**Investigate how irrigation systems work:**

* **used year round?**
* **distances reservoirs used for?**

“Millet in dry north and maize in more humid south” (UFC source)

**Table

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<https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/52227/IDL-52227.pdf> (image)

**Dry and Rainy Seasons by region:**

<https://gfc.ucdavis.edu/profiles/rst/bfa.html#:~:text=The%20main%20food%20crops%20in,maize%20in%20more%20humid%20south>

“Three broad climatic zones can be distinguished in Burkina Faso: the dry Sahelian north, the North Sudan zone in the center, and the more humid South Sudan region in the south. The Sahelian north has mean annual rainfall of 300-600 mm and a dry season of 7-9 months (October to June). The North Sudan zone in central Burkina Faso has mean annual rainfall of 600-900 mm, with a 4-5 month rainy season (June to October). The South Sudan region in the south has mean annual rainfall of 900-1200 mm, and a rainy season lasting up to 6-7 months (May to October).“

**“Spatiotemporal Assessment of Irrigation Performance of the Kou Valley Irrigation Scheme in Burkina Faso Using Satellite Remote Sensing-Derived Indicators”**

<https://www.mdpi.com/2220-9964/9/8/484>

“The critical period of irrigation typically spans January to April, with rice nursery starting in December followed by transplantation in January. Maize sowing and sweet potato planting also occur in January. The growth cycles for maize, sweet potato, and rice cultivars vary between 80 and 100 days, 90 and 100 days, and 90 and 120 days, respectively. Harvests for all three crops generally take place in May.”

*Is our aim to support dry season agriculture, or better support normal ag activities? Water availability is the biggest limiting factor for dry agriculture*

*https://www.fao.org/giews/countrybrief/country.jsp?code=BFA&lang=en***Chart, treemap chart

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**General**

* Wet season: May/June – October, Dry season: October – May/June
* Maize: May - August
* Millet: May - October
* Sorghum: May - October

**Designing for support during normal growing season (not year-round use)**

* Current rainy season supports agriculture from May-October, so would only need to design to supplement precipitation when needed

**Designing for year-round use**

* Design to supplement precipitation during rainy season and fully support agriculture in dry season (October – May)
  + What’s grown during dry season?
    - Maize, potentially fruits + vegetables (short season crops)
* Current dry season agriculture (<https://www.researchgate.net/publication/235701827_Water_Grows_Food_Dry_Season_Farming_Food_Sovereignty_and_Integrated_Water_Resource_Management_in_Burkina_Faso>)
  + Usage of diesel-powered pumps to extract water from nearby rivers