



Prototype LoRaWAN monitoring Soil N,P,K parameters at Oil Palm Plantation. (Proposed Research Collaboration)



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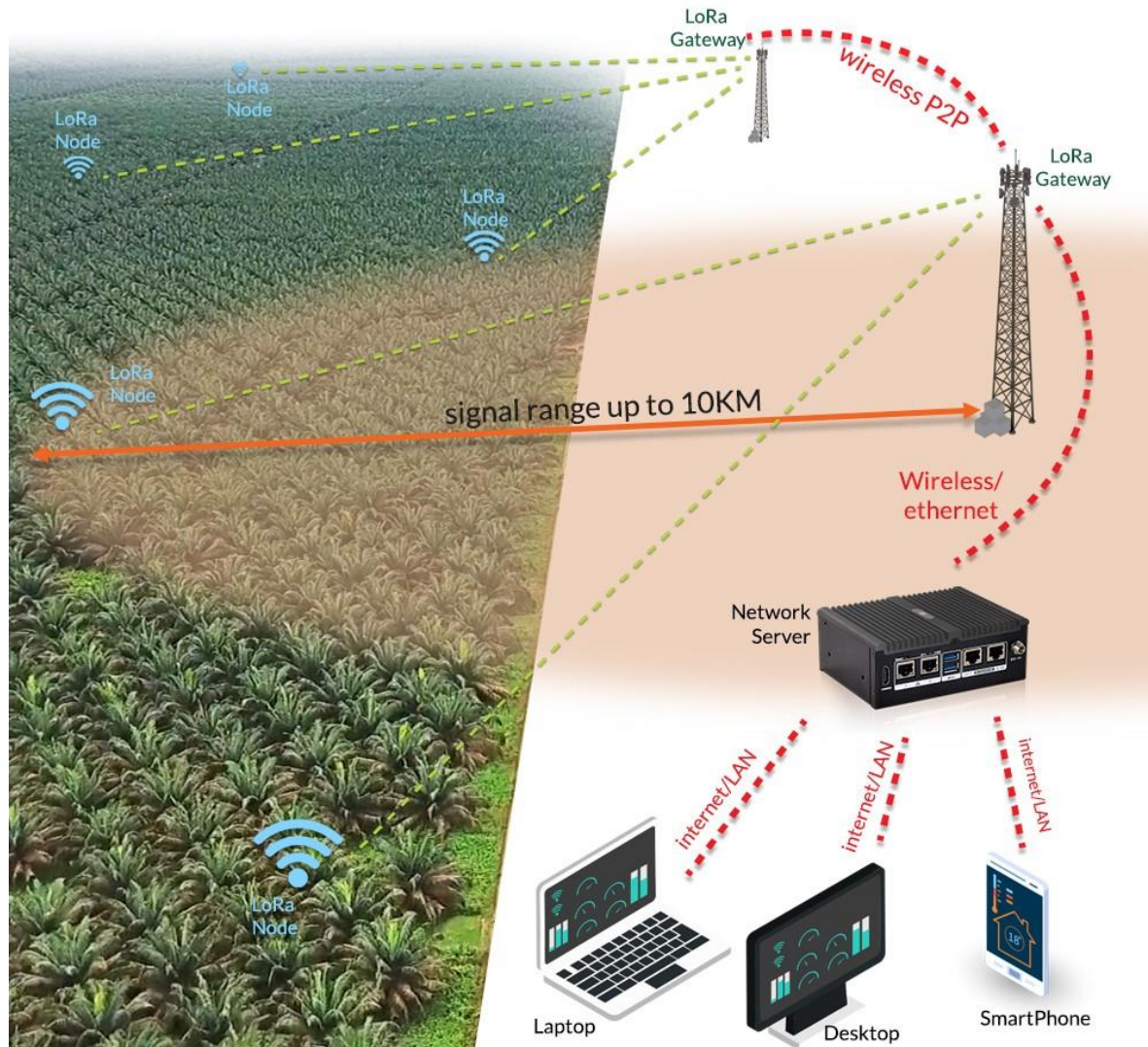
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LoRaWAN
Monitoring Parameter N,P,K and others ** at Oil Palm Plantation
Block's in Realtime using IoT Technology , Industry 4.0
(LoRaWAN , Long Range Wide Area Network)

LoRAWAN is a type of network for wireless telecommunication areas which is designed for long distance communication with low bit rate

* *(ph, humidity, temperature, river's level..)*

Architecture Diagram



Purpose :

1. Monitoring continuously 24/7 soil parameter at the plantation block.
2. Eliminate/Reduce /substitute LSU method (Leaf Sampling Unit)
3. Accurate fertilizer dosing applied.

How the system works.?

1. LoRa Nodes embedded in the plantation blocks
2. The nodes equipped with IoT and long lasting battery up to 5 years ,transmitting the value of N,P,K chemical properties.
3. LoRa gate way Tower receive signal from Node and convey to Network Server. All communication using internet signal.
4. Using cloud internet the data can be read by respective devices such as Laptop, Desktop , even Handphone around the globe.