The 100-year tree: In 'hard pear' — and patience — Amritsar farmer reaps dividends

Courtesy: Anju Agnihotri Chhaba



In the quiet fields of Beharwal village, tucked under the Chogawan block of Punjab's border district Amritsar, 52-year-old farmer Jasbir Singh Gill is spearheading a silent horticultural revolution. Amid calls for crop diversification across the state, Gill has turned to the indigenous Patharnakh—also known as the sand or hard pear—transforming his farmland into a thriving model of sustainable fruit cultivation. With earnings of Rs 4–5 lakh per acre, he not only grows this native fruit but also handles its marketing and direct sales himself. More than just a profitable crop, Patharnakh trees—once planted—can bear fruit for up to a century, making them a deeply rooted investment in both soil and future. Traditionally grown in Amritsar, Tarn Taran, and Gurdaspur, the Patharnakh pear has never been widely consumed within the state. Yet, its popularity is now surging across India, especially in West Bengal and parts of South India. In West Bengal it is also in 'Durga Puja' rituals. Starting with just two acres in 2011–12, Gill now cultivates Patharnakh on six acres of his 16-acre holding and plans to expand to eight acres in the coming year. His long-term goal: to convert at least 90% of his land under this crop. "Today, Patharnakh is the backbone of my farming," he says. Gill says, "During harvest season, hundreds of trucks leave from this border belt daily. Many farmers in the area are now dedicating at least one acre to several, to it." Patharnakh, literally meaning "stone pear" for its firm texture, is round, green-skinned with tiny dots, weighing between 100-250 grams per piece. It is prized for its crisp flesh, juiciness, and most importantly, its

exceptional shelf life. "It doesn't spoil quickly, making it perfect for long-distance transport," Gill says, adding that traders from Bengaluru are also showing interest in it. Gill planted his orchard meticulously—digging 2×2 ft pits and filling them with fresh soil and decomposed cow dung. Planting is done in January using one-year-old saplings. Initially spaced at 14×28 ft, he now prefers 20×25 ft spacing for better canopy development. He started with 108 plants per acre but later reduced it to 78 for improved fruiting. "Each sapling costs about Rs 60, and with preparation, manure, and labour, it takes Rs 50,000 to Rs 60,000 per acre to establish the orchard. Annual maintenance—including pruning, fertilisers, and tillage — costs another Rs 20,000 per acre. Harvesting, grading, and packing add about Rs 50,000 in labour costs during peak season per acre," he says. Gill follows a structured fertiliser regimen. Manure and base fertilisers are applied in December, with urea split between pre-flowering (February) and postfruit set (April). Irrigation is minimal but strategic — twice in March, and 3-4 times in June. "Flood irrigation 5-6 times during summer enhances fruit size and sweetness," he says. The trees start bearing fruit in the fifth year, though farmers are advised to take only a light harvest that year and wait until the sixth year for full returns. "If you have patience for five years, a tree will serve you for 100 as this tree has a long-long life," he says. Each mature tree yields 1-2 quintals, averaging around 150 kg (1.50 quintals). Harvesting starts by June 15 and extends through July. Gill often saves part of the crop for August, when prices improve. Typically, three pickings are done: the first with large fruit in June, the next two, smaller in size, in late July and early August. "June rates were Rs 1,400-Rs 1,500 per 20 kg box. Rates drop to Rs 800-Rs 1,100 during later pickings, but demand remains strong," he says. One acre yields around 550-650 boxes (20 kg each) worth Rs 5.50 to Rs 6.50 lakh, bringing in around Rs 4–5 lakh per acre net profit if boxes are sold at an average of Rs 900–1,000. The fruit's firmness is what brings repeat buyers, he says. Intercropping helps Gill optimise land use. Till the trees are small and are in non-bearing stage farmer can grow mash, moong, and other crops in Kharif season, and in rabi, peas, gram, and wheat which covers the initial cost of the planting of the orchard easily. His orchard generates seasonal employment for about 30 workers, with 5-6 hired regularly from January. However, spider mites, which suck sap and yellow part of the leaves, are a major threat. Gill tackles them with sulphur and fungicide sprays, especially in February before flowering. Pruning is done annually in January to control height (ideally 12–15 feet), remove diseased branches, and improve light penetration. Gill also cultivates guava on two acres, and rotates the remaining land between basmati varieties—1121, 1509, 1692, 1718—and wheat. He maintains a 20-cow dairy, supported by three acres of silage grown from spring maize. He credits the Horticulture Department for providing training and technical support but expresses concern over the government's apathy when Patharnakh growers suffer losses due to heavy fruit drop caused by strong winds in May or June. "We need government support during such times. There should be a minimum support mechanism, better cold storage facilities, and compensation for weather-related losses," he says.
