

“Database Radionuclides Levels in Typical Latin American Foods”

ARCAL CXXIX – PROJECT RLA9/072

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Summary

- Introduction
- Objectives
- Methodology
- Results



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Introduction

There are several projects and research in the area of radionuclides in food.

Problems encountered:

- Large amount of information;
- Dispersed information;
- Disorganized information;
- Not always in a digital format;
- Is not accessible to everyone.



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Introduction



Need to standardize, store and make available information of radionuclides in food in a database for Latin America.



How to make the project viable?



Cooperation agreement



Project ARCAL RLA0972



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Introduction

Project **ARCAL RLA 07/92**

Regional Cooperation Agreement for the Promotion of Nuclear Science and Technology in Latin America and the Caribbean;

Funded: International Atomic Energy Agency - IAEA;

11 participating Countries: Brazil, Argentina, Costa Rica, Chile, Cuba, Ecuador, Mexico, Paraguay, Peru, Uruguay and Venezuela.

Period: January /2012 - July /2014

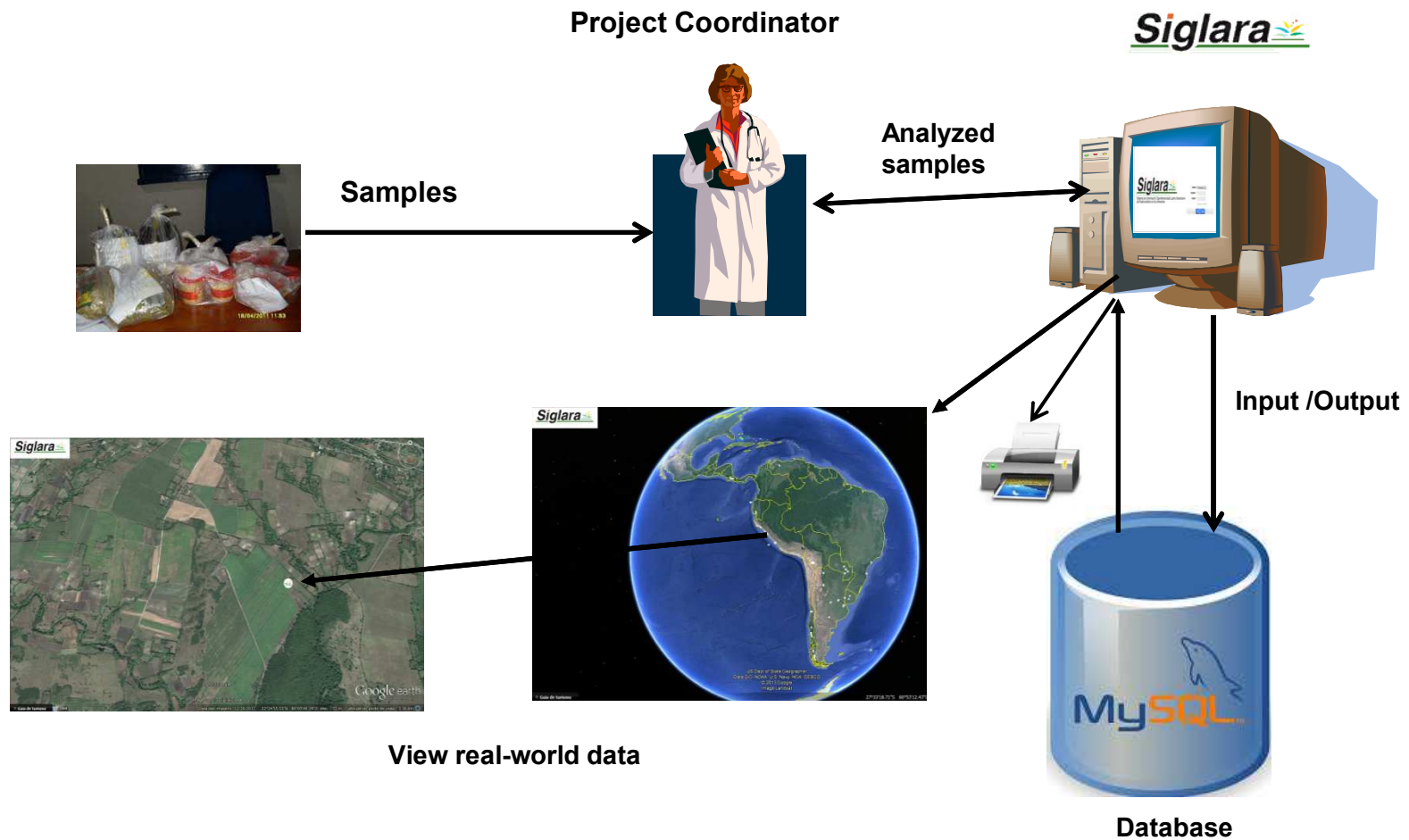
Chosen by the workgroup name to System: **SIGLARA**



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Methodology



Main Objective

Develop a database of geo-referenced data for incorporation of data in the information values of radionuclides in typical Latin American food system.

System developed in three languages (Portuguese / Spanish / English).



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Specific Objectives

- Typical food produced in each of the participating countries;
- Inventory of important radionuclides to be determined in foods identified;
- Standardize and store all available information on the values of the radionuclides analyzed in laboratories registered by the participating countries food;
- Modeling of the database;
- Geo-reference system and development;
- Information available to the scientific and public in general.



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Methodology

- 1- Planning (during meetings);
- 2- Survey of the different compartments for system development;
- 3 - Development System;
- 4 - Training the staff;
- 5- Insert the data.



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Development System

- The Operating System : Linux
- Database: MySQL
- The development tool: Scriptcase
- View maps: Google Earth
- Defining the layout of the screens of the system was developed by the group
- The system is hosted IRD on page:

<http://siglara.ird.gov.br>



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Results

- The System SIGLARA
 - Home screen;
 - Auxiliary tables;
 - Consultation;
 - Data of Sample;
 - System maintenance.



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Results : 1° SCREEN SYSTEM



Siglara

Sistema de Información Georeferenciado Latino Americano
de Radionúclidos en los Alimentos

Language

User *

Password *

[Sign up](#) [Lost Password](#)



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Results: Samples

 Sistema de Información Georeferenciado
Latino Americano de Radionúclidos en los Alimentos

Auxiliary Tables ▾ Queries ▾ Update Samples Reports ▾ Maintenance ▾ Exit

Update Samples10/02/2014



Sample DataPre TreatmentAnalysisRadionuclidesCoordinatesInstitutionShip datumBibliographic References

Sample	FAO Group * <input type="text" value="Select..."/>	Type Food * <input type="text" value="Select..."/>	Food * <input type="text" value="Select..."/>	Presentation * <input type="text" value="Select..."/>
Category * <input type="text" value="Select..."/>	Country * <input type="text" value="BRASIL"/>	State Country * <input type="text" value="Select..."/>	City Name <input type="text"/>	FAO Zone (only for fish) * <input type="text" value="Select..."/>
Who Sample * <input type="text"/>	Date Sampling * <input type="text" value="mm/dd/yyyy"/>	Observation <input type="text"/>	Sample Lab Code <input type="text"/>	Status of Sample * <input type="text" value="Analysis"/>
Date Insert <input type="text" value="10/02/2014"/>	User lucia		Lab that Sample * <input type="text" value="Select..."/>	Lab that Analyzed * <input type="text" value="Select..."/>
Scientific Name <input type="text"/>				

* Required field



Results: Coordinates



Sistema de Información Georeferenciado
Latino Americano de Radionúclidos en los Alimentos

Auxiliary Tables ▾ Queries ▾ Update Samples Reports ▾ Maintenance ▾ Exit

Update Samples 10/02/2014

Sample Data Pre Treatment Analysis Radionuclides **Coordinates** Institution Ship datum Bibliographic References

Latitude (Grade) <input type="text"/>	Latitude (minutes) <input type="text"/>	Latitude (seconds) <input type="text"/>	Sample Latitude	Sample Longitude
Longitude (degree) <input type="text"/>	Longitude (minutes) <input type="text"/>	Longitude (seconds) <input type="text"/>		

* Required field



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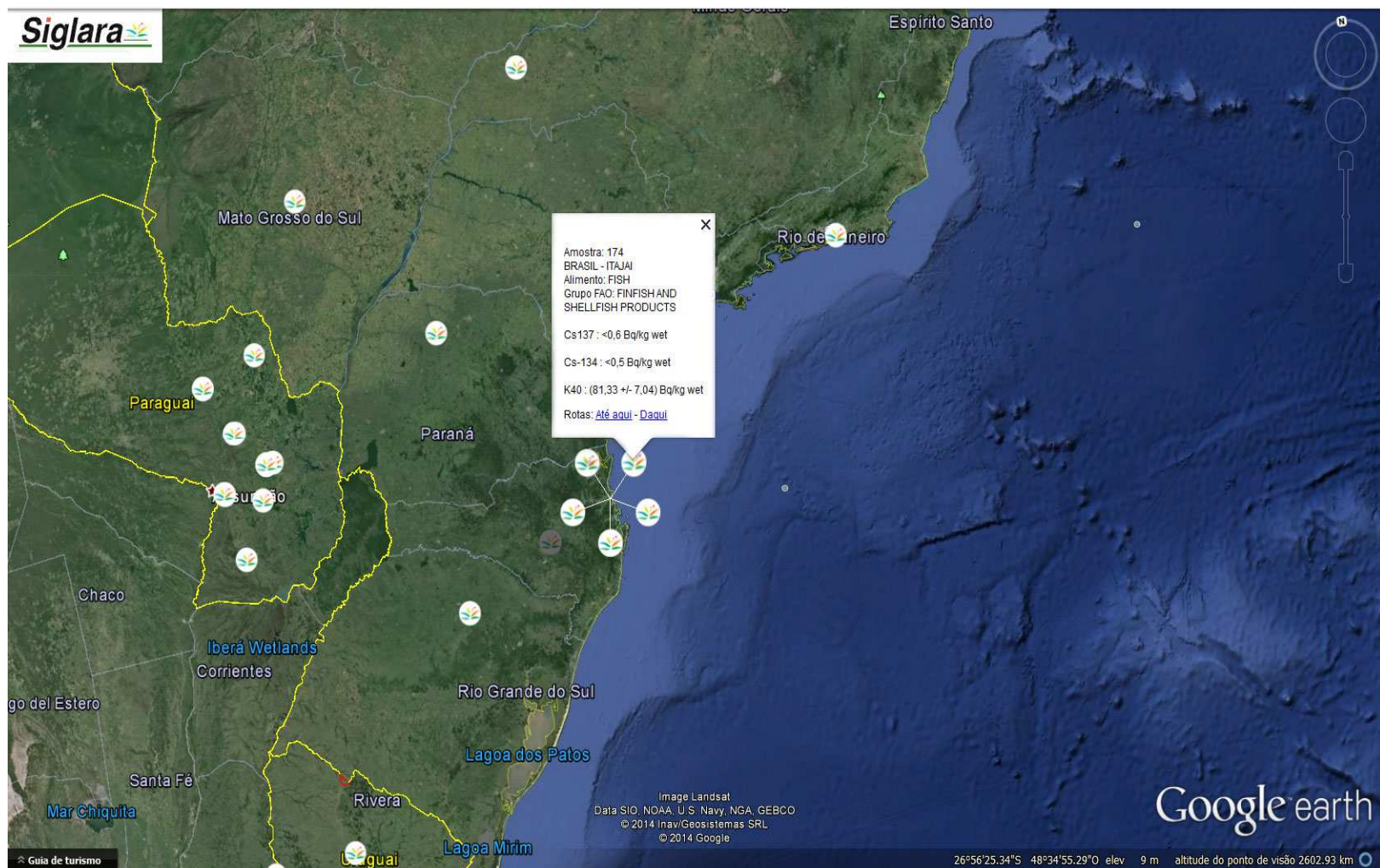
Results: View Maps



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Results: View Maps



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Conclusions

The system provides:

- Standardized data entry;
- Availability of values of radionuclides in typical Latin American food;
- Reporting and maps;
- Query of the background of the area;
- Continuous updating;
- Management of new users (different type of access);
- Anyone can have access, it allows the query in multiple languages.



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Thank you

<http://siglara.ird.gov.br>