



Mapping and analysis of the Community Tourism System using the Resilience for Social Systems (R4S) Approach: a case study of the Mayan Caribbean in Honduras and Guatemala



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Executive summary

In July 2019, the community tourism system¹ of the Mayan Caribbean² was mapped and analysed using the R4S Approach, to provide evidence-based information for the bio-commerce strategy of the Regional Coastal Biodiversity Project (RCBP). Supported by the US Agency for International Development (USAID), the project is committed to bio-commerce as a governance strategy for social inclusion and the conservation of biodiversity, which ultimately improves people's livelihoods. GOAL's R4S Approach is a multi-tool guide that measures and analyses a system's resilience to disasters or during normal times. It should be complemented by participatory workshops with the target group and stakeholders to obtain their feedback and validation.

In 2019, facilitators from the RCBP project decided to use the R4S Approach for analysing and mapping the community tourism system of the Mayan Caribbean, to identify strategic interventions that will strengthen the system. The study spanned 5 months encompassing field visits to consult micro-enterprises and community actors, a visit to Guatemala City and local communities to consult government agencies, civil society actors and private companies, and desk work at GOAL offices. Maps of the system were created and presented to system actors. A vulnerability, resilience, and causal loop analysis was developed for an identified risk scenario: **significant escalation of the activity of armed non state actors in the system's areas of influence and the establishment of temporary "State of Siege" by the Guatemalan government, that paralyzes the core activities of the community's tourism system and negatively affecting the wellbeing and income generation of system actors.**

Based on the R4S analysis and mapping, strategic interventions to strengthen the system functionality and resilience were identified and proposed to the programme. It was evident that it was necessary to enhance the tourist offer, commercialize community tourism offer in collaboration with the Reservation Center and tour operators and facilitating strategic alliances for micro-enterprises capacity building. Additionally, supporting environmental sustainability in community tourism and promoting regional cooperation between the system actors in Mexico, Belize, Guatemala, and Honduras was needed. To date, the programme has progressed in undertaking the majority of these interventions, however the COVID-19 pandemic has limited progress in some respects.

1 A system can be understood as individuals or organizations collaborating together, in an interacting, interrelated and interdependent way, coordinating their actions and connections intentionally or unintentionally, producing their own patterns of behaviour, to affect a specific outcome.

2 A section of a tourist route in northern Honduras and Guatemala

Finally, the case study gives insight into the main challenges, success factors and lessons learnt from the R4S analysis and mapping process. R4S has proven to be a useful Approach, not only in informing programme interventions but also, because local organizations in Izabal, Guatemala, were interested in learning more about the R4S Approach and incorporated aspects of it into their own work with community tourism.

1 Context

GOAL³

GOAL is an international humanitarian response agency established in Ireland more than 40 years ago, with a presence in Central America since 1998. GOAL works with different kinds of vulnerable groups across a variety of regional and national projects. Since 2017, GOAL has collaborated with the implementation of the RCBP regional project in Honduras, El Salvador and Guatemala to promote community entrepreneurship and strengthen bio-commerce and livelihoods.

GOAL's purpose is to save lives and empower communities to build their resilience and greater control over their lives and livelihoods. Its objective is to increase the resilient well-being of the world's poorest people, targeting those who are excluded and marginalized, particularly those who are vulnerable due to their gender, age, or socioeconomic status.

GOAL believes in a world where poverty no longer exists, where vulnerable communities are resilient, where barriers to well-being are removed, and where all people have the same rights and opportunities.

The Regional Coastal Biodiversity Project (RCBP)

The Regional Coastal Biodiversity Project (RCBP), based in the countries of El Salvador, Honduras and Guatemala, aims to contribute to the conservation of the biodiversity of marine-coastal ecosystems in Central America to guarantee the provision of benefits for current and future generations. RCBP is being implemented by the consortium IUCN, GOAL and four local partners, and is financed by USAID.

The project is committed to bio-commerce⁴, as a governance strategy that facilitates social inclusion and the conservation of biodiversity, which ultimately improves people's livelihoods. The RCBP project's bio-commerce strategy emphasizes the community tourism sector as one of significant economic importance to coastal communities, and therefore strategically includes among its interventions fund granting to community tourism related micro-enterprises and associations to strengthen their business.

³ For more information about GOAL, visit www.goalglobal.org

⁴ Biocommerce: Those activities of collection, production, transformation and marketing of goods and services derived from native biodiversity (genetic resources, species and ecosystems) that involve conservation and sustainable use practices, and are generated with criteria of environmental, social and economic sustainability. Definition based on the RCBP strategy.

While developing the intervention, GOAL analysed and mapped the community tourism system of a tourism region known as Caribe Maya using the R4S Approach. Among the main activities were consultations with critical system actors, validation of visual mapping of the system, and a vulnerability and resilience analysis under a risk scenario.

2 What is the R4S Approach and why use it

The Resilience for Social Systems (R4S) Approach⁵ uses various tools that together determine the level of functionality, inclusion and resilience of a socioeconomic system and generate proposals and interventions for change. Additionally, the Approach suggests actions for planning, monitoring and evaluation of the interventions.

The R4S Approach is structured into 5 components, 1) identify and select the system⁶, 2) map the current state of the system, 3) identify and select risk scenarios, 4) analysis of resilience and synthesis of the system, and 5) participatory monitoring, evaluation, accountability and learning⁷.

To view the components and steps of the R4S, go to Figure 1.

The R4S was used because:

The practical mapping of the system helps with understanding and visualizing the community tourism chain and actor relationships in the Mayan Caribbean tourist route⁸. It can be a valuable visual aid when sharing knowledge about the system with stakeholders and target groups.

The vulnerability and resilience assessments can be applied during emergency/disaster events, or during normal times. These can be complemented by the causal loop analyses to delve deeper into the root problems of actor relationships and system dynamics.

The results and products of the R4S Approach have been used throughout the programme implementation to guide and support a number of strategic interventions for strengthening the community tourism system of the Mayan Caribbean.

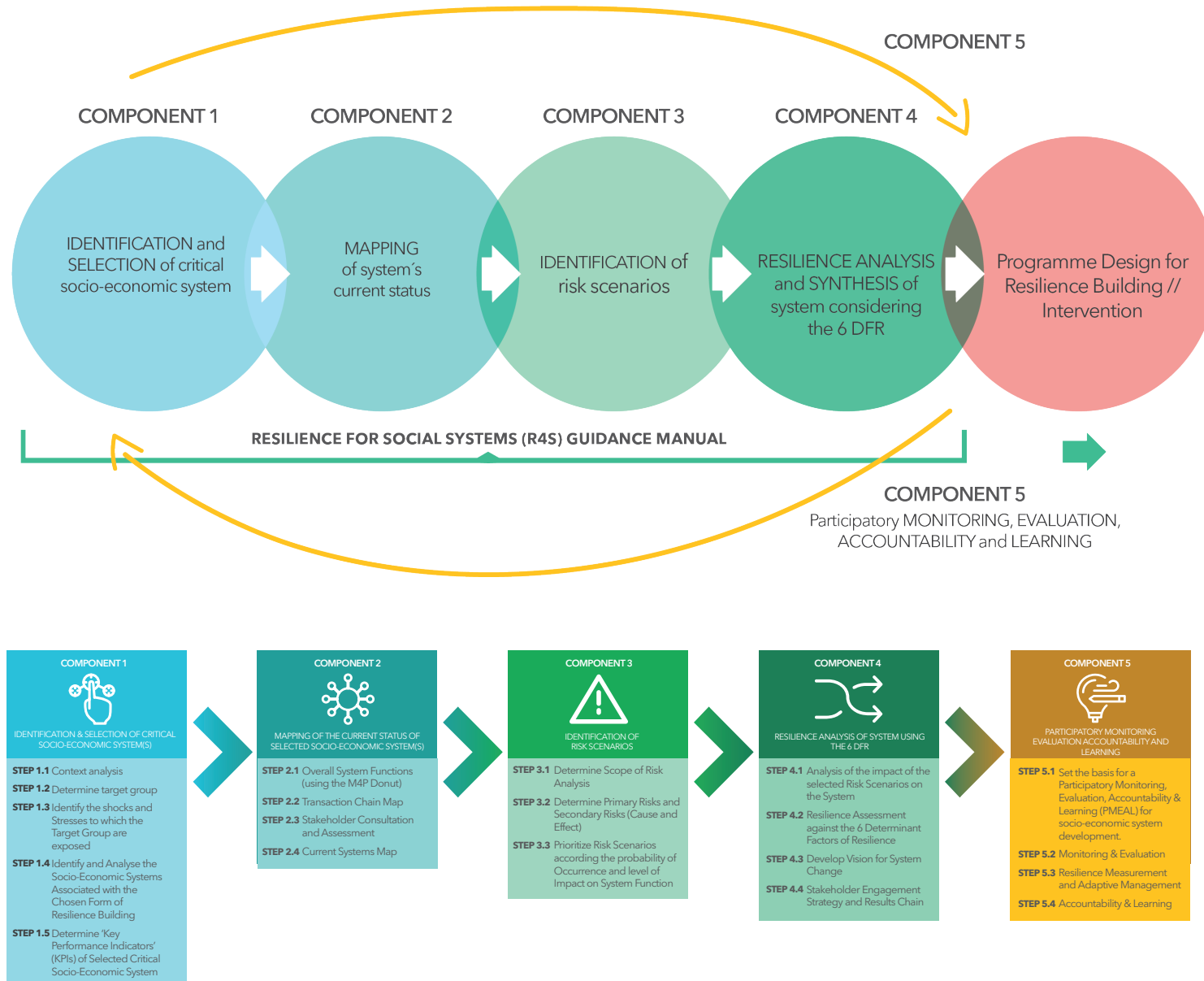
⁵ For more information on the R4S Approach visit <http://resiliencenexus.org/r4s/>

⁶ Component 1 was not undertaken because by the time of the R4S assessment, the system had already been chosen by the programme.

⁷ Component 5 was not necessary since the programme has its own monitoring and evaluation system.

⁸ Tourist route formed in 2017 that promotes micro-enterprises and national and international tourism. This route is much more developed in Guatemala since the flow of tourists is greater, and the micro-enterprises and associations in Honduras have been operating for less time compared to Guatemala.

Figure 1. Components and steps of the R4S Approach



3 Estimated resources needed

Components 2 and 4: System mapping and Resilience and System Analysis were used for this initial application.

The Approach was implemented in 5 months with 1 full-time specialist getting acquainted with the target region. The budget was mostly weighed out by travel and workshop costs.

Budget estimate: \$13,393.68		
Personnel	Description	Time
Advice	Market Systems Specialist	5 months, 20%
Researcher	Environmental engineer with knowledge on market systems	5 months, 100%
Driver	Field visits	2 months, 40%
Digital designer	For maps and final report	

R4S Approach suggested basic profile for a researcher/facilitator

University degree in the professional area relevant to the system to be analysed. He or she must have basic knowledge of risk scenarios, socioeconomic systems mapping and analysis. He or she must have experience in research, application of qualitative and quantitative techniques for collecting information and facilitating participatory workshops. He or she must be proactive, have analytical and oral and written expression skills.

4 How the R4S Approach was applied

Because the system was already selected, the first component - identify and select the system – was not used for this R4S iteration. Additionally, as RCBP has its own monitoring and evaluation tools, the last component of the R4S was not employed. Primarily the system mapping, vulnerability, resilience, and causal loop analysis were used for this R4S application.

Mapping the current state of system

The mapping began with desk work collecting secondary information to understand the area and generate a preliminary map of the system. At this time, the main researcher was granted a pre-consultation field visit to the study site and to initiate contact with actors and stakeholders while validating the system map with them. Based on these initial findings, the researcher reviewed and updated the first versions of the map of the system.

Later, data collection instruments were developed to evaluate the actors, their relationships, and the system dynamic as instructed by the Stakeholder Assessment Matrix (SAM) of the R4S Approach. This was followed by a field tour that involved surveys, interviews, and workshops with the various actors from the system, such as community entrepreneurships and other actors from the transaction chain, and support and regulatory functions. Finally, an official version of the system map was created.

Vulnerability, Resilience and Causal Loop Analysis

Though the vulnerability and resilience analysis were not originally contemplated, they were later included in response to a significant escalation of the activity of armed non state actors in the system's areas of influence and the establishment of temporary "State of Siege" by the Guatemalan government, which almost completely paralyzed the core activities of the community tourism system. Resources limited the analysis of the information already available to the researcher, without the opportunity of returning to the field to validate the products generated at this stage.

Once the vulnerability analysis was completed, an analysis of the resilience of the system followed based on the Six Determinant Factors of Resilience from the R4S⁹. Next, the researcher continued with the synthesis of the dynamics of the system by developing a causal loop diagram and a theory of change of the system.

The information provided by the R4S tools yielded a set of recommendations for the system and for the RCBP project that were presented in the report. The recommendations were discussed with specialists of the system and responded to the strategies established by the RCBP project for the biocommerce sector. The final report was submitted to RCBP's national and regional project coordinators for review and publication.

⁹ The six determining factors proposed in the R4S Approach are: connectivity, diversity, redundancy, governance, participation and learning.

5 Introduction to the system mapping and resilience assessment key concepts

The system map is used throughout the R4S, it is first presented as the current system map which depicts the status of actor relationships and other system dynamics. The map draws upon the basic market system structure used in the Making Markets Work for the Poor (M4P) Approach.

The stages of the supply chain are made of input-output processes, known as the transaction chain. These stages have actor nodes or groups of actors placed underneath, that connect by the throughput line. The upper and lower sections of the map show the supporting and regulatory functions and what kinds of actors participate in each. The size of the actor nodes will be determined by its relevance in the system.

Other information shown in the map include where the target group is located, and what relationships are functioning well, and whether these are stressed or bad. Actors in the regulatory and supporting function are also classified according to their closeness to core system actors, which can be Direct, Indirect or Absent.

The vulnerability map belongs to another section of the R4S concerned with assessing system vulnerability. The map will be based upon an already selected risk scenario. It will show the state of vulnerability of system actors, and whether activities are/will be interrupted by the risk scenario.

See below the main terminology and concepts used in the R4S Maps:

General R4S Maps and current system map:

Transaction chain: Input-output process of the selected socio-economic system; commercial or non-commercial transactions that take place, starting with 'Input' on the left and ending with 'Output' on the right.

Throughput line: Arrowed lines showing the flow of the throughput of the main product or service. The size of the line is determined by the volume of the throughput being channeled between those actor relations.

Core function: The transaction(s) with other market players. On the demand-side, as consumers of a good or service, on the supply-side, as workers or producers (SDC, DFID, 2014).

Supporting & regulatory functions: The enabling environment for the core function of the system. These functions exist to shape or influence the system with resources, inputs, supplies, rules, norms, standards, etc., that are an essential part for a system to operate and work.

Relevance or size of actor node: Their relevance in the system determined the size of the actor node. It is calculated by the Throughput and Replaceability of each in the Stakeholder Assessment Matrix. The higher the Relevance score of the actor, the larger the circle, the lower the relevance score, the smaller the actor node circle (GOAL, 2019).

Bad relationship: Relationship not working for target group (GOAL, 2019). In the current system map, an (X) represents a bad relationship, and a good relationship has no symbol, just the connecting line.

Stressed relationship: Inadequate, one of the actors has dominance over the other, not working in ideal terms for both actors (GOAL, 2019). In the current system map, a lightning bolt represents a stressed relationship.

Direct relationship: Actors in this level of the enabling environment have a direct person to person relationship with Target Group Transaction Chain Actors (GOAL, 2019)

Indirect relationship: Actors in this level are present in the system but have an indirect relationship with the Target Group (GOAL, 2019).

Absent relationship: This level represents a cut in the relationship or lack of presence of the function and its actors mandated to carry out an enabling environment function in the operation of the system (GOAL, 2019).

Vulnerability Map

Shocks: Shocks are sudden events that impact the vulnerability of the system and its components. There are many different types of disaster-related shocks that can strike at different levels (DFID, 2013). Note that drought is not a sudden event, as the definition would suggest, however, once a drought surpasses the tipping point into an extreme event, it is classified as a shock.

Stresses: Stresses are long-term trends that undermine the potential of a given system or process and increase the vulnerability of actors within it (DFID, 2013).

Vulnerability: The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard (UNISDR, 2009).

Partially disrupted: This level represents a cut in the relationship or lack of presence of the function and its actors mandated to carry out an enabling environment function in the operation of the system (GOAL, 2019). In the vulnerability map, an exclamation mark (!) represents a partially disrupted relationship.

Completely disrupted: The relationship is fully disrupted and the connectivity between the actors has been broken due to the impact of the risk scenario. This could be temporary or permanent and cannot be re-established without external intervention (GOAL, 2019). In the vulnerability map, an (X) represents a totally disrupted relationship.

Determinant Factors of Systemic Resilience (DFRs)

The Resilient Systems Matrix (RSM) is a key tool at the heart of the R4S where the assessment of the system up to this point is consolidated and reviewed against the 6 DFRs in order to translate this assessment into overall recommendations to improve the system resilience.

Connectivity refers to the degree to which a system transfers the impact of shocks and stresses across a system. Connectivity can be both a good and a bad thing. A well-connected system reduces the degree of impact on a single or small group of actor nodes (e.g., the target group) and increases the capacity of the system to recover or bounce back following an impact. However, an overly connected system can lead to contagion or rapid spread of disturbance across the system. The degree of connectivity should be considered from the perspective of the system's functionality, and the degree of protection afforded to the target group (GOAL, 2019).

Diversity refers to the different forms through which a system can function which are sufficiently different, such that a single risk scenario will not disable the entire system's functionality. A system with a good level of diversity has the capacity to continue to function in different or adapted ways when impacted by a risk scenario. A system which has a small number of actors or is dependent on a small number of actors that are critical (i.e., cannot easily be replaced) has less diversity and is more vulnerable to shocks and stresses. Diversity allows some components to compensate for the loss or failure of others (GOAL, 2019).

Redundancy refers to having a sufficient number and capacity of actors which can carry out system functions, should system actors become disabled due to the impact of shocks and stresses. It means having a back-up plan through which the system continues to function, should some actors become unavailable. Certain systems can be said to function in a polycentric or modular way which increases their overall resilience. This means that if modules of the system fail, the system as a whole can continue to function; although with reduced capacity (GOAL, 2019).

Governance revolves around three dimensions: power (authority)/leadership, decision-making and accountability. It is contextually driven; thus, it will vary from social system to social system. From a system's resilience perspective, governance relates to whether the system has the capacity to take decisions and act as a whole using complex adaptive thinking. This is reflected in how actors throughout the system become aware of potential risks, how they organize themselves (naturally or intentionally) to make decisions to face those risks and, if through these decisions the leaders are able to guide the system to a position of an acceptable level of impact ensuring that the system continues to function. If this governance function exists in the system, a key consideration is how it may be impacted by shocks and stresses, before, during and after emergencies. The quality of this governance function should be assessed to understand how effective it will be as a coordination mechanism during shocks and stresses – is it led by a single actor or a consensus group of actors, are the voices of the actors that do not have the power/authority heard, and which actors are held accountable for their decisions? (GOAL, 2019).

Participation refers to how inclusive the system is in considering the needs of vulnerable or disadvantaged actors. If the system is operating in a way that benefits only a small group of the overall system actors, then the system is less functional and less resilient. The system should make the provision to protect vulnerable groups and ensure zero exploitation, particularly of children. It also reflects the degree of freedom to associate, participate and speak (skill and will to do so) and the obstacles that impede an effective participation from all possible actors (especially women; women's economic empowerment or leading role in the transactions of the system are especially important, since evidence shows that households and communities who are led by women are inherently more resilient to perturbations in the system) (GOAL, 2019).

Learning refers to how the system learns through feedback loops in response to past experiences or proactively from learning exchanges. For system learning to be effective, there must be a change in understanding (first) at the individual level and (second) at the group level and this change must be demonstrated through practices, interactions and processes between actors in the system. Learning also refers to the quality of learning and to the barriers for learning. Learning is directly correlated to Participation, learning in a social system cannot take place if there is no participation at the individual, household, community, and organizational level (GOAL, 2019).

6 Results and impacts

What follows summarizes the main outputs from the report and presents updates of the application of the recommendations. The main outputs are two maps of the system (current and under risk scenario) and the resilience and causal loop analyses. These results are briefly described in this case study.

Mapping the current state of system (Component 2)

Figure 1 represents the community tourism current system map. It initiates with marketing of community tourism service which can be made through a tourist package or lodging services, then to the facilitation of the service, visitor attraction management of the service, ending with the Tourist who is the consumer of the service. The throughput line unit indicates the number of tourists per year. An estimated 60% of hotels/hostels commercialize community tourism services, with the remaining 40% commercialized by tourist packages. The tourist services are facilitated (20%) by the Reservation Central or directly to community tourism microenterprises, which are quite numerous and can operate independently or together as the Community Tourism Network. Around 27% of tourist packages offered by tour operators are sold directly to one enterprise – Sendero Las Escobas. Some hotels also work with Sendero Las Escobas, increasing their demand to 32%. The rest of the tourist packages or hotel services are delivered by enterprises affiliated to the Community Tourism Network, and some independent enterprises. Relationships in the transaction chain are mostly considered good, though there are some actors and relationships under stress with other actors. A potential cause could be that some actors' facilities and services are not up to the standards of national or international tourists. Conflicts in water distribution and management is another reason of stressed relationships between an important enterprise and the local government.

The Target Groups

Reservation Center: An integrated platform of actors designed to promote and marketing community-based enterprises products and services to hotels/hostels, tour operators and tourists. It is also in charge of administration and logistics of tourist services with community-based enterprises and the Community Tourism Network. The Reservation Center is represented and overseen by Ak'Tenamit (GOAL, 2020). The Reservation Center was created with sponsorship from donors, and since then it has been partially functional.

Community-based Enterprises: A series of efforts an organization or association from a community make to improve their social and economic situation of all individuals in their surroundings (GOAL, 2020). For this system, these community-based enterprises are those dedicated to providing a service such as sightseeing, hiking, boat riding, and other

experiences such as eating local food, buying local artisanal products, etc. Community-based enterprises are usually made of family members working together.

Relationship status between the transaction chain and supporting and regulatory functions

Relationships that are not functioning well are those between the transaction chain actors and good environmental practices actors. These supporting actors do not have an active role in the system due to a lack of resources and influence or are not facilitating a better representation of local enterprises. As a result, many of their efforts wear off, one example being the Environmental Management Plans that were written which were not implemented. On the other hand, transaction chain actors are unprepared or unwilling to apply better environmental practices while they work in protected areas or wildlife refuges, with the burning of trash still being commonplace as well as poor solid waste management.

The supporting and regulatory functions show the main actors operating in the enabling environment of the system. These include boat input and service suppliers and basic services and infrastructure, market coordination actors and, for promotion and publicity, capacity strengthening actors, tourism regulation actors such as quality standards or registering and certification, permit regulation, natural resource management and indigenous governance actors. To see in greater detail the relationships between core actors and supporting and regulatory function actors, see the map of the system in the report.

There are good relationships between regulatory and transaction chain actors for the most part, with the exception of indigenous populations (who constitute a significant proportion of the population of Livingston and Puerto Barrios) that feel they are not sufficiently protected or supported by pro-indigenous government entities. From the supporting function, stressed relationships are observed between transaction chain actors and basic service providers due to the dissatisfaction enterprises or other actors experience when these services are ineffective or unreliable. Supporting functions that are considered absent are financial services, good environmental practice management, promotion and publicity, and capacity strengthening. These are usually services that are considered non-existent among target group actors, especially for community-based enterprises. In regulation, the indigenous and afro-descendant people protection function is stressed due to social issues that are impacting the community and poor management by the government actors. A significant portion of the target group are indigenous or afro-descendant.

Figure 2. Community Tourism System Current System Map

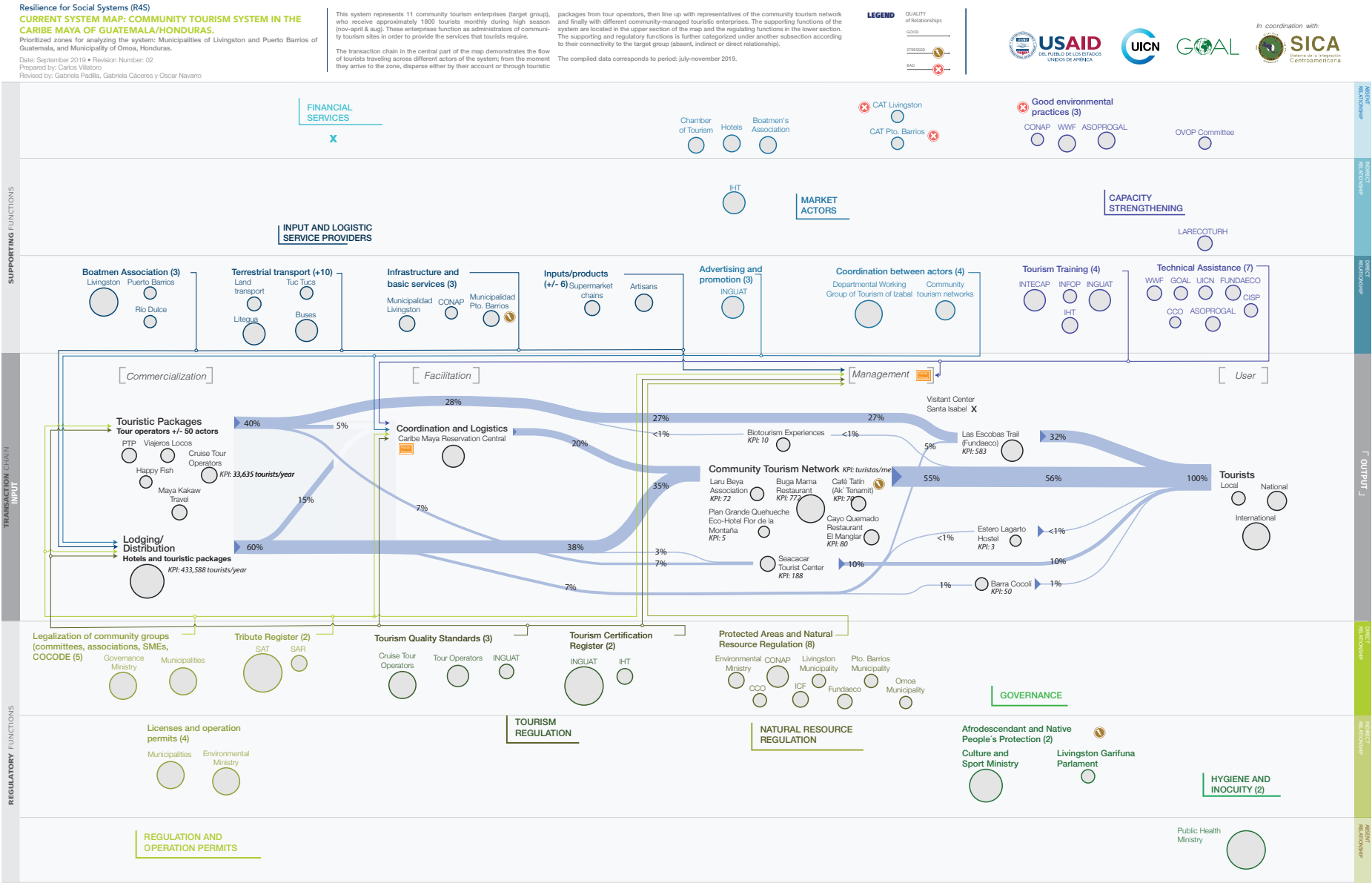
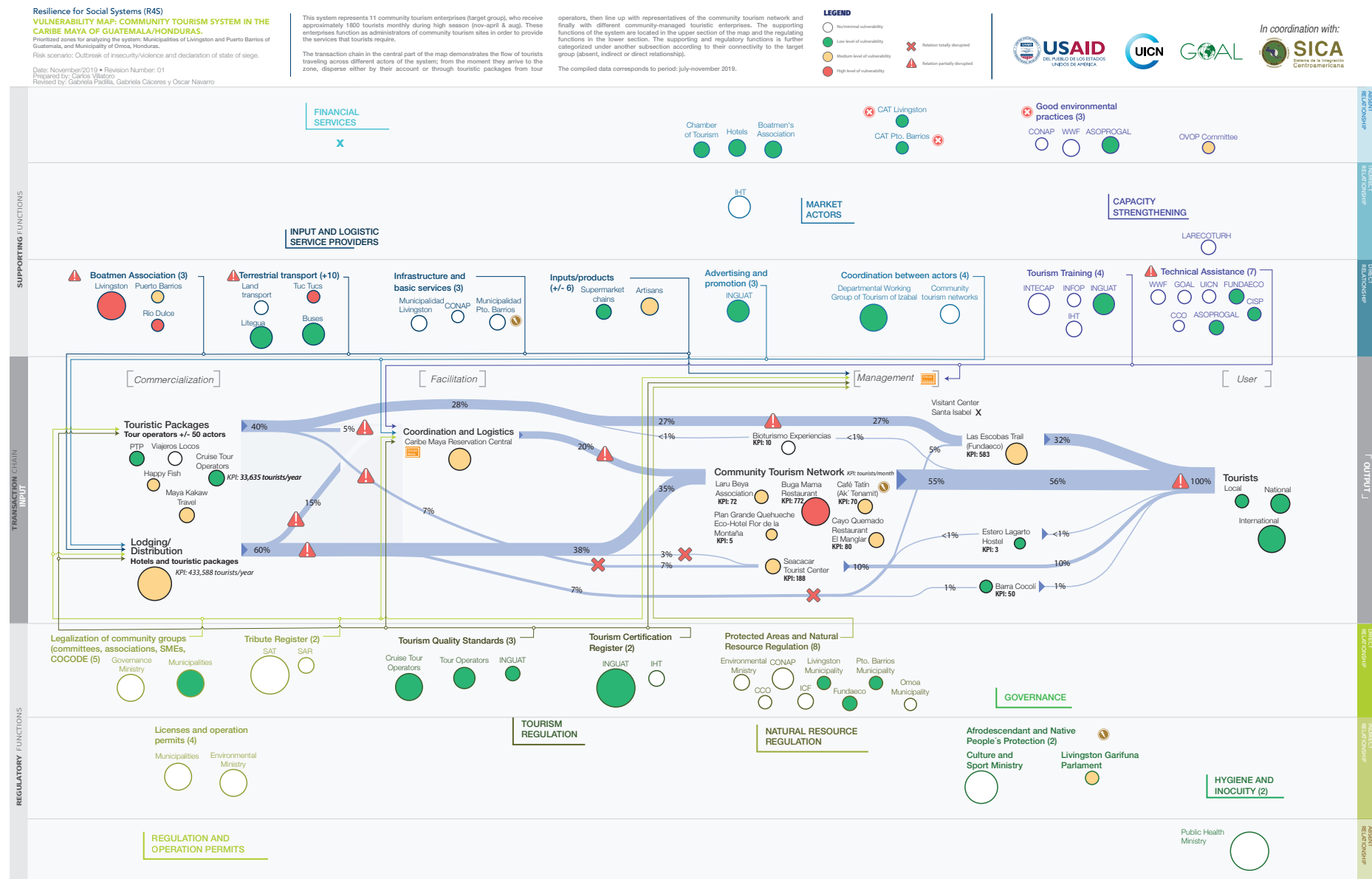


Figure 3. Vulnerability map for the risk scenario “significant escalation of the activity of armed non state actors in the system’s areas of influence and the establishment of temporary “State of Siege” by the Guatemalan government, that paralyzes the core activities of the community’s tourism system and negatively affecting the wellbeing and income generation of system actors”.



Risk Scenario, Vulnerability, and Resilience Analysis (Component 3 & 4)

An analysis and mapping of the vulnerability of the system under a “shock-induced” risk scenario was completed. Risk Scenario: significant escalation of the activity of armed non state actors in the system’s areas of influence and the establishment of temporary “State of Siege” by the Guatemalan government¹⁰, that paralyzes the core activities of the community’s tourism system and negatively affecting the wellbeing and income generation of system actors. As shown in Figure 2, it caused a momentary disruption in the system that halted tourist related services in the area. Tourists stopped visiting communities, and those that were in the area stayed in their hotels. Actors with high vulnerability were boatmen associations, ground transportation providers and the community tourism network. Actors with low vulnerability in the transaction chain included some hotel chains and tour operators. The map also shows which relationships were partially or completely interrupted, these were actors such as hotels or small enterprises that had to stop activities or water and land transportation operators left without clients. This showed that shocks that cause a decline in tourist inflow have a direct, immediate impact on the target groups wellbeing and their livelihoods.

The resilience analysis presented a brief summary of each Determinant Factor of Systemic Resilience (DFRs) under the selected risk scenario: significant escalation of the activity of armed non state actors in the system’s areas of influence and the declaration of temporary “State of Siege” by the Guatemalan government , that paralyzes the core activities of the community’s tourism system and negatively affecting the wellbeing and income generation of system actors . Most of the transaction chain actors were not prepared for a shock, and the partial disruption affected the connectivity and redundancy of the system, while other factors such as learning or participation were considered positive to their resilience, though still lacking in terms of managing shocks.

¹⁰ The state of siege is an exceptional measure or regime that must be declared by the President of the Republic and that seeks to restore the full exercise of order and the Constitution. The state of siege restricts the full validity of six citizen rights. Among them are action (doing what the law does not prohibit and cannot be persecuted or disturbed by their opinions), locomotion (freedom to enter, stay, transit and leave the territory), meeting and demonstrating, carrying weapons, legal arrests (only by court order) and interrogation of detainees and prisoners.

Connectivity	Redundancy
The system depends strongly on the actors from stage 1 of the system – tour operators and hotels/hostels. Community-managed enterprises depend on these actors for selling their service, as otherwise they do not have access to tourists. The risk scenario directly affected this first stage and therefore influenced the rest of the transaction chain, partially interrupting relationships. As a result, the connectivity was drastically reduced between core actors.	The target groups - the Reservation Center and community-managed enterprises – are not yet able to attract tourists by their own means and must rely on their providers. When tour operators and hotels/hostels were interrupted during the state siege, community-based enterprises closed their business, even though there was still some tourist activity in the area that could have been taken advantage of.
Diversity	Governance
On the one hand, the transaction chain is considered diverse, particularly by the many products and services that community-based enterprises offer. However, when the state siege was in place, many tourists decided to stay in popular and conventional hotels/hostels rather than visit community-based enterprises.	The transaction chain relies on one actor – the Reservation Center – to mediate between community-based enterprises and tourist package sellers such as tour operators or hotels/hostels. Though some community-based enterprises have joined the network that works with the Reservation Center, there are many enterprises that are missing. The Reservation Center needs a plan that guides them to integrate more enterprises into their organism, strengthen their decision making, and define the route towards their legal status.
Learning	Participation
Target group actors from the system, those that are members of or involved with the Reservation Center, have received numerous trainings and technical assistance and attended many exchanges of experience events with regional community tourism networks. This has provided them with knowledge and education that can be observed in how they are currently organized and developing their business. However, there is not enough knowledge or experience on how to address or manage interruptions in system functions or activities under state sieges, or any other kind of shock and there is minimal evidence of learning from previous impacts of risk scenarios.	The actors of the system are noted to have a high level of motivation for participating in decision making. Actors are very involved with second level structures that represent them, such as the Departmental Tourism Committee of Izabal. Here two different actors coordinate and lead various subjects and projects in benefit of communities and the tourist economic sector.

Causal Loop and Theory of Change (Component 4).

The causal loop diagram in Figure 3 attempts to identify system variables that affect the community tourism system. The variables considered for this system were: no marketing, low income in communities and low influx of tourists. The re-enforcing and compensating variables that maintain these systemic variables in constant relation include deficient infrastructure, unavailable financing and harmful environmental practices, among others. These variables evolved into Figure 4, a causal loop as a Theory of Change. Effective marketing, constant income in communities, and high tourist influx resulted in the positive re-enforcing loop of the system.

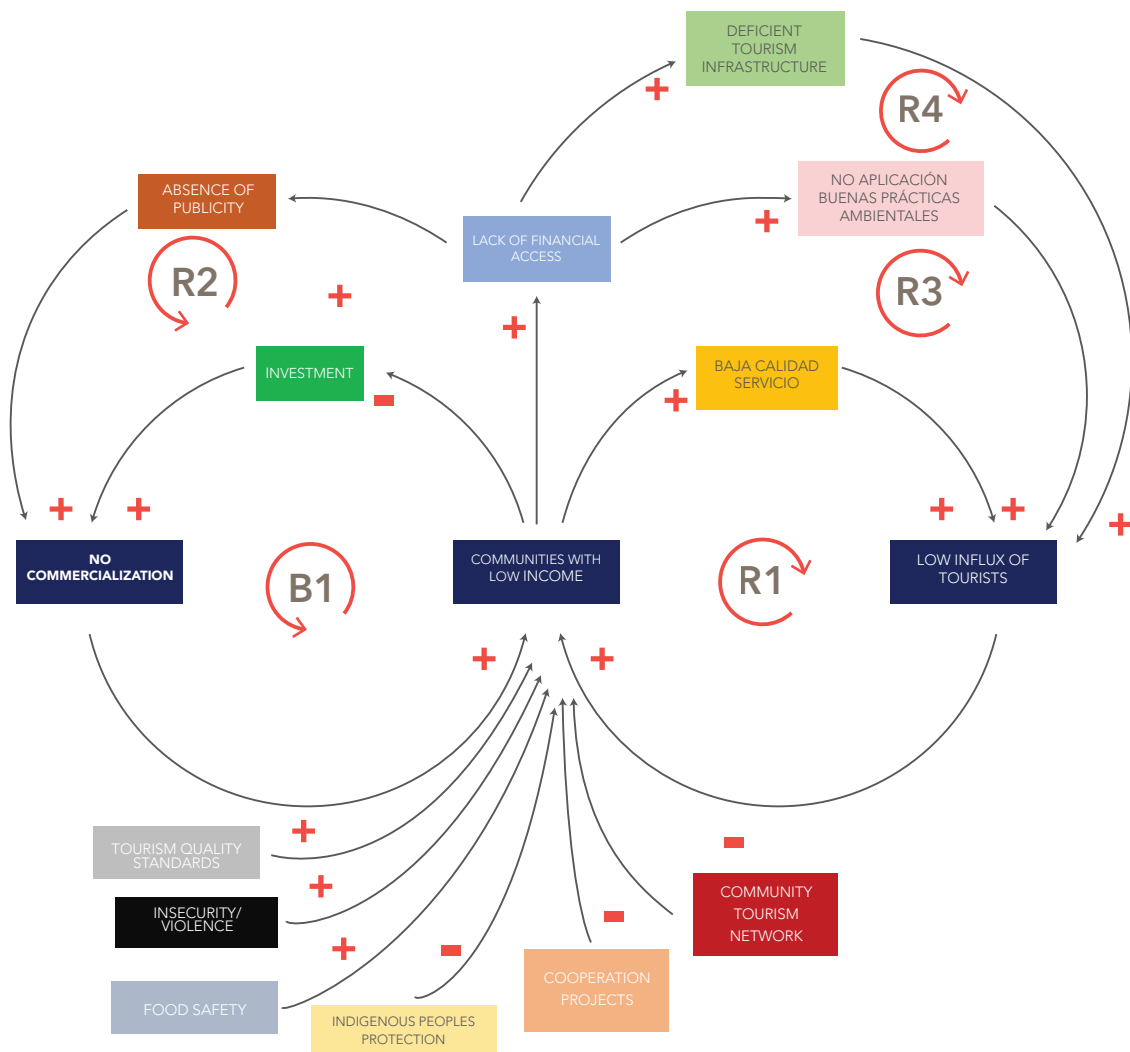


Figure 3. Causal loop diagram of the community tourism system

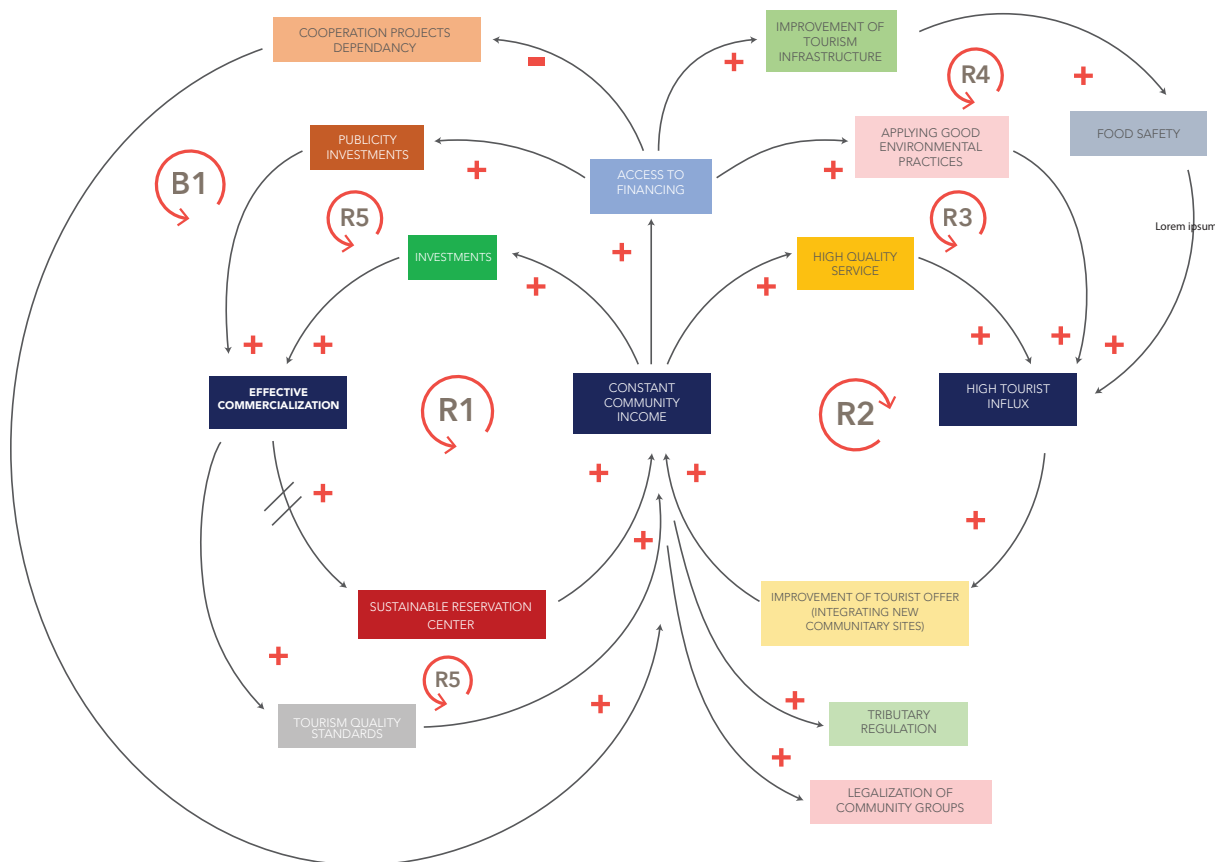


Figure 4. Causal loop as theory of change for the community tourism system

Recommendations resulting from the R4S and progress on strengthening resilience and the functionality of the Community Tourism system of the Mayan Caribbean.

The gained understanding of the system allowed the team to propose the following recommendations for the RCBP project. These are in the process of being implemented and outcomes can be observed already. The technical foundation of the study resulted in resources being approved for implementing the recommendations from the investigation and therefore was added to planning processes.

- **Update the tourist offer data for each enterprise.** This excludes enterprises that have not been selected by the project; those that have been selected have updated their tourist offer and also offer new products or services. Others have been trained as tourist guides. This has contributed to diversifying the offer in the supply chain.
- **Commercialize the community tourism offers in collaboration with the Reservation Center and tour operators.** Though the Reservation Center is not fully functional, new

and regular enterprises are managing social media to increase their coverage and currently a “familiarization trip” is planned between tour operators and enterprises, all of which are new strategies for community tourism microenterprises¹¹.

- **Strengthen the Reservation Center as an organization and add new members from community tourism enterprises.** The Reservation Center was designed to facilitate the tourist service provision of community-based enterprises. However, due to COVID-19 contingencies, the Reservation Center, as an entity, has discontinued operations, and consequently these recommendations have not been fulfilled.
- **Create strategic alliances between institutional actors.** The project has promoted alliances through training and certification partnerships between institutional actors and microenterprises. These training and certification packages are generally available but are not readily used by critical actors of the system. Official training from the government will spark interest and from tourist enterprises wanting to get certified.
- **Implement actions that reduce dependency of businesses on external donors and NGOs.** Small enterprises are rapidly learning to take advantage of donors and NGO support while becoming responsible for their earnings and income generation. In response to project efforts, organizations are beginning to take responsibility for credit payments, for applying capitalization schemes, paying loans, etc.
- **Support environmental sustainability in community tourism.** To date, management plans have been prepared for enterprises and businesses as Environment, Monitoring and Management Plans (EMMP), though these are waiting to be implemented.
- **Promote an integrated network of regional cooperation between Mexico, Belize, Guatemala and Honduras.** The regional network has stalled due to current stressors such as COVID-19 and travel restrictions. Rather than facilitate exchanges which are common between organizational leaders, the project has decided to open dialogue and training spaces at local level, which will have a greater impact on their relationships due to the current context and travel restrictions.

Also, it is important to mention that local organizations in Izabal were interested in learning more about the R4S methodology and the results of the research to incorporate aspects of the methodology into their own work with community tourism. One local organization incorporated some basic aspects of the methodology for a project proposal that was later approved. This indicates that the consultation process served as an impulse for community enterprises to improve their research and writing capacities.

¹¹ The Fam Trip, are courtesy trips that are offered to tour operators or travel agencies in which they can live the experience of a tourist destination first-hand.

7 Success factors

- The “familiarization tour” that provided direct learning and knowledge of the system before beginning research activities. The researcher directly experienced the transaction chain dynamic and met the actors during a “familiarization tour”, or “fam trip” prior to the design and development of the consultation process. The researcher was new to the region, and consequently the fam trip was very helpful in enabling the researcher to become well acquainted with the system actors and dynamics.
- During the study, a shock impacted the system which forced the team to quickly decide to apply Component 4 of the R4S, thereby including the vulnerability, resilience and causal loop analysis into the study. Interest and available resources for applying the R4S during an adverse event have helped to document how the system functions during a shock.
- The study objectives were met within the desired timeframe with the tools and map (which are also available in graphic editions). These maps are the basis for advanced mapping on these systems. Experience and previous training of R4S were critical in meeting research objectives.

8 Challenges and limitations

- GOAL incorporated Component 3 and Component 4 outside of the consultation process as a rapid response to an unexpected shock. To continue addressing this shock, the analyses should be socialized and validated with the actors and stakeholders of the system.
- Significant effort was placed in generating the current system map with little or low quality of information. The system is mostly qualitative data with little to no quantitative data represented in the system.
- The Caribe Maya route has more information from Guatemala than Honduras. In Honduras, the system does not have strong connections between local actors and tourist operators. This area was not included in the vulnerability analysis and mapping the risk scenario directly affected, since the shock occurred in Guatemala.

9 Lessons Learned

- The amount of time dedicated to field work was too short to consolidate the systemic analysis that the R4S Approach offers, considering the Approach suggests participatory pre and post research consultations. New, continued iterations of the analyses and mapping of the system will provide deeper, more detailed knowledge of the system and thereby better targeted interventions.
- The technicality of the R4S made it difficult to explain to different audiences, this obliged the researcher to simplify the analysis for the actors involved in the study. Common words should be sought out to explain the R4S products and make it easily digestible to various audiences with simple maps and diagrams.
- In addition to a comprehensive reading of the manual, it is necessary to make an institutional investment in the training and orientation of the human resource responsible for applying this Approach. It should be ensured that researchers show previous analytical and systemic vision and capabilities in the fields of: resilience, Disaster Risk Reduction (DRR), and market systems.
- The R4S was implemented at a time when the system and target groups had already been prioritized and the implementation of activities were underway, and consequently, the recommendations had to be adjusted to the context. For advanced, high-quality results, R4S tools and methods should begin to be employed at the start of a project or programme.
- The R4S is a useful Approach to inform the design process of interventions aimed at strengthening socioeconomic system's functionality and resilience. To keep promoting positive changes on targeted systems, high participation from system's actors and/or training workshops on R4S could be planned along the R4S implementation or programme interventions.

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Links or references for further reading

Links to access the R4S: <http://resiliencenexus.org/r4s/> Read an Op Ed on Systems Approach to Resilience Building: [Here](#)

Consent and confidentiality

The research does not demand personal or specific data from the actors involved, however, the team always requested informed consent according to GOAL procedures, especially for community actors. Furthermore, the results are presented at the system level and no reference is made to particular individuals or groups. Finally, GOAL made the process of consent from the partner and the donor for the publication of this study.

