

Reforming agriculture: When power is worth saving

Punjab has rolled out a promising scheme that pays farmers for consuming less electricity and water

Karamjit Singh Rai, early last month, got Rs 12,904 that was transferred to his bank account by the Punjab government. This wasn't any loan waiver, but a cash subsidy given for using less power and water for irrigating his paddy crop harvested in mid-October.

In May, just before the paddy nursery sowing season, the 75-year-old farmer from Khusropur village in Jalandhar district had been approached by Punjab State Power Corporation Ltd (PSPCL) officials to avail of the state government's 'Paani Bachao Paisa Kamao' (save water, earn money) scheme.

"I was suspicious about their intentions first, but they managed to persuade me to install an electricity meter on my 10-horsepower (HP) motor tube-well," says Rai, who is also the numberdar (headman) of his village. Under the scheme, he was entitled to a monthly power consumption of 2,000 kilowatt-hours (@200 units per HP) for four months from June 20 to October 20, covering the period between transplanting and harvesting of paddy. The unique part about the scheme was not this power being made available free — which is anyway the case in Punjab — but it actually offering to pay farmers in the event of their consuming less than the allocated quota.

During the four-month period, Rai consumed only 4,774 units of power, as per the digital metre reading, for watering the paddy on his seven-acre holding. On his power "savings" of 3,226 units, he, thus, earned a subsidy of Rs 12,904 at a rate of Rs 4 per unit. "In my six decades of farming, I haven't seen a scheme that pays us for something good that we are doing. As a farmer, I know that even if power is given free, it comes at a cost. That cost is of digging deeper for extracting groundwater, which ultimately falls only on the farmer," he remarks.

Surat Singh (76) from Samrawan village of Hoshiarpur district's Mukerian tehsil, too, has received Rs 5,008 as power consumption savings subsidy transferred directly to his account. "Many of my fellow farmers discouraged me, warning of huge power bills from installing meters. But I went ahead and am being rewarded," remarks this 18-acre farmer who has two 5-HP motor tube-wells, which are now both metered.

The good thing about the scheme, according to him, is that farmers don't lose even if they consume more than 200 units per HP, as power is either way free. "But in this case, I get paid for consuming less. I am planning next to install a sprinkler irrigation system, which would further reduce my power and water consumption. It will, then, result in more money being transferred to my account," he adds.

Paramjit Singh, a seven-acre farmer with a 7.5-HP tube-well connection in Kukar Pind village of Jalandhar district and tehsil, has received Rs 5,584 payment under the power-savings incentive scheme. “Farmers don’t want free power. We wouldn’t mind paying at all if the price of our produce is fixed based on the Swaminathan Commission formula of 1.5-times actual production costs. Farmers, moreover, have an interest in saving water, because we are investing thousands of rupees in drilling deeper bores every year,” he points out.

The above three farmers are among the 173 who enrolled for direct benefit transfer payments under the Punjab government’s ‘Paani Bachao Paisa Kamao’ scheme in the recent kharif paddy season. Together, they saved around 1.75 lakh units of power — and, thereby, water — and received payments totalling Rs 7 lakh. These farmers belong to 30 villages that are supplied power through six feeders in Jalandhar, Hoshiarpur and Fatehgarh Sahib districts. For the ongoing rabi wheat season, another 40 have enrolled. The monthly quota for availing payments against power savings for this season has been fixed lower, at 50 units per HP, as against 200 units in kharif. The reason for it is that paddy is 4-5 times more water-guzzling than wheat. “The fact that they will get Rs 4 for every unit saved is a huge incentive. During the paddy season, we supplied uninterrupted power from 8AM to 4PM to the farmers who had enrolled under the scheme. If more enroll, we can increase supply by another two hours, with the confidence that they will still try to save power usage,” A. Venu Prasad, chairman and managing director of PSPCL, tells The Indian Express.

Punjab currently has some 13.5 lakh tube-wells that are supplied power through nearly 5,900 rural feeders. The annual consumption per tube-well, having motors mostly with power ratings between 7.5 and 12 HP, is reckoned at 8,000-9,000 units. That figure is, however, only an estimate based on supply from feeders and not at the point of consumption. At an agricultural pump-set power tariff of Rs 5.16 per unit, fixed for 2018-19 and not charged to the farmer, the annual cost of free electricity in Punjab would work out to Rs 5,500-6,300 crore.

The state government’s power-savings incentive scheme has been designed in collaboration with the Abdul Latif Jameel Poverty Action Lab (J-PAL), a research centre affiliated to the Massachusetts Institute of Technology. J-PAL — along with experts from the World Bank, Punjab Agricultural University (PAU) and the state’s agriculture, irrigation and soil conservation departments — is also undertaking a detailed study of actual power/water use by farmers and how it might change once they are given a monetary incentive to consume less.

“Nobody knows how much power our farmers are really consuming now, and how much others are benefiting from the subsidy given in their name. That’s why we need metering in the first place. Also, in many cases, tube-well connections are in the names of people who are non-resident Indians or even no longer alive,” admits a PSPCL official.

“The current scheme can turn out to be a game-changer, in a state where groundwater levels in many parts are depleting by 80-90 cm every year. With this reform, farmers may start treating water as individual, not common, property that is worth consuming only drop by drop,” notes

Rajan Aggarwal, senior research engineer and head of PAU's soil & water engineering department.

The hope is that the scheme will enroll many more farmers in the ensuing kharif planting season — when the Lok Sabha elections would also have been over.