



Experience from the PSACC project: Private sector adaptation in the tourism sector in Costa Rica

Kick-off Workshop on Mainstreaming Climate Change
Adaptation in the Tourism Sector

18-19 October 2017, Bangkok

Mirko Zuerker, adelphi



Content

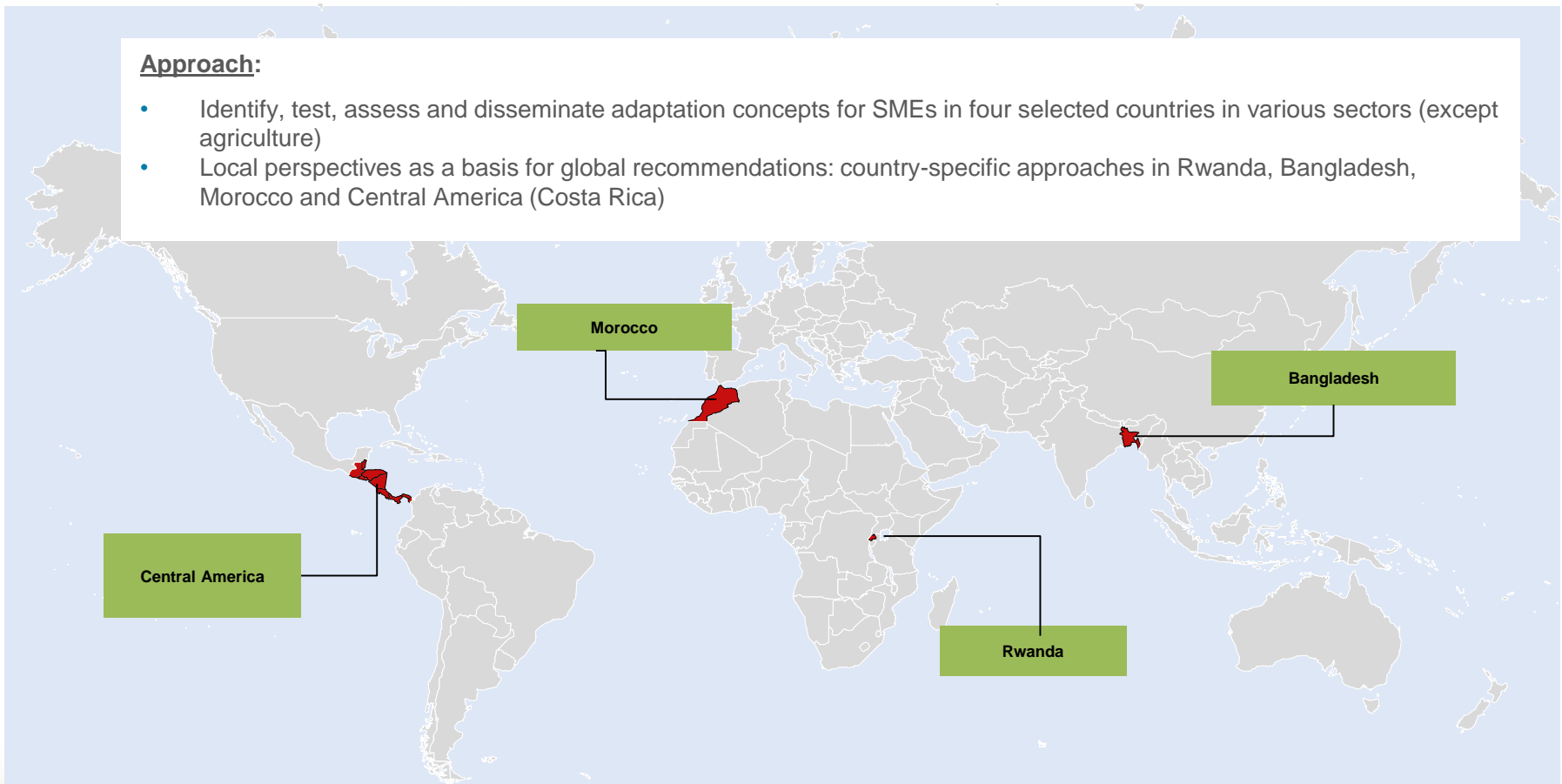
- PSACC programme
- PSACC activities in Costa Rica
- Case studies
- Adaptation measures in the tourism sector
- National Project Committee

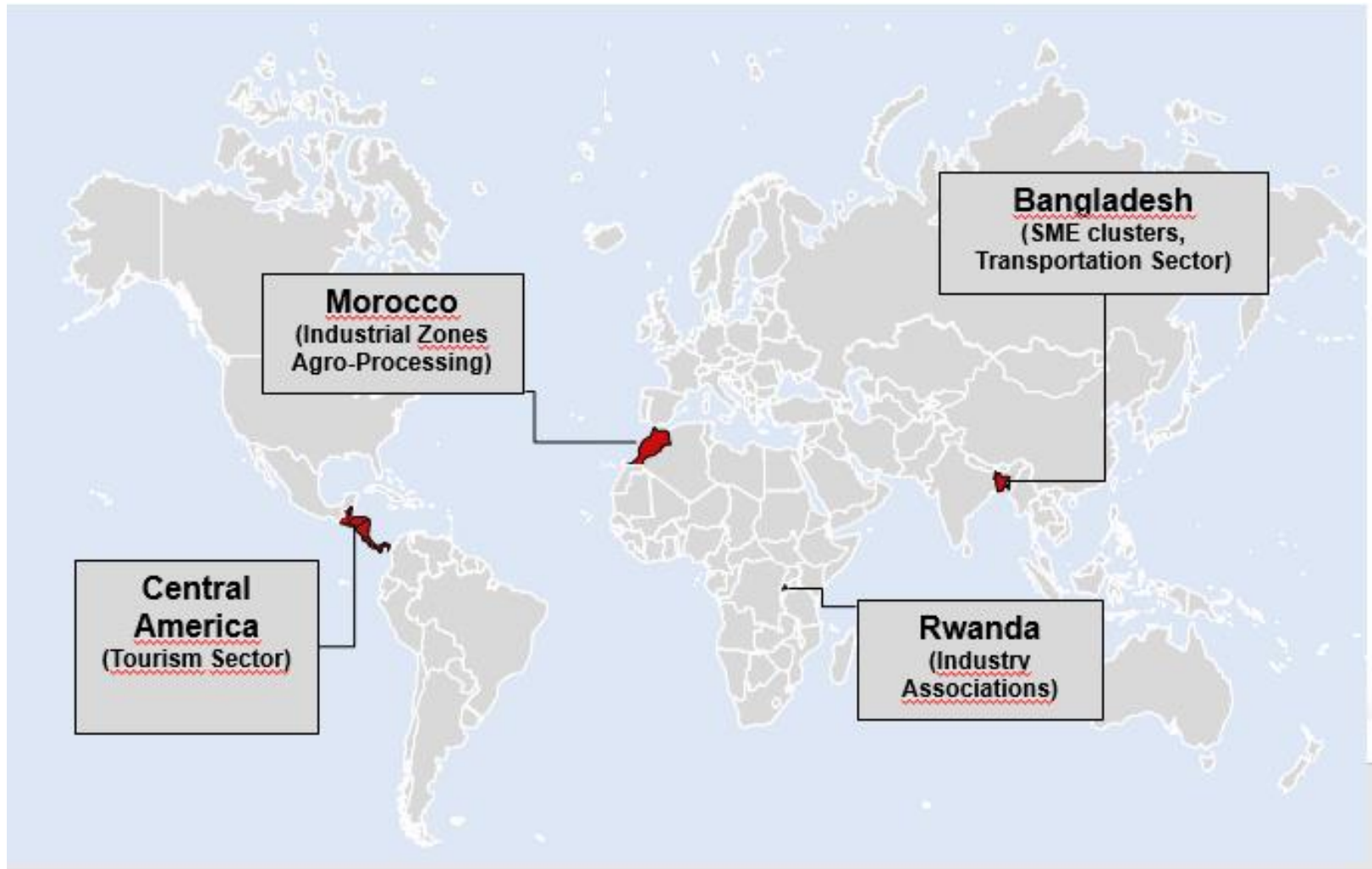
PSACC programme: overview

Key objective: Test instruments to reinforce capacity of private sector for climate change adaptation

Approach:

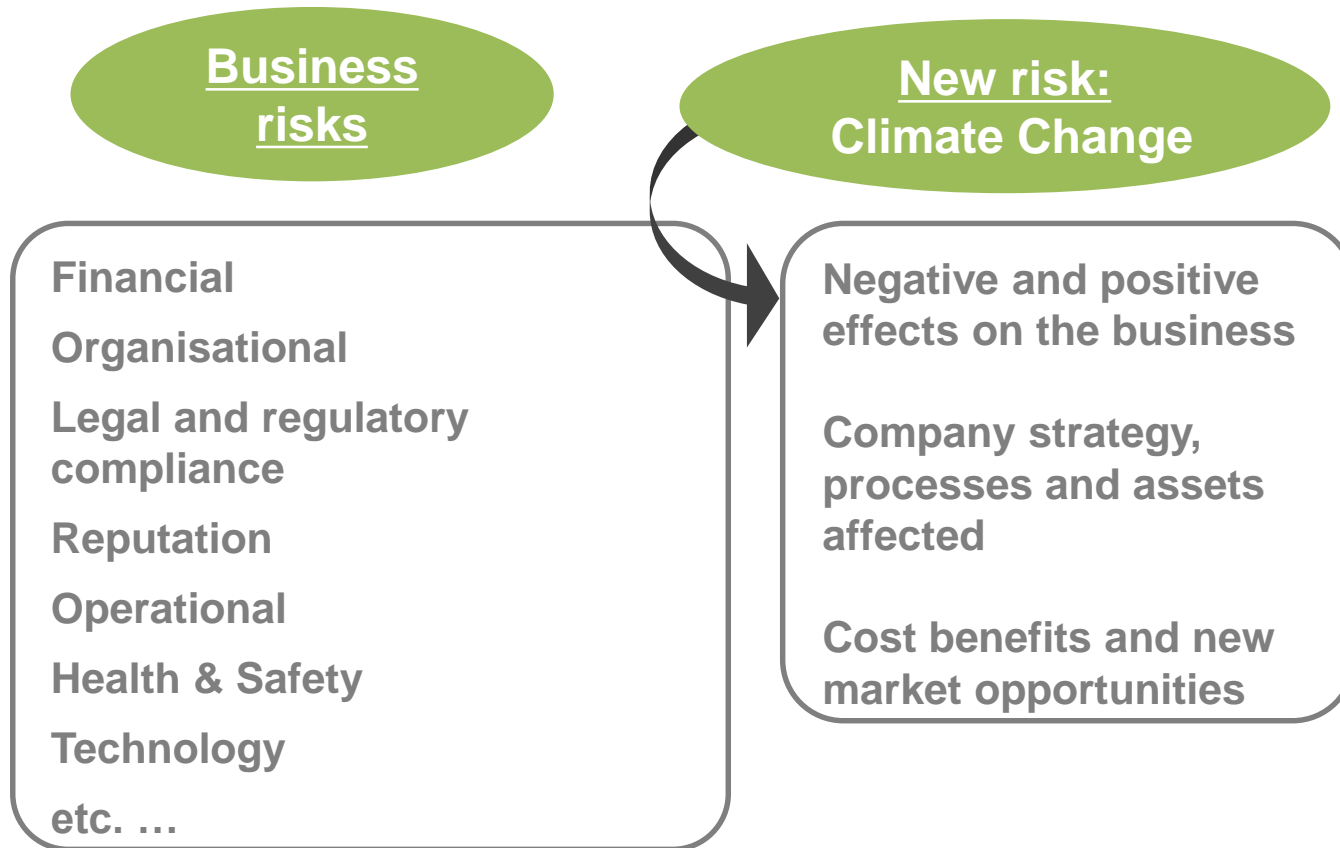
- Identify, test, assess and disseminate adaptation concepts for SMEs in four selected countries in various sectors (except agriculture)
- Local perspectives as a basis for global recommendations: country-specific approaches in Rwanda, Bangladesh, Morocco and Central America (Costa Rica)







PSACC programme: Climate Expert approach

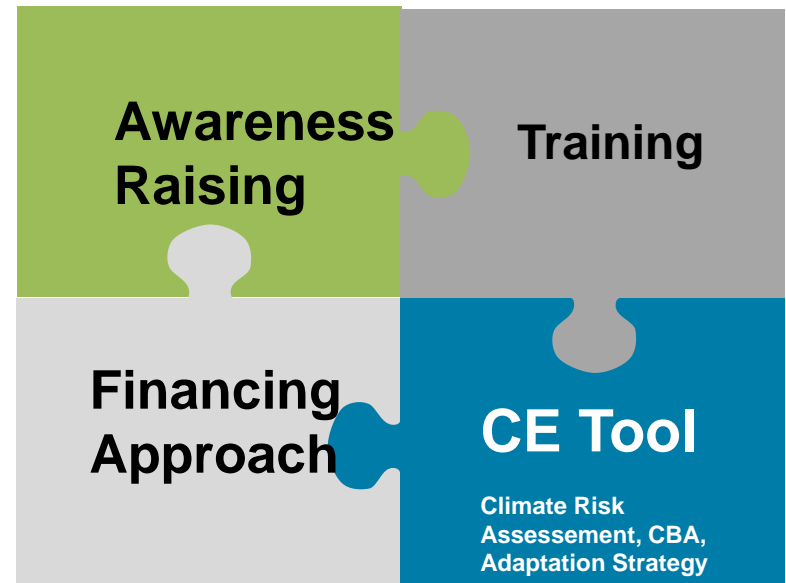


Need for a structured approach for assessing and managing climate risks and opportunities!

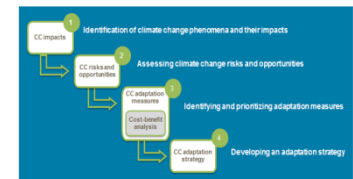
PSACC Methodology



CLIMATE Approach EXPERT

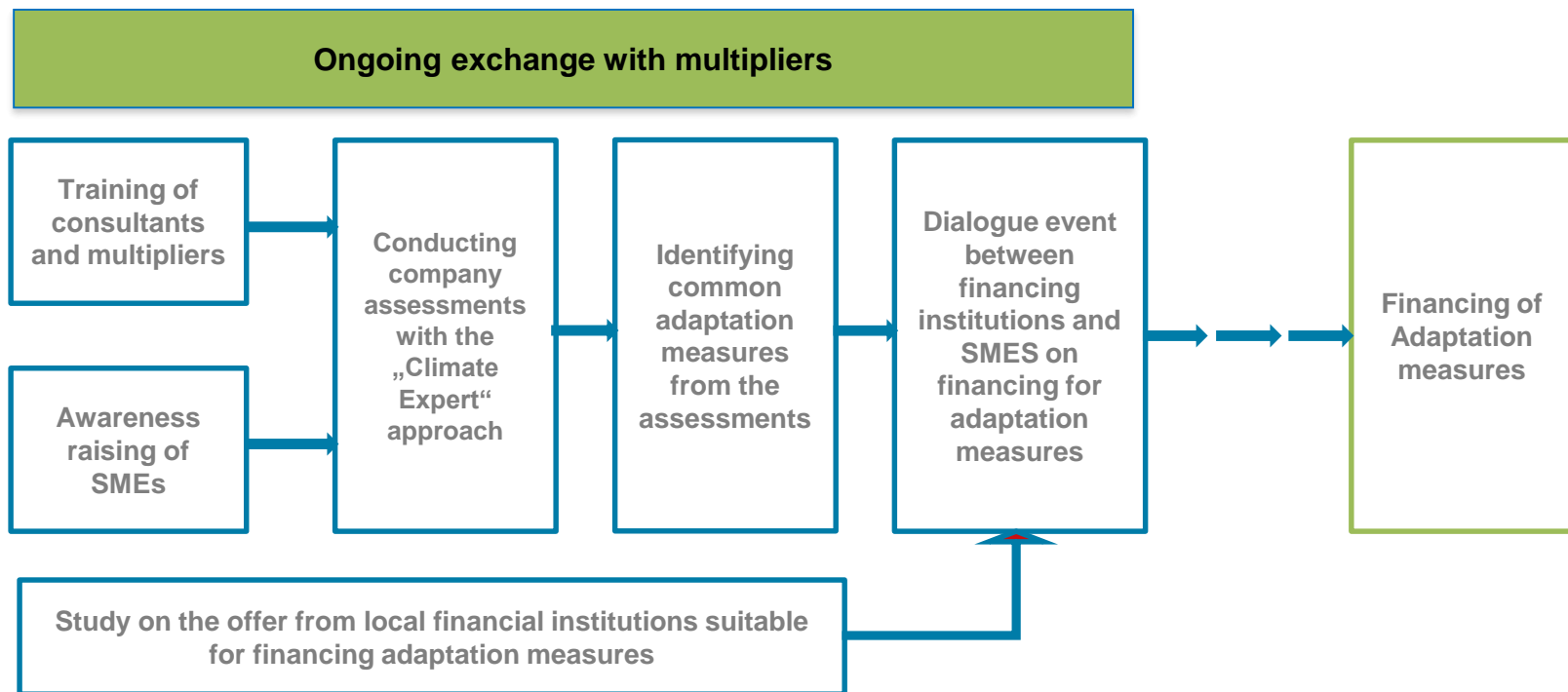


The adaptation process for SME's





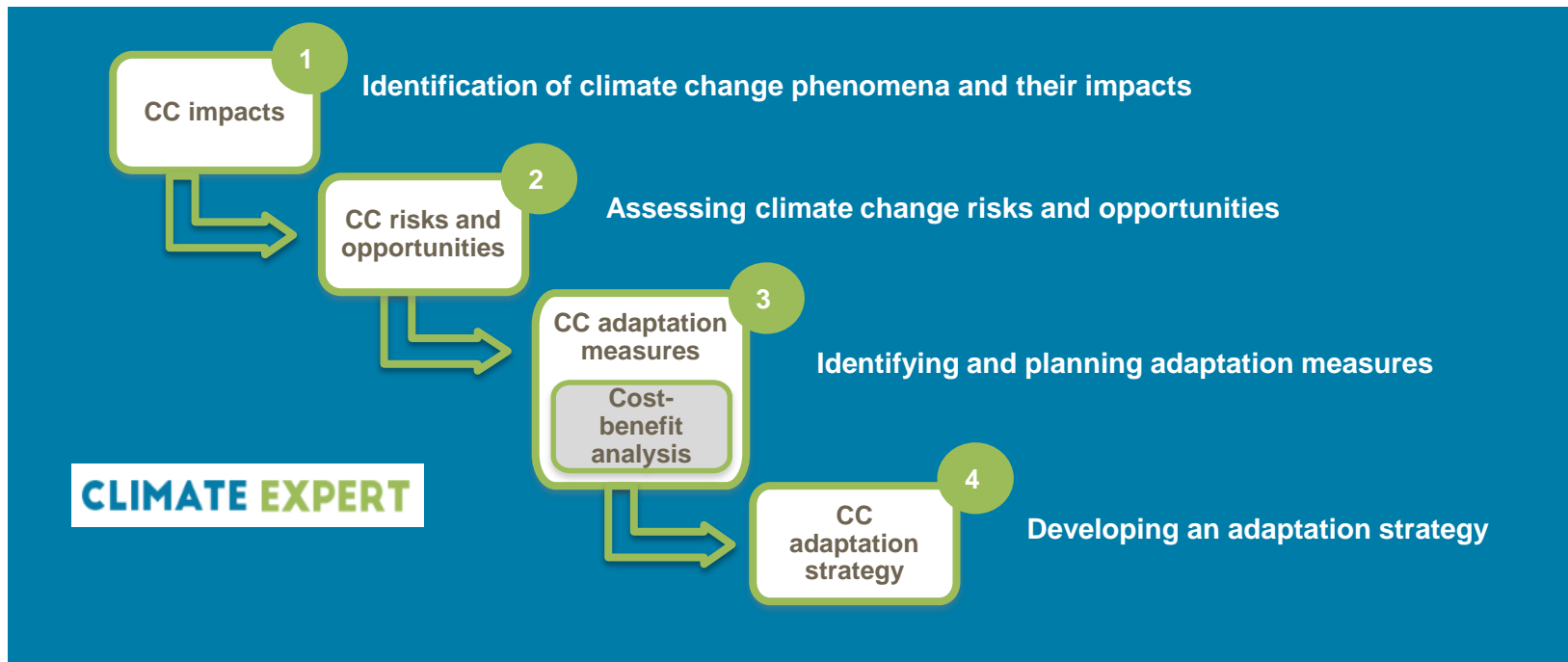
PSACC programme: approach for Climate Expert consultancy



PSACC programme: Climate Expert Tool

In 4 steps, companies can:

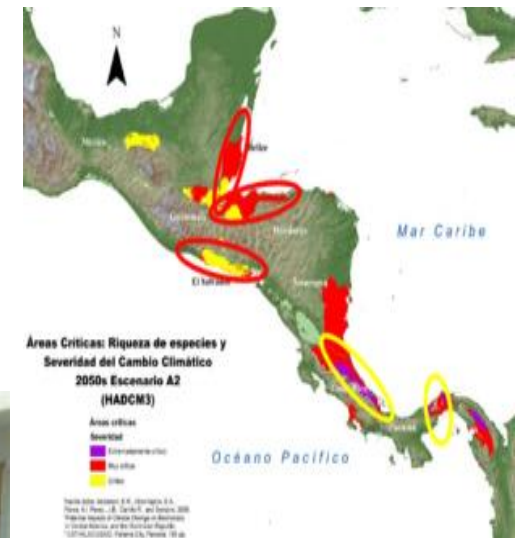
- analyse climate change risks and opportunities
- develop adaptation strategies



www.climate-expert.org

PSACC programme: activities in Costa Rica I

- Presentation of PSACC and scope of the study: Climate Change Adaptation in tourism sector for Central America (06/15)
- Formation of national **Comité Consultivo** (08/15)
- Collaboration with Fundación Horizontes with 2 local experts who conducted a **study about climate vulnerability in Monteverde and Caribe Sur** (12/15 to 01/16)
- Presentation of study, sensitisation workshop and selection of enterprises for assessments (02/16)



PSACC programme: activities in Costa Rica II

- Assessment of two companies in Monteverde: Cabañas Los Pinos and Life Monteverde (06/16), in cooperation with Instituto Monteverde (IM) and elaboration of available case studies, assessment of a 3rd company by IM
- Establishment of four working groups in Monteverde (02/16) for Joint Action regarding: supply, demand, water resources and baselines (climate and biodiversity). Integration into climate resilience commission (CORCLIMA) (11/16)
- Climate Expert training for 18 assessors and multipliers in cooperation with Tourism Ministry (ICT) and Tourism Chamber (CANAECO - 11/16), in the aftermath, 7 additional CE company assessments by assessors
- Short investigation about financing sources for adaptation measures and identification of available financial products (01/17)



PSACC programme: activities in Costa Rica III

- Workshop about options for financing adaptation measures with 4 invited financial institutions and about 30 companies with CST; together with Tourism Ministry (ICT) and Tourism Chamber (CANAECO - 03/17)
- Conclusion in 06/17
- Integration of comité consultivo in the development of national adaptation strategy (action plan for tourism) of the Directorate of Climate Change (DCC)



Case Studies: Los Pinos Cabañas y Jardines

About

- Guesthouse for national and international tourists
- 15 wooden units
- 10 employees
- Reputation for ecotourism

Risk

- Inconvenience for guests and staff due to heat waves
- Increased demand of water due to dry periods
- Loss of attractiveness for ecotourism



Adaptation measures implemented

- Improved natural ventilation
- Planting native species
- Using ozone for disinfection of rooms
- First steps towards water security plan





Case Studies: Unión Varsan, Monteverde

About

- Family owned agro-tourism business producing sustainably farmed coffee
- Educational programme “Life Monteverde” educates local people and visitors about sustainable agriculture
- Farms are located near famous national park (Monteverde Cloud Forest Reserve/Bosque Nuboso)
- 17 employees, 12 associates



Risk

- Quality of coffee beans is threatened by heat, lack of water/humidity
- Loss of harvest due to damaged plants from strong winds
- Increase of health risk for employees and visitors due to infectious diseases transmitted by insects



Adaptation measures implemented

- Made infrastructure on site more resilient (roads, roof for common area, renewal of water collection and storage facilities)
- Alliances with different universities
- Planting of native shade tree species

PSACC programme: VA on destination level

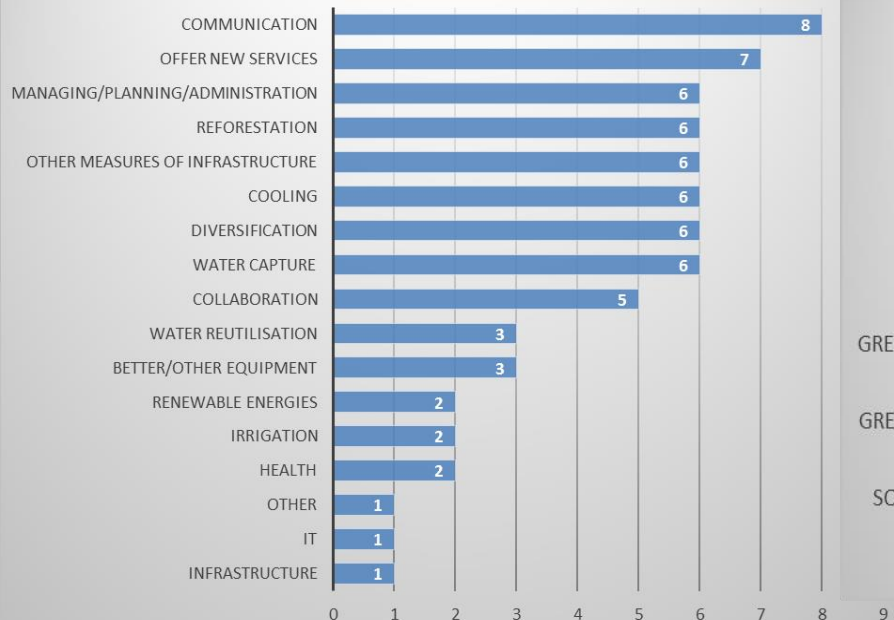
- Very relevant in the project were vulnerability assessments at the level of a tourism destination

Evaluación de Vulnerabilidad, Monteverde

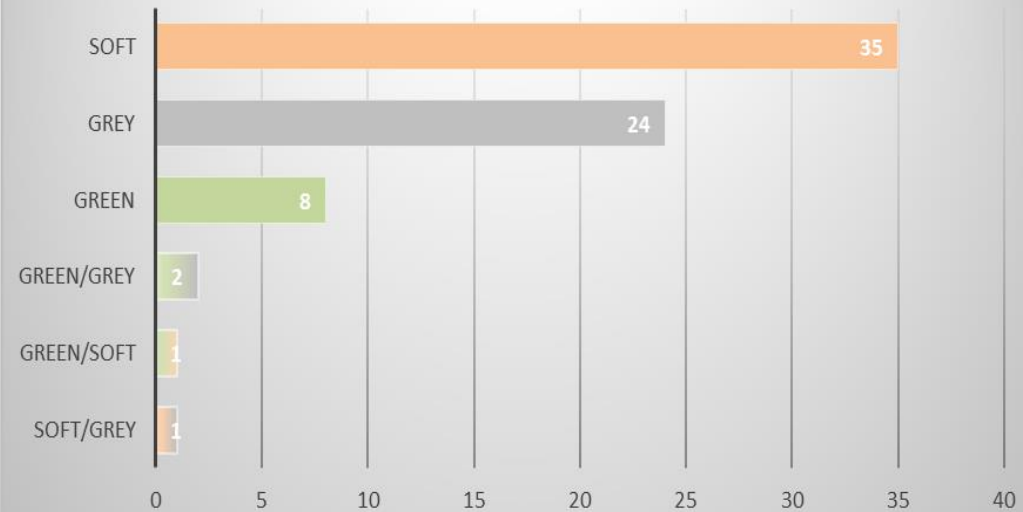
Tipo	Empresa	Grado de Exposición	Grado de Sensibilidad	Potencial Impacto*	Capacidad Adaptativa	Vulnerabilidad
Hotel	Hotel de Montaña Monteverde	Media	Baja	Bajo - Medio	Baja	Media - Alta
	Trapp Family Lodge	Media	Baja	Bajo - Medio	Alta	Baja - Media
	Los Pinos Cabañas y Jardines	Media	Baja	Bajo - Medio	Alta	Baja - Media
	Poco a Poco	Media	Media	Medio	Media - Alta	Media
	Monteverde Rustic Lodge	Media	Baja	Bajo - Medio	Media	Media
	Sunset Hotel	Media	Baja	Bajo - Medio	Media-Alta	Baja - Media
	Hotel Belmar	Media	Baja	Bajo - Medio	Alta	Baja - Media
	Cloud Forest Lodge	Media	Baja	Bajo - Medio	Media-Alta	Baja - Media
	Hotel Claro de Luna	Media	Media	Medio	Baja	Media - Alta
Prod.	Jardín de Orquídeas	Media	Media	Medio	Media	Media
	Life Monteverde	Media	Media	Medio	Alta	Baja - Media
	SKY Adventure	Media	Media	Medio	Media	Media
	Jardín de Mariposas	Media	Baja	Bajo - Medio	Baja	Media - Alta
	Reserva Monteverde	Media	Alta	Medio - Alto	Media	Media - Alta
	Anura de Monteverde (Ranario)	Media	Alta	Medio - Alto	Alta	Media
Trans.	Ecotransportes	Media	Baja	Bajo - Medio	Baja	Media - Alta
	Transmata	Media	Baja	Bajo - Medio	Baja	Media - Alta
T.O.	Ocotea Monteverde	Media	Media	Medio	Baja	Media - Alta

Adaptation Measures: Evaluation of measures suggested in Costa Rica I

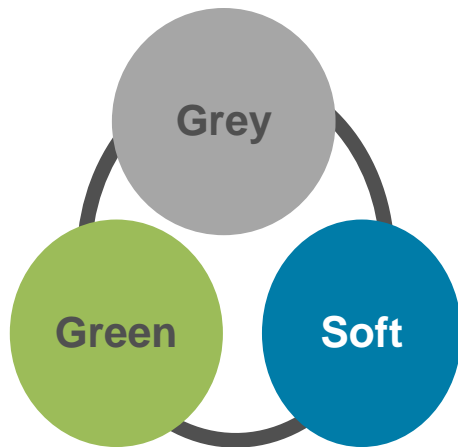
Groups of measures



Categories of measures

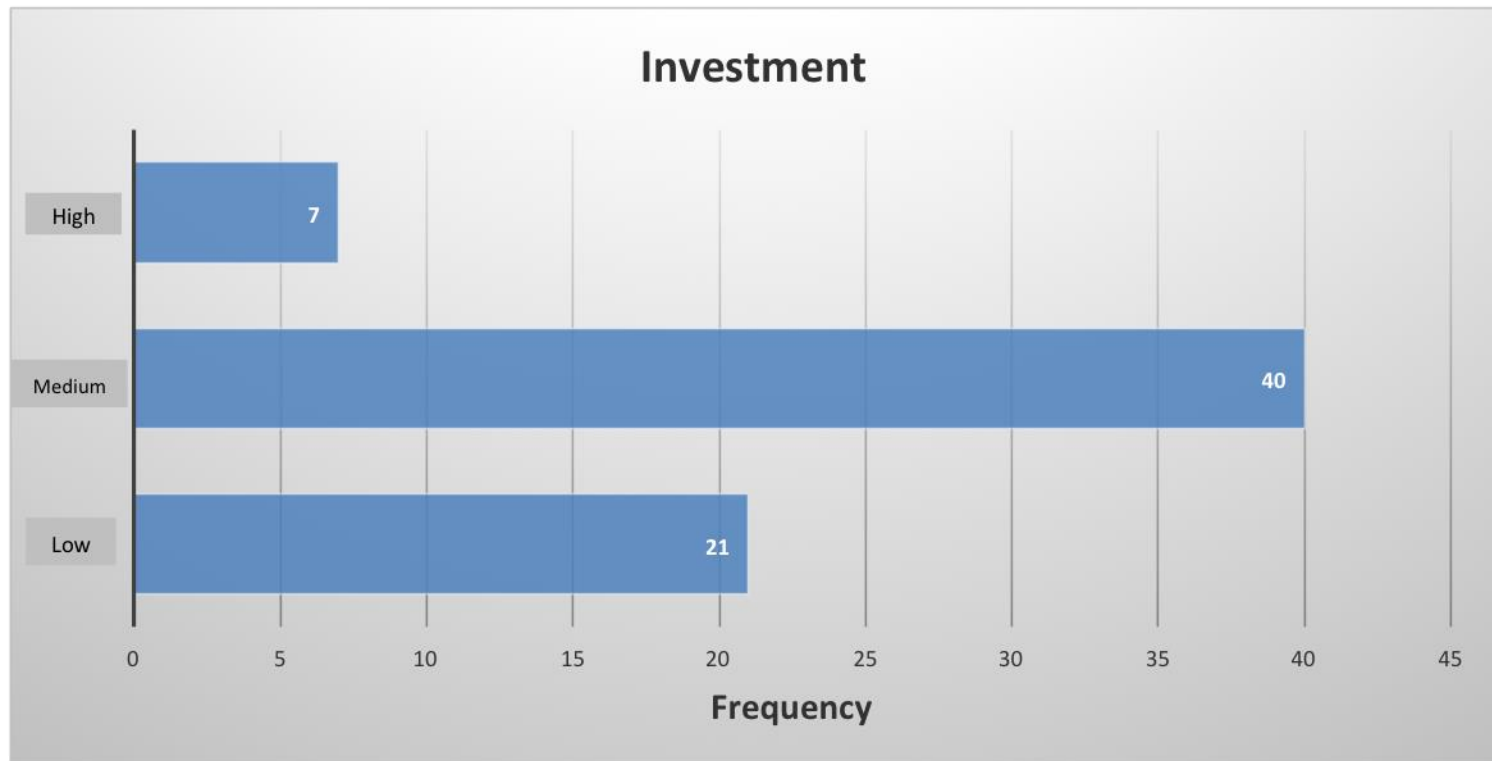


Adaptation measures: classification



- **Grey:** technical solutions which decrease company's vulnerability
- **Green:** measures involving the ecosystem
- **Soft:** administrative, management, communication measures

Adaptation Measures: Evaluation of measures suggested in Costa Rica II



PSACC activities in Costa Rica: Joint Action approach I

A **joint action** can be understood as a participatory and collaborative planning and decision-making process through which a group of stakeholders agree on a number of measures to implement in order to achieve a set of common goals.

Potential outcomes of joint action initiatives:

- **Common understanding** of the risks and opportunities posed by climate change to stakeholders, based on the sharing of own experiences as well as on scientific empirical evidence.
- **Effective engagement of stakeholders**, who are convinced of the potential of the Joint Action as an effective strategy to achieve common goals
- **Awareness of the scope for potential cooperation**, not only among stakeholders but also with governments and local communities facing common challenges and opportunities related to climate change.

PSACC activities in Costa Rica: Joint Action approach II

Potential outcomes of joint action initiatives:

- **Detailed risk assessment** through the pooling of information and analytical capacities.
- **Joint plans of action** which already take into consideration the interests of all relevant stakeholders as well as the spill-over effects of the adaptation measures.
- **Joint financing strategies** that enable stakeholders to collectively access financing sources which may be inaccessible to individual firms and organizations.
- **Greater implementation capacity** due to the pooling of know-how and of human and financial resources.
- **Greater leverage of the stakeholders** vis-à-vis policy makers and an enhanced capacity to communicate their goals in terms of climate change adaptation to society at large.



Actor Map



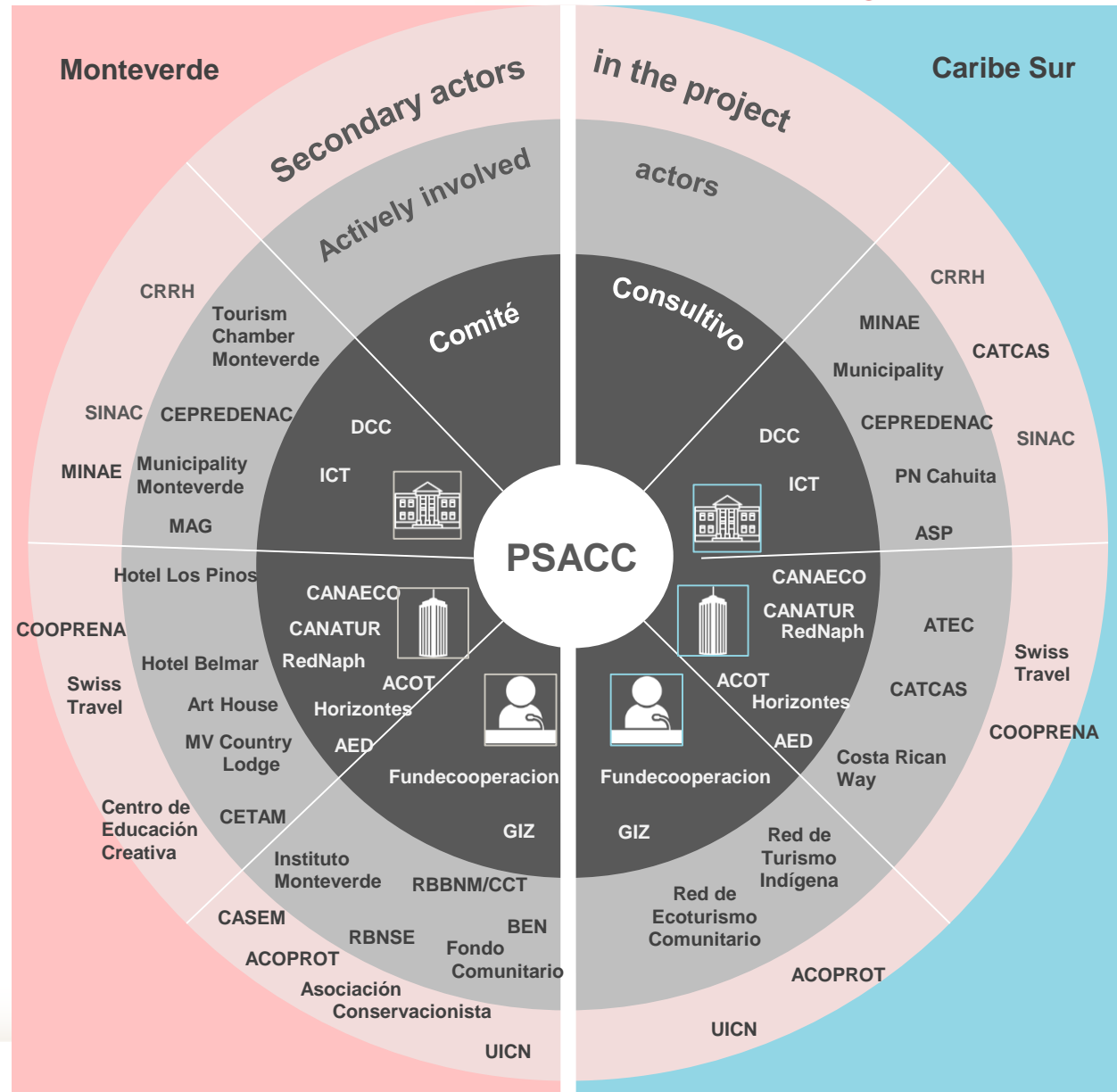
Public institutions



Private sector



NGOs, Academia





National Project Committee I

- National Committee (Comite Consultivo) formed at the beginning of the project
- Comprised of
 - Tourimus Ministry (ICT-Instituto Costarricense de Turismo),
 - Tourism Chambers (CANECO),
 - Tour operators association (CANATUR)
 - Small Hotel Association (ACOT),
 - Directorate for Climate Change of the Ministry of the Environment (DCC),
 - Asociación Empresarial para el Desarrollo (Social Responsibility Association),
 - Fundecooperación (Foundation for Sustainable Development).

National Project Committee II

Roles and function:

- Support in the implementation of the most important activities during all PSACC missions in Costa Rica. Accompanying the missions and strategic "feedback" during and after the missions.
- Supporting the positioning of the PSACC programme in the tourist industry in Costa Rica, especially in the case of companies that operate in the field of ecotourism and sustainable tourism.
- Supported in identifying key stakeholders at the local level in the destinations: chambers, entrepreneurs, consultants, other local institutions such as research institutes, nature conservation areas (public and private), etc.
- Implementation of sustainability activities during and after consolidation of the project in Costa Rica, such as use of the Climate Expert approach in the awarding process of new loans from Fundecooperación (this is already running) or consideration of the Climate Experts (formulation of an adaptation strategy) as part of awards given to tourism companies by ICT

Thank you very much for your attention!

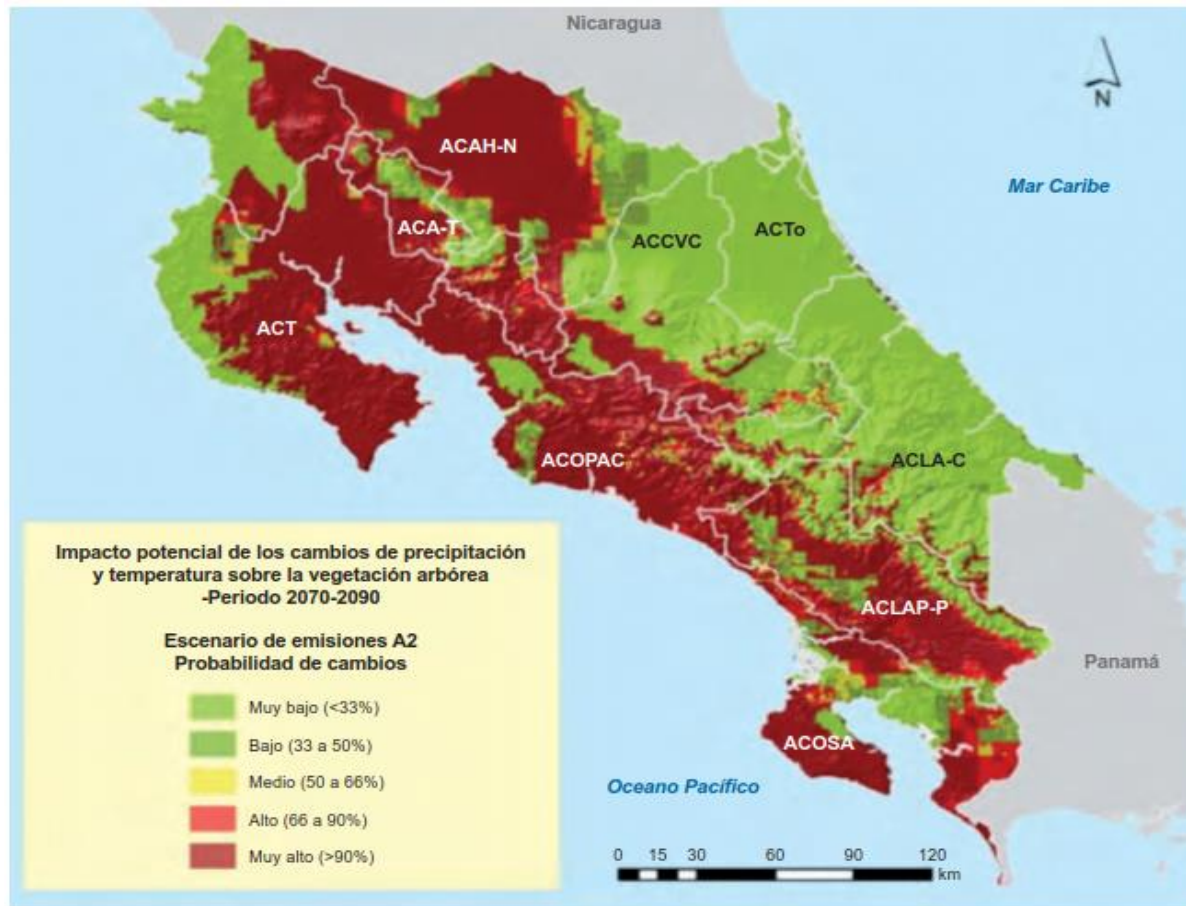
Questions?

Mirko Zuerker
Senior Project Manager
adelphi
zuerker@adelphi.de



Back-up slides

Climate change in Costa Rica: biodiversity

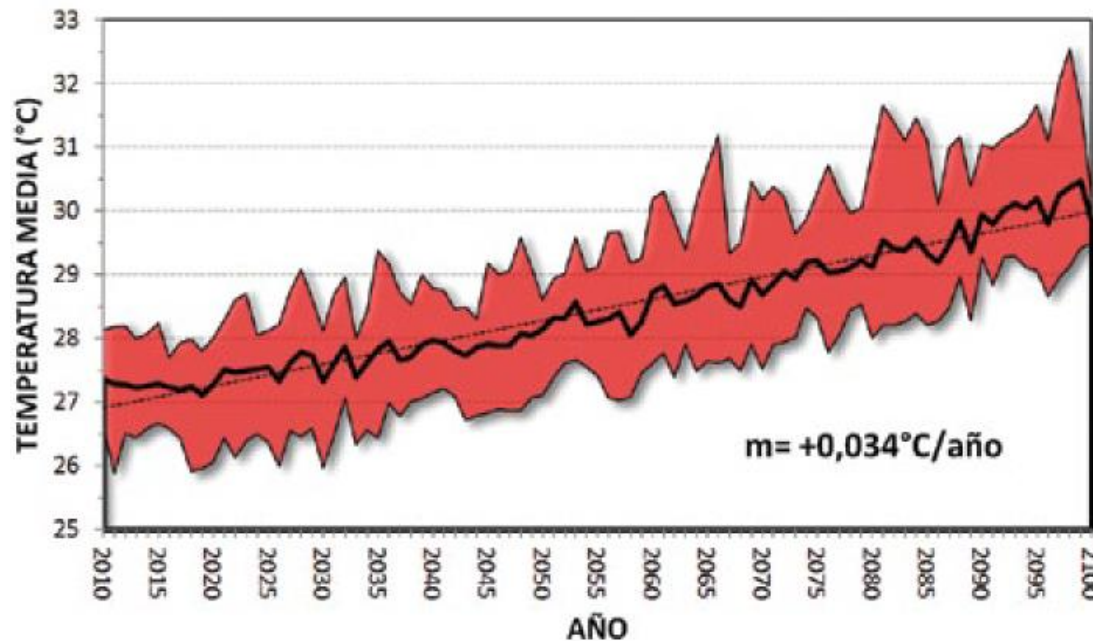


Source: MINAE 2015

→ Vegetation (and with it biodiversity) will change in the western regions due to the change of temperature and precipitation



Climate change in Costa Rica: temperature



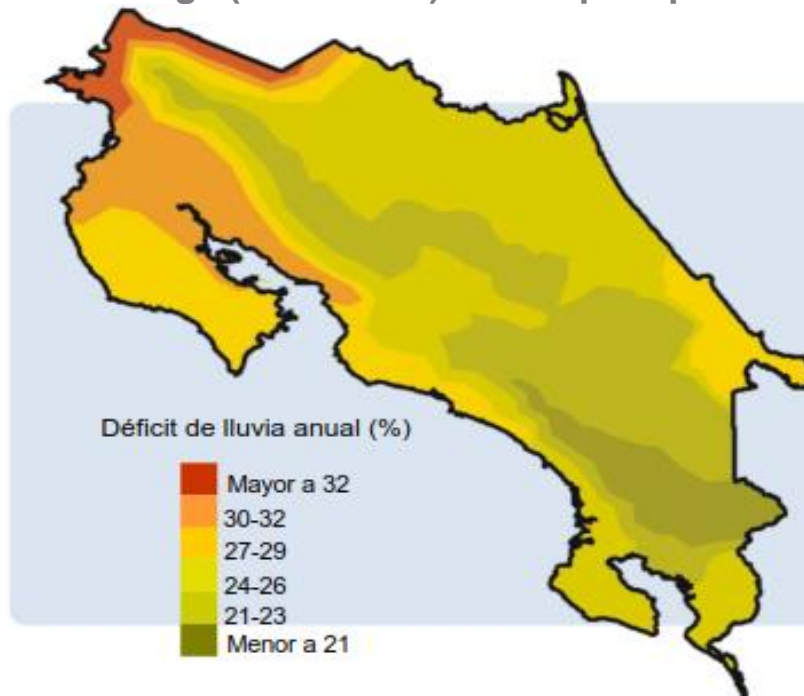
Source: MINAE, 2012

→ Until 2100 average temperature is forecasted to increase by 2.4 to 3.9° C.



Climate change in Costa Rica: precipitation

Spatial distribution of average (1960 -2005) lack of precipitation during droughts in Costa Rica

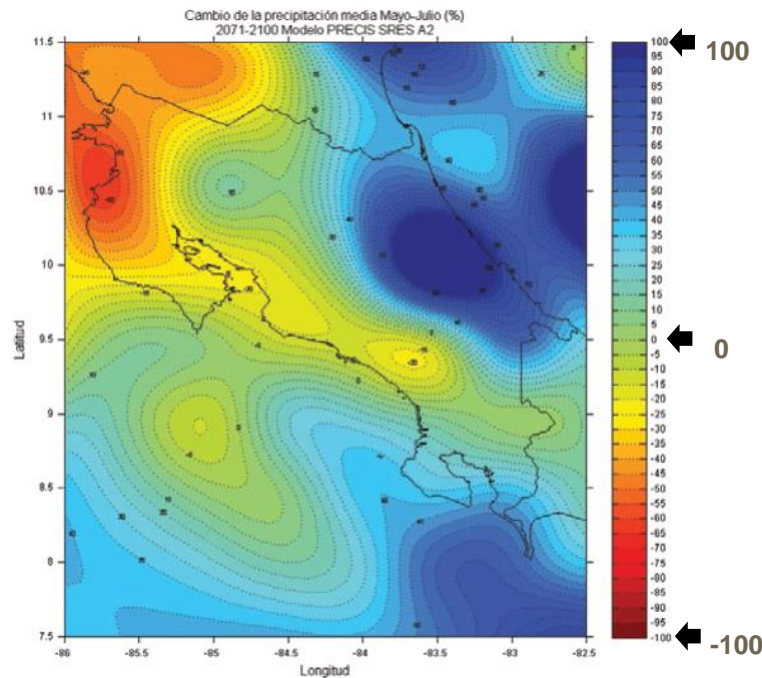


Source: Instituto Meteorológico Nacional, 2008

→ Particularly strong droughts in the north-western part of Costa Rica.

Climate change in Costa Rica: precipitation

Change of average precipitation (%) in the months of May to July for Costa Rica, 2071-2100



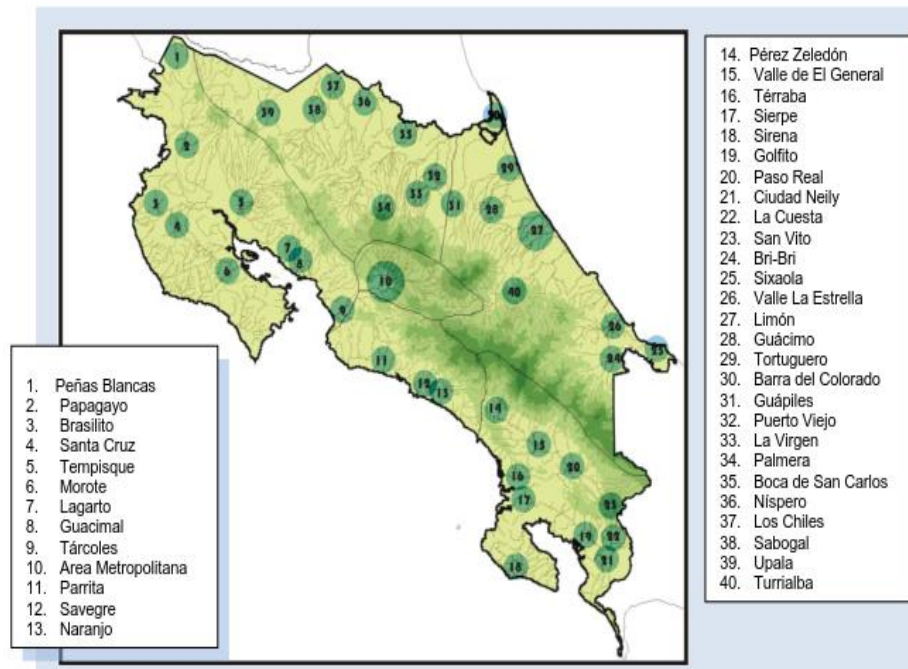
Source: MINAE 2012 (Model PRECIS SRES A2)

→ During summertime average precipitation will drastically increase in the eastern part and decrease in the north-western part of Costa Rica.



Climate change in Costa Rica: precipitation

Areas of particularly high risk for floods



Source: Instituto Meteorológico Nacional, 2008

→ Risk for floods depend on regional particularities.

Case Studies: Ríos Tropicales

About

- Eco-adventure company focussing on sustainable tourism
- Offering variety of (wild) water activities on rivers
- Engaged in public affairs about environmental protection
- 60 employees

Risk

- Health risk for participants due to altered water levels
- Unreliable accessibility of lodges due to landslides
- Unattractiveness of water related activities due to extreme weather



Adaptation

- Developing guides for alternative waterways and applying lighter rafts in more shallow waters
- Construction of foot trails as an alternative access to lodges
- Diversification of portfolio to offer more activities which do not depend on the conditions of the river



Adaptation measures: examples



Rainwater capture system

- Install drainages and tanks to capture rainwater over a longer period
- Effective adaptation measure against water scarcity due to droughts
- Decrease consumption costs and dependency on local water network



Bio-digester

- Anaerobic digestion of organic wastes produces fertilizer and recuperates energy as biogas
- Effective adaptation measure against power blackouts from extreme weather events
- Decrease consumption costs of fertilizer and energy and dependency on local electricity grid