Bed and Furrow Irrigation for Bananas

Rationale

Sindh province produces 96 percent of the country's bananas. However, flood irrigation, the prevalent practice, uses more than twice the amount of water than the crop actually requires. Efficient irrigation systems, such as drip irrigation, though beneficial, have high capital and operational costs, which most farmers in Sindh cannot afford. Additionally, these systems require frequent irrigation, which is often disrupted by the warabandi canal water supply (a rotational irrigation system), where farmers receive water every 15 to 21 days. Furthermore, much of the groundwater in the region is saline and unusable.

As a more affordable alternative, bed and furrow irrigation, where crops are grown on raised beds, offers several benefits, including better root growth, improved water infiltration, and increased water productivity. Trials and adoption by the Pakistan Council of Research in Water Resources in districts such as Badin and Sujawal have shown promising results with this method.



