Could 'Power Walking' fuel the energy revolution? India is ready to step up

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Anand and Singh ran a survey in which they explored how people in India view the reliability of their household power and what their attitudes were towards generating their own electricity. They also asked participants how much they walked on average and whether they would consider implementing piezoelectric tiles into their homes.

They found that more than one in five people suffered frequent power-cuts in their area, highlighting the potential benefits of household energy generators such a piezoelectric tiles. Around 40% of respondents said they walked for more than three hours a day, and roughly 70% were willing to produce their own electricity using their feet.

The researchers also suggest that while household tiles can be used to solve problems of energy reliability and generation for individual families, piezoelectric tiles will also be a good investment for public or commercial areas with heavy footfall. They estimate that for the cost of a single 1 kW solar panel, three times more power could be generated a year using piezoelectric tiles.

"As a gadget, the piezoelectric tiles can be attractive home décor that will also help in producing household electricity," says Singh. "In this paper the output generated through the piezoelectric tiles has been studied in comparison with solar power generation."

As the efficiency and durability of piezoelectric tiles improve and as the need for green solutions becomes more urgent, the researchers predict that this type of energy production will experience a boom on the green energy market.
