# Internet of Nature

# Concept - DIGITAL PLANTATION

May 2020

Recording of the agriculture data on a farm.

# PICTURE AN INTERNET OF NATURE AND THINGS PRECISION AGROFORESTRY, FULL DIGITAL INFRASTRUCTURE, WIFI EVERYWHERE

**THIS IS WHAT WE DIGITALIZE**

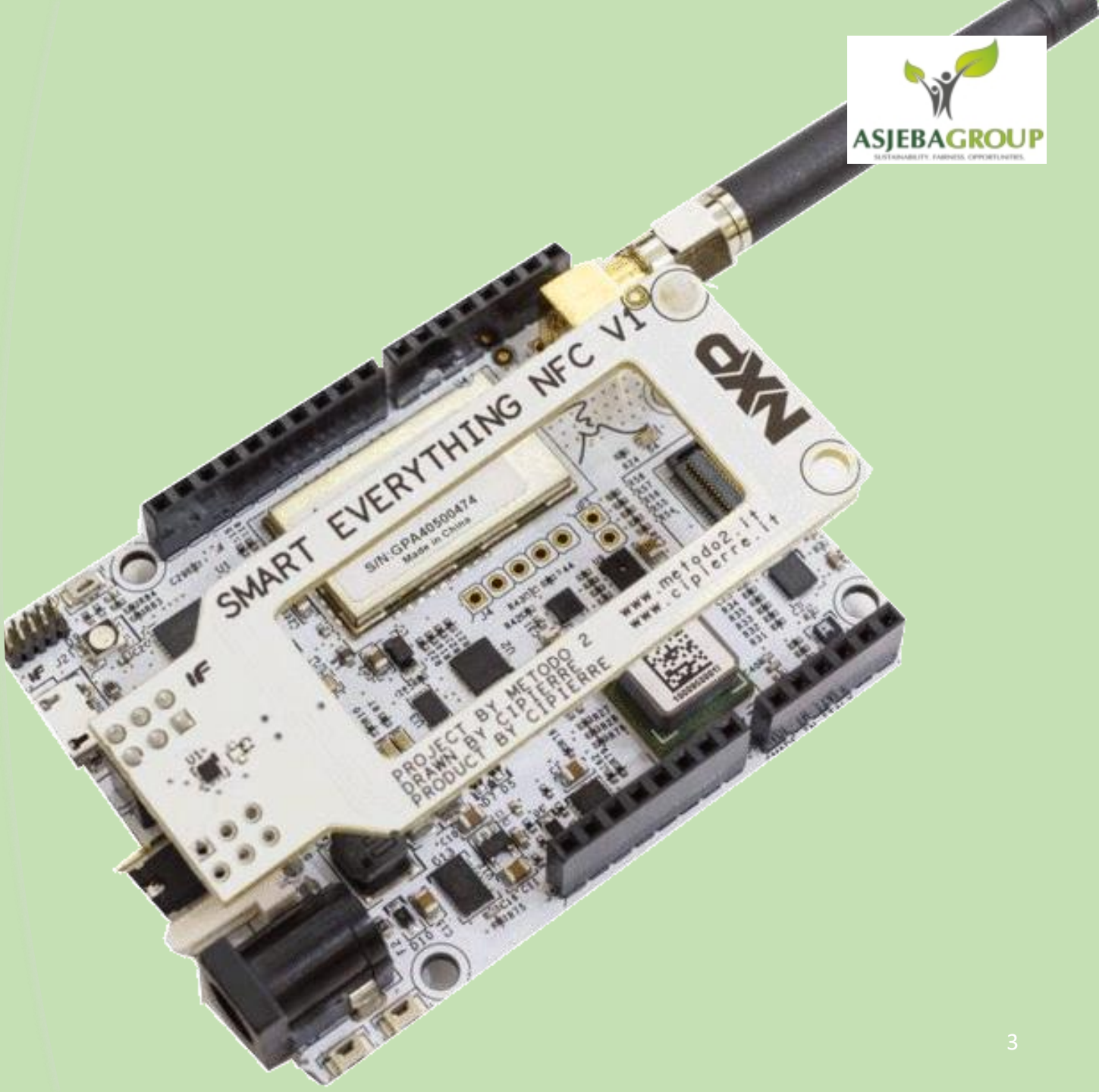
- TREES
- WATER
- WEATHER
- ANIMALS
- FACILITIES
- VEHICLES
- PERIMETERS AND LOCATIONS

**THIS IS THE DATA WE MINE**

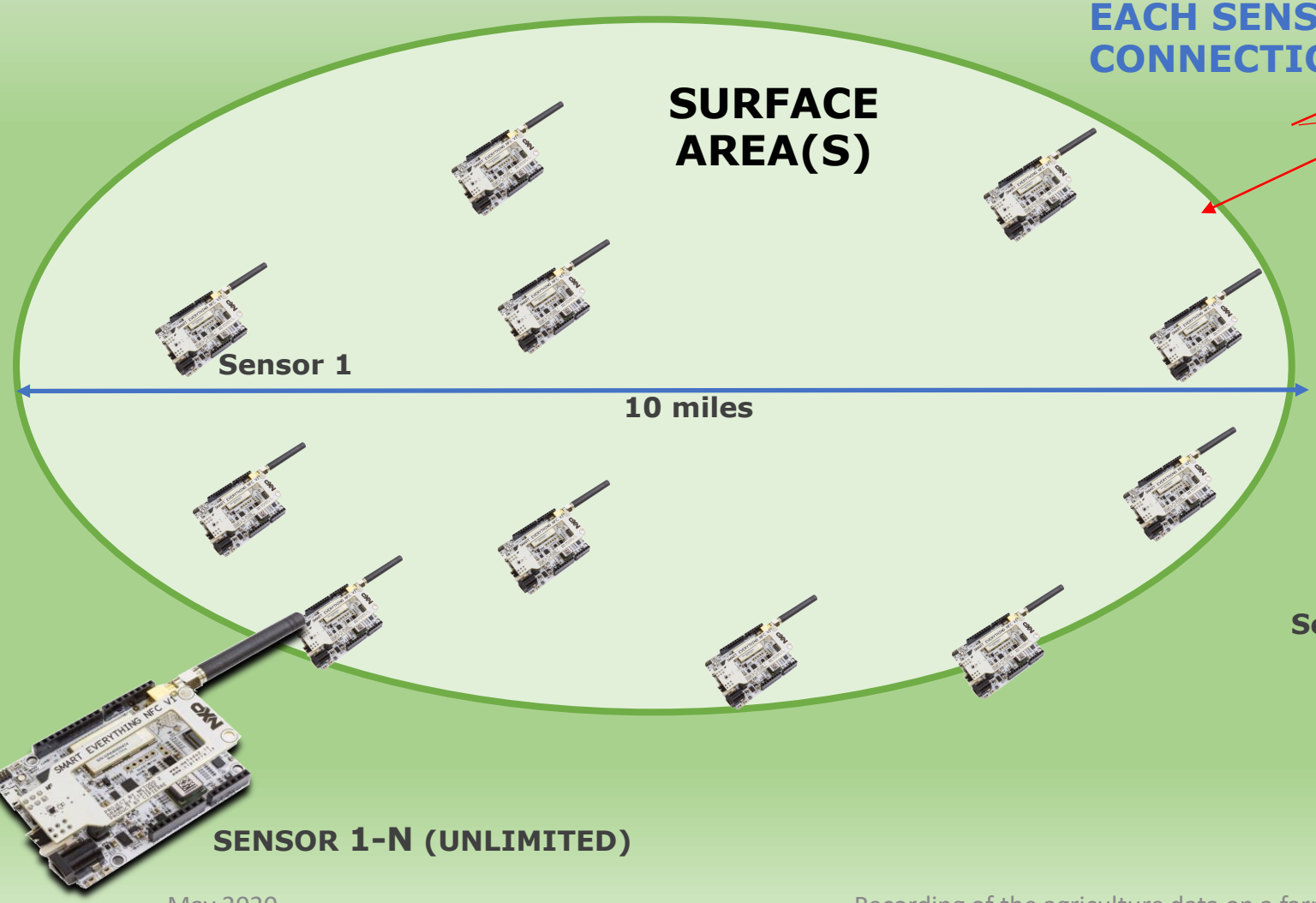
- LEAVES, BARK, ROOTS, PESTS,CO2
- OXYGEN, BACTERIA, IMPURITIES
- RAIN, TEMPERATURE, WIND
- DIVERSITY, HABITAT, NUMBERS
- UPKEEP, SYSTEMS,SAFETY
- UPKEEP, POSITION, SECURITY
- INTRUDERS, SECURITY, PERSONNEL LOCATIONS

# SPECIFICATION OF COMPONENTS

- WIRELESS COMMUNICATION
- LOW COST APPROPRIATE PARTS
- FREELY AVAILABLE COMPONENTS
- FREE AVAILABLE FREQUENCIES (ISM-BAND 433.05- 434.79MHZ)
- LONG BATTERY LIFE
- LONG DISTANCE FOR TRANSMISSION (RURAL DISTRICT – UP TO 10 MILES)
- IP-BASED
- OFF GRID – NO THIRD-PARTY INFRASTRUCTURE
- BROAD VARIETY OF SENSORS



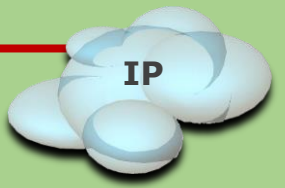
# DIGITAL INFRASTRUCTURE DESIGN




EACH SENSOR WITH WIRELESS CONNECTION TO THE BASE

BASE

SERVER




**ALARM** CENTRAL OFFICE

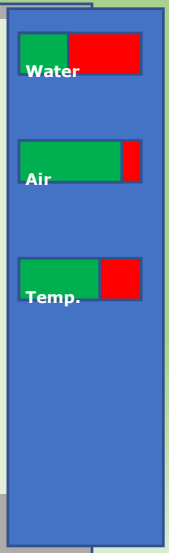
**FENCE A 4 - INTRUDER**

**NO WATER ON THE PALMS**

**ALERT**

**WORKER A102 IN AREA F9**

**80 C° IN THE GREENHOUSE**



# AUTONOMOUS PRECISION DIGITAL SYSTEM

- NETWORK STRUCTURE UNDER ASJEBA MANAGEMENT
- LOW COST COMPONENTS, APPROPRIATE TECHNOLOGY FOR RURAL SITES
- INFINITELY SCALABLE, VERY HIGH RANGE
- DATA AVAILABLE WORLDWIDE TO REGISTERED USERS
- REAL TIME MONITORING OF ALL ASPECTS OF PLANTATION
- WIFI FOR STAFF, EDUCATION, PRODUCTION AND PERSONAL ON- SITE USE
- ATTRACTIVE MODERN WORKING SITUATION FOR TECH SAVVY STAFF

**SITE SPECIFIC INFORMATION TO BE DEVELOPED.**