



## WHO ARE WE?

The SEEARTH Consulting Group, experts in geographic information systems and geotechnologies, is made up of professionals with vast experience in various fields of Geographical Sciences, Geotechnologies, Social and Human Sciences, as well as Environmental Sciences, and Engineering, which have the capacity to generate, implement and optimize projects, consultancy and consultancy as support to various fields supporting the growth of the country.

74+ Projects Excuted 13+ Years Serving

our Contry

20K+ Hectares

Flown

**10+** Projects Approved by IGM



Address. Av. Gaspar de Villarroel y Av. 6 de Diciembre, Edificio Plaza 6, Oficina 48 Cel. 099 981 2120 Tel. 023 360 198 Email. xavier.mejia@seearth.com Quito - Ecuador

#### FIRST CADASTRE WITH DRONES APPROVED BY THE IGM

In April 2016, Seearth Consulting, was the first consultant to raise and approve by the IGM, a cadastre made with DRONES.

#### INTERNATIONAL EXPERIENCE

Seearth, has international experience in work and training in Drones for aerial topography in **USA, Brasil, Colombia**, **Perú, Guyana**.



Our company since 2006, is in the capacity to provide effective solutions to various users, such as: central governments, provincial and GADs, international cooperation organizations, local communities and private companies. Our fields of action are broad and range from location, inventory, data collection from satellite, aerial or terrestrial platforms, infrastructure planning, territorial planning to cadastres, inventories, integrated studies of natural resource management, and planning for conservation and other themes.

#### Flexibility

We consider that each client or project has specific needs, which is why we have a technical team with several years of experience in various applications, which guarantees that the focus of our products is adjusted to the particular conditions of each project.

#### Innovation

There is hardly an application that lacks a spatial dimension, and that is why any process or problem can be analyzed spatially. Our goal is precisely to allow our customers to make use of innovative solutions that increase productivity, reduce risk, and increase effectiveness in different areas of planning and engineering.





### LINES OF ACTION SERVICES & PRODUCTS



Geomatics, GPS and specialized cartography



Urban, rural and infrastructure cadastres



Environmental-social-humanistic studies



Territorial planning - PDOT



Web Mapping, GIS in the Cloud and Geoportals



**Communication and education** 



Sale and distribution

### GEOMATICS, GPS AND SPECIALIZED CARTOGRAPHY



One of the most common needs today is to be able to locate spatially where the natural and non-natural elements are located, which in the geographical space we can locate or inventory (e.g., land use and vegetation cover, infrastructure in general: bridges, roads, buildings, restaurants, supermarkets, businesses in general, oil pipelines, fiber optic cabling, electrical transmission towers, etc.). SEEARTH, under this theme, is able to generate high resolution aerial photography using drones and manned aircraft. In addition to the use of Global Positioning Systems (GPS) for the accurate obtaining of the location of the terrestrial elements.

- Design in implementation of Geographic Information Systems – GIS
- Survey and systematization of geoinformation (establishment of points and milestones of GNSS control (geodetic networks), georeferenced inventories, digitization, geodatabases in general.
- Processing and analysis of satellite and airborne images (orthophotos, supervised interpretation, validation in the field).
- Generation of base and thematic cartography (updating of all types of cartography, conflict analysis, participatory mapping, ebusiness mapping, etc.).
- Spatial models.
- IDE spatial data infrastructure.
- Geoportals Opensourse.



### URBAN, RURAL AND INFRASTRUCTURE CADASTRES

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Within the area of cadastres we have two lines of action that are:

**Urban and rural cadastres**. - Where the objective is to provide an integral service to the Decentralized Autonomous Governments (GAD), guaranteeing the updating of their cadastres. Our work is based on the taking of aerial photography with our modern photogrammetric equipment, UAV UX5 Trimble, the property sweep and the valuation of the land and buildings, likewise we offer the computer system \*, providing an integral solution to the municipal needs, in an attached to the COOTAD, the regulations of the Miduvi, permits and approval of the cartography of the IGM, DAC, etc.

**Cadastres of networks and infrastructure**. - Directed to companies dedicated to the provision of public services (telecommunications, electricity, drinking water, energy, fiber optics, oils) that have developed their infrastructure without adequate planning on the territory or require spatial updating of their databases.

SEEARTH implements cadastral and monitoring systems for companies providing public services that have the need to: manage and georeference the existing infrastructure, and plan the location of new investments according to demographic, socioeconomic, and environmental projections; all in order to optimize their current investments and make future increases in their service network more profitable.

#### **Products**

ANTONIO MORA

- Aerial photography with our modern photogrammetric equipment, UAV UX5 HP Trimble from 2 to 15 GSD, scales 1: 500, 1: 1000, 1: 2000, and 1: 4000.
- Geodetic Milestones +/- 2mm ppm, error.
- Generation of Base Cartography.
- Generation of Cadastral Cartography.
- Georeferenced and integrated multi-thematic surveys.
- Cadastre and geo-referenced inventories of water networks (AALL, AASS, AAPP)
- Cadastre of electrical voltage networks, optical fiber, data transmission cable (cable TV, internet, communication infrastructure)



### ENVIRONMENTAL-SOCIAL-HUMANISTIC STUDIES



The study of spatio-temporal relationships between society and the environment seeks to analyze the framework for the management of development policies. SEEARTH understands the need to apply technological and participatory tools in the investigation of socio-environmental dynamics, in order to generate crucial information for decisionmaking among the different levels of actors. Thus, we have formed a multidisciplinary and comprehensive team to perform in the fields of: analysis of change in land use and plant cover, analysis of natural risks, environmental impact assessment and environmental remediation, analysis of environmental services, resource management natural resources and planning and management of conservation projects.

- Cartographic analysis of changes in use and vegetation cover.
- Studies and analysis of multi temporal series of plant cover and land use.
- Monitoring of natural resources management using satellite images.
- Analysis of natural risks (floods, landslides).
- Environmental impact assessment and environmental remediation.
- Environmental Audits
- Diagnosis, design and management of sustainable development projects.
- Analysis and evaluation of environmental services (water, biodiversity).
- Management plans for conservation areas and sustainable use.
- Plans of management of natural resources.
- Conservation projects
- Heritage studies, documentaries, museological.
- Monitoring studies by mining, oil, electrical intervention and infrastructure in general.



# TERRITORIAL PLANNING PDOT



SEEARTH, considers important the generation of management plans for urban development, plans in the provision of services in different topics such as: health, education, infrastructure, etc. In addition, we believe it is important that adequate planning is important for the management and conservation of natural resources, but it is also important to evaluate possible environmental conflicts that may be generated by poor planning and / or ignorance of the legal status.

#### **Products**

- Management plans (urban development).
- Plans for the provision of services (landfills, health, education, infrastructure location, junk routes).
- Planning for the management and conservation of natural resources.
- Evaluation of environmental conflicts.



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Undoubtedly, the activity in vogue during the last times. SEEARTH, understands how to socialize geography; the elements of human understanding must be displayed on the internet, through a computer, iPad, or cell phone... that is, geolocation for the common citizen and also for the specialized, supporting large government projects to expand their information to their beneficiaries.

- Inventory and Update (infrastructure, ecology, tourism, data models)
- Customization of information management systems (SIGWEB portals, management of relational databases)
- Web publication of geographic information systems
- Geoportals, web mapping (built with several open source or licensed platforms)



crecimiento, así como la detección precoz de plagas para su tratamiento, cantidar de biomasa y zonas de limpia para evitar incendios forestales o captura de Cathono

# COMMUNICATION AND EDUCATION

**WIFT** 



One of the issues for which SEEARTH is most concerned and committed to a better knowledge and communication is education and training. Thus, the generation of new information and the strengthening of it in different branches is vital for a better development of the population in general. Our programs range from environmental education, awareness, training to basic and advanced levels related to the generation, use, management and interpretation of spatial information. This training includes courses in geographic information systems (GIS), remote sensing, global positioning, spatial modeling, topography, GPS, VANTS - UAV - DRONES management, among others.

- From environmental education, awareness
- Training in participatory mapping techniques
- Training in the management of geomatic software (ArcGIS, open source, cloud GIS, GIS for programmers, several and various platforms)
- Institutional strengthening
- Handling of fixed-wing and multi-engine VANTS-DRONES.
- Training course for aerial photography processing and generation of DSM, DTM and orthophotomosaics.
- Training courses for spatial models applied to different topics



# SALE AND DISTRIBUTION



SEEARTH's experience in the use and management of different equipment and supplies for our work have shown why choosing well is of utmost importance prior to investing with closed eyes. The adequate knowledge allows us to suggest and justify the purchase and acquisition of equipment in geotechnologies and technological inputs such as: satellite images, aerial photography, software and additional software extensions, GPS equipment, PAD devices, VANTS -UAV - Fixed Wing Drones and multirotor, among others.

- DRONES
- GPS / GNSS equipment
- Procurement advice (equipment, software, information)
- Medium and high resolution satellite images
- Equipment specialized in geotechnologies (gps, topography, security, tracking)
- Geo-computer software (licenses)







### CONTÁCTANOS

#### **OFICINA CENTRAL**

**Dir.** Av. Gaspar de Villarroel y Av. 6 de Diciembre, Edificio Plaza 6, Oficina 48.

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