



# REMOTEWELL

An Agritech Solution for Digitalization of Groundwater Extraction

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PRODUCT AWARDED BY THE

1.6M

Tubewells in Pakistan

500K

**Electrical Tube Wells** 

22K

Drip Irrigation Systems

10K+

Solar Tubewells

## Pakistan Challenge in Groundwater based Agriculture

Undigitized farms rely on physical work and local presence to control workflows like water irrigation, fertilization and crop selection. There is no possibility to aggregate important data like, humidity, temperature, soil quality and crop health over a constant period of time.

Therefore, yield efficiency, water & energy efficiency, crop performance and technical failures can not be controlled or monitored adequately. Revenue waste, bottlenecks in crop performances are rising and impacting socio-economic conditions. Additionally, un-tracked farm numbers are growing!



#### Family Farms Worldwide

## 570M

Farms existing worldwide

### 500M

Considered as family farms

### 475M

Being less than 2 ha in size

### 80%

Food produced by family farms













## PROBLEM STATEMENT

Farmer's Pain Points



Labor Cost and System Low Efficiency



Physical Presence & No Time to Learn



Lack of Water & Energy Tracking



Downtime & Maintenance Costs



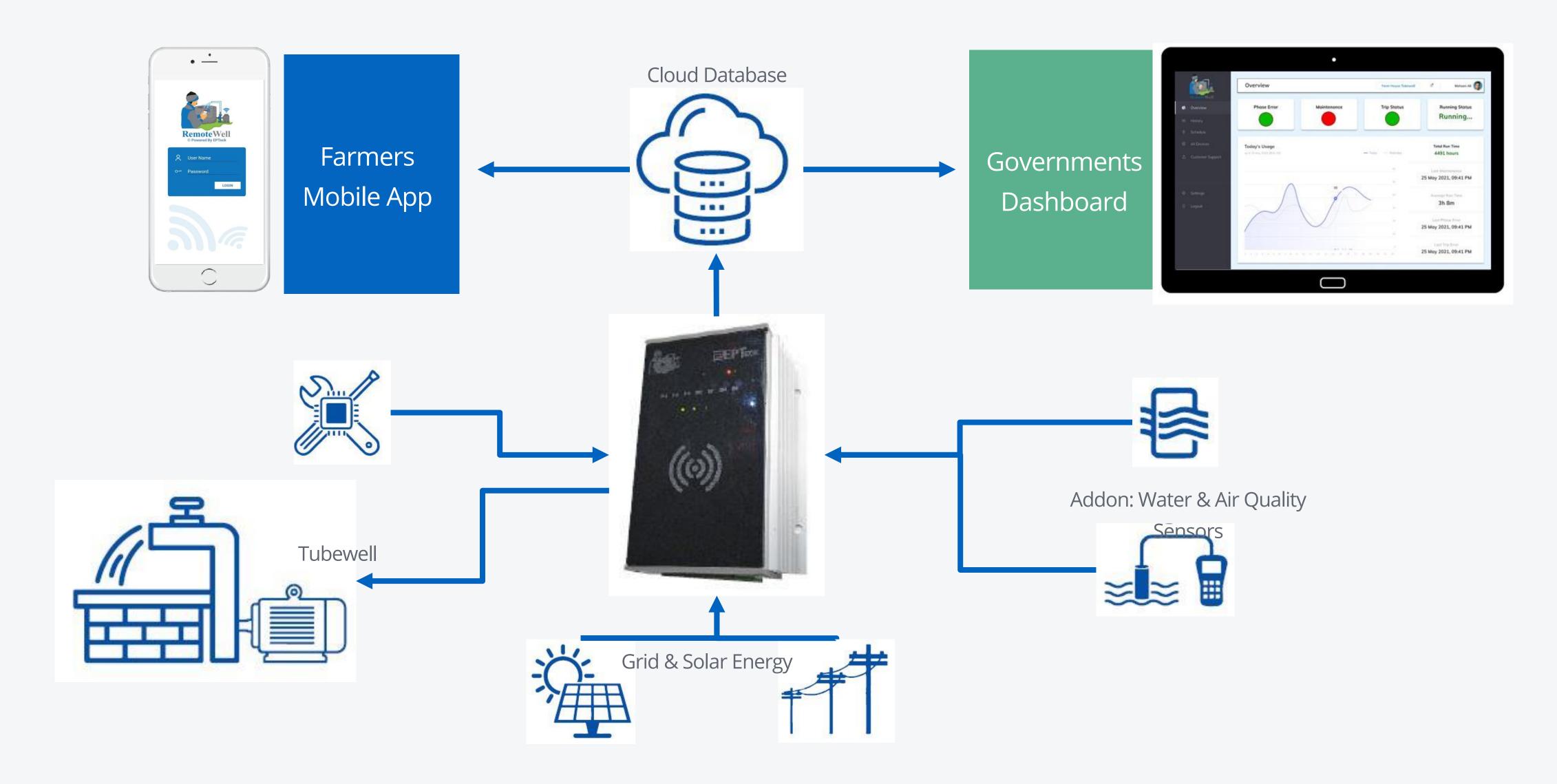
Lack of Data/Statistics



Next Generation Engagement

## THE SOLUTION

Easy adoptable into exiting ecosystem for Farmers



#### **Control Unit**

RemoteWells Control Unit aggregates sensor data and controls the pumps. It enables remote & smart capabilities to rural agriculture farms.





### THE SOLUTION

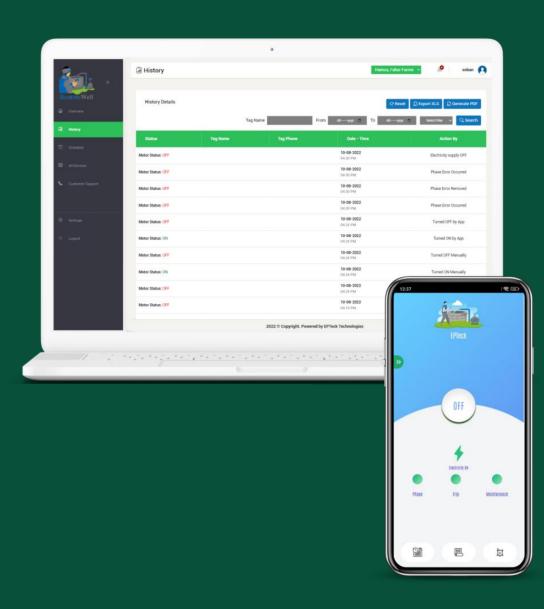
Designed for tube wells and drip irrigation systems, **RemoteWell** is an IoT device that offers wireless switching, scheduling, controlling and ensures the aggregation of real-time sensor data.

RemoteWells software application features predictive maintenance, air, soil and water quality monitoring, and most crucially, power consumption versus output water to assess the effectiveness of the farming operation. RemoteWell allows to control and monitor water irrigation, fertilization and crop selection through a smartphone app anytime and anywhere.



#### **Cloud Software**

RemoteWells unified dashboard visualizes the aggregated sensor data into meaningful key metrics and provides full remote pump control through any mobile device.



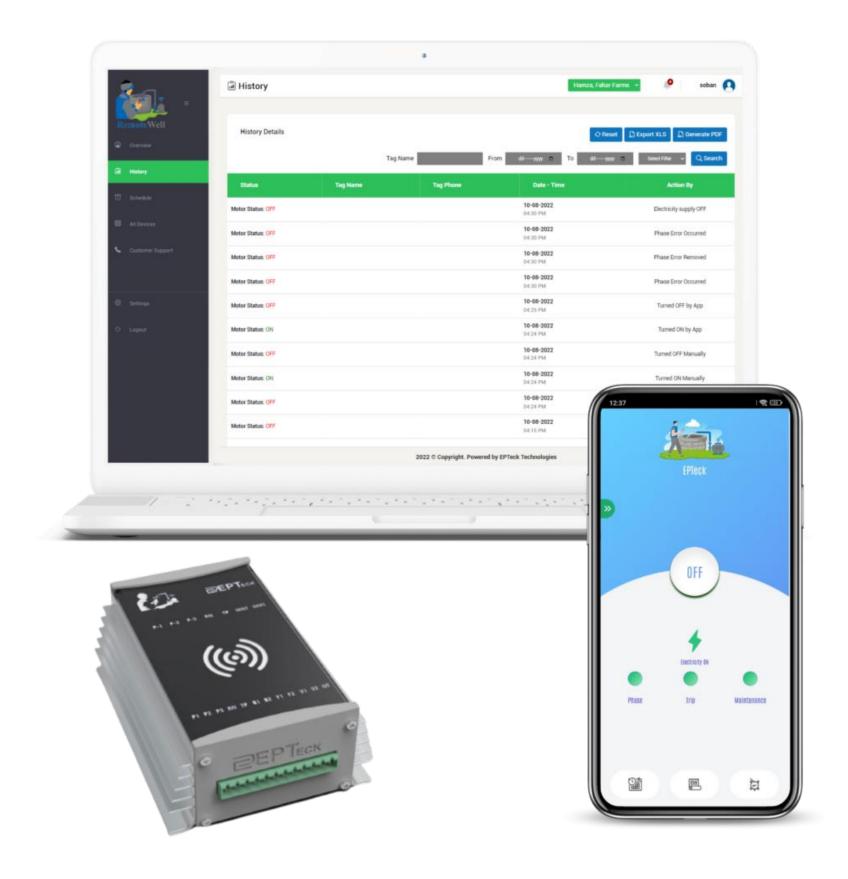


# INTELLIGENT FARM MANAGEMENT MADE EASY AS TAPPING YOUR PHONE



Very easy usability for farmers according to their intuitive understanding and common use of irrigation systems







#### **Monitoring**

Monitors all farm data that occurs in real-time for data logging, data aggregation and fault detection.



#### Scheduling

Creates schedules to automate watering operations and indicates fertilizing needs in the farmers fields.

#### **Automation**

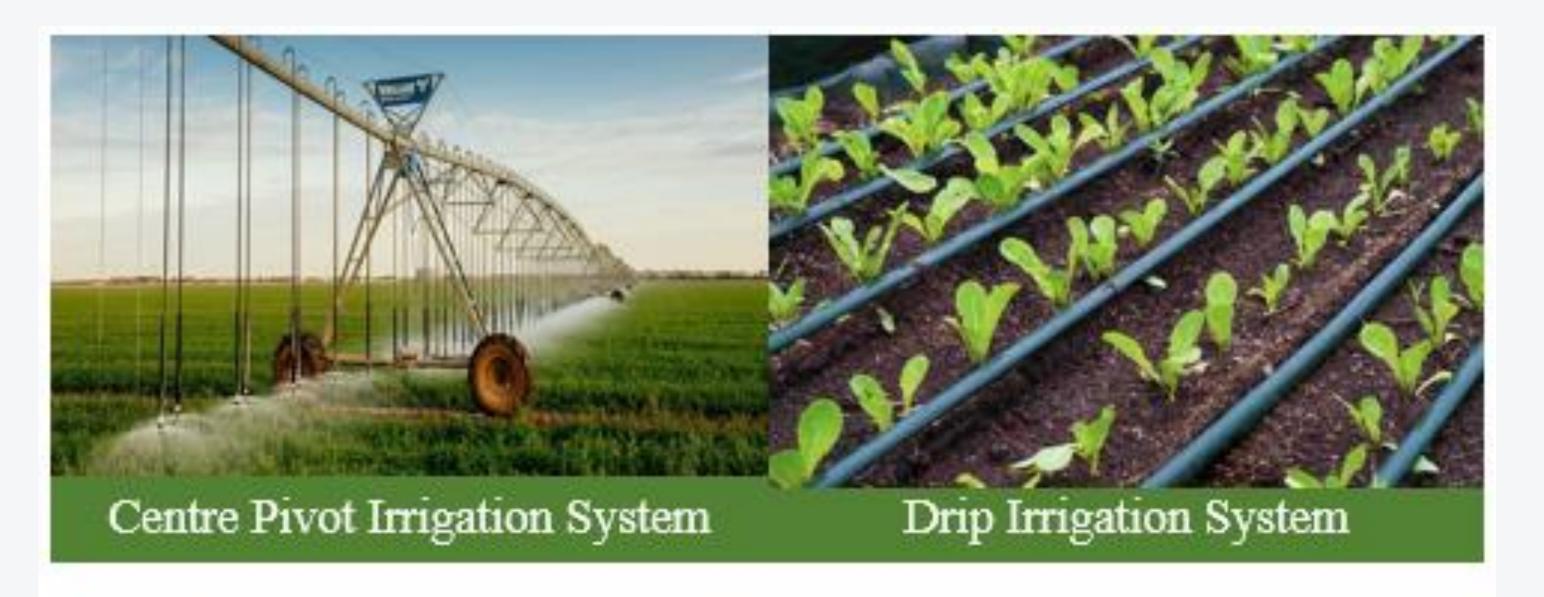
Automates the watering process based on sensor, satellite imaging and cloud data to achieve higher crop yield.



## Remotewell Use Cases For Agri Farming















## PRODUCT VARIANTS





- B2C market
- low cost
- for 3-phase star/delta
- installable inside or outside of control panel
- human and motor protection
- scheduled maintenance
- for farmers

- B2B market
- high accuracy of power monitoring
- for 3-phase star/delta
- installable inside control panel
- IP67 outdoor variant
- build in support for multiple add on modules
- basic predictive maintenance
- for corporates

- B2C market
- single-phase motors
- submersible pumps
- up to 80A switching
- device acts itself as own control panel
- human and motor protection
- scheduled maintenance

#### **USE CASES**

- Family Farmers TubeWells
- Drip Irrigation

#### **USE CASES**

- Corporate Farms
- Housing Society Water Management
- Industrial Water Management
- RO Plant Water Management
- City Waste Water Management

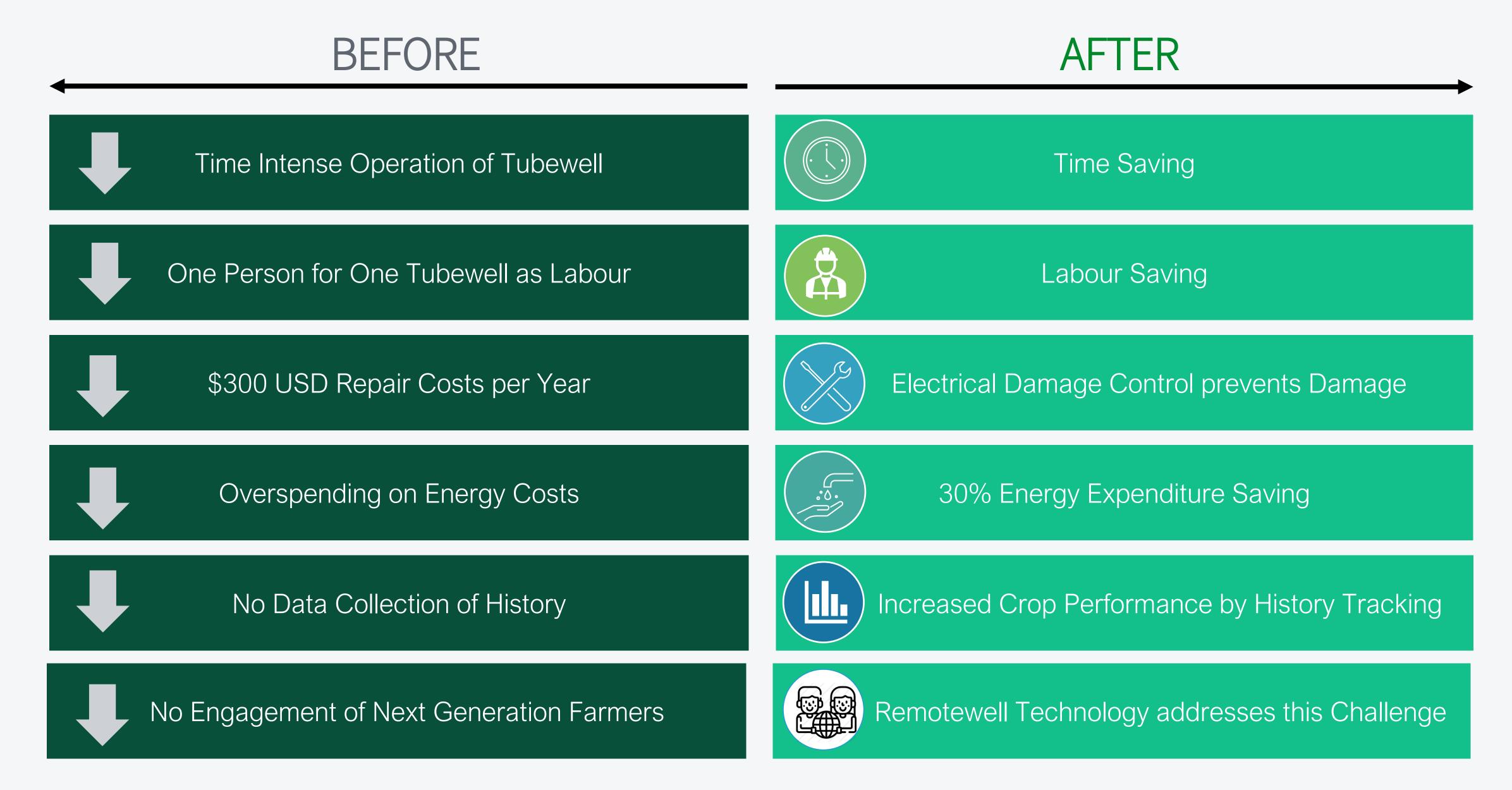
#### **USE CASES**

- any single-phase / submersible motors
- rice fields irrigation





## FARMERS DIRECT BENEFITS





**NON-Govt. ORGANIZATIONS** 

Hardware (IoT Device)

SAAS (App, Dashboard)

Data (Energy, Land, Water, Air)

- creating huge social impact with data-driven decision making
- doing what matters most, a step towards saving water & energy
- special dashboard with all parameters of organization interest
- cluster of local farm monitoring



**FARMERS** 

Hardware (IoT Device)

SAAS (App, Dashboard)

- farming yield increase
- remote access to farm data
- personalized mobile app dashboard
- asset protection & monitoring
- predictive & scheduled maintenance
- automated billing scheme
- subsidized installation cost



**GOVERNMENTS** 

Data (Energy, Land, Water, Air)

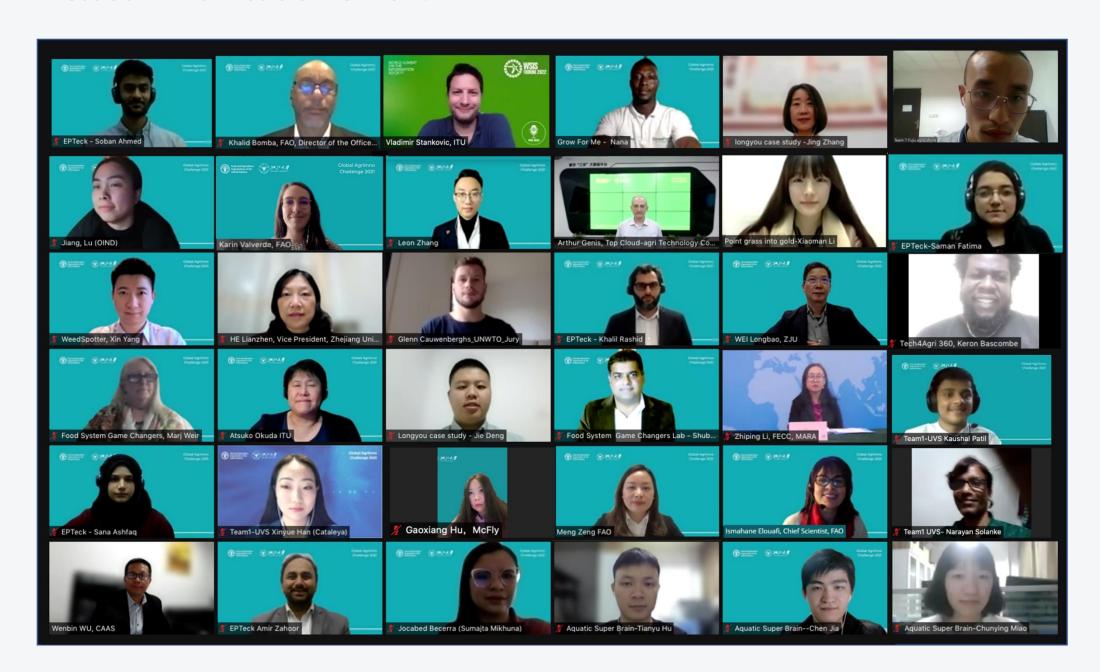
- environment protection planning
- can suggest farmers crops based on water/soil/air data
- groundwater consumption patterns and extraction
- energy consumption monitoring
- data-driven subsidy for farmers

#### **Award Winning Product**



## 2. Place at Agrilnno Challenge 2021

**RemoteWell** won the 2nd placing worldwide in the "Global AgriInno Challenge 2021" by the FAO (Food & Agriculture Organization) of United Nations. The challenge was organized in cooperation with Zhejiang University, Ministry of Agriculture China, and the International Telecommunication Union.



## ADRESSING SDG's & BETTER FOUR







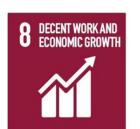
























## OUR PARTNERS

Strong Product-Market Fit with amazing Partnerships





#### **FAO United Nations**

RemoteWell is an official agriculture innovation partner of the United Nations.





NIC

4G A NEW DREAM

Globally

Connectivity

Visibility

Insight

Knowledge



RemoteWell will be the leading provider Irrigation and Fertilization monitoring and tracking solutions to farmers around the world. We use our enthusiasm and years of expertise irrigation, and agronomy, sensing to environment cutting-edge create solutions that will maximize crop yield on your field.













RemoteWell has partnered with NIC to scale the local Startup visibility and demonstration.



#### **SACAN**

RemoteWell has partnered with SACAN Network for being technology partner.



#### **University of Agriculture**

RemoteWell has partnered with UAF and their experience in precision agriculture knowledge.





## Customer Experience













#### **Geographic foot-print expansion – Pakistan**

RemoteWell plans a coherent expansion of its sales and service footprint which balances the need to rapid sales expansion with management capacity, logistical efficiency and capital availability. At the moment, RemoteWell is installed in 21 Districts from Punjab and KPK. Quality of service (pre- and post-sale) in the markets serviced would be a prerequisite for all expansion in those markets whether via dealerships network as well as digital marketing reach out.

	CURRENT INSTALLATION LOCATIONS	
Kabul 기반	DISTRICTS	DISTRICTS
Islamabad JAMMU	Khanewal	Chiniot
السلام آباد (KASHM	Multan	Lahore
	Vehari	Nankana Sahib
	Bahawalpur	Sheikhupura
THI Personal Property of the Personal Property	Lodhran	Muzaffar Garh
	Bahawalnagar	Dera Ghazi Khan
PUNJAB	Sahiwal	Bhakkar
Pakistan	Pakpattan	Layyah
♦ A	Okara	Rahim Yar Khan
	Faisalabad	Upper Dir KPK
	Jhang	Malakand
Google	Toba Tex Singh	





## INTERNATIONAL MARKET





RemoteWell expansion to Saudi Arabia and Middle East







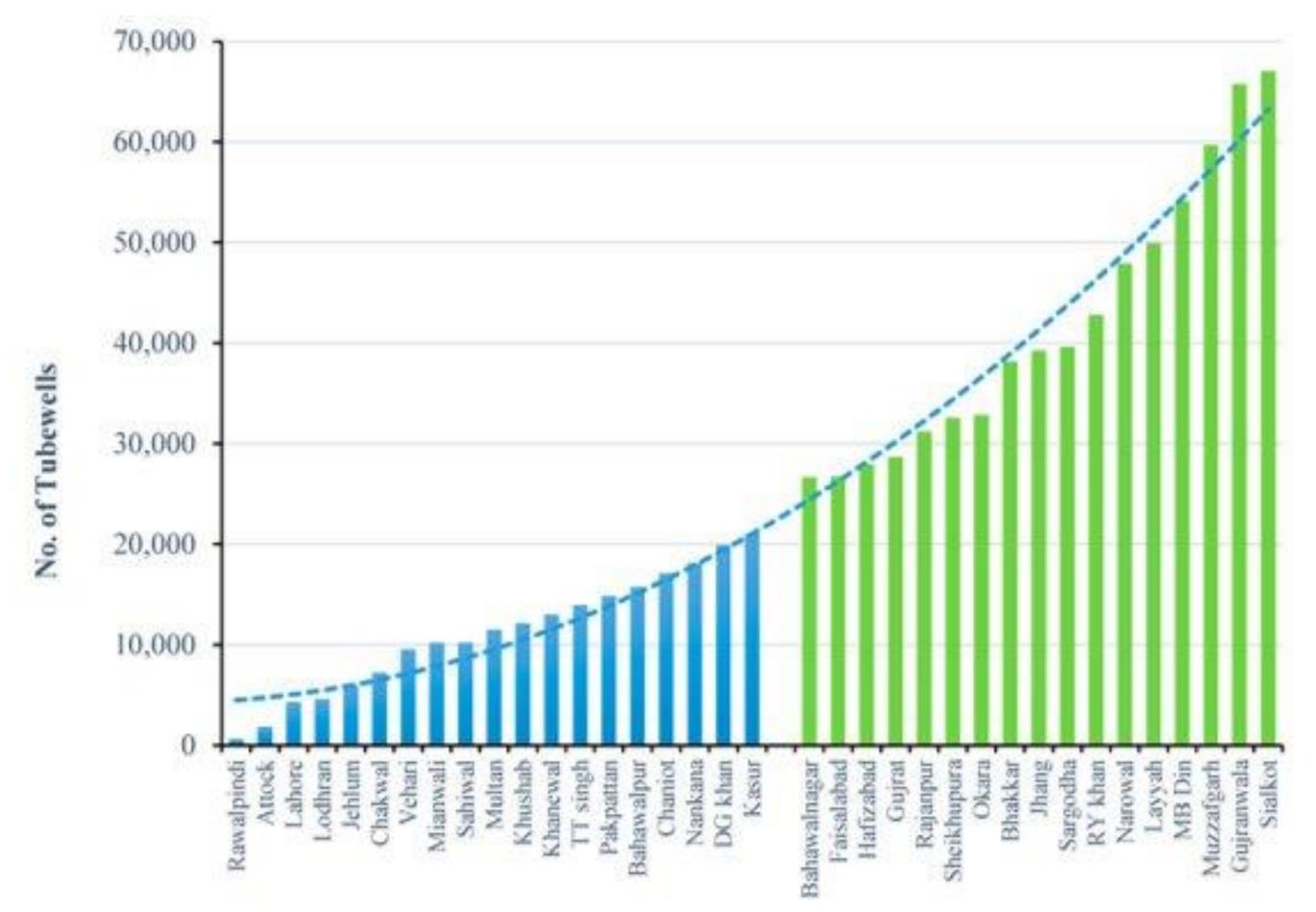








#### **Pakistan Challenges & Opportunities**



https://www.mdpi.com/2073-4441/12/11/3017

Punjab Agricultural Statistical Department





## Committed to Serve Pakistani Farmers

We are open to Partnerships to conserve Water and increase Water Productivity



## THANK YOU

https://remotewell.io/

#### **Pakistan Office**

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