Benefits

- Alternate livelihood during inconsistent rainfall patterns which affect crop sowing and growth, leading to losses
- · Beneficial use of saline water which is predominant in the area
- · Partially reducing reliance on traditional agriculture
- The practice provides a solution as a proactive climate adaptation measure

Challenges

- High temperatures and sandy soils increase evaporation and seepage rates
- Making controlled cages are more suitable for small-scale fish farming however, these are cost intensive
- Constructed by Sindh Coal Authority to store dewatering effluent, the Gorano Dam (spread over 25 hectares) has potential for fish farming. Initial fish farming showed promise, but challenges in fish catching due to depth (5-7 m) hindered further promotion.



Scaling Potential

The practice has a scaling up potential in the Thar region of Sindh, where farmers are dependent on rainfed agriculture and has an uncertainty in agriculture production due to adverse impacts of climate change manifested by change in rainfall patterns. There is an opportunity to build a long-term public-private partnership to make saline aquaculture viable in Gorano dam as well others are planned or under construction by the Sindh Coal Authority.



Message for Farmers

Saline aquaculture offers a sustainable alternative livelihood in saline environments, reducing reliance on traditional rainfed agriculture. With proper support and management, it can significantly contribute to local and national economies.

