Drought risk reduction measures in Bangladesh such as the development and promotion of drought-resistant crop varieties, efficient soil-water management practices, rainwater harvesting, efficient irrigation, mulching and conservation tillage, and crop specific early warning systems have provided valuable lessons and opportunities for scaling out.



47% of the land is at risk of drought, and 33% of the population lives in drought-prone regions (1)

Drought Intensity

1.2 to 1.31.3 to 1.41.4 to 1.51.5 to 1.61.6 to 1.7

Bangladesh has had severe historical droughts in 1951, 1957, 1961, 1973, 1975, 1979, 1981, 1982, 1984, 1989, 1995 and 2006. Its projected drought will intensify in the future. (2).

Figure 1: Future drought susceptibility (Source: Rahman, et al., 2023)

The adoption of digital technologies, web platforms and mobile applications, involvement of local communities, and the integration of indigenous knowledge have proven crucial for the success and sustainability of the drought mitigation measures in Bangladesh.





Promotion of sustainable land management practices to combat drought

By leveraging the lessons and opportunities, Bangladesh can strengthen its drought resilience To scale up the drought reduction measures, improved policy frameworks, investments in advanced technologies (e.g., soil moisture sensors, drip irrigation, sustainable land management practices), integration of big data and AI, and fostering public-private-community partnerships are essential.

Reference: 1. https://www.sciencedirect.com/science/article/abs/pii/S0022169423010387 2. https://www.nature.com/articles/s41598-022-24146-0 Photo source: Author

Md. Arfan Uzzaman | FAO Bangladesh | Thisisarfan@gmail.com

Figure 2: Drought frequency (Source: Kamruzzaman et al., 2022)