ABSTRACT: Currently, the portable hand-held meters in the market manufactured by well-known companies are too expensive (about $300) and above the reach of small and medium holder farmers in developing countries. Additionally, none of these moisture meters have the means to capture data in order to share between trading partners remotely for transaction purposes. On these devices, data is still captured via an LCD display and hand-written down on paper, making it easy to manipulate and hard to track, which is a major problem for long-distance trade transactions between the seller and buyer. We have developed a grain moisture device prototype with data capture and logging using a smart cell phone. We would present our novel idea of how networking the moisture meter with cell phones that encompasses data sharing between the seller, buyer and financial institutions enable smallholder farmers to participate in more lucrative markets of the value chain. This process empowers small- and medium-holder farmers with the means to directly market their crops to higher value markets in order to capture favorable prices rather than leave the margins of trade to the middleman.

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