



Low cost wind mill for power generation

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As his new house was far away from existing electrical lines, the electricity board asked Subramanian (51), a mechanic by profession, to deposit a certain amount towards the cost of electric poles. Since it was beyond his capacity, he gave up the idea of obtaining an electric connection from the electricity board. He then started working on ideas to address his household energy needs.

While experimenting with batteries and thinking about using solar panels, he realised that wind was abundant near his house and decided to build a wind mill. Being an electric mechanic, he had sound knowledge of motor winding and dynamos. He started his work in 2007 and complete one round of prototyping by 2009 installing a windmill on the roof of his house. However, this had problems which he rectified after careful observation.

His windmill cost him about Rs 70, 000 to develop. It can be installed near the house or on the roof with a RCC construction and produces 0.8-1.2 kVA (80 volt @ 10-15 A) electric power at a wind speed of 3-3.5 m/s. The turbine blades can also be stopped from rotation or the direction of rotation can be reversed from ground itself by electric brakes.

