

Genetically modified organisms

[Business](#), [Industries](#)



Some people might ask why agriculture is so important, or why it would matter to me? Well there are many reasons why it matters; it matters because farming is what built this country. We are going to go over a few main points including feeding, livestock, tractors, and equipment. Farming is also very important because it is what feeds the people everywhere; they grow the food that you see every day.

In bread and cereal there is wheat which is mostly grown down in Kansas. Wheat is found in any different products like flour, bread, crackers, and anything with whole grain. Crops like these including corn and soybeans contribute too many things that make what are food is today. Corn helps with ethanol, corn starch, flour, and high fructose corn syrup. Soy beans help with oil; like vegetable oil and the grease in the fryers they use in fast food restaurants. Speaking of restaurants, you can't have a restaurant without beef or pork.

The cattle industry has been on a rise for a long time, beef is all your hamburgers, steaks, and roasts you have come to know and love to eat. The pork industry has been on the rise from what it has been. A couple of years ago it took a major drop, my dad had to sell his hogs because they weren't worth it. They would cost more to feed than the money you get back from selling them at the sale barn. This was just one business that almost went broke from having hogs, Nebraska Pork Producers went broke a few years ago and two big businesses bought them.

Those business are Pilled Family Farms and The Masochism, they both have over a 100, 000 hogs. That's a lot of pork! You may not know and this may

take you by surprise was all those things are connected to each other. The corn, soybeans, beef, and pork all connected together because the farmer grows the corn and soybeans and takes some of it to COOP and puts the rest of the bin and feeds it to his livestock so they can gain weight and take them to the sale barn and sell them.

There has been much advancement in raising livestock. People think that livestock is just for food; well it helps in the medical field too. It helps in the medical field because they use pig skin for skin grafts, they use their organs in insulin. They also use their hide for anything leather, rugs, and mats. Their hooves and horns help to make combs and brushes; and even the poop of the cows, pigs, horses, and whatever else there is, they don't go to waste.

Farmers use their poop to spread manure on their fields and pastures so their grass in the pastures and the crops in the field can get more nitrogen. That way the crops can grow more and be healthier. Feeding and breeding livestock has become well planned and they can be on a strict diet so they can put out nice healthy calves and so the cow doesn't have problems giving birth. When feeding calves and cows you can give them rations of feed, like for a couple says you give a pen of 150 calves bosses of feed and then you give them more the next day so they have bosses of feed.

The reason they get more feed is because they're just like kids, when they grow more they eat more. Breeding livestock has had many advancements including selective breeding, which is when you take your best male and your best female and you have them mate, so they can put a nice, strong,

and healthy baby. There has also been changes in the genes of cattle. A while ago they made pure bred red Angus, and if you don't know Angus cattle are all black. There also is a black Hereford, and regular Hereford re red and white.

They have also messed around with Hereford genes because they had white around their eyes which means they can get cancer of the eye and blind really easily, but they have made it so that they can put red around their eyes so that doesn't happen. Hereford usually have horns, but people have found out that they can kill you, or they can get their heads stuck really easily and when they get stuck they panic, and break their necks trying to get out, but that's changed because they have made it so you can get them without horns, they are called polled Hereford. Artificial Insemination is another form of breeding cattle.

You can do it and not even have a bull, you can buy them off of people who get the semen from their bulls and sell them. It is just like how they inseminate people; they take a rod with semen and put it in the cow's vagina. That semen contains the characteristics of that bull you bought it from, you want to buy the semen from a bull that is strong, big, and has the features you want the calf to have. The bull has specific birth weights for the calves they can have, like if the bull's birth weight is supposed to be boss-boss then that is what the calf is supposed to weigh.

You pay for the bull you want, if you buy a cheap one then it is most likely the bull won't have a very good birth weight. It also depends on the mom, it

depends how big her pelvic is, and if the calf is too big it can hurt her by getting stuck and not being able to go through, and then you have to do a C-section on the cow, it also hurts her in general and can pull her vagina inside out, or a vaginal prolapsed. Then if that happens you have to call the veterinary to put it the vagina back in and sow it up.

After the calf they have gets fat enough to sell they well o to the slaughterhouse. At the slaughterhouse the cattle go through a pre-inspection and if the cattle pass the inspection they get to be slaughtered. How they kill it, is they take a gun powered by air, and it has a small metal rod that it shoots in the brain and pulls back out. It kills them instantly and is painless. Then they get hung upside down and their main artery cut so they bleed out, then they get skinned and they start cutting them up and taking out the meat.

Speaking of cattle and slaughtering them, the person who feeds the cattle needs a feed wagon to do it and other equipment. There have been numerous advantages in feed wagons. The first feed wagons made where just chains that brought the feed up and out of a spout. The first feed wagons were also very small, like the Kelly-Ryan feed wagon was their fifth. Manure spreader with a few modifications. Then they started making bigger feed wagons and with augers that mix the feed.

That way you're not just feeding silage in one spot and hay in the other, you feed it all equally. Cattle feeding have become almost ascience, because now people feed them minerals and weight boosters so they grow faster.

Cattle can also gain weight faster if they put implants in their ear, implants are small pellets that you put under the skin of the ear and they help to gain weight faster. Feed wagons now have orbit motors that run everything, the spout going up and down, the chains or augers running the feed out, vertical beaters, and the 3 or 4 auger mixer.

In feed wagons with augers, the augers spin in a way to bring the feed forward and down to the spout and then the chains or augers take the feed out. A farmer's equipment is just as important as he is, without his farm equipment he wouldn't be able to do anything. He wouldn't be able to disk, plant, feed, and anything else that needs to be done with a tractor. With equipment there has been many advantages made with making them more accurate, larger, and being more efficient.

A planter used to be very simple, you put the seed in the box and the wheels turn, dropping the seed and a disk blade would push it into the ground. Now they have GPS so it's straight, maybe a couple inches off, they also have it on air systems which uses air to push the seed in the ground and they have it so you don't have to disk before, it's called no-till. Planters have also put tanks on them and on the tractors that are filled with nitrogen and certain herbicides and pesticides. They spray out the back right on top of the dirt where the seed is so it can soak into the seed.

Manure spreaders have had numerous advances from what they used to be. They used to be boxes with a chain that drags across the floor to take the manure back to a cylinder with teeth that throws it across the ground.

Manure spreaders today have gotten much bigger; some can hold up to 42 tons of manure. There are two types of manure spreaders, one type has 2 horizontal beaters, and the other has 2 vertical eaters, but they both have a door that comes down in front of the beaters so no manure can fall out or push against the beaters and get them jammed.

The horizontal beaters go side to side and are run by orbit motors and they flop the manure out the back so that way you can haul frozen manure in the winter without ruining your beaters and motors. With vertical beaters they are run by orbit motors to, but they can't have frozen chunks, cement block, or anything hard go through the beaters because they are closer together and they explode the manure out the back really far. They both have a big door in the back that is run by hydraulics. The chain that drags the manure to the back is run by 2 orbit motors on each side.

There have been many advances in agricultural equipment including tractors. Tractors used to be steam powered, and now they are run by diesel. Tractors have been advanced in and outside the tractor, tractors have cabs and the cabs have become more fancy than just a seat, steering wheel, and levers. They now have climate control, heated and cooled seats, they have air ride seats and air ride cabs, and everything is electronic, like the hydraulics, throttle, gear shifter, and all the seat controls.

Tractors have also advanced in horsepower, older tractors used to be like 40-80 horsepower and now they have tractors with over 600 horsepower. They have gotten so big because they need that horsepower to pull the equipment

because they have gotten bigger too so farmers can farm more and get more done. Tractors have little seats in them for people that are called buddy seats with mini fridges underneath them but they aren't supposed to have people with you in the tractor so they are called instructor seats.

You can put GAPS on your tractors so you can plant straight and they have made it so you can use GAPS on your cultivators too. Tractors have 3-points on the back which are just 2 bars that have holes in the end and you back up to a cultivator or another piece of equipment and you slide a pin through both. Then there is a top one and it is the same as the bottom 2. Tractors now have quick hitches which allows you to just back up to the equipment and pull up 2 levers on each side and when you are lined up with hole that has a pin through it you pick it up and it is a hook that catches the pin and then you can flip the levers down.

They have also made it that the top bar is hydraulic so that you don't have to leave the cab. It allows you to move the quick hitch so it is facing up or down if your piece of equipment is facing up or down. Tractors have also become more fuel efficient too. Now in tractors they have your fuel, oil pressure, and all your other gauges on the dash or up along the corner of the cab. It also shows you how much fuel you are burning in an hour; they also have powerhouses and COW transmissions.

A powerhouse lets you go through all the gears without ever touching the clutch. A COW is like that but there is no shifting. If I had to pick one it would be the tried and true powerhouse. The powerhouse is so much better and I'm

speaking from personal experience, Joe Beck once rented a 300 horsepower Challenger with front wheel assist tractor because he needed a new tractor and so he demoed that one and when it was pulling a 22 foot disk the transmission couldn't take it and it sheared the transmission.

So after the people came out and got it we hooked up a Case 8930 Magnum, which has 150 horsepower and is 2-wheel drive, pulled the disk with ease through the field. Balers have become more advanced over the years. They used to just pick up the hay with a chain and just roll it into a little bale that is about 4 ft long and is rolled up like a Tornado from Pump and Pantry. They also have square balers that make them into little squares and they have also made big square balers that make bales into big squares.

Other balers would be like loafers and they pick up the hay and put them into loaves like bread, there is also just the regular round baler that picks up the hay and makes it into a round bale. They have monitors in them that tell you how wet the bale is, how big it is, when you are supposed to let it out the back, when to close the back, when you're out of mesh wrap, and when there is something wrong. Combines have made many changes over the years. They came from people just picking the crop by hand to driving and picking 24 rows at a time.

Combines used to not have a cab on them, then they put them on since it would get dusty and hard to breathe, you could have gotten dust pneumonia, and other lung problems. They started putting heaters and air conditioners in them and then nicer seats, and now they have cooled and

heated seats, dashes that tell you what the moisture is, like how wet the corn or beans are, and they have switches for lifting up the head or lowering it instead of levers. There are many other pieces of equipment that is involved in agriculture including pickups and semis.

There are many pickups out there from many different countries, but the American made pickups are Ford, GM, and Dodge. Ford was the first company to have an assembly line, they paved the way to mass production of different products. The Ford F-series have been the number one best-selling in the US for the past 30 some years. Ford was the first to put diesels in their ½ ton pickups. They had International build them the 6.9 liter diesel that had 200 horsepower and non-turbo.