**Food, Fiber, Fuel and Shelter Demands**  
  
As our population continues to grow at its current rate, estimated to reach 9 billion people by 2050, the demands for these life maintaining staples will increase at an ever increasing rate. We will need to maintain and grow our family farms and ranches across our world. The family farms and ranches are our greatest resource of food, fiber, fuel and shelter for American families and other families around the world. Generally, should agriculture lands go out of production, it very seldom returns.  
  
The food, fiber, fuel and shelter demands by 2050 are expected to nearly double. That being the situation, our worlds farms and ranches will be ask/required to raise more life sustaining staples that has been raised in our history to date. The present estimates are that one farmer/rancher raises sufficient food, fiber, fuel and shelter for 155 other people. Meeting future demands will require increasing that number dramatically.  
  
Our planer “Earth” is composed of :75% oceans, lakes and rivers, 12.5% polar ice caps, deserts, swamps and mountains; 9.5% lands that are too rocky, steep, wet, dry or cold. Thus, the demand on the remaining 3% of lands used for agriculture to supply food, fiber, fuel and shelter for our worlds population will increase. These agricultural lands rely greatly on the top two inches of soil for these production feats.  
  
We- the total world population will need all the agricultural technology that can be mustered to meet these future demands, protect these lands and continue to reduce environmental impact. The new agricultural technology will be essential for farmers/ranchers to accomplish this enormous production demand.  
  
The field of agriculture offers a great opportunity for agricultural technology development to accomplish the task being presented. We- farmers/ranchers are applying new agricultural technology at a rapid pace. However, new life sustaining production demands for an ever growing population will require even more advanced agricultural technology. The agricultural technology field is challenging for many private and public areas of research and development.   
  
Agriculture is Tennessee’s largest economic sector, as so in several other states and will become the world’s largest economic driver as farmers/ranchers prepare to raise food, fiber, fuel and shelter for our ever increasing worlds population.