**CROP\_TYPE:**

Wheat:

600 <= Soil\_Moisture <= 750

15 <= Temperature <= 25

50 <= Humidity <= 70

6.0 <= pH <= 7.5

700 <= Light <= 1023

Rain\_digital < 300

Rain\_analog < 400

Rice:

750 <= Soil\_Moisture <= 950

25 <= Temperature <= 35

70 <= Humidity <= 90

5.5 <= pH <= 6.5

600 <= Light <= 1023

Rain\_digital > 600

Rain\_analog > 500

Maize:

500 <= Soil\_Moisture <= 700

20 <= Temperature <= 30

50 <= Humidity <= 70

5.8 <= pH <= 7.0

700 <= Light <= 1023

Rain\_digital < 400

Rain\_analog < 400

**ACTION:**

Fertilize:

(500 <= Soil\_Moisture <= 800)

(20 <= Temperature <= 30)

(50 <= Humidity <= 80)

(not (6.0 <= pH <= 7.5))

(Light >= 600)

(Rain\_digital < 500)

Irrigate:

(Soil\_Moisture < 600)

(Rain\_analog < 400)

(Temperature > 20)

Spray Pesticide:

(Humidity > 75)

(20 <= Temperature <= 35)

(Rain\_digital < 500)

**COST:**

Wheat:

# HIGH

(600 <= Soil\_Moisture <= 750)

(15 <= Temperature <= 25)

(6.0 <= pH <= 7.5)

(50 <= Humidity <= 70)

(Light > 700)

# MEDIUM

(550 <= Soil\_Moisture <= 800)

(25 <= Temperature <= 30)

(5.5 <= pH < 6.0 or 7.5 < pH <= 8.0)

# LOW

Soil\_Moisture < 500

Temperature > 32

Light < 500

pH < 5.5 or pH > 8.0

Rice:

# HIGH

(750 <= Soil\_Moisture <= 950)

(25 <= Temperature <= 35)

(5.5 <= pH <= 6.5) and

(Humidity > 70)

# MEDIUM

(600 <= Soil\_Moisture <= 749)

(20 <= Temperature <= 38)

(5.0 <= pH <= 7.0)

# LOW

Soil\_Moisture < 600

Temperature < 20

pH > 7.5

Maize:

# HIGH

(500 <= Soil\_Moisture <= 700)

(20 <= Temperature <= 30)

(5.8 <= pH <= 7.0)

(Light > 700)

# MEDIUM

(crop\_type == "maize")

(450 <= Soil\_Moisture <= 750)

(18 <= Temperature <= 35)

(5.5 <= pH <= 7.5)

(Light >= 600)

# LOW

Soil\_Moisture < 400

pH < 5.5

Temperature > 35

Light < 600