



## The challenge of using scientific information for decision-making: Experiences of the project Global Changes and Coffee in Mesoamerica.

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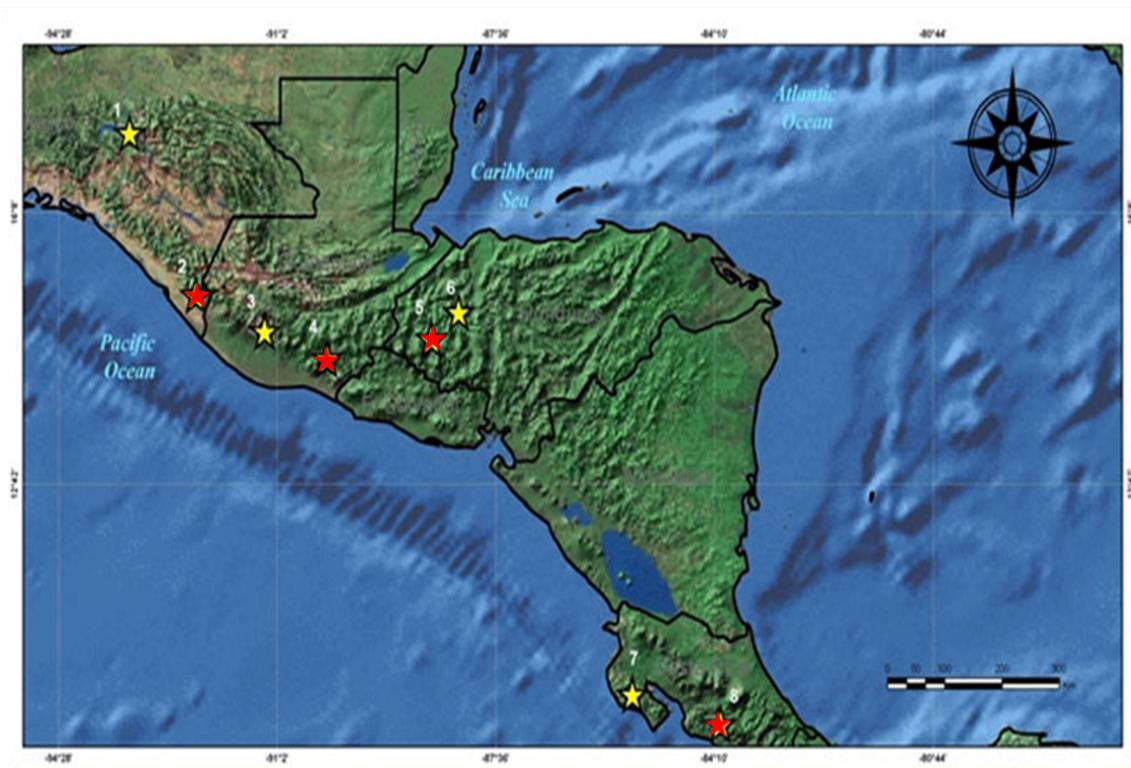




# Coffee and Global Changes (CGC)

## General objective

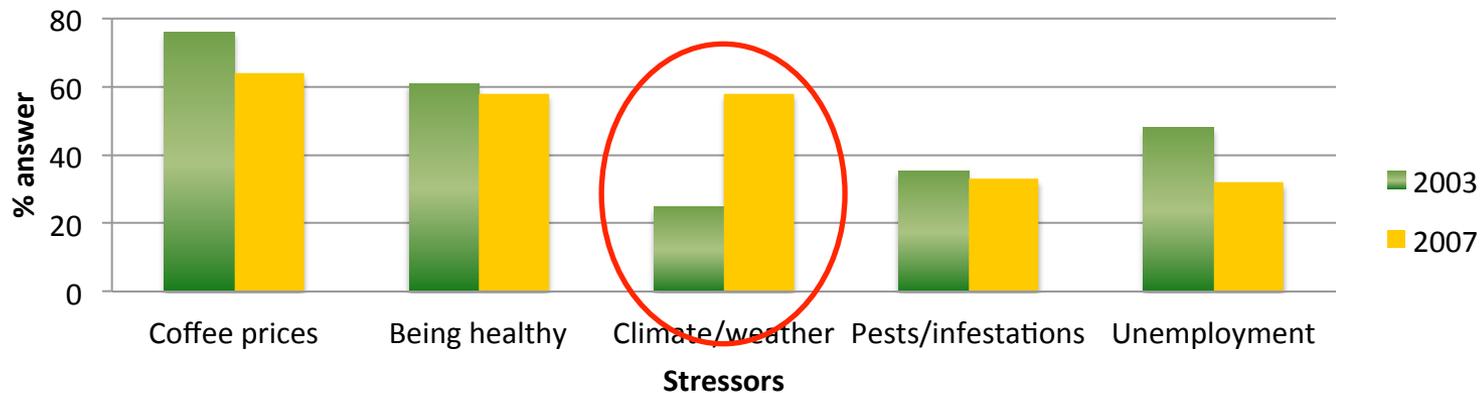
Study perceptions and limitations that define adaptation strategies of the families of small farmers to multiple pressures that come from global changes such as fluctuating prices, climate change and increased pests and diseases, in four Central American countries: Mexico, Guatemala, Honduras and Costa Rica.



- ★ Red: phase 3
- ★ Yellow: phase 2

# Some conclusions

1. All producers participating in the study perceived that the climate is changing, particularly the timing and intensity of rainfall, and this is related to the change in coffee pests and diseases.
2. The challenges facing forced to look for different adaptation strategies. Some have been effective in the short and long term, as diversification of income (for agricultural and non-agricultural activities), and other have been effective in the short term but with great consequences in society and in the family as migration and declining household spending.



*What of these stressors concern more to coffee producers?* . Comparing farmers perceptions about the global changes that affect them most, in phase 1 and 2 of the project.



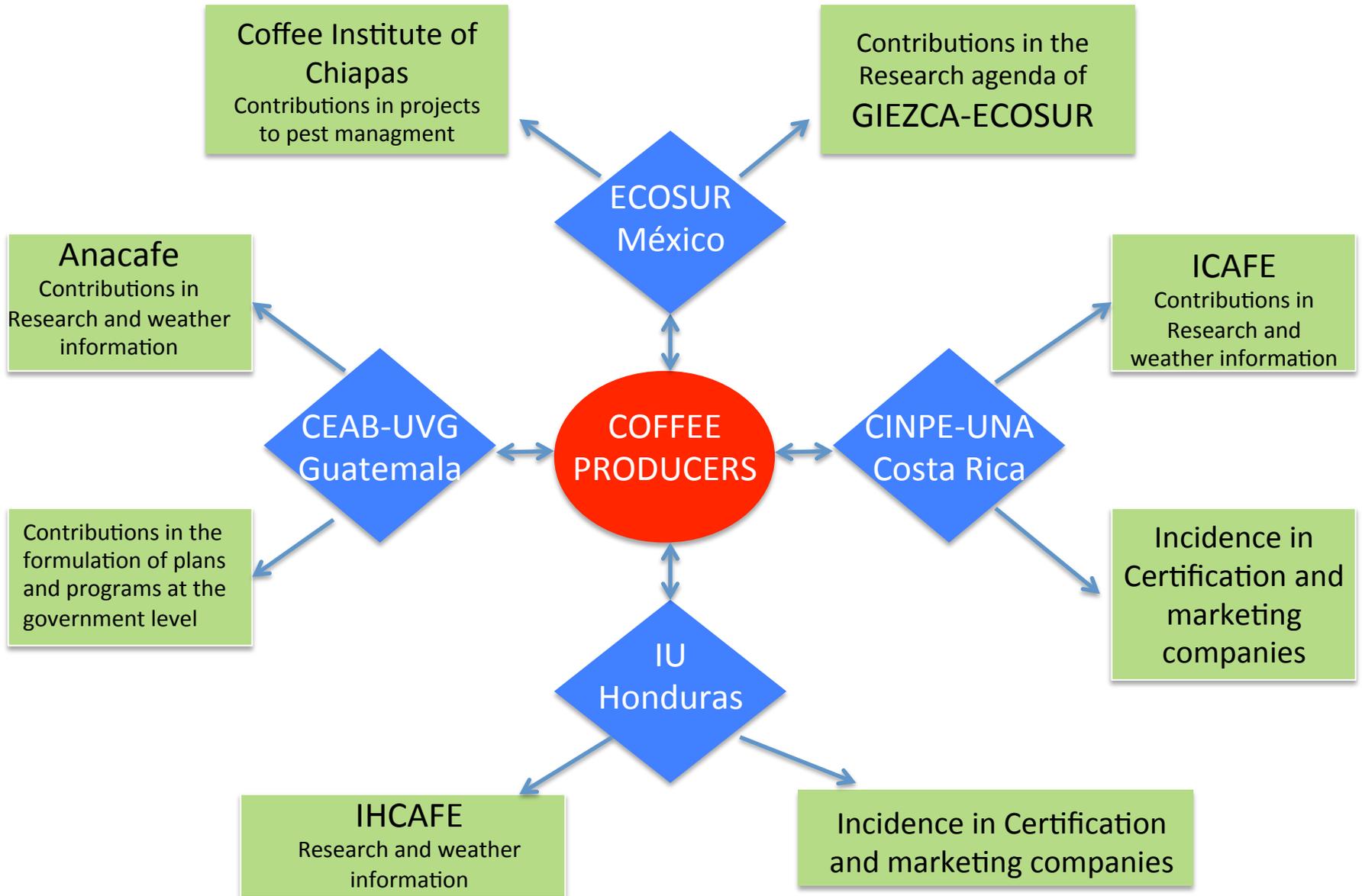
## Key messages for decision makers

1. Promote, support and accompaniment in the processes of **diversification**.
2. Creating access to **credit** and agricultural insurance.
3. Expand **technical assistance** and access to **climate information**.
4. Strengthen the capacity of **local organization**.
5. Promote **fair marketing channels**.
6. Support **organic farming**.
7. Recognition of **environmental Services**.
8. Integrate Coffee Agroforestry systems to voluntary market for **carbon credits**.



# Impact of the project

*Since local and scientific knowledge to decision makers*



# Dissemination of project results

Policy brief for decision-makers

Special reports for farmers, calendars, posters.



Mesoamérica es una región con una gran riqueza cultural y natural que se ha visto expuesta a eventos climáticos extremos cuyos impactos son acentuados por su localización y topografía.

Alunado a lo anterior, la vulnerabilidad se incrementa también por los altos niveles de pobreza y exclusión social que históricamente padecen los países de esta región.

En este escenario se encuentra la caficultura, una actividad que más allá de representar un ingreso económico para muchos hogares, es un patrimonio natural y cultural en la región. El café es uno de los productos que más aporta al Producto Interno Bruto en los países de Latinoamérica, tanto por los ingresos que representan sus exportaciones como por la generación de empleo para millones de personas que trabajan principalmente en la cosecha del grano. No obstante estos beneficios, el café vive se enfrenta constantemente a múltiples presiones internas y externas que perjudican su economía. Entre estas presiones se puede mencionar cambios que ocurren a nivel global como la fluctuación de los precios, la incidencia de plagas y enfermedades del café y el cambio climático.

En este contexto surge el proyecto "Cambios Globales y Café", con el objetivo de estudiar las estrategias de adaptación de las familias de pequeños caficultores ante estos cambios globales en Costa Rica, Guatemala, Honduras y México.

El proyecto se realizó en tres fases de estudio, desde el año 2003 hasta el 2015. En la última fase se propuso establecer si las prácticas agrícolas inventadas en la certificación del café podrían constituir un ecosistema más resiliente a los cambios globales.

En este documento se cuenta brevemente la historia de la agroindustria en estos doce años de investigación, haciendo énfasis en los resultados obtenidos en la última etapa del proyecto, que es el más reciente y útil para que los tomadores de decisiones en el sector evalúen las capacidades de adaptación de los caficultores a los cambios globales.

## Global Change and Coffee

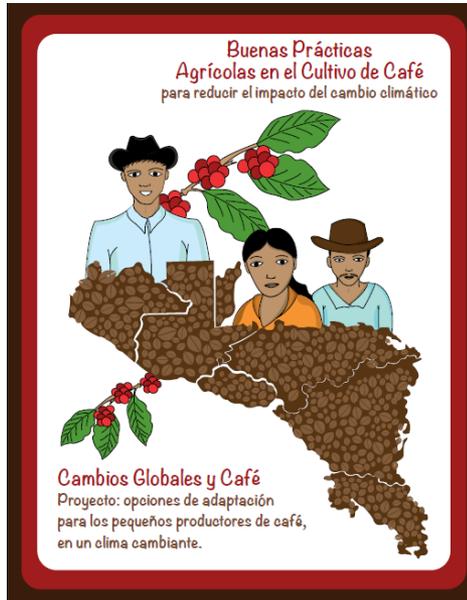
### Strategies for Effective Adaptation and Risk Reduction

In the face of price volatility, climate change, pests and disease  
*Lessons from the Coffee Crisis in Mesoamerica*

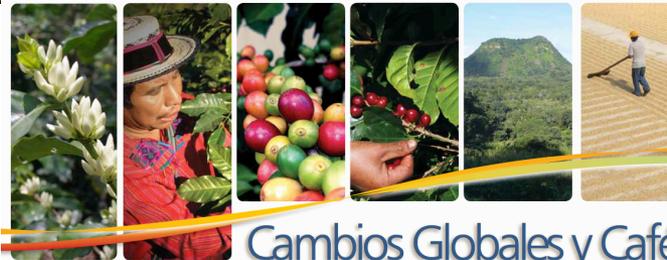
Today coffee producers in Mesoamerica face stresses from global change that directly affect the sustainability of their production and livelihoods. Among the primary challenges they face are the fluctuation of coffee prices (the most notorious example being the crisis of low prices at the beginning of this century), changes in climate and the incidence of pests and diseases.

In the face of such variability farmers have taken actions to sustain their production and improve their household economics. Farmers have undertaken these actions as part of a process of livelihood adaptation for both the short and long terms.

The objective of this project was to study these adaptive responses, with two ends in mind. The first one is, to support the autonomous adaptations of the coffee farmers, thus empowering their efforts. Secondly, to disseminate the experience of the farmers who participated in the project in order to enhance rural efforts at adaptation and help other farmers face the challenges of global change and the risks brought about by the extreme events that affect the region. In addition, it is important that decisionmakers in the public and private sectors are aware of the adaptive actions that coffee farmers are taking so that activities and programs can be developed to help the coffee sector.



Cambios Globales y Café  
Proyecto: opciones de adaptación para los pequeños productores de café, en un clima cambiante.



## Cambios Globales y Café

Estrategias Efectivas de Adaptación y Reducción de Riesgos por Fluctuaciones de Precios, Plagas y Cambios Climáticos:



## CAMBIOS GLOBALES Y CAFÉ

Estrategias de adaptación y reducción de Riesgos por variación en los precios, plagas y cambios climáticos:  
LECCIONES DE LA CRISIS DEL CAFÉ EN MESOAMÉRICA



Dr. María Rosales - Ecosistema Andes Global Change  
Pablo Cortés de Mesa (Ecosur)

Junio 2010

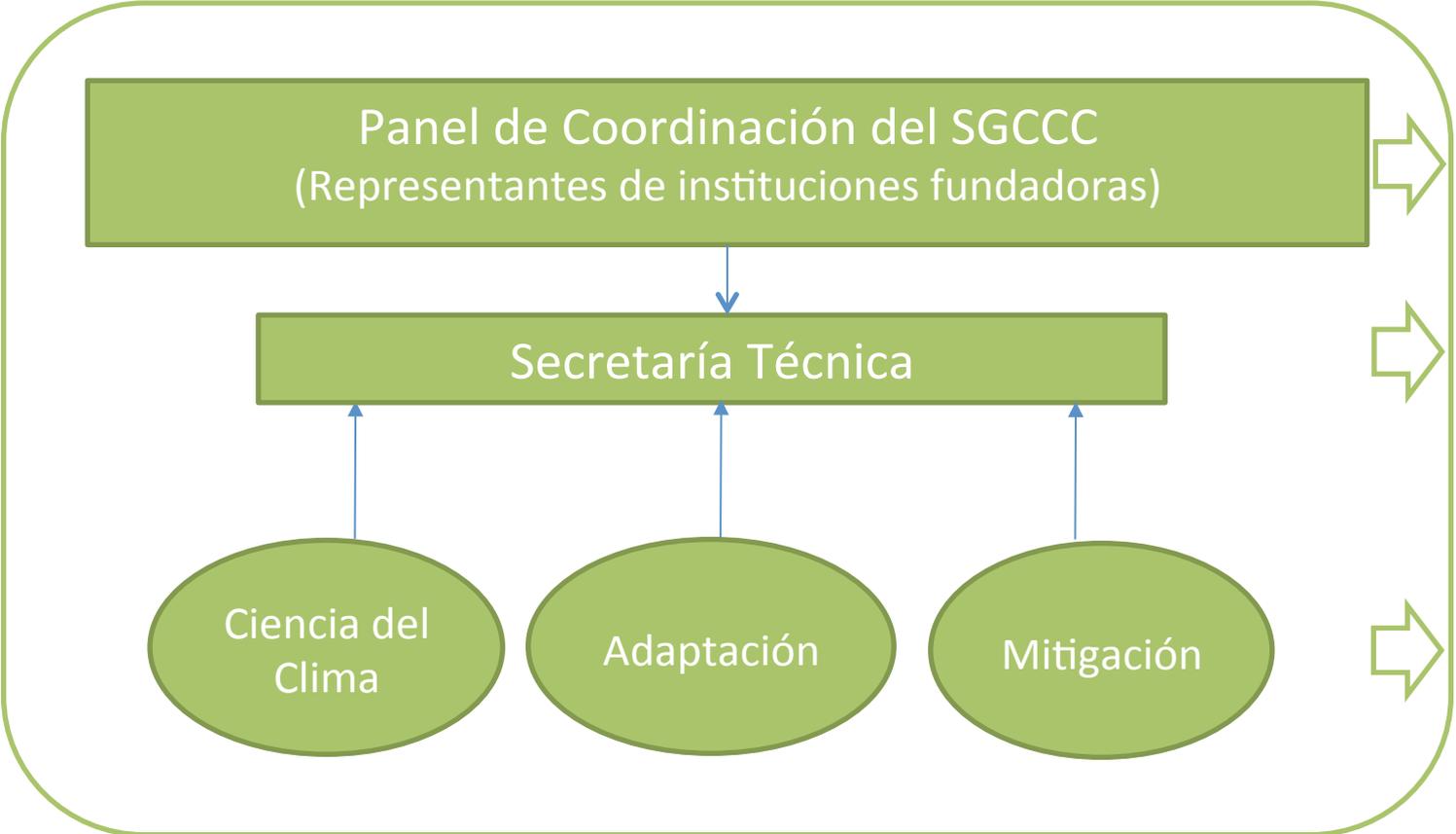


Sistema Guatemalteco de Ciencias del Cambio Climático

# Guatemalan System for Climate Change Science SGCCC



# Internal Structure

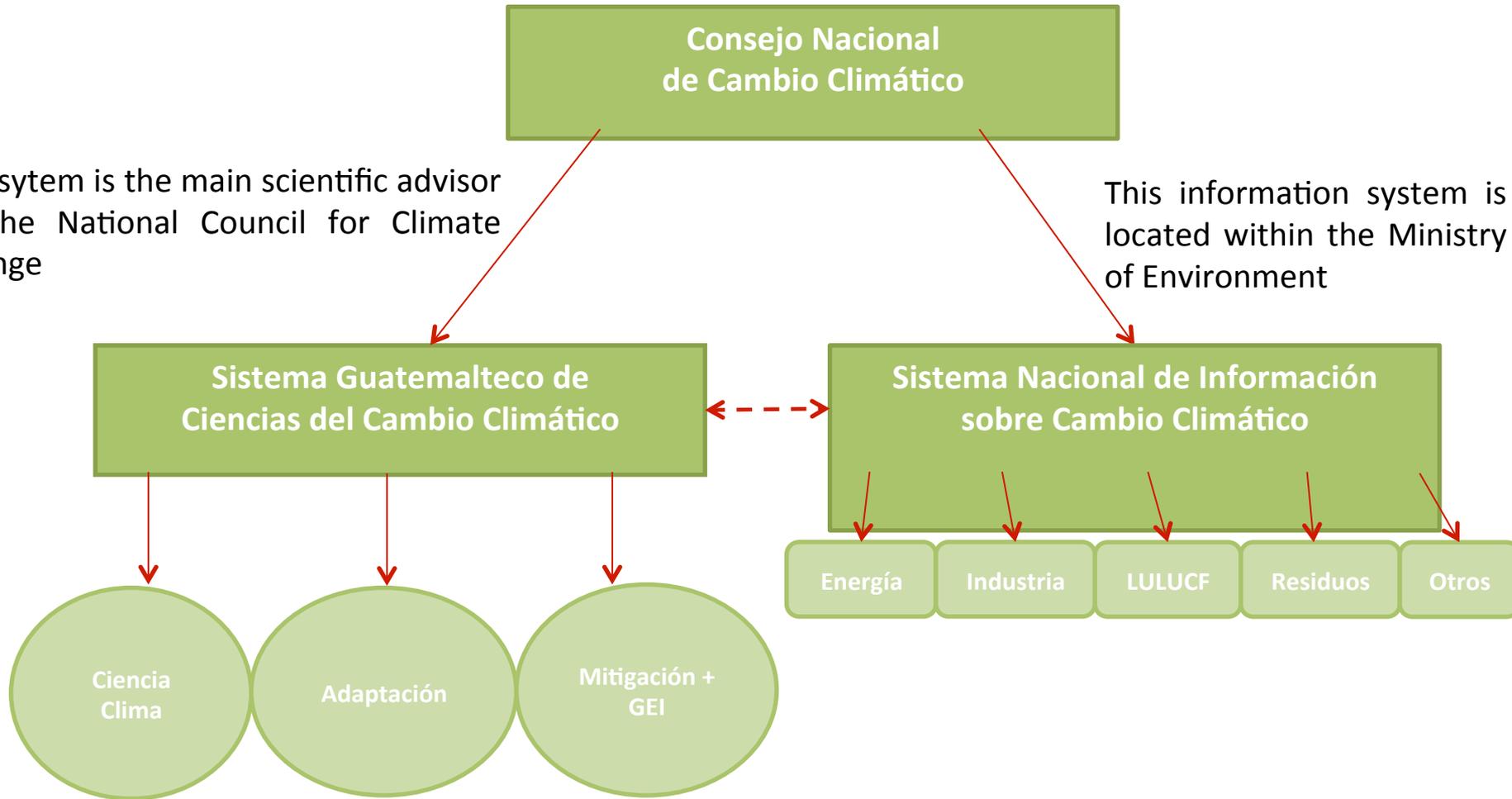


- Communication with external stakeholders
- Coordination with working groups.
- Implement assesments and other technical evaluations

# Science-Policy Interface

The system is the main scientific advisor to the National Council for Climate Change

This information system is located within the Ministry of Environment





For more information

<http://www.uvg.edu.gt/investigacion/ceab/cafe/index.html>

