Thank you for sharing that the intended users of the system will be farmers, researchers, and policymakers in agriculture.

To wrap up, let's summarize the information you've provided.

1. **Plain Text Summary:**

   John is working in the agriculture domain and aims to automate and improve crop yield predictions using AI. Currently, he relies on traditional farming knowledge, statistical methods, and limited weather-based models. He has access to a batch dataset of 35,000 rows in CSV format, containing features such as climate parameters, soil type, crop type, season, area of land, region, and historical yield values. The dataset is labeled with crop yield as the output variable but contains missing values, duplicates, and outliers. John expects numerical predictions of crop yield and will evaluate the system using R^2, Mean Absolute Error, and Root Mean Square Error, with a tolerance for errors of about 12%. The intended users of the system include farmers, researchers, and policymakers in agriculture.

2. **Structured JSON Object:**

```json
{
  "domain": "Agriculture",
  "experience_level": "Advanced",
  "problem": {
    "goals": "Automate and improve crop yield predictions using AI.",
    "current_solution": "Traditional farming knowledge, statistical methods, and limited weather-based models."
  },
  "data": {
    "type": "Batch",
```

    "format": "CSV",

  "size": 35000,

  "organization": "Time-series agricultural data organized by region, crop, and season.",

  "features": [

    "Climate parameters (temperature, precipitation, humidity)",

    "Soil type",

    "Crop type",

    "Season",

    "Area of the land",

    "Region",

    "Historical yield values"

  ],

  "labeled": true,

  "issues": [

    "Missing values",

    "Duplicates",

    "Outliers"

  ]

},

"task": {

  "output": "Numerical prediction of crop yield.",

  "evaluation_metrics": [

    "R^2",

    "Mean Absolute Error",

    "Root Mean Square Error"

  ],

```
    "error_tolerance": "12%"
  },
  "constraints": {
    "privacy": "No major privacy issues.",
    "legal": "No major legal obligations.",
    "ethical": "No major ethical concerns."
  },
  "intended_users": [
    "Farmers",
    "Researchers",
    "Policymakers"
  ]
}
```

If you have any further questions or need additional assistance, feel free to ask!