SHARED ON LINKEDIN YESTERDAY

DIRECT AND INDIRECT WATER USE FOR INDUSTRIAL ACTIVITIES

- CROATIA: 149 m³
- NORWAY: 290 m³
- UNITED KINGDOM: 203 m³
- THE NETHERLANDS: 433 m³
- GREECE: 178 m³

- INDIRECT WATER USE (m³ per capita)
- DIRECT WATER USE (m³ per capita)
WA POR - MONITORING WATER PRODUCTIVITY THROUGH REMOTELY SENSED DERIVED DATA

Boudewijn van Silfhout
CEO eLEAF
FEEDING 10 BILLION PEOPLE SUSTAINABLY . . .

- **target 2.4**
  - Increase agricultural productivity

- **target 15.3**
  - Combat desertification

- **target 6.4**
  - Increase water use efficiency

- **target 17.18**
  - Availability of high-quality, timely, and reliable data

2022:
- 8 bn people
- 50% more food production
- Using less water

2050:
- 10 bn people
USING SATELLITE DATA HAS **THREE KEY BENEFITS**

1. **Scalable:** satellite-based data cover the entire globe

2. **Up-to-date:** near real-time and historical information for early detection

3. **Consistent:** unbiased indicators comparable across regions for more transparent and equal distribution of water resources

However, most use cases rely on ‘indicative’ satellite date, more green, less green, not enabling quantified data
Quantified data makes it possible to support ‘industrial’ actionable use cases.
THE CONCEPT OF WATER PRODUCTIVITY

Is water or land the limiting factor?

Yield = kg/ha

Water productivity = kg/m$^3$
FAO WAPOR PORTAL TO MONITOR WATER PRODUCTIVITY

https://wapor.apps.fao.org

| Open-access |
| on crop growth and water status |
| for Africa and the Middle East |
| 2009 – present |

| Globally available in June |
The Hydraulics Research Center (HRC-Sudan) set up an advisory service for the Gezira Irrigation Scheme that conveys WaPOR satellite-based information on crops and irrigation.

Major change: farmers started to irrigate more frequently using less water.

- Wheat yield increased by 67% (average)
- Save in irrigation water /season 33% - 55%
EVALUATING IRRIGATION PERFORMANCE

Water usage

Yield

Water Productivity

**Low Water productivity:**
- Yield = low
- Water usage = low

**High Water productivity:**
- Yield = high
- Water consumption = low

**Low Water productivity:**
- Yield = high
- Water usage = high
THANK YOU