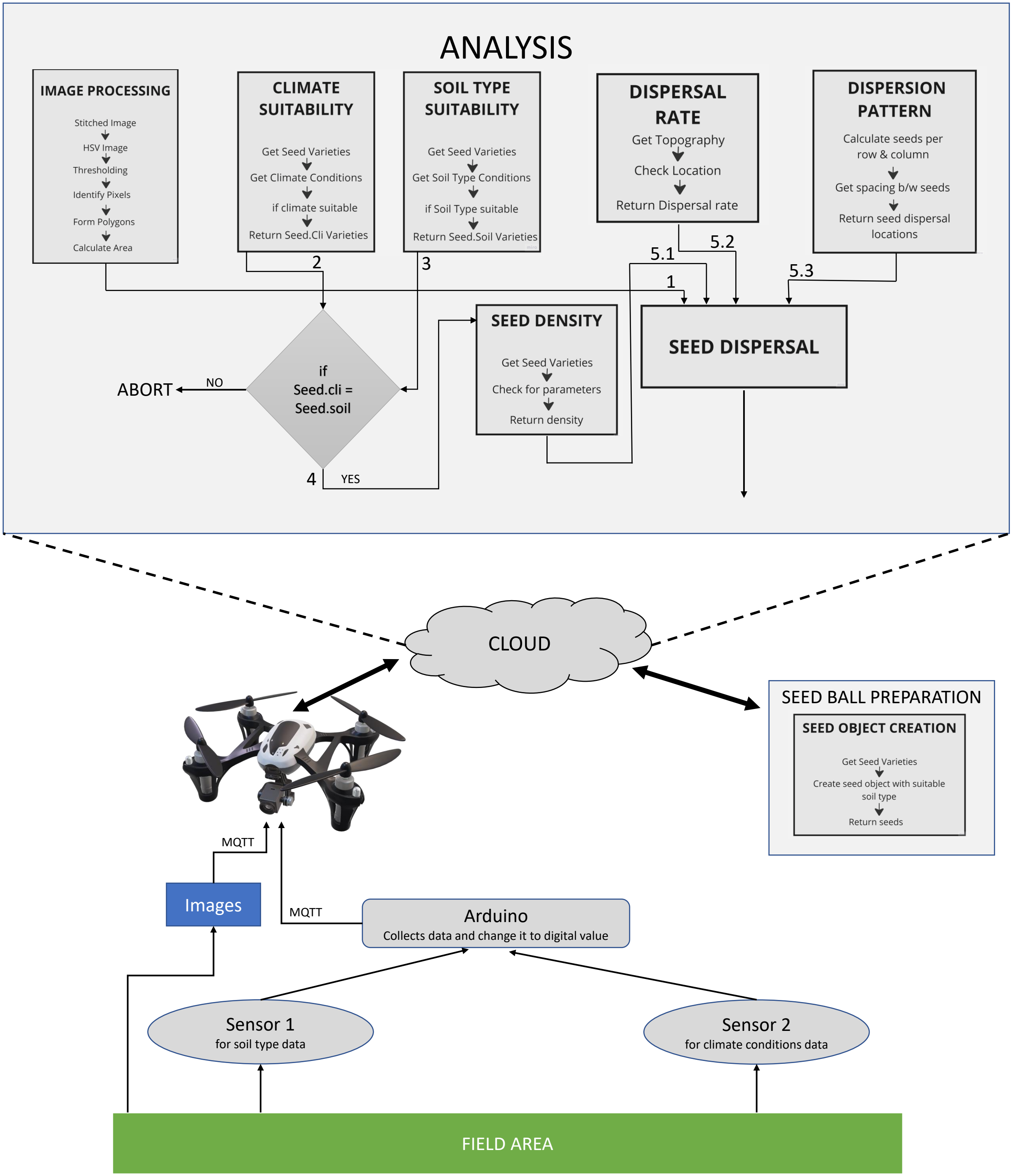
ANALYSIS
IMAGE PROCESSING
Stitched Image
HSV Image
Thresholding
Identify Pixels
Form Polygons
Calculate Area
CLIMATE SUITABILITY
Get Seed Varieties
Get Climate Conditions
if climate suitable
Return Seed.Cli Varieties
SOIL TYPE SUITABILITY
Get Seed Varieties
Get Soil Type Conditions
if Soil Type suitable
Return Seed.Soil Varieties
DISPERSAL RATE
Get Topography
Check Location
Return Dispersal rate
DISPERSION PATTERN
Calculate seeds per row & column
Get spacing b/w seeds
Return seed dispersal locations
2
3
5.1
5.2
5.3
1
if Seed.cli = Seed.soil
ABORT
NO
4
YES
SEED DENSITY
Get Seed Varieties
Check for parameters
Return density
SEED DISPERSAL
CLOUD
SEED BALL PREPARATION
SEED OBJECT CREATION
Get Seed Varieties
Create seed object with suitable soil type
Return seeds
MQTT
MQTT
Images
Arduino
Collects data and change it to digital value
Sensor 1
for soil type data
Sensor 2
for climate conditions data
FIELD AREA