**Agent farmer**

The agent needs to be Rational, he needs to do the right thing which means determining what to do, and the consequences of actions e.g. :

Checking plants, are the plants desirable for growth?

Yes: proceed to check all plants.

No: There is any hazard in the plant? The soil is good or there is any hazard?

Agent Perception: location and status (States machine)

P.E.A.S.:

What else could be added next?

Performance measure: Safe, Maximise harvest,

Environment: Field

Actuators: Patrol Field, Plant States, Soil State, Hazards, Harvesting.

Sensors: Camera, Infra Red

**State Machines**

**Patrol Field** – Pathfinding the field area (If plant found > Check Ground Soil)

**Check Plant State** (What is the stage of the plant?

Grow > Watering

Develop > Watering

Blossom > Watering

Fruitful > Harvest

Dead Plant > Take Dead Plant > Check Ground)

**Check Ground/Soil**: Check the Soil

Has seeds? No > Sow Seeds. Yes > Hazard Check

If Hazardous soil is found:

**Check hazard**

Else > Check Plant State)

Watering: Water plant/soil

Check Hazards ( Dry soil > Watering, Bugs or Animals > Pesticide)

Harvest: Fruitful harvest fruits