1. Reasons for Reduction of Bees Due to Pesticides, Weedicides & Chemical Fertilizers

Bees are **essential pollinators** critical to farming. However, chemical-based agriculture severely harms their populations in several ways:

Cause	Impact on Bees
Pesticides (especially neonicotinoids, organophosphates)	Interfere with bees' central nervous systems → disorientation, inability to find their hive, death.
Weedicides/Herbicides (like glyphosate)	Kill flowering weeds and wild plants → eliminates nectar sources → food scarcity for bees.
Fungicides	Disrupt beneficial fungi in bees' digestive systems → weakens immunity and gut health.
Chemical Fertilizers (especially urea, DAP)	Alter soil and plant biochemistry → reduction in flower nectar quality → less attractive to pollinators.
Contaminated water sources	Bees drink water from fields; residues from agrochemicals poison them slowly.
Long-term soil degradation	Reduces diversity of flowering plants → leads to poor bee habitats.

Result: Decline in bee population leads to **reduced pollination**, lower crop yields, and disruption in biodiversity.

2. How Bee Populations Are Enhanced by Using Khuba Products (Organic Farming)

Khuba products, being **organic and biologically derived**, create a **bee-friendly ecosystem**:

Organic Practice/Khuba Benefit	Positive Impact on Bees
No synthetic pesticides or herbicides used	Safe for bees to forage and pollinate freely. No neurotoxins.
Plant growth boosters made from natural microbes & bio-enzymes	Improve flowering and nectar production → more food for bees.
Soil health restoration	Encourages growth of native flowering plants and cover crops → natural habitat for bees.
Natural pest repellents (not killers)	Control pests without harming non-target organisms like bees.
Balanced ecosystem	More insects, flowers, and microfauna → diverse and stable environment for bees to thrive.
Higher sugar (TSS) in fruit and flowers	Increases nectar quality → more attractive for pollinators.

Result: Bee activity increases, leading to **higher pollination, better fruit quality, and improved farm biodiversity**.

3. Comparative Table: Effects of Chemical vs Organic (Khuba) Farming on Bees

Factor	Chemical Farming	Organic Farming (with Khuba Products)
Bee Population	Decreasing	Increasing
Pesticide Impact	High toxicity to bees	No toxic effects
Nectar Availability	Reduced due to weed elimination	Abundant from diverse flowering plants
Bee Health	Poor (due to exposure to chemicals)	Strong (due to safe environment)
Pollination Rate	Low	High
Biodiversity	Decreasing	Enhancing
Crop Quality	Average (low TSS, poor shelf life)	High (rich in TSS, longer shelf life)
Sustainability	Not sustainable	Eco-friendly and sustainable