifying deficiency just by picture.

For example Spain based startup Agrobot launched a product Agrobot SW6010, which looks like tractor. With the help of sensors and robotic arms, this machine can detect the ripe berries and pick them up from ground. Similar to berries harvester, cucumber and bell pepper harvester are also available in market. Another machine learning product HortiBot, Created by Danish engineers can pick up 25 types of weeds and with the help of its weed-removing attachments it can eliminate them.

Agriculture sector needs to adopt robotic technology to boost its productivity. Similar to these technologies, some other technologies are also available in market which can accelerate the agricultural machinery market. Drones along with camera are also playing important role in improving productivity. Precision farming will be adopted everywhere to maximize the crop yield and reduction in wastage.

However these technologies are still expensive for most of farmers and they are still dependent on traditional method. Some key players such as Kubota and Deere & Co. also investing huge in R&D to develop more advanced product. For example Kubota is planning to invest approximately \$65 million to open a new R&D center in Europe. This center is dedicated for development of upland farming tractors and expecting to starts its operation by 2020. We can expect the upward trend in European agriculture machinery market.