



# Forestry innovations, the best way facilitating communication outside of the forestry sector

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# Content

- Importance of Communication
- Stereotypes
- Communication Campaign
- Smart Sensors / Smart Forest
- Feedbacks and Outcomes
- Topic suggestion



# Communication – Why is it important?

- Foresters don't like to communicate
  - Work in silence, listen to the Forest
- Numerous stereotypes
  - Forester / Woodcutter
  - Random / Planned Harvesting
  - Reforestation obligation
- We must communicate our vocation, dedication, and certitude to the forest



# Forester / Woodcutter Stereotype

Plant, growth, cultivate

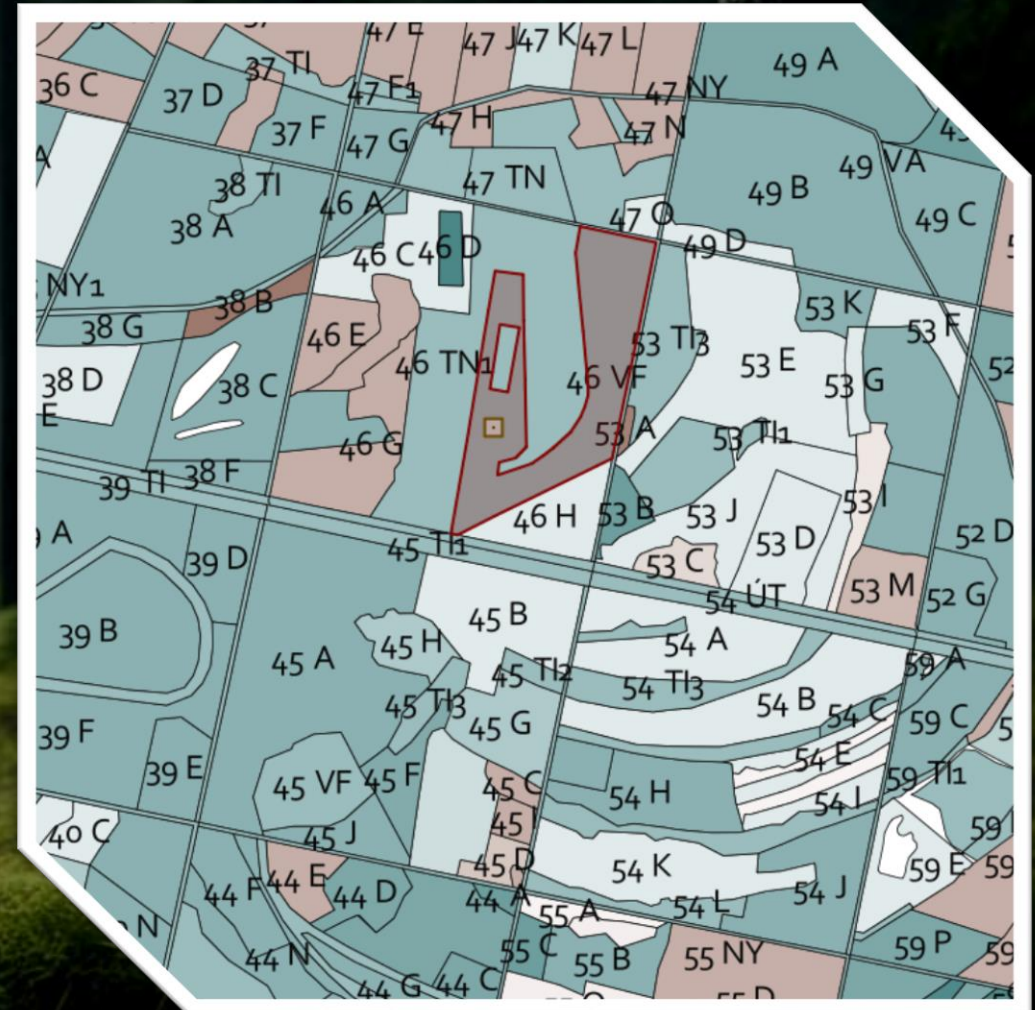


Cutting, harvesting



# Random / Planned Harvesting Stereotype

- „We harvest the finest stands”
- We cannot harvest anywhere
- Strict annual harvesting plan
- Authorization and inspection
- 10 years plans
- Strategic plans



# Reforestation Stereotype

- „We soon cut all trees”
- Reforestation obligation
- cc. 1% ha annual loss, but reforestations starts at once
- Forest land use area is constant or increases



# Start Communication

- 2021. University model change
- University contracted with a Communication Company (*IndigoCom*)
- Conversation about research
- Smart Sensors/Forest selected
- Communication campaign started



# Smart Sensors / Smart Forest

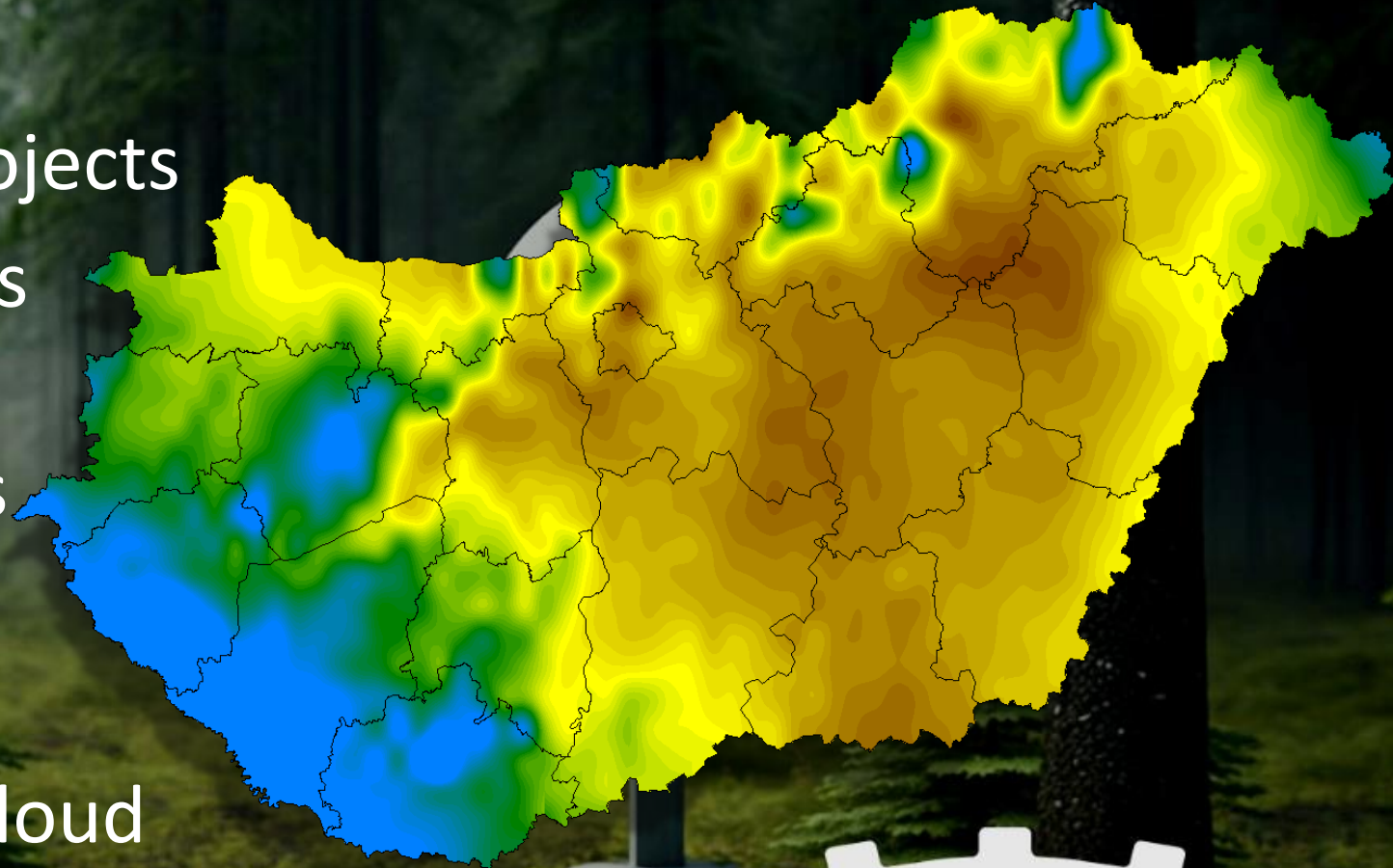
- NB IoT: narrow band Internet of Things sensor
  - Measuring many things
  - Sending data to CloudDB
  - Alarm system, monitor
  - Short/long-term analysis
- Network of Sensors = SmartForest





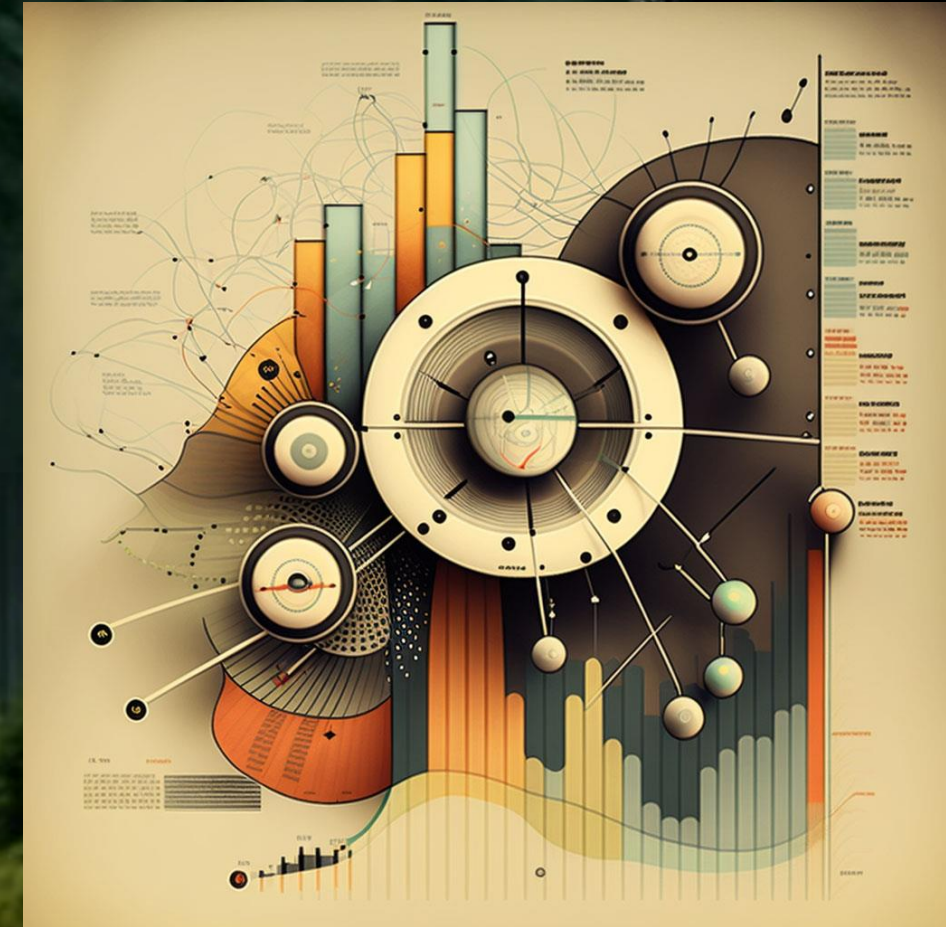
# Why do we use these sensors?

- Former Climate Change projects
- Predict the future of forests
- We have meteorological data from weather stations
- We don't have these data for forested area
- We need online data and cloud database processing



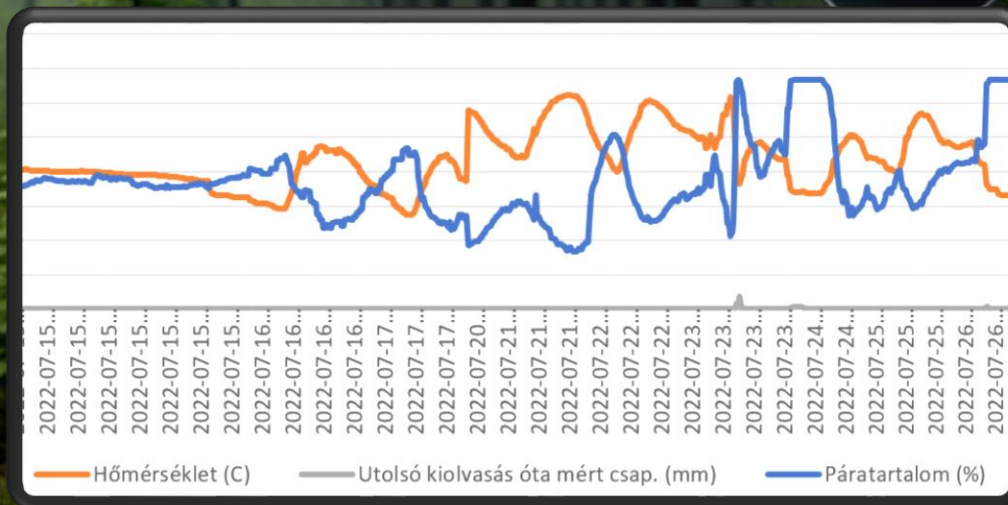
# Sensors' outputs

- Temperature, precipitation, air humidity, soil moisture
- Stem diameter growth
- Multivariate analysis
- Drought and number of hot days
- Mortality, biotic damage analysis
- Number of visitors



# „Real” Smart Sensors

- Complex sensor
  - Temperature
  - Precipitation
  - Humidity
  - Soil moisture
- Small sensor
  - Temperature
  - Humidity



# Communication Campaign

- Fall 2021. – Spring 2022
- 2 pages press release  
„Smart options in Forests”
- 70+ written appearances
- 7 radio interviews
- 3 TV interviews



# Campaign outcome

- Calling the attention to the forest, to our University
- Many positive feedbacks
  - One funny from my student
- Better known, more beneficial communication position
- They listen to us, are asking us, invite to discussions, debates





# Artificial intelligence

- We have just entered a new era: „The age of AI”
- Presentation images were mostly generated by AI
- What are the benefits and threats of AI in education?
- Will teachers be needed?
- How can we prepare, adapt and regulate?
- It can be the next topic



# Summary

- Forest engineers are the most skilled experts to manage, protect, utilize the forests many ecological services
- Communication is important
- Our latest innovations, project results are the best topics to communicate







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# Thank You for Your Attention

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