

IOE



Investing in rural people

Independent Office of Evaluation



## **Harnessing opportunities from information technology for evaluation – with some caution**

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# Geo-based data before , during and post COVID

- ❑ Started using Geo-based data (i.e., data generated by satellite imagery) in 2017 to complement data collected during country and field visits
- ❑ COVID 2020 meant no international missions and sometimes no field mission at all when national consultants did not receive clearance to travel out of the capital
- ❑ At present, trying to systematize use of geo-based data in project-level and country-level evaluations







Helped check elevation, infrastructure and other characteristics not influenced by the project



Before the Project  
(2014)



After the Project  
(June 2019)



Compared with our own observations in the field

And with community interviews

Low cost: you just pick the GIS coord. of visited sites

## Coastal Climate Resilient Infrastructure Project in Bangladesh

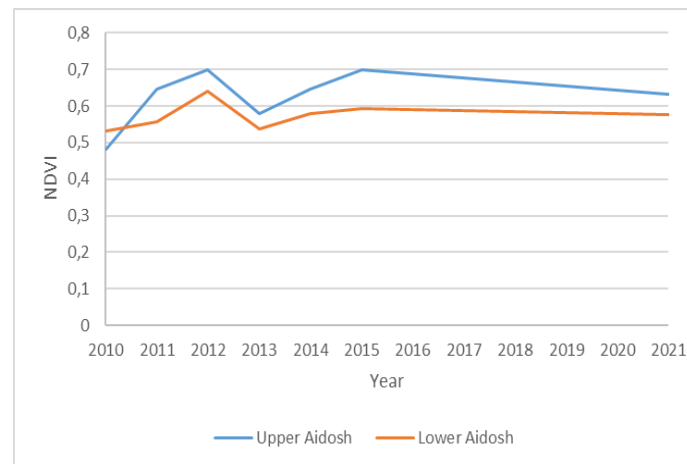
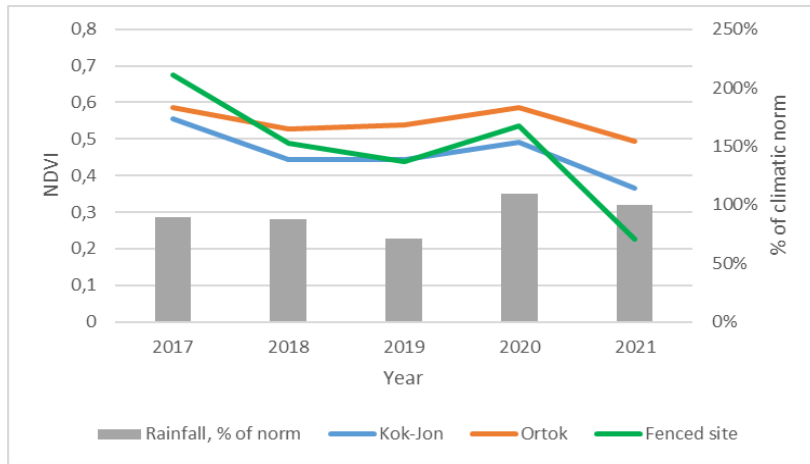
### Special case under COVID

- Investment in infrastructure for market and market access
- No travel authorized, including for national consultants
- ❑ We had the name of municipalities and GIS coordinates and could track market infrastructure (see image: before and after)
- ❑ Hires a civil engineer to help us with image interpretation
- ❑ Also used remote phone surveys (more on this later)

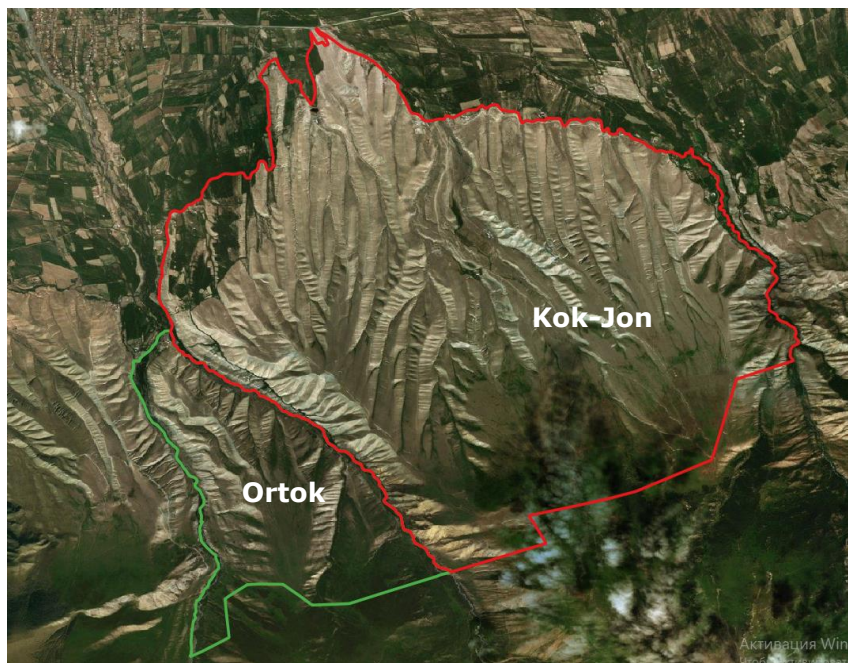




# Kyrgyzstan – Dynamics of pasture vegetation (2022)



- Time series on normalized vegetation index
- Compared with rainfall data
- And with community-level interviews
- More pasture degradation than reported



# Guidance on Geospatial Tools for IOE



## Global Forest Watch

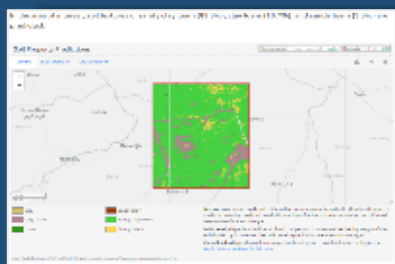
Produced Guidance note (2023) to make more consistent use of geo-tools and seize opportunity of massive data on-line (many free of charge)

- Focus on online applications, requiring limited input of external expertise



## Earth Map

- Ex. retrieve data before and after intervention: infrastructure vegetation cover, cropping patterns, soil characteristics,



## Geofolio

- Project Evaluation in Cuba 2022: GIS coordinates of the field sites visited → *SoilGrids*: carbon content in soil as indicator of soil health (triangulated with other evidence)

## Strengths:

- Addition to ‘traditional’ methods and field visits (*leitmotiv* of this presentation), with some exceptions during COVID
- Useful for projects on infrastructure, irrigation, crop pattern changes, pastoral corridors, agroforestry. Needs triangulation
- While data analysis may require trained specialists, it is overall low-cost.

## Limitations:

- Less suited to analyze changes that can not be detected “from the sky” and to explore causal chains. Requires ground-truthing
- Few projects are geo-referenced (at IFAD);
- Image quality not always good (e.g. high-gradient mountain areas)
- Privacy



- ICT useful, not a *panacea*, not (yet) revolutionizing evaluation profession
- Our emphasis has been on Geo-based data. Additional source of evidence analysis, to **complement** traditional methods (field visits, interviews, focus Group, mini-surveys.....)
- So far, focus is on **low-cost tools**, involving time-bound consultant input
- **Artificial intelligence**: an opportunity to synthesize from very high number of sources and interface between different databases
  - manage expectation on software analytical capacity
  - lengthy teething period (algorithm training, software adjustment)
  - we plan to build on current work done by ICT unit of IFAD