Food Sustainability with Imagination, Innovation and Technology

According to West Hawaii Today, statistics show that 90% of beef, 67% of vegetables, 65% of fruits, and 80% of milk are all imported. These imports make a bigger carbon footprint than necessary. In order to reduce our carbon footprint, my idea is to use technology and innovation to improve Hawaii's food sustainability for the next 50 years and more. The plan is to create more farms and maximize agricultural production through automation, management of invasive species, and diversified hobby farms.

We need to encourage more farming in Hawaii. This way we can produce our own food. When I think of farm equipment, I think of machines driven by people behind the wheel. But what if we could change that? For example, we could build a tractor, plow, or seeder where you just set the time and locations. Bam! Automated farms. This would change how a farm is run, however, no jobs are lost because automation must be supervised and maintained by people. Automation means that farms can be run 24/7 which can result in higher food production. Automated farms will put many workers at ease. They won't have to be out in the sun every single day, in danger of harmful UV rays, but just monitor fields and farms on CCTV.

Next we have to manage invasive species because they are dangerous to farm crops and the environment. What if we made automated machinery for that too? We could build something with sensors in the soil for all kinds of invasive species. Once we locate the invasive species, we can remove them. By keeping invasive species away, farm crops will be safe which will result in maximized agricultural production. Through innovation, we can design a game where players can hunt for invasive species. Players

can volunteer in their local communities to remove invasive species to get game rewards.

Another idea to improve food sustainability in Hawaii is using diversified hobby farms as tourist attractions. We can utilize social media to promote these new hobby farms. We can plant special crops for the tourists like broccoflower or cocoa pineapples, and other hybrid fruits and vegetables. Visitors can live on a hobby farm for a few days and learn about farming. They can gain experience in the fields as well as help the farmers. As for their food, they can eat meals with locally-grown ingredients.

Some people will agree with my ideas, and others may doubt me, but the important thing is that technology and innovation starts with imagination. Let's reach the goal of dropping the percentage of imports to below 20%. Let's improve Hawaii's food sustainability for the next 50 years, using technology and innovation to create more farms and maximize agricultural production.