Co-funded by the Erasmus+ Programme of the European Union

HARMONY

Universidad Zaragoza

IaH Capacity Building Webinar with a focus on VIRTUAL MOBILITY

(ONLINE WEBINAR BY UNIVERSITY OF ZARAGOZA, SPAIN)

1st APRIL 2022

Virtual mobility on regional planning, cooperation and aid to development

Prof. Dr. Rafael de Miguel González

Previously

2015 - 2019:

Several development cooperation projects for training on Regional Planning

Key points:

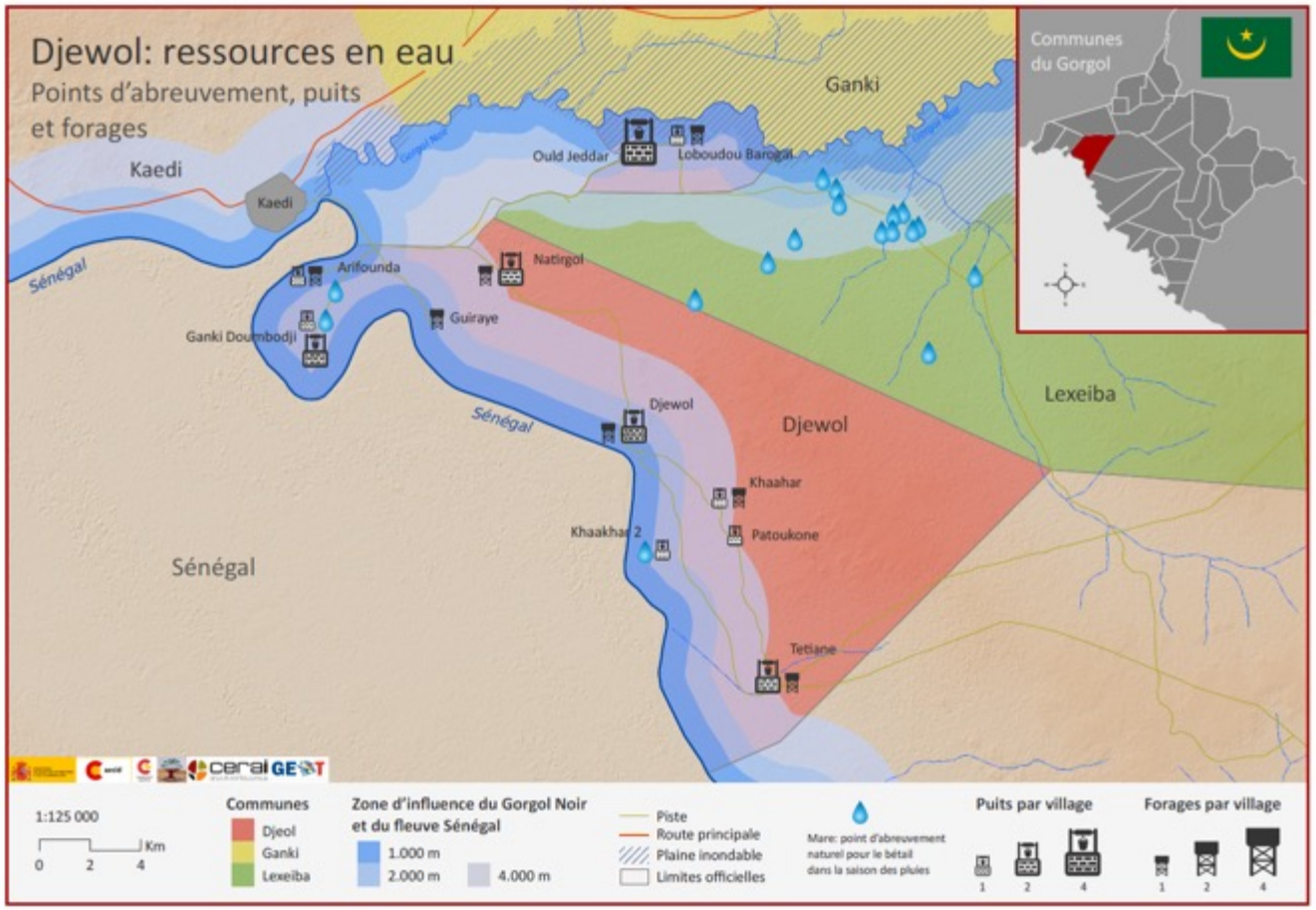
- ✓ **fostering governance processes**
- ✓ **Collaboration citizen empowerment**
- ✓ **impulse to women**
- ✓ **training of technicians and cooperators**

Vicerrectorado de Internacionalización y Cooperación
Universidad Zaragoza

GEOT

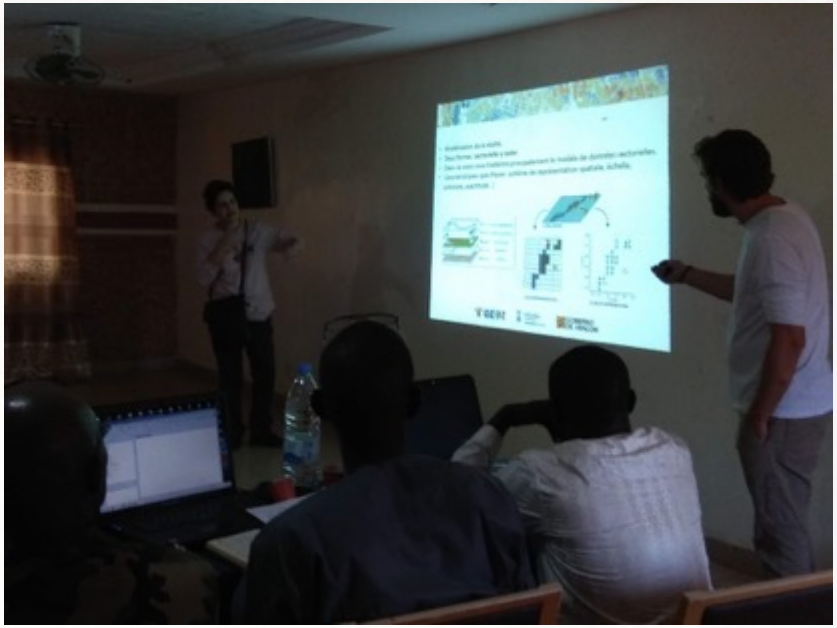
Departamento de Geografía y Ordenación del Territorio
Universidad Zaragoza

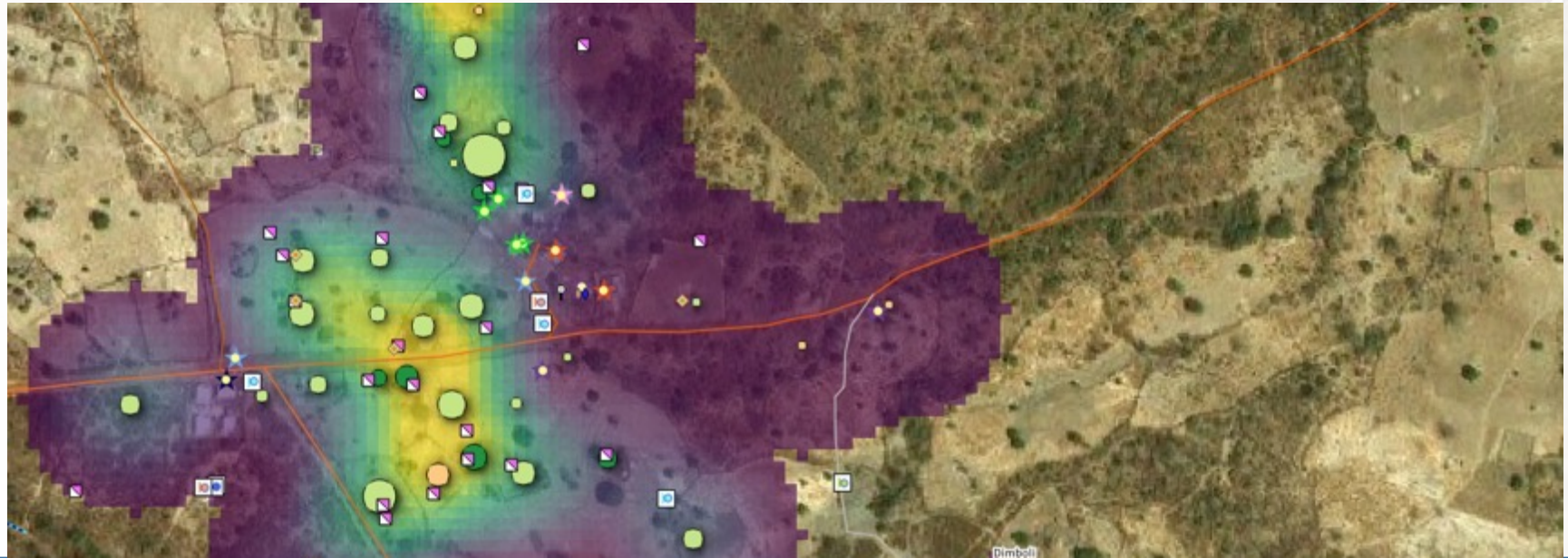
2015 – Mauritania - Gorgol



2017 – Senegal - Kaolack

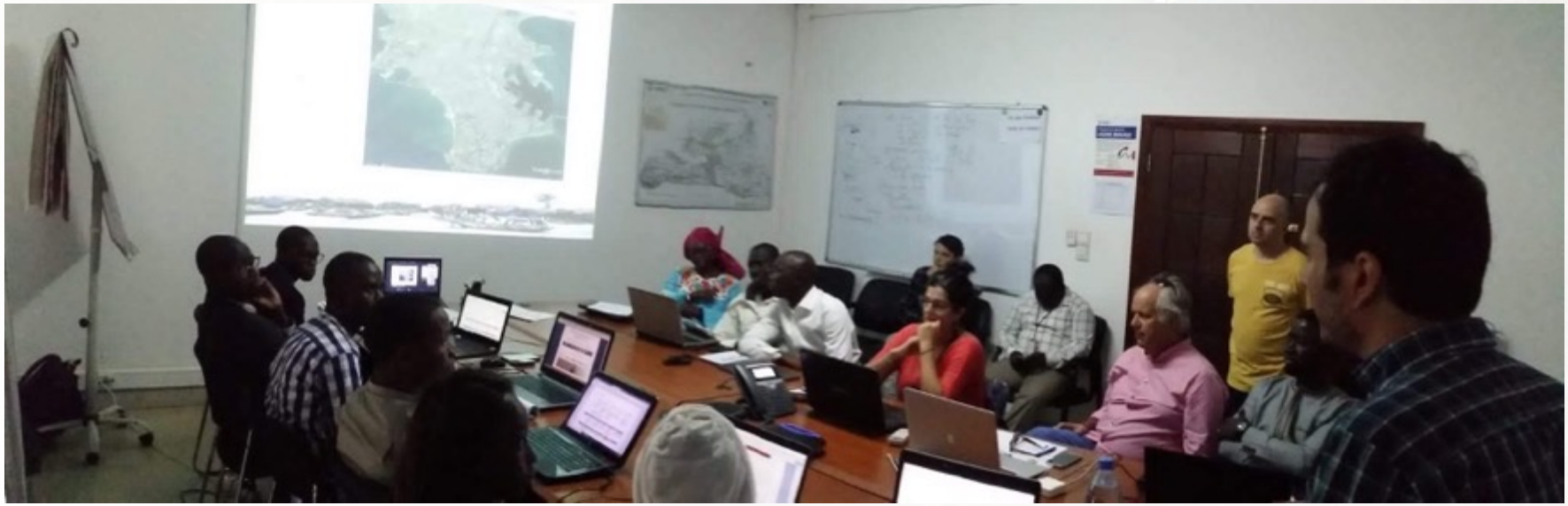
2018 – Senegal - Kédougou





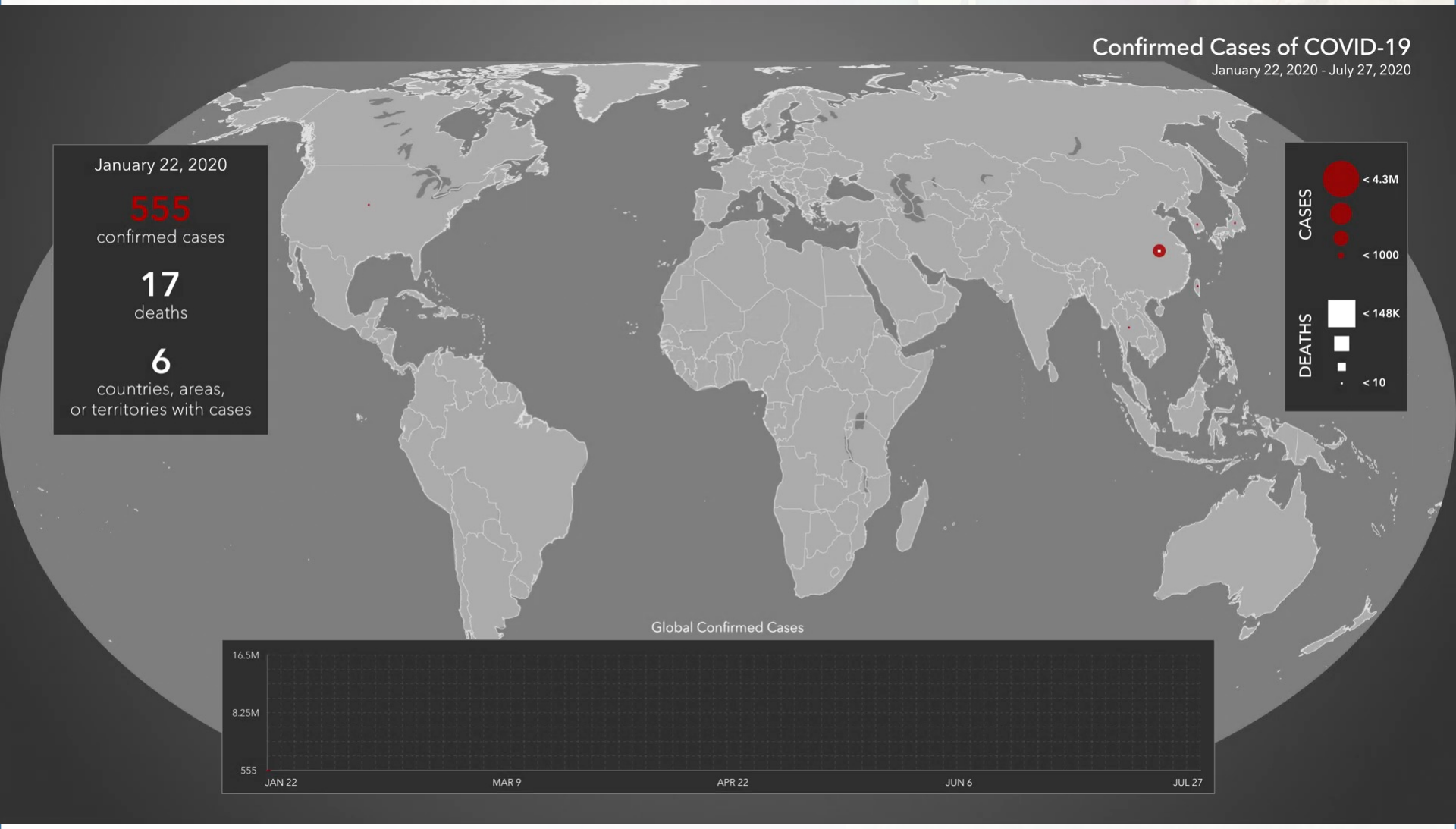
2019 – Mauritania – Trarza

2019 – Senegal – Dakar (hybrid trainning – diferents locations)



2020 – pandemic of COVID 19

New paradigm



2020 – pandemic of COVID 19

- **New methodologies**
- **New tools**

- **Same approach**

„ The interest is to offer tools and ways of working to be able to respond with adequate planning to the local population, and to the development of administrations and the cooperation of NGOs. The aim is to ***train university students, researchers, local technicians in free format tools for data analysis, validation of results, management of thematic cartographies and preparation of reports****.*
As in the previous projects, ***governance processes, collaboration, citizen empowerment, the promotion of women, as well as the training of technicians and aid workers****, will be promoted. All aspects related to access to food, water and sanitation services will be selected as a work topic with the aim of reducing poverty and inequality, and improving social and health conditions“*

2020 – Online course on tools and applications with Geographic Information Systems and thematic cartography for governance and territorial management within the framework of the Sustainable Development Goals

Goals:

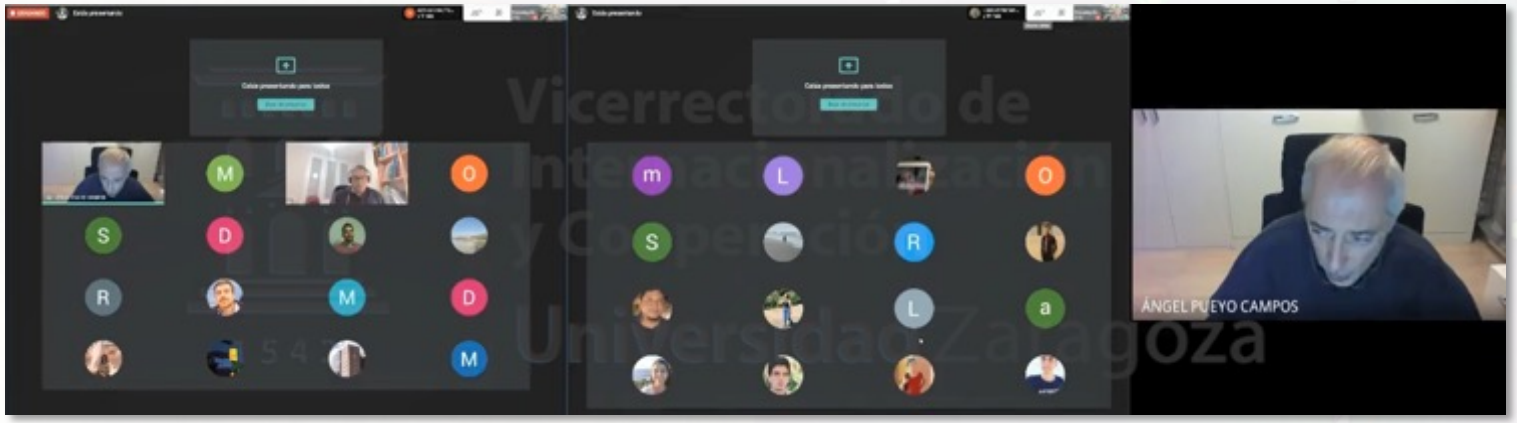
- Offer GIS and thematic mapping tools to promote the development and innovative **knowledge of local development skills for urban and regional planning technicians**, as well as NGOs participating in projects of local development (SDG 4, 5, 8, 9, 17).
- **Propose solutions** for the problems of health, accessibility, water supply, energy, sustainability, protection of ecosystems, etc. (SDG 3, 6, 7, 12, 13, 14, 15).
- Promote virtual mobility pedagogies to carry out local development projects and territorial management with geospatial tools that enhance geo/co-governance, solidarity, equality and social justice (SDG 1, 2, 10, 11).

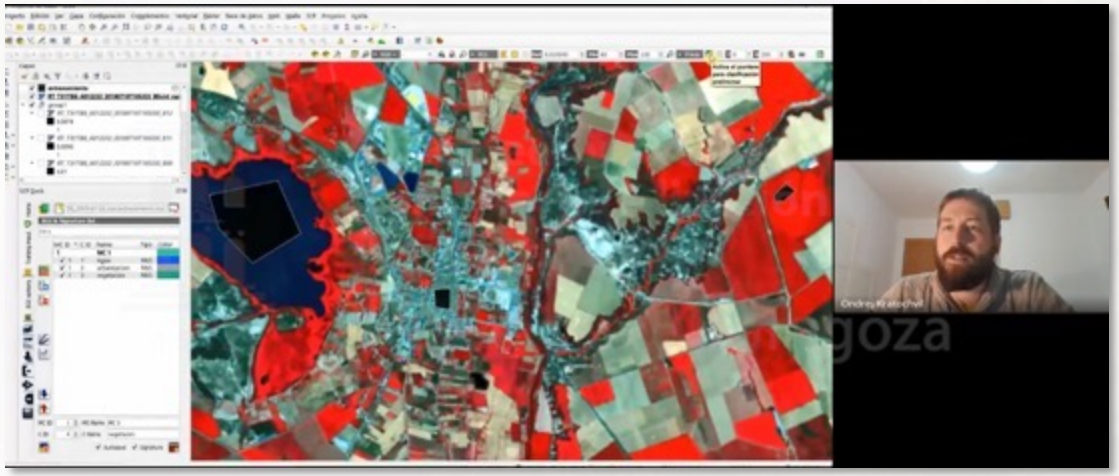
2020 – Online course on tools and applications with Geographic Information Systems and thematic cartography for governance and territorial management within the framework of the Sustainable Development Goals

- The course was conducted online through the UNIZAR-Google Meet platform and had **182 participants from 17 countries** (Argentina, Bolivia, Brazil, Cape Verde, Colombia, Chile, Costa Rica, Cuba, El Salvador, Spain, Morocco, Mali, Mauritania , Nicaragua, Senegal, Sahara, Venezuela)
- **Nearly half of those enrolled (46%) were women.**
- The participants were university students, technicians from NGOs dedicated to cooperation, university professors or researchers (Universidad Libre de Colombia, Universidad Nacional de Cuyo, Universidad Nacional Autónoma de Nicaragua, Universidad Centroamericana José Simeón Cañas).

2020 – Online course on tools and applications with Geographic Information Systems and thematic cartography for governance and territorial management within the framework of the Sustainable Development Goals

- The training was delivered in **16 two-hour sessions** including presentations of real cases, the potential of GIS and knowledge on thematic cartography.





2020 – Online course on tools and applications with Geographic Information Systems and thematic cartography for governance and territorial management within the framework of the Sustainable Development Goals

- The agenda focused on GIS theory, data management and creation tools, vector or raster geo-processes, field data collection and cartographic, online or 3D representation.
- The course worked with spatial data corresponding to the places of delivery (Colombia, Senegal, Nicaragia, El Salvador)

2020 – Online course on tools and applications with Geographic Information Systems and thematic cartography for governance and territorial management within the framework of the Sustainable Development Goals

- Classes were followed in online stream by **up to 100 people per session**.
- **More than 130 people have obtained a virtual mobility certificate** of attendance to the course (30h) or of active participation in the course by submitting tasks (60h)

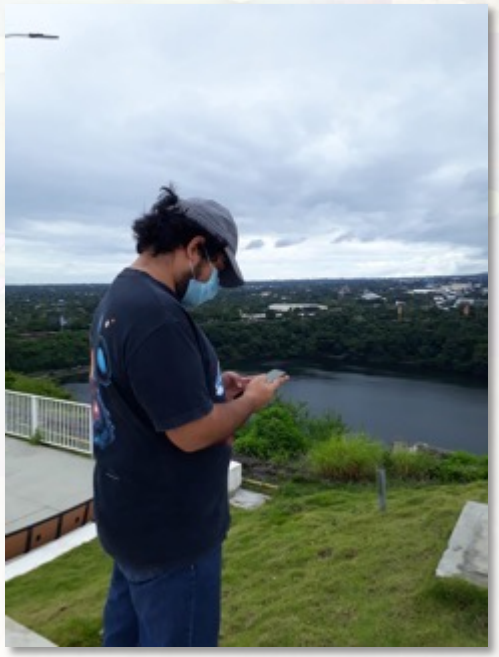
Certificado de superación

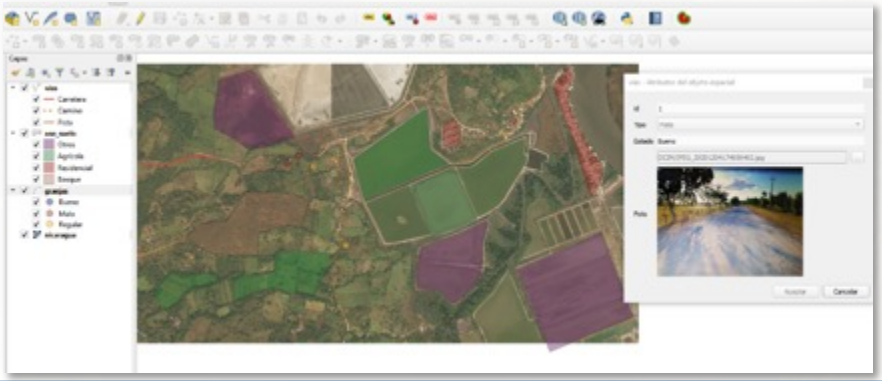
Ondrej Kratochvíl

ha completado con éxito el siguiente curso de 60 horas
3 – 30 de noviembre 2020

FORMACIÓN ON-LINE CON SISTEMAS DE INFORMACIÓN GEOGRÁFICA Y CARTOGRAFÍA TEMÁTICA PARA LA GESTIÓN TERRITORIAL Y EL CUMPLIMIENTO DE LOS OBJETIVOS DE DESARROLLO SOSTENIBLE

GEOT · Vicerrectorado de Internacionalización y Cooperación Universidad Zaragoza · GOBIERNO DE ARAGÓN





2020 – Online course on tools and applications with Geographic Information Systems and thematic cartography for governance and territorial management within the framework of the Sustainable Development Goals

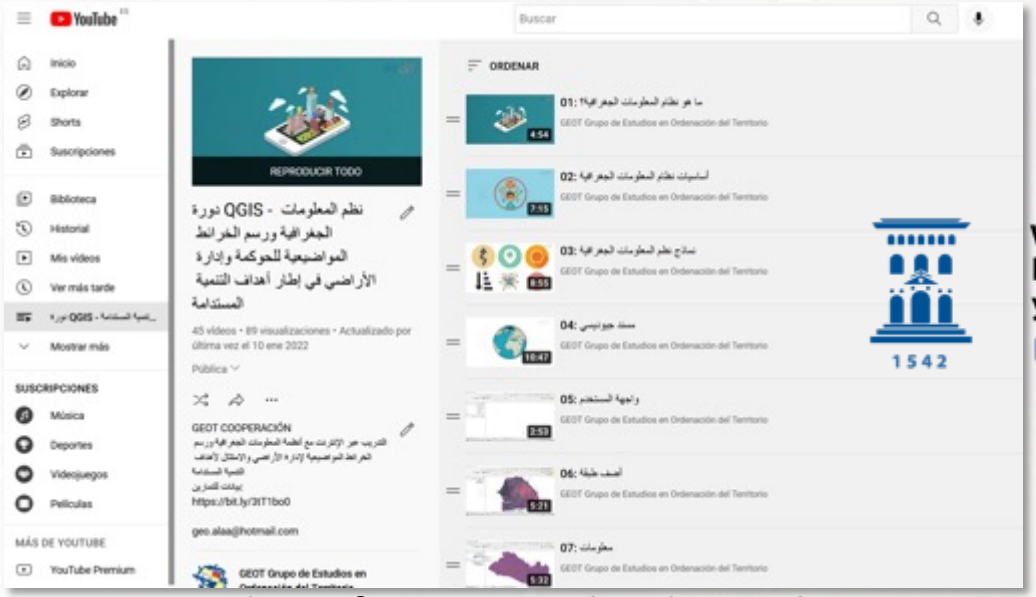
The students were provided with almost **seven hours of videos** that explain step by step all the tools mentioned in the course.

It is important to note that the videos are **available on YouTube** and on the website of UNIZAR Internationalization Office and Cooperation **in five linguistic modalities:**

https://internacional.unizar.es/

https://youtube.com/playlist?list=PLmZRXHhlSxLywA75y1Zsj7EZIBS6CpPP4

- **Spanish**
- **Portuguese**
- **French**
- **Arab**
- **English**



Vicerrectorado de Internacionalización y Cooperación

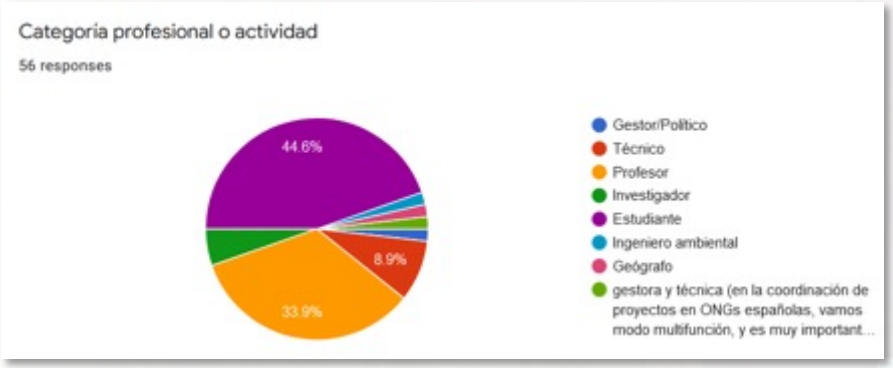
Universidad Zaragoza

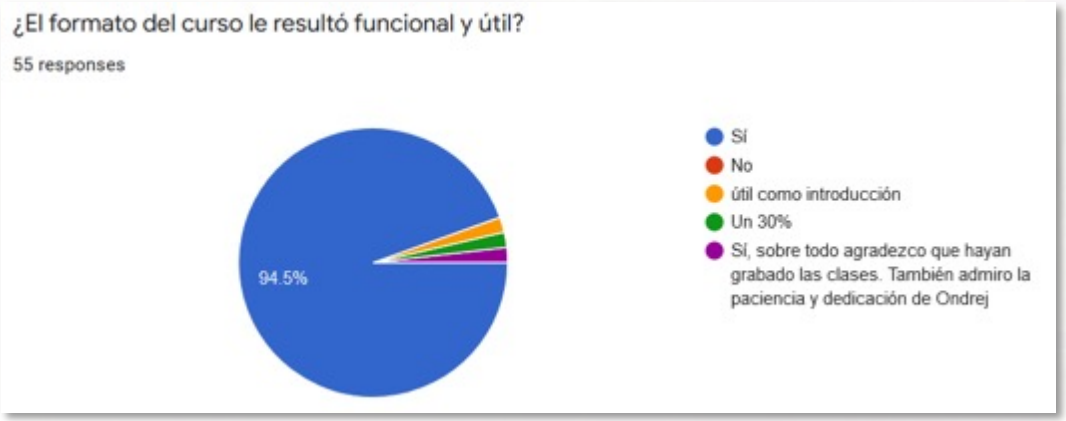
1542

Each of these modalities presents the software visualized **in its language** and has explanations narrated by **native speakers**.

2020 – Online course on tools and applications with Geographic Information Systems and thematic cartography for governance and territorial management within the framework of the Sustainable Development Goals

- An evaluation survey has been launched for users

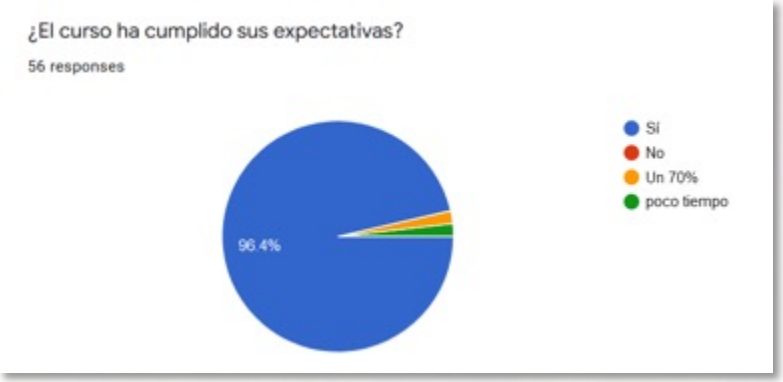


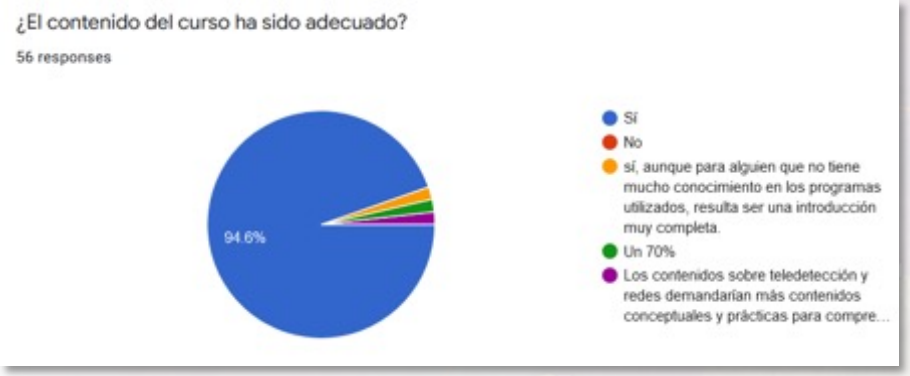


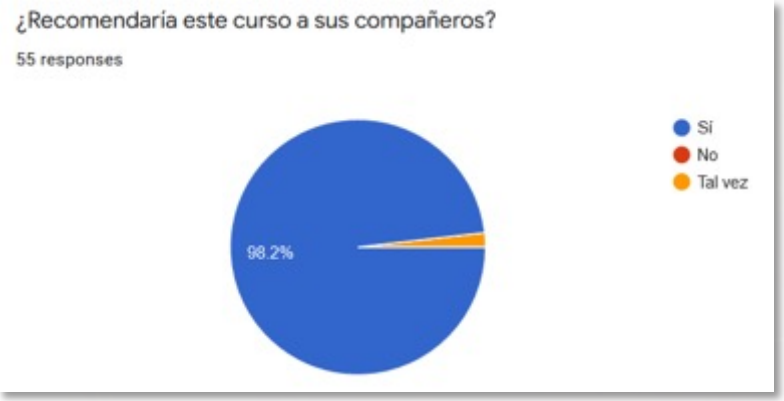
2020 – Online course on tools and applications with Geographic Information Systems and thematic cartography for governance and territorial management within the framework of the Sustainable Development Goals

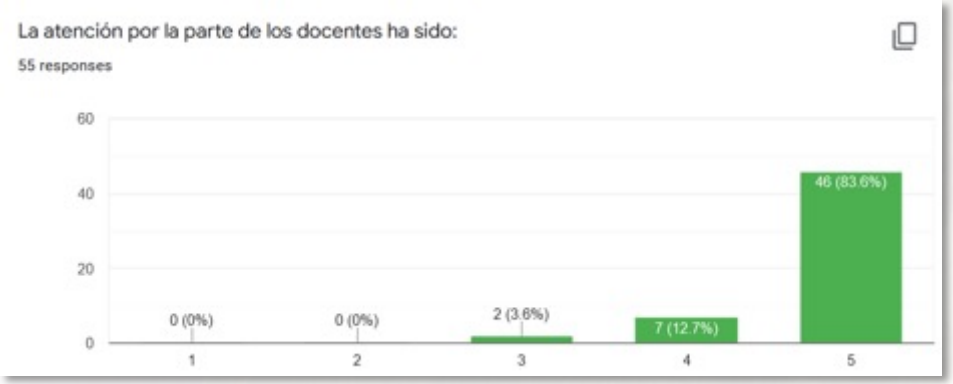
We can highlight

- **for 96% of the participants the course met their expectations and**
- **98% would recommend this training to their colleagues**







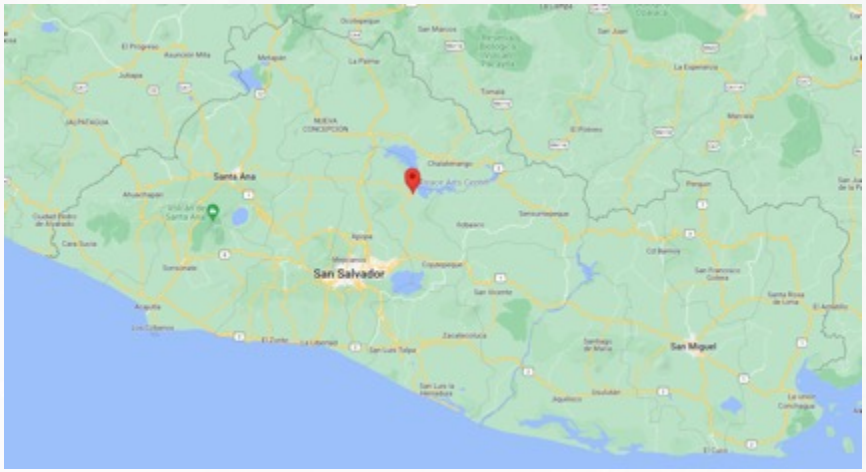


2021 – Local Water Information System for drought risk reduction and water governance with a basin approach, in Suchitoto, El Salvador

Cooperation project with the NGO Cerai and dDialoga for the **analysis of water resources** in the Salvadoran municipality of Suchitoto (the counterpart - Cordes Association)

Online training of local technicians in data collection in the field – 10 hours

Online training in GIS for the exploitation and use of field data - 15 hours



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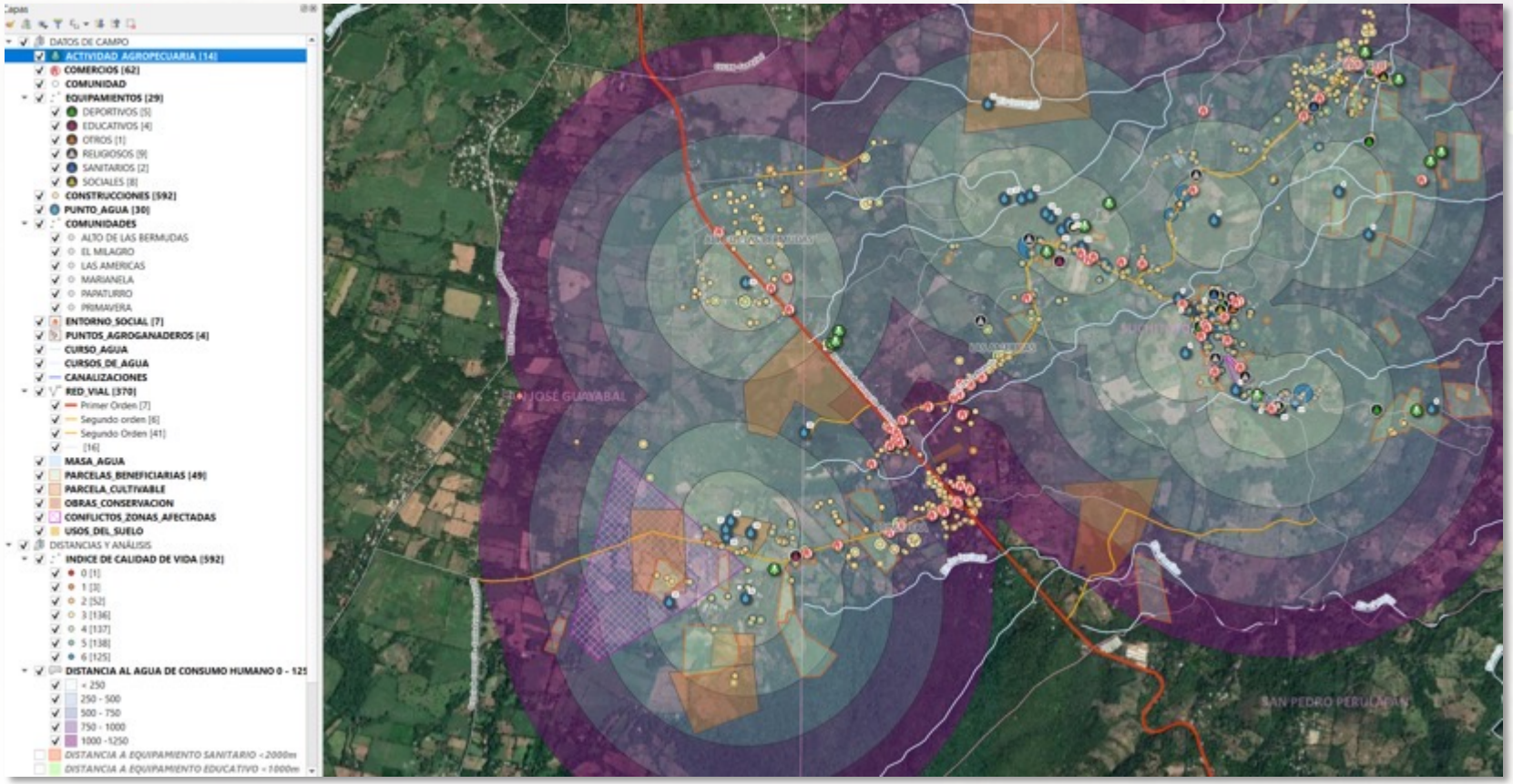
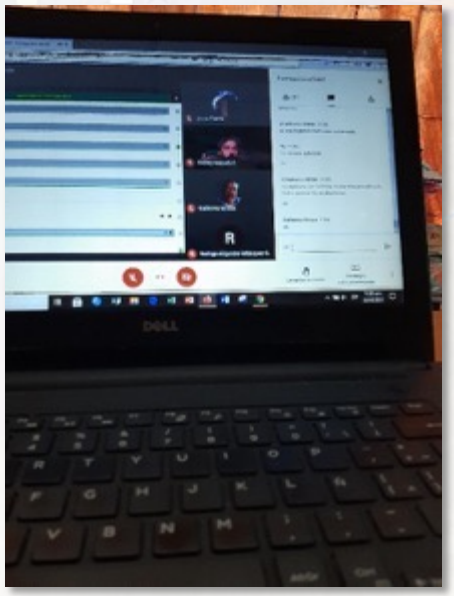


2021 – Sustainable management project of the water cycle in rural communities of El Salvador through the use of photovoltaic energy

- The previous project has been so successful that the adjacent municipality chose to take advantage of the methodology for its cooperation project with the NGO Tierra Sin Males focused on analysis of the territory from the point of view of the distribution of **drinking water** in the Salvadoran municipality of Jutiapa
- Online training of local technicians in data collection in the field – 5 hours
- Online training in GIS for the exploitation and use of field data - 10 hours



GEOT-SIS

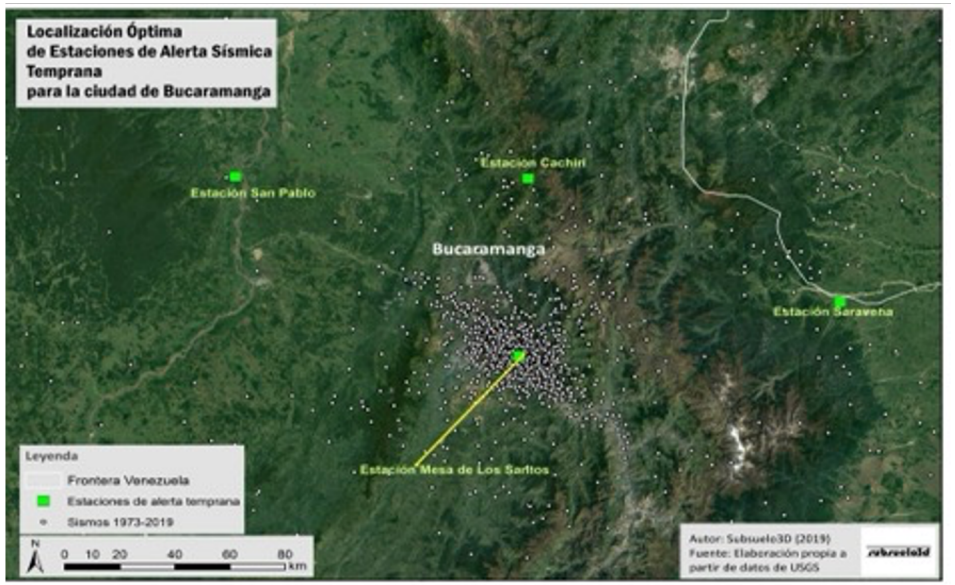
DEVELOPMENT OF A SEISMIC EARLY WARNING SYSTEM EARTHQUAKE RISKS AND HAZARDS IN COLUMBIA 2022 – HYBRID MOBILITY

GEOT-SIS

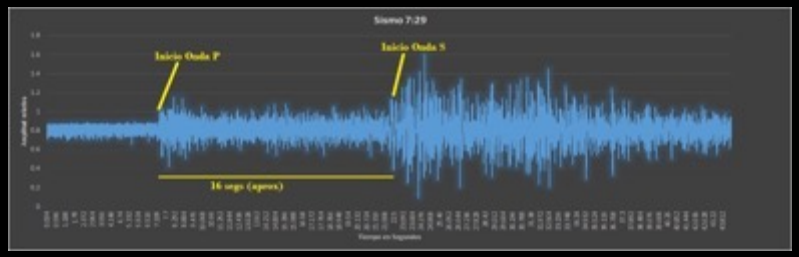
GOALS

- Provide to Bucaramanga and other Columbian cities of Seismic Early warning System to prevent earthquakes risks and hazards.

- Training to students as future technicians and urban city managers, but also to current City Council officers.



INTERNATIONAL MOBILITY UNIZAR-ULCO
FOR SETTING UP TECHNICAL SENSORS



Sesiones	Especialidad	Tipo	Nº de asistentes (Aprox)
U. Distrital 1	CCSS y futuros docentes	Virtual	21
U. Distrital 2	CCSS y futuros docentes	Virtual	20
U. Distrital 3	Egresados, docentes y geógrafos	Virtual	12
U. Externado	Geógrafos y estudiantes de magisterio	Virtual	15
Charla profesores rurales	Docentes rurales	Virtual	15
Unilibre Bogotá	Diferentes grados de ingeniería	Presencial con streaming	30 presenciales + 205 online
Unilibre Socorro	Diferentes grados ingeniería	Presencial con streaming	20 presenciales + 152 online
Conferencia Colegios Santander	Docentes y alumnos de secundaria + Otras instituciones públicas municipales	Virtual	100
Colegio Integración Moderna	Estudiantes de secundaria	Presencial con streaming	80 presencial + 52 online
Colegio Unilibre 1	Estudiantes de secundaria	Virtual	25
Colegio Unilibre 2	Estudiantes de secundaria	Virtual	23
Seminario Unilibre	Diferentes grados de ingeniería	Virtual	85
TOTAL: 12 charlas	-	-	**855 personas (aprox.)**

VIRTUAL MOBILITY

+

PHYSICAL MOBILITY

=

HYBRID MOBILITY

GRABANDO
Juan Mar está presentando
Proyecto de instalación de un sistema de alerta sísmica temprana y prevención de riesgos naturales y sísmicos desde un enfoque educativo
GEOT-SIS
Proyecto GEOT-SIS
Grupos de Investigación GEOT-DS y ARGOS del IUCA
Cooperación Universitaria al Desarrollo 2021. Universidad de Zaragoza
Ponente: Juan Mar Beguería. E-mail de contacto: 651341@unizar.es
Investigadores Principales: María Sebastián López y Carlos López Escolano
Universidad Zaragoza
GOBIERNO DE ARAGON
subvelo3d
Universidad Lleida
mup-rzmo-duz

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AI QUAD CAMERA

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Thanks so much

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