Global Agricultural Challenges — Geography & Climate

Open the GAEZ Data Portal Map Viewer directly: GAEZ Data Viewer

1. **Land and Water Resources:** This map shows the land classifications of different regions around the world. This classification system determines land suitability for farming by mapping and combining climatic, soil, and terrain characteristics. This linkage is crucial for crop production, as it predicts potential yields, identifies environmental constraints, and guides optimal crop choices and management practices for any given area.
    - Click the **Legends** icon to understand what the colors represent. 
    - On your blank world map, color or identify the regions of "**Land with severe soil/terrain limitations**"

2. **Agro-climatic Resources:** This map shows the length (low to high) of the annual growing period. The growing period is the amount of time in a year when the weather—specifically temperature and moisture—is good enough for a crop to grow. If a crop has a longer period, it has more days to make food (photosynthesis), grow bigger, and fill its seeds or fruit, which usually leads to a larger harvest or a higher yield, assuming it has enough nutrients.
    a. Click the **Legends** icon to understand what the colors represent. 
    b. On your blank world map, color or identify the regions with low growing periods (white and grey).

3. Agro-climatic Potential Yield: This map shows the potential crop yield for global regions. A high value indicates that region is able to produce more food crops, compared to low value yields, which may struggle to grow food crops.
    a. Click the **Legends** icon to understand what the colors represent. 
    b. On your blank world map, color or identify the regions with low crop yields (white and grey).

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