



FINAL EVALUATION REPORT

"RESILIENT NEIGHBORHOOD-BUILDING RESILIENT CITIES THROUGH RESILIENT NEIGHBORHOODS" PROJECT

CICLE: SEPTEMBER 28TH 2017-SEPTEMBER 30TH 2022

GRANT NUMBER: AID-OFDA-G-17-00232

SECTOR: Ulloa, Las Brisas, Villanueva/Los Pinos Municipality of the Central District Honduras

APRIL, 2022

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ACRONYMS

AAUI	Informal urban settlements	
AJAASFRAM	Association of Water Management Committees of Francisco Morazán	
AMDC	Central District Municipal Mayor's Office	
AMEXCID	Mexican Agency for International Development Cooperation	
BL	Baseline	
BR	Resilient Neighborhood	
CABEI	Central American Bank for Economic Integration	
CCT*	Tegucigalpa Chamber of Commerce	
CEPREDENAC	Central American Center for Coordination on Natural Disaster Prevention	
CODED	Departamental Emergency Committee	
CODEL	Local Emergency Committee	
CODEM	Municipal Emergency Committee	
COPECO	Permanent Contingency Commitee	
DECOAS	Department of Education, Communication Environment and Health.	
DGCDH	Directorate of Community Management and Human Development	
DOT	General Directorate of Territorial Organization;	
DRR	Disaster Risk Reduction	
EQ	Evaluation Questions	
ERSAPS	Regulating Entity for Potable Water & Sanitation Services	
ET	Evaluation Team	
EWAS	Early Warning and Action System	
Faces	Faculty of Space Sciences - Land Use Observatory	
GER	Risk Evaluation Management	
GF/FG	Focus group	
Idem	Municipal Development Institute	
IHCIT	Honduran Institute of Earth Sciences	
IMTA	Mexican Institute of Water Technology	
JAA	Water Management Committee	
L/p/d	Liters per person per day	

	•
Los Pinos Sector	Altos de los Pinos and Los Pinos
NGO	Non governamental organization
NR	Resilient Business
OMM*	Woman's Municipal Office
ООТ	Observatory of the Territorial Organization
PCGIR	State Policy for Comprehensive Risk Management in Honduras
PEC	Projects implemented by the Community
PMOT	Municipal Spatial Planning Plan
PMRRD-B	Disaster Risk Reduction Master Plan
SANAA	National Autonomous Service for Aqueducts and Sewage*
SCALL	Rainwater collection system
SCI	Incident Command System
SEDECOAS	Secretary of State at the Community Development, Water and
	Sanitation Offices
SIMRET	Municipal System of Risk Information and Territorial Studies of the Central District
SINAGER	National Risk Management System
SMART	Company Conformed by 97 Business Networks.
UGASAM	Municipal Water and Sanitation Management Unit
Ulloa Sector	José Ángel Ulloa, José Arturo Duarte and Nueva Providencia
UMGIR	Municipal Unit for Comprehensive Risk Management
UMPEG	Municipal Management Planning and Evaluation Unit
UNAH	National Autonomous University of Honduras
UNITEC	Central American Technological University
UTH	Technological University of Honduras
Villanueva Sector	Villanueva Norte, Villanueva Sur

SUMMARY

The Resilient Neighborhood (BR) "Building Resilient Cities through Resilient Neighborhoods" project was executed by the community, the Central District Metropolitan Mayor's Office (AMDC) and GOAL, between October 1, 2017, and December 31, 2021. Prior to completion, a cost-effective extension was carried out, for the year 2021 and a second cost-free extension of 9 months (up to September 2022), to follow up on the activities and ensure the sustainability of the strategy. This is a project funded by the Bureau of Humanitarian Assistance (BHA) of the United States Agency for International Development (USAID).

The project aimed to reduce disaster risk in Tegucigalpa with an emphasis on protecting vulnerable groups, focusing on 8 neighborhoods: Nueva Providencia, José Angel Ulloa, Las Brisas, Betania, Nora de Melgar, Los Pinos, and Villa Nueva.

BR is a strategy developed by GOAL with the support of USAID / OFDA, which is based on the principles of a "Neighborhood Approach" and aims to increase resilience in existing or new informal settlements, which experience uncontrolled expansion, thus creating the conditions for sustainable urban development. It includes a defined approach (HOW) to tackle problems in informal settlements and a more detailed implementation strategy (WHAT).

In the first instance, the approach includes four complementary interrelated components, which are key to achieve effective and sustainable solutions. These four components are: inclusion, resilience, systemic thinking, social and behavioral change.

Seeking to measure the results of the project, an external final evaluation was developed, with the purpose of assessing the BR approach, from the OECD criteria: relevance, efficiency, effectiveness, sustainability, and impact, providing credible and evidence-based responses to the evaluation questions (EQ). The main methodological tools to measure these factors were applied to the beneficiary population, which participated directly, together with CODEL, JAA, the AMDC team, stakeholders, and the project team. More specifically, semi-structured surveys and interviews applied to focus groups in the field were used.

At the *level of relevance*, the main results of the project are oriented towards the institutionalization of the BR approach, which seeks to strengthen the capacities of the AMDC in risk and disaster reduction, promoting local participation as a strategy. This involves a practical methodological framework of accompaniment that results in the direct link between CODEL and the neighborhood, connecting institutional actors present and thus enhancing the role of the neighborhood in the development of its environment with prevention actions, but with a long-term vision. This local process is a key strategy for building resilience in the neighborhood and the city.

In terms of Efficiency and execution 91.35% of the amount budgeted for the project stands out. The investment cost per beneficiary was US\$ 57.32 The project reached 77,811 beneficiaries, and has been implemented by key actors, such as the AMDC and its dependencies, SANAA, academia (public and private universities), schools, community structures (CODEL and JAA), business owners and young community leaders. Both were involved in activities throughout the project and contributed to the achievement of the proposed goals and particularly the AMDC, which assigned a technical work team with more than 20 managers who facilitated the planning, adjustments, and implementation during the life of the project.

From the knowledge acquired, it is important to highlight that the beneficiary population interviewed knows the threats of landslides in their neighborhoods (94.94%) and knows what to do (93.45%). Among the actions most valued by families as a contribution to DRR are the SCALL works availability of water in safe places (88.10%); construction of stands and ditches (73.10%) and the support of CODEL in 72.92%. The project produced 40 tools and instruments of the BR strategy, which the local government adopted and whose technicians put into operation. In the implementation of the strategy, it managed to link 80% of the AMDC units and directorates and 100% of community organizations that have increased their capacities to adequately perform their functions in the face of disaster risk.

In terms of effectiveness, processes of institutionalization of the BR approach in the use of technology for flood risk assessment are highlighted: weather stations, forecasting models, field information from CODELs, modeling and data processing that allow the generation of reports, alerts and publications that facilitate decisionmaking to prevent risks. The consolidation of a technical team at the AMDC level for inclusive and resilient sustainable urban development. Regarding urban planning, the AMDC (DOT) adopts the manual for the configuration of neighborhoods, a tool that has been institutionalized in the DC to facilitate the promotion of economic strategies aligned with housing and services policies, which gives greater resilience to neighborhoods in the face of possible natural disasters. The AMDC as an actor has been key, to increase resilience at the community level by making a political commitment and allocating financial and technical resources, for the development of activities that improve risk reduction; the updating of the Municipal Plan with a focus on Territorial Planning and the realization of an Urban Plan was promoted, achieving the updating and expansion of the perimeter of the DC. This process leads to the creation of the Inclusive and Resilient Urban Development Unit (U-DUSIR) as a technical support to DOT, which in turn has indicators for informal settlements that it has already implemented, 100% of the indicators were met and, in some cases, exceeded the target. This project demonstrates that urban resilience is a living process, which requires in addition to a constant review and update of the neighborhood situation, to adopt measures such as: diagnoses, performance measurement and evaluation of the available information. The technical expertise combined with the inclusion of communities

and other institutional actors makes it possible to mitigate the risk in different phases with different time horizons; it allows immediate action on the one hand a long-term solution to the problem on the other.

In terms of sustainability, it would be defined in this case, as the horizon that the State and the municipality are drawn in a planning perspective as orderly and systemic as possible (central to the BR offer), but a mechanical development cannot be expected from it. In one or the other area, there are risk factors-political ones for example-that qualify the interaction of the different actors in the achievement of results.

Among the main *lessons learned* from these processes, it is worth mentioning the following: the approach to informal settlements oriented to their reconfiguration, originated specific training processes. Thanks to these processes, municipal (CODEM), community (CODEL. JAA NR and patronages) identified the risks and took the corresponding mitigation measures. Among the most prominent processes that created resilience are: first, local planning, second, the construction of infrastructure works from the reality and participation of the population, and third, the accompaniment of the AMDC.

Among the good practices, two stand out: (i) reconfiguration and improvement of human settlements, has contributed to reducing risks and vulnerability of housing, in critical infrastructure and to take advantage of abandoned spaces to create recreation centers for the inhabitants of the neighborhoods and (ii), the prepared CODEL, incorporates all sectors within the neighborhood for the analysis of the threats to which it is exposed and generates possible risk scenarios in its neighborhoods. Through its plans, it prepares to act and improves its capabilities in the event of emergencies.

Among the many recommendations, the following are proposed: a) at local level the stability of the human resources trained in CODELs will continue to be a challenge, because it is voluntary work with a vocation of service. However, it will be necessary to seek some incentive, not necessarily economic, that would better specify the social recognition that they already enjoys; b) to strengthen the capabilities of the SIMRET platform, it is recommended the training of community meteorologists from the climate stations to support measurements of temperature, relative humidity and precipitation from an APP application, on tablets or smartphones, to send information in real time; and c) the success of this experience is to have provided the AMDC with concrete instruments that will help it formulate policies with clear methodologies, key actors, tasks and ways of monitoring and institutionalization. However, its effectiveness will depend on whether there is a corporate agreement to create the relevant policy.

METHODOLOGICAL PROCESS OF THE EVALUATION

2.1. PURPOSE OF THE EVALUATION

GOAL office in Honduras hired SEDC Consulting Group to carry out a final performance evaluation of the Resilient Neighborhood (BR) project. The main recipient of the evaluation is GOAL in Honduras, which will use the findings to inform the coordination on the achievement of the objectives and goals achieved during the five years of implementation. These findings will also be used to implement improvements in future project designs from the approach implemented in Honduras: similarly, it may be of interest to USAID/BHA and other groups related to the experience of reconfiguring informal human settlements.

The purpose of the evaluation was to assess the BR approach from relevance, efficiency, effectiveness, sustainability, and impact, providing credible and evidence-based responses to the evaluation questions (EQs). The evaluation covered the period from September 2017 to December 2021 considering that it has an extension until September 30, 2022. This study offers several suggestions on necessary corrections and adjustments towards an expansion and/or extension of the project.

2.2. THE METHODOLOGICAL FRAMEWORK

The methodological framework of the exercise was based on a mixed¹ approach. Due to the pandemic, the number of participants in the focus groups (no more than eight people) was reduced using biosafety measures and in spaces of no more than three hours, to prevent contagion. At the level of implementation at the beneficiary survey scale, the planned sample was met. The analysis method used to measure the results of the project was the contribution method, based on the ToR's EQs. This method allows to explore the degree and mechanisms that accompanied the actions of the project with a view to achieving the results, understood as the transformations or changes observed in the groups in which it was intended to influence. To complete the information and discuss the hypotheses of analysis and interpretation, group and individual interviews were organized, which complement the measurement of the scope obtained to date.

The evaluation criteria used were relevance, efficiency, effectiveness, sustainability, and impact. The findings and evaluations presented in chapter two of the Report correspond to answers to the evaluation questions according to each

 $^{^{1}}$ The term mixed refers to the fact that both quantitative and qualitative methods of data collection and analysis are used in the evaluation.

of the five criteria. These questions, organized by criteria, are presented in the initial report (Annex 1), and were adapted based on the following inputs: i) the terms of reference; ii) a virtual meeting with the person responsible for monitoring, which also served to clarify the route proposed by the evaluators, and iii), the virtual internal meetings with the technical team, which helped the adaptation of the questions.

2.3. EVALUATION QUESTIONS:

This final external evaluation focused on the following lines of research or EQ, which were proposed to the GOAL and reviewed in consultation with the consulting team, as indicated in the scope of work included in Annex 1.

2.4. SAMPLING

The Evaluation Team (ET) collected data in four neighborhoods of the Central District: To determine the sample of stakeholders that should participate, a sequential process of the work sectors was used, supported by the database of activities accompanied by the project.

The sample calculation was based on:

$$n = Z_{\alpha}^{2} \frac{N \cdot p \cdot q}{i^{2}(N-1) + Z_{\alpha}^{2} \cdot p \cdot q}$$

Where:

N= Population size (75,128) Error (s) = Margin of error (5%) n = sample size (382)

Below are the criteria, in the order applied, that the ET used as a filter in the universe of beneficiaries at the level of families and organizations:

- Participants preferably from year one of implementation (after the signing of the agreement) and with a minimum average of three active years in the project.
- Consider that the neighborhood has some community mitigation infrastructure.
- Geographical location determined, in part, by logistics and security considerations.
- √ Type of stakeholders: families directly benefited by local, linked and institutional stakeholders such as AMDC and other stakeholders.
- $\,\,\checkmark\,\,$ Type of activities: people involved in different sectors.

2.5. DATA COLLECTION METHOD

The design used included qualitative and quantitative evaluation. The qualitative design consisted of:

Review and analysis of internal documents related to the execution of the project and other external documents, such as academic studies, official government publications, other evaluations, and press articles. A list of the documents most frequently consulted and analyzed during the evaluation is included in annex chapter six.

Interviews with key informants Findings come from all evaluation questions. There were 38 interviews with key stakeholders at the municipal level that were linked to direct observation (OD). Table 1 details the number of participants by location.

AMDC	Other stakeholders	
Interviews		Focus Groups
Department of Territorial Planning DOT	UNAH	CODEL
Land Registration Office	Chorotega cooperative	Resilient Businesses
Risk and Disaster Management Unit UMGIR	COPECO	Business network
CODEM	Program Team	Water Management Committees
Directorate of Community Management and Human Development		

Table 1: Participants in the evaluation process

The data collection protocols (Annex 2) include questions that address and originate in the EQ, as well as in the review of documents, conversations with the project staff, as well as their knowledge and experience in the strategies implemented and monitoring design. Due to the impact of the pandemic, interviews with the AMDC and stakeholders were conducted virtually.

Quantitative design: The findings helped identify adoptions by families on the knowledge and works with which they benefited, corroborate the community's perception of resilience from infrastructure works and the sense of belonging. It was based on a digital survey applied to beneficiary families in each of the four sectors where the project was developed (Los Pinos, Duarte, Ulloa, and

Villanueva). In total, a sample of 355 beneficiaries surveyed was achieved, representing a maximum error of 5.19% for a 95% confidence level. The surveys were applied via telephone to the beneficiary population, having a control sheet of those who received direct benefits from the project.

Focus Groups To identify installed capacities and measure the objectives envisaged in each sector, a total of 13 focus groups were carried out with beneficiaries from the different neighborhoods: Local Emergency Committee CODEL, water management committee JAA, resilient businesses and business network, achieving a participation of 55 people (37 women and 18 men). To minimize the risk that certain people might dominate the debate, opinions were sought from all participants and direct questions were asked from those with less intervention. The joint work of GOAL International Association and local organizations made it possible to select safe places for the conferences; similarly, the Association's monitoring team considered time, logistics and security when scheduling the focus groups.

Direct observation To report the findings related to the infrastructure works, the team moved to the field, identified some such as: Scall in homes, ditches, simplified plans, and businesses. The purpose of these observations was: (1) to verify contributions to the works and their use; (2) to corroborate the sense of belonging that the community has of the facilities and to verify their interactions with those facilities from the opinion of local leaders.

2.6. DATA ANALYSIS:

ET members transcribed focus group notes and real-time interviews, refining, and exchanging electronic summaries on an ongoing basis throughout the fieldwork. They conducted internal discussions to analyze the evidence collected, its patterns, and discrepancies. They were able to capture the preliminary findings, conclusions, and recommendations in a matrix with the following purposes: (1) to ensure that there was a systematic and comprehensive response to each evaluation question; (2) to verify that the preliminary analysis included dimensions of resilience and gender; (3) to identify any gaps where further clarification or analysis was needed; and (4) to serve as a basis for the development of the evaluation report.

Triangulation made it possible to cross-check and validate the findings that emerged from the above data sources and collection methods, identify correlations between the findings, and ultimately determine the overall effectiveness of the BR project. Triangulation also made it possible to formulate parallel protocols with the same or similar questions in all their interviews and FG. This allowed for greater data crossing, because each method addresses subsets of the same evaluation questions, and their findings were validated or refuted by the other techniques. It also made it possible to strengthen the possible links and precision of its data when the results obtained by one method were less conclusive than those achieved by another way.

There were several methods of analysis to identify key findings from the data collected, draw conclusions, and make recommendations:

- Content analysis: involved a thorough review of interview and focus group data as well as project documents, to identify and highlight evidence (or lack thereof) of the results that contributed to or inhibited the achievement of the objectives envisaged in each of the sectors.
- 2. <u>Trend analysis:</u> with this, it was possible to examine the perceptions of the stakeholders regarding the institutionalized practices in the reduction of risk of urban disasters at the municipal level and in the neighborhoods, the relevance of the approach for the authorities of the municipality and the importance and implementation within the priorities in the beneficiary neighborhoods to increase their resilience and the contribution that the project makes within those priorities.
- Comparative analysis: After that exercise, the results of the project were compared in the neighborhoods intervened to evaluate the convergence or divergence of perspectives. In doing so, the variation in the different ways to perceive the risk, to adopt measures, to build from opportunities for cooperation, the community organization among local actors, the diverse understanding of the roles and responsibilities of CODEL, JAA and resilient businesses were considered. The implementation, definition, and application project objectives by of the each team was also valued.

2.7. BIASES AND LIMITATIONS:

It is necessary to anticipate certain limitations and risks of bias for data collection and analysis:

- 1. Safety limitations in field visits: Due to safety problems, it was not possible to visit directly all the infrastructure works that implemented the project, but they were verified in their expenses and photographic evidence. Only a few were observed by interviewing the local leaders of CODEL and JAA in the areas that were considered "safe" where the FG were developed without recent security incidents. All interviews were conducted remotely with selected individuals in the linked municipal units, the project team, and other interested actors. A virtual survey was also conducted through a telephone call.
- 2. **Response bias**: This is the very explainable risk that key informants might be motivated to give appropriate responses to get support from GOAL. In this sense, a certain degree of response bias was found among CODEL, JAA and NR beneficiaries, who were looking for opportunities to receive more benefits. The effects of this bias were mitigated through triangulation.
- 3. Selection bias: implicit risk that arises when implementers help facilitate contact with beneficiaries. Given safety concerns, the ET coordinated closely with GOAL to organize interviews, focus groups, and individuals who received infrastructure benefits. The possible selection bias as much as possible was overcome, using various data sources and the evidence matrix.

KEY FINDINGS

This chapter presents the analysis of the information collected for each of the factors proposed in the final evaluation: relevance, efficiency, effectiveness, sustainability, and impact on the implementation of the BR Project. This analysis is based on the measurement of compliance with objectives, results and indicators achieved by the project. The results obtained so far, according to the defined indicators, provide the degree of compliance, and constitute the background to evaluate objectives.

2.1 ANALYSIS OF RELEVANCE

It is the extent to which the results of the project are compatible with the priorities and needs of the target population, as well as national policies. The evaluation was based on an analysis of the design of the project and how it was adapted to the resolution of the problems identified, in turn considering the existing capacities in the executors.

2.1.1. Results of relevance

1.1 In the local, national, international context/ Priorities-Needs

- 1. **In the political framework**: The project is based on the risk management found in the first articles of the Constitution of the Republic, which establishes the right to physical integrity and life and the right to security (art. 61, art.65, art. 68) and the concept of the common good (art. 62).
- 2. The SINAGER law (decree 151-2009) defines responsibilities and strategies for mainstreaming risk management in development planning. It acts through territorial structures, with the aim of protecting the life and livelihoods of the population, through actions aimed at preventing, reducing, or controlling levels of risk at the national level. The SINAGER law states that this institution recognizes and endorses the existing territorial organization, through the Departmental Emergency Committees (CODED); Municipal Emergency Committee (CODEM); Local Emergency Committees (CODEL); Emergency Committees in Schools (CODECE) and Emergency Committees of Workplaces (CEDECEL).
- 3. The project strengthens COPECO and SINAGER's legal mandate from the autonomy and authority they have, to respond immediately to events of calamity or disaster that occur in these neighborhoods, where they make use of economic and material resources for local support; it acts preventively, not only in emergencies and response, it also does so in reconstruction.

accompanying locally for the appropriate management of threats that arise in these neighborhoods.

4. It is complemented by the State Policy for Comprehensive Risk Management of Honduras (PCGIR), approved by Executive Decree No PCM-051-2013 on October 22nd, 2013. The PCGIR aims to lead the development of processes of strengthening and inter-institutional coordination that contributes to the operation and quality in compliance with the regulatory, financial, plans, national, regional, and municipal strategies mediated by comprehensive risk management, which includes the various sectors and at the territorial level, so that these actions impact on the reduction of conditions of vulnerability for human security, property, and the territorial environment.

1.2 In line with the objectives.

- 5. **It bases its general objective** in the Law and incorporates the principles recognized by the Central American countries in the new Convention establishing the Coordination Centre for the Prevention of Natural Disasters in Central America (CEPREDENAC), in force since July 12th, 2007, the international framework known as the "SENDAI Framework", as the international platform for risk reduction, of which Honduras is a signatory, as well as the strategic vision agreed by the Central American Presidents in the Declaration of Guatemala II of October 18th and 19th, 1999, in order to have a more effective impact on the incorporation of risk management and vulnerability reduction into the region's development policies. Honduras is committed to the incorporation of 198 municipalities in the country to the "World Resilient Cities Campaign" and this is where GOAL seeks to operationalize the BR approach from the campaign, known as "the preachers".
- 6. It takes up the guidelines of the 2030 agenda to face disasters, as well as information systems for its follow-up. It is complemented by a scaffolding such as that provided by the Sendai Framework, the New Urban Agenda, and the Addis Ababa Agreement, among others. These agreements require institutions that act from new logics, considering the integrality of sustainable development. For this reason, the project promotes a comprehensive process, giving life to national development instruments and adapting them locally.
- 7. Disaster risk management links elements of the 2030 Agenda for Sustainable Development, in particular the Paris Agreement on Climate Change and the Sustainable Development Goals, while action on risk management is essential to the achievement of poverty eradication and the other Sustainable Development Goals.

- 8. The project aims for municipal planning to institutionalize a response to address the challenges of DRR under a systemic approach, because its complexity affects the different dimensions of development.
- 9. It seeks to strengthen the capacity of the AMDC to assess and prepare for geological and hydrometeorological disasters, provide improved basic services (housing improvement, management of surface water, wastewater, and sanitation), basing its action on the policy of municipalities (Municipal Law and Regulations, Reform Decree 143-2009) which grants autonomy and powers to municipalities for the creation of bodies to support municipal management. Article 12 states that the municipalities are empowered to "plan, organize, execute and administer basic services"; Article 13 establishes as the first attribution of the municipalities the preparation and execution of development plans. Article 14, paragraph 2, states that "the municipalities ensure the participation of the communities in the solution of the problems of the municipality".
- 10. The project promotes a risk management policy and practice and is based on the Regulation of the Municipalities Law Article 49, which it establishes that "it is the function of the municipal councils and committees formed by the municipalities, to assist the corporation when states of emergency or public calamity occur and that it is necessary to mobilize community resources to address such emergencies. The Municipalities Law (Decree No. 134-90) establishes competencies about the implementation of municipal development plans and urban planning (art. 13). The Territorial Planning Law (Decree 180-2003) expands the powers of municipal governments in risk management through municipal territorial planning (art.27).

1.2 People's needs/priorities.

- 11. Beneficiaries: live in informal precarious settlements in urban areas. In the Central District, most people in marginal urban areas are poor, located mainly on steep slopes and in flood-prone areas.
- 12. According to studies of "Risk Evaluations" carried out by the project, the main threats faced by this population are floods of 2.2% and in terms of landslides the average susceptibility is 23.30% and high of 19.7%, being key sectors of work for this project. The same study determined that approximately 428 houses have 21% high risk, 75% medium risk and 4% low risk.
- 13. Integrated vulnerability and risk mapping and the data provided by geographic information systems have been many since the post-Mitch era, but this information has not always reached these populations to make decisions. According to the baseline, only 26 per cent of the population had knowledge of risk management in their territories.

- 14. After Hurricane Mitch and the management of humanitarian aid funds, many agencies decided to channel their resources to the local level, and this is where the organizations of the local emergency committees (CODELs) emerged to respond to their needs through popular participation. It is important to note that, of the eight target neighborhoods, four had a CODEL at the beginning of the project, of which three were already from phase one of the program (2013).
- 15. According to the risk evaluation studies carried out by the project, only 45% of families have a legal document that certifies them as owners of their land. 10% are in rented houses and could not confirm legal tenure of the property. Finally, 45 per cent of families confirmed that they did not have legal land tenure. This group includes 11% of the families who reported paying for their land and when they cancel it, they will receive their public deeds². Ninety-four point eight per cent of the population surveyed lacks savings to support them in responding to an emergency³.
- 16. The houses are built of adobe, concrete, tin roofs and dirt or concrete floors. They are houses have problems in the supply of drinking water through pipes, use of latrines, surface water management, lack of sewerage services and with high levels of contamination. Lack of drainage systems and the existing one in poor condition. Streets in poor condition, non-existent public electricity system or illegal connections in many homes, increasing levels of insecurity.
- 17. These families have limited livelihoods and the impact of their economic assets area affected due to the exposure they have in their neighborhoods (rain, wind, and water)

1.3 Institutionalization of the approach

Facilitating factors from the relevance:

- 18. <u>Municipal leadership:</u> The project recognizes the leadership and strengthens the capacity of the different internal bodies of the mayor's office, so that they adopt methodologies and tools that have been recovered from the documentation of good practices. To do this, it resumes the internal planning processes of the mayor's office and adapts to them.
- 19. Local participation as a strategy: The importance of clear roles in local support bodies (CODEL), passes through a practical methodological approach and clearly defined accompaniment, which results in a direct link of CODEL with the community, achieving local participation and connecting with institutional actors present, thus enhancing the role of the neighborhoods in the

² GOAL International Association, Systematization of Resilient Neighborhood experiences 2018

 $^{^{\}rm 3}$ Survey applied to beneficiary families in the framework of the final external evaluation.

development of their environment with prevention actions, but with a longterm vision that includes from the maintenance of the works, planning, new investments and local organizational strengthening. This local process is a key strategy for building resilience in the neighborhood and the city.

20. Alliances with different institutional actors (UNITEC, UNAH, COPECO, Fire Brigade, among others) are essential to address underlying causes of risk, therefore local knowledge together with the scientist is fundamental in its systemic approach (natural risk, concomitant risks, and social risks) because it creates mitigation conditions to existing risks, allows more sustainable investments over time, decreases the vulnerability of the population, and creates resilience.

Limiting factors

21. The change of authorities brings with it the departure of municipal technical personnel who have been trained in the life of the project, which invites the formalization of the institutionalization in the U-DUSIR, through a municipal cooperation agreement for its financial operation.

1.3. Basis for the implementation of the project

22. Existing local bases:

- The existing local organization (JAA, CODEL and in some cases the community board); this despite its legal existence has little awareness about disaster management to address it.
- The existence of informal settlements on land of irregular topography, susceptible to heavy rainfall that can trigger landslides and floods, which coincides with accelerated urban expansion and without planning, occupying land with steep slopes and inappropriate construction practices, which represent scenarios of disaster risk.
- They are populations living in extreme poverty and with high levels of conflict and insecurity.
- The project prioritizes two risks (landslide and flood) included in the risk and disaster reduction master plan, under a climate change adaptation approach and in a land use planning context⁴.
- Strengthens the National Comprehensive Risk Management Plan PNGIRH 2014-2019 implemented by the AMDC

23. National Bases:

- The project is consistent with the objectives of the 2010-2038 Country Vision and 2010-2022 National Plan.
- GOAL's previous experience working at the national level with academia (University), the private sector and civil society in its facilitating role,

-

⁴ July 2018

- contributes to the capacity building and future relationship of communities with specialized bodies.
- The National Risk Management Policy

2.2 EFFICIENCY ANALYSIS

It is understood as the actions, processes and products achieved according to the results compared to the resources used (human, technical, financial, and material).

2.2.1. EFFICIENCY RESULTS

1.1. EFFICIENCY IN THE IMPLEMENTATION OF THE PROJECT

- 24. The project begins its implementation in September 2017 to September 2021 and is granted an extension to September 30, 2022. It had a budget approval of US\$ 4,460,345 to be executed in five years. Of this total amount, as of December 2021, a total of US\$ 4,074,604 has been executed, equivalent to 91.35% of the total approved.
- 25. The variance in execution between what was approved and executed in five budget lines (1, 5,6,7, 9) is as a maximum factor-3.48% and as a minimum factor 0.42%.
- 26. The budget lines with the highest execution are training activities (line 7) with 38.10% and salaries with 33.17% and the lowest: travel and transport, plus equipment with 1.83% which is closely related to the results generated.
- 27. It highlights an execution of 91.35% of the amount budgeted for the project. The investment cost per beneficiary was US\$ 57.32. The project served 77,811 beneficiaries.
- 28. This project has a large amount of community counterpart, of partners and of the AMDC itself that is not accounted for.
- 29. The project has been accompanied by key actors, such as, AMDC and its dependencies, SANAA, academia (public and private universities), schools, community structures (CODEL and JAA), business owners, and community volunteers, engaged in activities throughout the project and contributed to the achievement of the proposed goals and particularly the AMDC assigned a technical work team with more than 20 managers and technicians who facilitated the planning, adjustments and implementation of the project throughout its life. At the AMDC level, DGCDH assumed responsibility for the coordination of the institution in the implementation of the Project. UMPEG and DGCDH supervised the actions that framed the implementation of the project.

30. In analyzing the cost benefit of such a project, it seems appropriate to introduce the following consideration by Eric Schwartz, a humanitarian expert. According to him, for every dollar invested in disaster preparedness, a saving of between five and ten dollars in economic losses is calculated⁵. In this particular case, if it is estimated that the investment of the project was US\$ 4,460,345, there was a saving of US\$ 8; so, it can be concluded that the attention to eight neighborhoods contributed to a saving in economic losses to the CD of US\$ 35,682,760. Not to mention the simple and cheap solutions in sectors such as water and sanitation, shelters and settlements that were implemented; and of course, the contribution of communities in skilled and unskilled labor.

1.2. MOST EFFECTIVE ASPECTS OF THE APPROACH

- 31. From the knowledge acquired, it is important to highlight that the beneficiary population interviewed knows the threats of landslides in their neighborhoods (94.94%) and knows what to do (93.45%). Among the participants, 58.93% stated that their homes have a risk of slipping and they know it. This is related to the number of people who sought shelter, 19.64% in Hurricanes Eta and Iota.
- 32. In the cost-benefit analysis, 3.93% of the budget was allocated to AMDC supplies (supply line 5) for the equipment of UMGIR and its SIMRET system and to strengthen CODEM.
- 33. Among the actions most valued by families as a contribution to DRR are the SCALL works; availability of water in safe places (88.10%); construction of stands and ditches (73.10%) and CODEL support in 72.92%.
- 34. It is an approach based on sustainable development because it includes the effective participation of various sectors (community, academia, private sector, and municipal, national government). Thus, it manages to operationalize fundamental principles such as human rights, incorporating the holders of obligations (AMDC) for their appropriation, through actions in vulnerable communities, empowering them from their representatives (CODEL/JAA for example), to propose and demand responses (before during and after disasters due to landslides or floods). To prioritize vulnerable groups, it proceeded based on gender (women, older adults, people with disabilities), implemented in informal human settlements betting on environmental-sustainability since the formulation of the PMDT, PMRRD-M, the urban plan for the city, the creation of E-DUSIR and the development of territorial indicators, adding risk reduction measures (e.g., ditch walls). Capacity development was a central axis for the appropriation and responsiveness of both the AMDC,

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⁵ Eric Schwartz, The Boston Globe, 23 March 2006. He took over as President of Refuges International in June 2017 and has been focused on humanitarian issues for three decades

which supported with information and technical resources working on the implementation of the project, as well as in the generation of policies and instruments that favor the management of the AMDC in the city (for example, the municipal policy of GR, the guides to develop DUSIR plans, the EWAS SIMRET module and the curriculum established with CODEM for CODEL training). As with community organizations, to generate effective response⁶ by responding to neighborhoods before, during and after. The project's <u>focus</u>, complemented by performance measurement of organizations (CODEL, NR, JAA, Beneficiary Families) and the validation of knowledge, key to measuring progress towards strengthening capacity for risk reduction in the population.

35. Some critical factors rescued from the practice, were decisive for the appropriation in DRR: a) identify the <u>elements exposed to the risk</u> and vulnerabilities of the populations (infrastructure and economic activities); b) <u>promotion of an approach based on landslides and floods</u> to strengthen local, municipal capacity, with certified and specialized <u>training at the technical level and with methodologies based on local reality</u>⁷, c) taking advantage of the documented experiences.

1.3. STRATEGY IMPLEMENTED

36. GOAL defines resilience as "the ability of communities and households living within complex systems to anticipate and adapt to risks, and to absorb, respond to, and recover from threats and stressors in a timely and effective manner without compromising their long-term potential, ultimately improving their well-being⁸.

⁶ Faced with hurricanes Eta and Iota

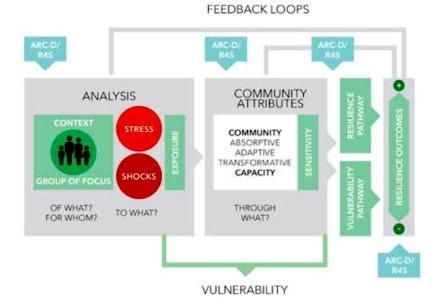
⁷ Pregones campaign and hygiene promotion

⁸ Analysis of the Resilience of Communities to Disasters, ARC-D Toolbox Guide, October 2016 second edition

Table 2: Categorization of Resilience in Neighborhoods

Level	Category	Description
1	Minimum Resilience	Little awareness of problems or motivation to address them. Actions limited to crisis response.
2	Low Resilience	Awareness of problems and willingness to address them. The capacity to act remains limited. Interventions tend to be one-off and short-term.
3	Medium Resilience	Development and implementation of solutions. The ability to act is improved. Interventions are major and long-term.
4	Approach Resilience	Coherence and integration.Interventions are extensive and cover all the main aspects of the problem and are linked to a long-term strategy.
5	Resilient	Safety culture among all stakeholders. DRR is in the policies and plans, practices, attitudes and behaviors.

Graph 1: GOAL Resilience Framework



Analysis:

- · Eight CD Neighborhoods
- Context Evaluation
- Threat and stressor evaluation
- Determination of the exposure level of groups
- Determination of levels to work: 1. Natural and technological hazards 2.
 Shelter and settlements, 3. Economic recovery and market systems, 4. Risk management policies and practice and 5. Water and sanitation

Neighborhood **Attributes**

- Capacities to be developed: Institutionalize best practices in the reduction of the risk of urban catastrophes using a neighborhood approach in the framework of "Resilient Cities".
- . With three types of management:
- Prospective management: Institutionalization of PMDOT framework from DOT
- . Corrective Management in the reduction of vulnerabilities (in vulnerable areas)
- Compensatory management: from understanding risk (in risk areas)

3. Pathways and outcomes:

- 40 instruments and tools developed within the framework of the BR strategy that have been adopted by the local government and put into operation by municipal technicians.
- 80% of the AMDC units and directorates that participated in the implementation of the BR strategy have contributed to strengthening their operational functions in disaster risk reduction.
- 100% of community organizations linked to the BR strategy that have increased their capacities and skills to adequately perform their functions in the face of disaster risk.

2.3 EFFICACY ANALYSIS

Defined as the actions implemented in the best possible and/or experimental conditions and the impact and/or its effect due to the strategy, activities, results, effect, and indicators proposed, as well as the scopes.

2.3.1. Efficacy outcomes

1.1. Project monitoring mechanisms

37. Project monitoring is based on GOAL's institutional experience. Within the BR project, participatory and continuous monitoring is identified, with concrete products that have allowed for decision making, working on the Microsoft

platform, using SharePoint to make the information space more productive and participatory. Among the key monitoring outputs identified are:

- Baseline
- Mid-term evaluation
- Measurement of performance indices (include application of surveys and resilience tool).
- Measurement of quantitative achievements
- The systematization of the project
- The case study of the BR approach sectors
- Sustainability Strategy
- · Indicator platform with semi-annual measurement.
- 38. Project monitoring is carried out every six months at headquarters, reporting on the progress of indicators to the donor and the evaluation of compliance with various aspects of implementation. The following are some of the indicators used to measure performance
- Beneficiary satisfaction
- Completed tasks, generated results, and effects.
- Monitoring and evaluation: Main aspects
 - Regular formal reviews with AMDC and project team during the life of the project.
 - Planning taking time, to ensure timely completion of tasks.
 - Final internal evaluation that was developed, but does not have a document to support it, for the framework of analysis of indicators, although a complete measurement is available.
 - Resilience level measurement tool.

1.2 Extent to which the project met its overall objective

Overall objective: Institutionalize best practices in urban disaster risk reduction using a neighborhood approach in the framework of "Resilient Cities"

For the analysis, the institutionalization variable was considered, understood as a commitment of the AMDC and the local organization, in the implementation of practices for risk management, evaluating, planning, and acting.

Institutionalized practices in the AMDC:

39. There is use of technology for flood risk evaluation: weather stations, forecasting models, field information from CODELs, modeling and data processing that allow the generation of reports, alerts and publications that facilitate decision-making to prevent risks. It was fundamental for the issuing

of newsletters in the face of hurricanes Eta and Iota and provided CODEM with timely early warning decisions in high-risk regions.

- 40. The AMDC consolidates a technical team for inclusive and resilient sustainable urban development; there are units where staff are key and relevant in their role, and therefore, the new authorities will not do removal.
- 41. Regarding urban planning, the AMDC (DOT) adopts the manual for the configuration of neighborhood⁹ a tool that has been institutionalized in the CD to facilitate the promotion of economic strategies aligned with housing and services policies, which allow greater resilience of neighborhoods to possible natural disasters, all in an environmentally responsible way¹⁰.
- 42. The AMDC has been a key actor in increasing resilience at the community level by making a political commitment, through financial and technical allocation, for the development of activities that improve risk reduction. Its direct link has been given in critical systems for the disaster risk reduction: Early Warning and Action System (SAAT), Housing System, Market System, Maintenance System, and provision of drainage works and Urban Planning.
- 43. Regarding social housing, AMDC supported the process of reducing the number of families living in high-risk areas through housing resettlement and improvement.
- 44. CODEM has had a fundamental role in the promotion, participation and strengthening of local organizations at the CODEL level, resilient businesses in the identification of vulnerabilities, design of proposals, and strengthening of the SAAT at the neighborhood level.
- 45. The DOT and Risk Evaluation Management (GER) are in the process of updating the Municipal Plan with a Spatial Planning Approach and carrying out an Urban Plan, achieving the updating and expansion of the CD 's urban perimeter. This process leads to the creation of the Inclusive and Resilient Urban Development Unit (U-DUSIR) as a technical support to DOT, which in turn has indicators for informal settlements that it has already implemented.

Institutionalized practices at the local level:

- 46. Availability of eight neighborhood disaster risk reduction master plans (PMRRD-B).
- 47. Operational plans from CODELs in close relationship with municipal agencies and other institutional actors present in their spaces.

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⁹ Certificate under point No. 7 of Minutes No. 5 of December 14, 2016 https://www.amdc.hn/index.php/amdc/documents-de-interes

¹⁰ Direct linkage of the Women and Youth Office, CODEM and AMDC legal specialist

1.3. Extent to which the project met its specific objectives

Sector 1: Natural and technological risks

Capacities of AMDC in the evaluation and preparation for geological and hydrometeorological disasters.

- 49. CODEM has strengthened its capacities to create and strengthen its cooperation relations at the internal level of the AMDC, with local organizations, with NGOs, neighborhood populations, CODELs and JAA. It has developed capacity to guide and strengthen processes of preparedness and response to threats and/or disasters within the Municipality of the Central District.
- 50. UMGIR improves knowledge about informal settlements, with a broader and holistic concept of relocation to intervene from a situation of origin, this involves understanding the roots and culture of life of the people.
- 51. The accompaniment of the BR Project contributed to improving EWAS operating structure, responding more efficiently to users of its information internally to make decisions within the AMDC.
- 52. U-DUSIR assumes responsibility for the planning and management of urban and territorial development, with all the inherent complexity.
- 53. On the other hand, the identification of vulnerabilities within the CD contributes to a greater understanding of the risk and identification of areas with greater attention.
- 54. Having a Municipal Plan with a Focus on Territorial Planning is a tool that guides the different sectoral plans and strategies for a comprehensive development that has become a key piece in decision-making. The new authorities express a commitment to return to the strategic axes of planning¹¹

Sector 2 Shelter and settlements

Objective: To strengthen municipal processes and improving coordination for the provision and improvement of social housing and the management of surface and wastewater.

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 $^{^{11}}$ Axis 1. Climate Change, Axis 2. Comprehensive risk management Human Settlements Dynamics

55. DGCDH adopts a methodological tool for housing improvements incorporating DRR in the CD neighborhoods. Inclusive and integrated housing schemes are part of the urbanization strategy, creating institutional conditions (alliances) for access to improvement or construction of housing of populations with greater risks and needs. As a result, the quality and expansion of housing improvements to cope with risks of landslides was increased in 57%¹² of families compared to the BL.

56. The AMDC units (UGASAM and UMGIR) from the disaster risk reduction master plans, will follow up on works already planned to reduce flood risk. Specifically, UGASAM will continue to strengthen local capacities on basic sanitation and capacity building of JAA.

57. The management of surface and wastewater has great community contributions; $73.13\%^{13}$ of the population considers that these works are helping to reduce risks in their neighborhoods. Proof of this is that with tropical storms Eta and Iota, the effects on housing were minimal, since in none of the neighborhoods linked to the program there were deaths due to landslides and/or floods. It is surprising, for example, that the impacts were less than those of Hurricane Mitch¹⁴ indicating the families, which was because they were prepared.

58. Sector 3: Economic recovery and market systems.

Objective: To strengthen the resilience of small enterprises so that they can continue to provide critical services in emergency and post-recovery situations.

59. The project has developed a strategy for the development of the urban economy, and concretely, it contributes to community resilience through resilient businesses that have an offer of critical products and services to the population of the neighborhood at all times essential in times of emergency. An example of this is that 88.69% of the population benefited had access to basic products in times of pandemic and hurricanes Eta and Iota, being at a same time a point of information for the prevention of the population.

Sector 4: Risk management policy and practice.

Objective: To facilitate the adoption of BR as a policy within the AMDC and with other key actors at the national and local levels within the framework of the Making Cities Resilient Campaign

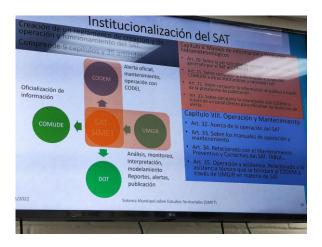
60. Institutionalization of the EWAS: Creation of a regulation for the creation and operation of this platform that is under negotiation. The main outputs are a) flood hazard map, landslide map, current flood map, cumulative rainfall

¹³ Survey of families in the neighborhoods and neighborhoods linked to the project, March April 2022

¹² Survey applied to families in the process of final evaluation

¹⁴ CODEL in José Arturo Duarte, José Ángel Ulloa, Villanueva and Altos de los Pinos neighborhoods. The precipitation of Hurricanes Eta and Iota was an average of 100 - 120 milliliters and in the Mitch it was 124.4 millimeters. Source: COPECO https://tiempo.hn/huracan-eta-lluvias-similares-mitch-honduras/

map, river level map, flood simulation map and b), a general map with all topics for all audiences. This output will contribute to enhancing the work of the 150 CODEL throughout the CD according to the UMGIR.



Graph 2: Institutionalization of the Early Warning System

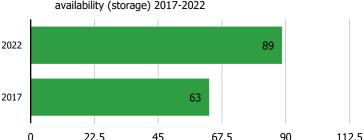
- 61. The project has created conditions and capacities that help integrate the BR approach to the new approach of the city through sectors and jump to a resilient CD from the design process of the Municipal Plan with Focus on Territorial Planning and the Urban Plan of the capital.
- 62. Neighborhoods from their local organization (CODEL) are empowered, participate, decide, and plan, local authorities value the knowledge and skills of people and their leaders.
- 63. For now, the institutionalization of the EWS goes through a formal political commitment by the AMDC authorities to ensure sustainable urbanization and guide a budget to manage and organize the CD before, during and after a threat.

Sector 5: Water, sanitation, and hygiene.

Objective: To promote personal hygiene behaviors and infrastructure management.

64. Along with AMDC, the project supported and promoted neighborhood-level projects to improve the accessibility of drinking water, storm drainage and basic sanitation structures.

65. A significant progress is the increase of 25.69% (over the BL) of families with household water availability. (Rainwater harvesters).



Graph 3: Percentage of families with household water availability (storage) 2017-2022

66. An achievement resulting from the local relationship (CODEL-AMDC) promoted by the project is the management and operation of the garbage collection train in the neighborhoods linked to the project, which has helped the permanent development of sanitation and cleaning campaigns promoted by CODEL. It is important to highlight that hygiene practices and the adoption of changes in families remain a challenge, due to cultural aspects and the same educational level of its inhabitants¹⁵.

1.4. Extent to which the project achieved results

Tools and instruments developed and adopted by the local government:

67. The project was able to develop 40 support tools and instruments, in which 81% (21) have been adopted and implemented by seven municipal agencies (CODEM, UMGIR, DOT, U-DUSIR, UGASAM, CADASTRE, IDM, Municipal Women's Office, Municipal Cadastre Management, GER, GCC, DGCDH) 75% (18) and have been adopted by CODEL, JAA, businesses and families (see annex 3). Of those mentioned, CODEL stands out for the greater adoption and implementation.

Percentage of AMDC units participating in the BR strategy, strengthened in their operational functions:

68. Seventy per cent of AMDC units participated directly and linked 80 per cent of the directorates to seven internal units. This represented the direct involvement of 20 managers and technicians in the planning and implementation of BR. The coordination was assumed by the Directorate of Community Management and Human Development DGCDH, as responsible for

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 $^{^{\}rm 15}$ It is an appreciation of the reality perceived by the CODELs of the beneficiary neighborhoods.

the coordination in the implementation of the Project. The Municipal Planning and Evaluation Unit UMPEG and the DGCDH supervised the actions that framed the implementation of the project. (See annex 4)

69. BR provided methodologies for the AMDC to currently implement participatory processes and the differentiated approach of informal settlements. They learned how the environments and the conception of the space work, building from their priorities, sectoral and neighborhood scale plans (improvement, urban development) in an inclusive way. The result has been an active participation of the community in the management of their territories that is leading to a sectorization with self-management emphasis.

70. One relevant strengthening process within the DOT Directorate of Territorial Planning is the creation of the Urban Planning Unit U-DUSIR, oriented to the development of key planning in the creation of the municipal development plan with a territorial focus; it fits into the new framework of decentralization made up of eight districts.

71. The UMGIR is strengthened with the establishment of SIMRET, which operates under an architectural model that operates with four subsystems that feed information at the level of hydrometeorological stations (currently 33 not all working), proxy models, radar and field information that process the precipitation measurement; all this information is stored in WS-data and is supported in the WS-SAT cloud, from which a report module is derived. It should be noted that the seven products that are already generated are related only to flood information. The installation of a module for slides and the installation of complementary sensors¹⁶ to improve projections is pending.

72. On the other hand, the U-DUSIR has given life and dynamics to all the units of the DOT and in turn, revitalized a relationship of dialogue and joint work that did not occur in its space.

73. Production of municipal planning tools that incorporate the AAUI in conjunction with the Municipality. As a result, a manual on the regulation of informal settlement processes emerged.

Community organizations linked to the BR strategy with skills and abilities:

74.The linkage that the BR strategy makes with the AMDC has facilitated the JAA to improve organizational strengthening processes and provide better services at the community level¹⁷. This is demonstrated by the fact that the performance rating of the JAA based

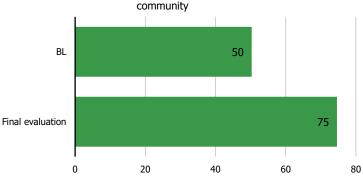
¹⁷ The revision of technical manuals on water quality and hydrosanitary facilities, until they have better control of their income and investments.

¹⁶ The stations supported by the BR project have only one rain sensor, to which the AMDC will add others to measure wind, temperature, relative air humidity and atmospheric pressure with KFW support

on the BL increased by 24.62%; these have been directly involved in improvements, maintenance, and administration of the service, especially in emergencies (Eta and Iota).

75. The leadership of CODELs, in identifying families with social housing needs, needs for DRR improvements such as landslide, water scarcity and sanitation, is recognized and valued by the communities in 72.92% for the services they provide in the community mainly in the face of emergencies. This result is higher when compared to the BL where $55.3\%^{18}$ of the population was unaware of the existence of this organization.

76. The articulation of CODEL, JAA and NR in emergency time (example: Eta and IOTA) was effective in coordination, where CODEL assumes the leadership and the other organizations the role of point support. In this context, the contribution of the businesses to the shelters that were activated with hurricanes Eta and Iota, providing basic products, and that of the JAA, which ensured that there was no shortage of water, is highly valued.



Graph 4: Assessment of the JAA's performance by the

1.5. RESULTS IN RELATION TO THE MEASUREMENT OF INDICATORS

77.100% of the indicators were met and in some cases the target was exceeded.

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¹⁸ BR Project Baseline Report

1.6. PROJECT CONTRIBUTIONS:

78. The project's contribution in preparing neighborhoods to cope with the expected impacts of crises and threats in the face of landslides and floods is based on:

- Local Organization
- The political will of the municipal authorities
- The openness and availability of accompanying the processes by the municipal offices.
- Interinstitutional coordination of the necessary actors (academia, private sector, civil society)
- And credibility of the organization that leads such a project

79. This project demonstrates that urban resilience is a living process, which requires in addition to a constant review and update of the neighborhood situation, to adopt measures such as: diagnostics, performance measurement and evaluation of the available information. This would allow advancing in knowledge and consolidating informed decision-making, optimizing investments to reduce risks and improve the lives of all people reached by the project.

- 80. The technical expertise combined with the inclusion of communities and other institutional actors makes it possible to mitigate the risk in different phases with different time horizons; on the one hand, it allows immediate action and, on the other, the solution of the problem in the long term. An example highly valued by beneficiaries and partners, are the actions to strengthen the EWS and its instruments such as the network of weather stations and the SIMRET platform; for its application, the training provided through CODEM and CODEL is fundamental.
- 81. The project has had a particular focus on women's empowerment, addressing practical needs (infrastructure) and strategies (technical and leadership training), thus promoting participatory spaces for women to assume leadership in local organization. An example of this is the high participation of women in community decision-making spaces (CODEL), but the investment in care (care economy) is still pending, so as not to make them vulnerable in states of emergency that they coordinate.

1.8. CONTRIBUTIONS MOST VALUED BY LOCAL ORGANIZATIONS AND AMDC

82. BR defined five key socio-economic systems for DRR, within which interventions highly valued by CODEL's, JAA and resilient businesses are identified and described below:

Sector 1 Natural and technological risks

- Strengthen CODEM's competencies in its role, thus improving the accompaniment and training of CODELs.
- The activation of CODEL and NR in critical times of emergency with Hurricanes
 Eta and Iota in the dissemination of alerts, activation of alarm and
 dissemination on the information boards, enhances the role and valuation by
 the community due to its usefulness.
- Simplified plans as a reference at the community level and practical guide for the community.
- The establishment of the Municipal Information System on Risks and Territorial Studies of the Central District (SIMRET), which is crucial for making decisions to the municipal authorities.
- · Campaign of preachers.

Sector 2: Shelter and settlement:

- Housing improvement with infrastructure works.
- Neighborhood Master Plans for Disaster Risk Reduction (PMRRD-B) as a guide for community management.

Sector 3: Economic recovery and market system.

- Training processes (boosting business growth) and the development of business alliances.
- · Delivery of 114 vouchers.
- · Conformation of SMART COMPANY.

Sector 4: Risk management policies and practices.

- Campaign of preachers of prevention with the theme "Improvement of housing and drainage system"
- Diploma in Urban Territorial Management (one and two)
- orange book
- · Creation of U-DUSIR

Sector 5: Water and sanitation

- Development of the SCALL
- Training of municipal technicians on water and sanitation issues

1.9. FACTORS INFLUENCING EFFECTIVENESS

- The BL of the project has timely and quality information on the existing risks and is essential to ensure the effectiveness of the strategy to be implemented in DRR.
- Focusing the execution on a proactive role of the AMDC and local organizations has been decisive in achieving the organization (8 CODEL and JAA), training and equipping them, which demonstrated with storms Eta and Iota have rapid response capacity and overcome risk.
- Communities such as Altos de los Pinos, Villanueva, and José Arturo Duarte, have achieved an active and self-managed participation generated from the CODEL dynamics (they execute their plan linking the population in prevention tasks such as sanitation campaigns and maintenance of works: cleaning of ditches, repairs, among others)
- The expected political will for the current authorities to maintain the BR approach and expand it, faces the risk that the municipal staff that has been trained, is placed in other dependencies due to the possible rotation in the new administration.

Concrete examples: With Hurricanes Eta and Iota, several neighborhoods organized the first response autonomously, formed brigades of community support volunteers to mobilize families to shelters, distributed food kits, supported by resilient businesses and masks and alcohol managed with the private sector.

CODEM recognizes local preparedness to respond to emergencies such as (Eta and Iota), when communities act immediately, and that limited to a more informative role.

EWAS contributed to SIMRET calibrating maps and activating it, so that CODEM could issue alerts with Eta and Iota, thus avoiding loss of life. None of the neighborhoods had deaths due to landslides or floods, only two houses were damaged.

- **Collaboration** and complementarity between actors made it possible to optimize resources and exceed the targets set.
- Collaboration and synergies have been key to building trust and credibility

An example of this is progress in a law and regulation that promotes the Common Alert Protocol (CAP). GOAL working together with CONATEL,

COPECO and CODEM on the dissemination of messages, through mobile phone companies, although it is not included in the SINAGER law.

Home improvements with 96 roofs in Villanueva, Los Pinos and José Angel Ulloa neighborhoods and Ulloa sector wastewater collection system (AMDC-UGASAM, AMEXID, SANAA)

2.3 SUSTAINABILITY ANALYSIS

It is understood as the probabilities that the processes that have been implemented will have continuity beyond the time of the intervention of the Project, with the maintenance and management of the results obtained. It is to identify the degree of ownership and involvement of authorities, beneficiaries, and local organizations

2.3.1. SUSTAINABILITY OUTCOMES

1.1. INSTITUTIONALIZATION.

This is measured from the involvement of municipal authorities in decision-making, budget approvals and allocation of human resources and agreements at the corporation level.

- 83. Among the outputs generated by the project that are in implementation with an approved budget for 2022 in the AMDC are:
 - Orange book
 - SIMRET platform in operation
 - Creation of a Unit for Inclusive and Resilient Sustainable Urban Development (DUSIR) and Consolidation of a DUSIR technical team
 - Update of the Municipal Territorial Planning Plan PMOT
 - Urban plan for the city
 - ARC-D Tool
 - SIG 2.0 Multipurpose Cadastre DOT (cadastre management).

At the local level with self-management:

- Development of campaigns on prevention, sanitation and communication using ICT (social networks¹⁹, WhatsApp groups and others).
- Maintenance of simplified plans.
- Continuity plans (business networks)

1.2. LIMITING AND FACILITATING FACTORS FOR INSTITUTIONALIZATION.

- 84. The institutionalization of BR goes beyond a series of processes, tools, and methodologies in DRR developed by the project; municipal commitment is required for the allocation of sufficient resources to the actions contemplated in the current plans. The goal is to ensure that the political changes derived from a new national and local government the Honduran situation do not affect the technical framework of the work left by BR.
- 85. The above has consequences of application when descending from the meso level (mayor's office) to the local level. In other words, institutionalization also involves CODEM, the updating of which would benefit the CODELs.
- 86. In short, sustainability is a horizon that the State and the municipality have traced in a planning perspective as orderly and systemic as possible (central in the supply of BR), but a mechanical development cannot be expected from it. In one or the other area, there are risk factors political ones, for example-that nuance the interaction of the different actors in obtaining the results.

3. LESSONS LEARNED

A. NATURAL AND TECHNOLOGICAL RISKS:

1. These informal settlements characterized not only by disorderly forms of occupation, but also by the vulnerability of the territory to rain and other natural phenomena, gave rise to specific training processes, oriented to their reconfiguration. Thanks to these processes, the municipal (CODEM) and community (CODEL) actors identified the risks and took the corresponding mitigation measures. These were accompanied, among others, by the installation or improvement of water and sanitation systems, construction of

¹⁹

accesses (streets and stands) and meeting spaces. The collective self-esteem that this has generated, could be verified in the exchange with the JAA and CODEL.

B. SHELTER AND SETTLEMENTS:

2. The perspective of inclusive housing refers not only to the construction or improvement of this, but it also has to do with the provision of water harvesters (scall), something that seems more individual, and the management of surface and wastewater that would be supposed to be something more community. But in the end, it is the latter that counts; that is why these works according to the population are helping you to reduce risks in your neighborhoods. In short, there is an interrelation, evidence of the systemic approach of the strategy, where the solution of one problem leads to the solution of several.

C. ECONOMIC RECOVERY AND MARKET SYSTEM:

- 3. The settlement approach went through an identification of critical risk factors, providing coupons that provided an option to purchase products that they could then sell in their businesses. Of the profit obtained, one part should be reserved for the business (75%) and the other (25%) for the SMART capitalization fund. It was created to give sustainability to business initiatives and represented an opportunity for families to purchase products at a lower cost.
- 4. During the pandemic an unexpected risk, was resiliently addressed by business owners due to the training received. When the usual suppliers stopped arriving, they resorted to wholesale centers, whose prices are usually lower than those of the supermarket.
- 5. For business owners, their activity is not only a profit but a livelihood, so they unified in networks that facilitated the acquisition of products and in passing contribute to the community.

D. RISK MANAGEMENT POLICY AND PRACTICE:

- 6. The linkage of community organizations (CODEL, JAA, NR and community board) coincided to accompany information processes to the population in the event of possible crises due to floods or landslides, supporting actions through early warning²⁰.
- 7. When asking how people have created resilience, they take as a reference: first the local planning, second, the construction of infrastructure works from

²⁰ Information boards in business, alerts with sirens by CODEL, provide JAA water services and accompany repairs.

the reality and participation of the population, and third, the accompaniment of the AMDC.

8. The sensitization of young people to encourage their participation through the *preachers*, favored providing information to the communities and greater knowledge of them by BR. These young people have been joining on their own, but it cannot be said yet, about active integration into the rest of the processes

4.
BEST PRACTICES

A. NATURAL AND TECHNOLOGICAL RISKS:

- 1. A demonstrable leap forward of the project is to have promoted the local participation of communities in the prevention and mitigation of the risk of flooding or landslide, managing to bring together institutional, public, private, and civil society actors, and integrating them for adequate prevention and mitigation.
- 2. The establishment of meteorological stations together with the strengthening of the EWAS in the neighborhoods (according to the 4 components: knowledge of risk, monitoring and forecasting, communication and dissemination, and response capacity), forecast models, radar information, transmitted to a data server and from this to WS EWS (with cloud support). This instrument allows the generation of reports for decision-making that help reduce risks and prepare for disasters due to floods²¹ in the sub-basins, above the urban area of the CD.
- 3. The SIMRET platform established by the project is linked to the expansion of the hydrometeorological network (currently there are 33 rainfall stations within the Rio Choluteca basin) that will be strengthened to operate throughout CD with the KFW project. The technicians hope that this will expand and enhance the work of BR

B. SHELTER AND SETTLEMENTS:

4. The partnership framework from the leadership of the AMDC through the Directorate of Community Management and Human Development with CONVIVIENDA²² contributed to the management of bonds for 125 homes that

21 The stations supported by the project have only one rain sensor; but others will be added, with KFW support for wind, temperature, relative air humidity and atmospheric pressure

²² In 2019, the Framework Law on Housing and Human Settlements was approved, which led to the creation of the Secretary of State in the Housing and Human Settlements Offices, with the aim of addressing the country's housing deficit and overcrowding problems

benefited families with incomes lower than LPS 4000 (USD 166) who lived in a risk area, improving the living conditions of those families.

- 5. The development of a comprehensive process accompanied by technical assistance facilitated the construction of trust between families to overcome the crisis that social roots bring, after having lived in a certain space and having to resettle in a new reality.
- 6. Regular meetings of the BR team with AMDC teams contributed to ongoing planning and monitoring, facilitating understanding of the intervention, but at the same time verifying progress and adjustments.
- 7. Appropriation of the roles of all CODEL members in the coordination and execution of actions aimed at the prevention, mitigation, preparation, response and rehabilitation of emergencies and disasters in the community. It is a permanent body made up of volunteer leaders. Its dependence on CODEM is linked to its functions and has been linked in a concrete way, recommending necessary prevention and mitigation measures in the neighborhoods, raising information (families at risk, solidarity), and dynamizing the SAAT, active in all the neighborhoods accompanied by the project.
- 8. The improvement of the configuration of human settlements has contributed to reduce risks and vulnerability of housing, in critical infrastructure and take advantage of abandoned spaces to create recreation parks for the inhabitants of the José Arturo Duarte and Altos de los Pinos's neighborhoods.

C. ECONOMIC RECOVERY AND MARKET SYSTEM:

- 9. Business owners are resilient, since they have been linked to the operation of the Early Warning System, developing prevention, response, and support actions at the time of Hurricanes Eta and Iota. Under these circumstances, they provided food kits in shelters, provided information through whiteboards and were in constant communication with CODEL about crises in some families.
- 10. Businesses have evolved from neglect to order, through accounting and daily inventory, also monitoring that within the family they did not take products without control. To that extent they would know how to invest, work with the competition, improve sales and thus derive real profits.
- 11. Linking up with financial institutions such as the Chorotega cooperative and taking advantage of the "solidarity credit" program of the previous government (which lent to 1%), prepared for the conventional in businesses outside the emergency. In this sense, a good indicator is that a savings bank is operating in the Ulloa, as an opportunity to access credits. This initiative is local in nature but serves neighborhood businesses.

- 12. When starting the businesses within the DRM, there was a need to review the location of these, identify fire risks, by the type of existing wiring. Likewise, they carried out mitigation actions for eventual landslides.
- 13. At the level of the SMART Company, it is important to clarify the commercial growth strategy that is not yet clear to its partners and, as a result, may weaken.
- The Company experimented purchasing products at low cost to favor better prices to businesses and these to the consumer. For some businesses it was functional for others it wasn't because their customers' demands vary by neighborhood.
- The distribution of the products acquired by the company for the affiliated businesses raised the acquisition costs, by freight price and allows us to be competitive in price in their neighborhood, so we chose to buy again in the central supply (wholesale).
- There is a question that needs to be further explored. What does the Company want? What problem is going to solve small businesses?
- Will a business mini holding that centralizes²³ services and products that have a demand greater than 90% of its members be more functional? To begin with, they should have an offer no greater than two products or services; assess turnover volumes based on profitability and define organizational processes: partner entry and exit policy, income requirements, as well as dividend policy, define management and internal control bodies, business operating structure (not JD). Finally, it is the organization that offers the products and/or services through a management that operates the business opportunities and/or services and under an economy of scale, with declaration to the tax authorities.
- 14. The strategy implemented to accompany resilient businesses has given results, because it starts from a methodological approach that forces a permanent review of the accompaniment process, measuring needs, assessing risks, satisfaction and ensuring transparency.

D. RISK MANAGEMENT POLICY AND PRACTICE:

15. CODEL prepares and incorporates all sectors within the neighborhood for the analysis of the threats to which it is exposed and generates scenarios of possible risks in its neighborhoods; through its plans it prepares to take measures and improve its capacities in the event of emergencies.

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²³ It is a network of diverse small businesses in lines of work that are organized with a common strategic vision to better manage, leverage synergies and reduce costs and taxes.

E. WATER AND SANITATION:

16.Despite the differences between the JAA consulted in La Duarte, Ulloa, and Alto de los Pinos, the performance index attributed to them increased from 51.48 in 2019 to 76.78% in 2021. It is also surprising that together with the CODELs, they have led the awareness and mobilization of the community, and not the community board, a traditional institution, whose inactivity in these contexts is notorious.

RECOMMENDATIONS

A. NATURAL AND TECHNOLOGICAL RISKS:

- 17. At the local level, the stability of the human resources trained in CODELs will continue to be a challenge, because it is voluntary work with a vocation of service. It will be necessary, however, to seek some incentive that is not necessarily economic, which would better concretize the social recognition it already enjoys.
- 18. The hydrological stations, due to the location of some, suffer from vandalism (damage to panels or theft of components). Some forms of protection are iron and mesh lattice boxes, and in some cases, looking for private sites that do not involve payment commitments.
- 19. The SIMRET platform is technologically highly developed and with competent personnel, but work must be done on the sliding module, as part of the comprehensive prevention model.
- 20. To strengthen the capabilities of the SIMRET platform, it is recommended that community meteorologists from weather stations be trained²⁴ to support temperature, relative humidity and precipitation measurements from an APP, tablet, or smartphone, to send information in real time. As it is a voluntary work, a form of stimulus must be created as for the JAA and CODEL, for this contribution

B. SHELTER AND SETTLEMENTS:

21. The training process of the diploma course developed for DOT technicians, through UNAH, was well valued for the knowledge obtained. But it implies a curriculum review that includes issues of improvement in DRR, adapted to the

²⁴ They are stations that broadcast information directly to the platform.

planning framework of the municipal directorates and adjusted to the profiles of the area²⁵.

22. CODELs are a body from which it can be created, a support arm to train young community promoters²⁶ of works management; they would be responsible for accompanying the community in the identification of safe sites for construction. Modular themes include: community infrastructure (housing and services), community waste management, environmental awareness (legal requirements, planning of community environmental projects). The training process should be designed together with CODEL leaders, certified and led by DOT.

C. ECONOMIC RECOVERY AND MARKET SYSTEM:

23. A challenge in the NR approach methodology is to incorporate the competitiveness variable as a determinant in DRR and this, in relation to its environment of violence and extortion

D. RISK MANAGEMENT POLICY AND PRACTICE:

24. The success of this experience is to have provided the AMDC with concrete instruments that will help it formulate policies with clear methodologies, key actors, tasks and ways of monitoring and institutionalization. However, its effectiveness will depend on whether there is corporate agreement to create the policy.

E. WATER AND SANITATION:

25. Local mechanisms must be identified to reduce the backlog, a widespread problem, even in Altos de los Pinos, which has developed a management model with many advantages.

²⁵ There was a lot of desertion because vocational training did not help in some cases to understand the subject.

²⁶ The suggestion comes from the CODELs of Altos de los Pinos and José Ángel Ulloa.

ANNEXES

Annex 1: Terms of reference

External Evaluation "Resilient Neighborhoods - Building Resilient Cities through Resilient Neighborhoods" Project Donor: USAID/BHA Terms of Reference

1. Introduction

1.1 Background

The Municipal Mayor's Office of the Central District (AMDC) with the support of GOAL International Association is implementing the project called Resilient Neighborhood "Building Resilient Cities through Resilient Neighborhoods". The project is funded by the Bureau for Humanitarian Assistance (BHA) of the United States Agency for International Development (USAID). The project ends in December 2021, with high potential to expand interventions in other cities in Honduras and Latin America.

The project intervention areas focus on 8 neighborhoods: Nueva Providencia, José Ángel Ulloa, José Arturo Duarte, Las Brisas, Betania, Nora de Melgar, Los Pinos and Villa Nueva in the city of Tegucigalpa, with technical assistance to other cities in the country.

The intervention is integrated by a neighborhood development strategy in the Central District that aims to increase resilience in existing or new informal settlements experiencing uncontrolled growth, creating conditions for sustainable urban development.

This intervention will work at the municipal, institutional and community levels, seeking to connect the actors so that disaster risk reduction and development processes within the neighborhoods can work for the most vulnerable people.

The project will intervene in 5 key socioeconomic systems for disaster risk reduction in the neighborhoods:

The social housing system includes the analysis of the main causes of the problems of access to housing for low-income families (mainly those earning less than 2 minimum wages), the identification of the potential for access to housing of the actors, resources, and procedures, promotes the establishment of a strategy that allows the municipality to join efforts to meet the needs of new or improved housing for low-income families and/or living at risk of disasters. Promotes the articulation of competent and relevant actors to generate sustainability over time.

The small business market system seeks to maintain, through networks of grocery stores, a stock of essential products from the basic food basket for humanitarian assistance in emergency situations for families at risk. It includes the analysis of the functioning of market systems for essential products and services so that low-income families can access them. Promotes networking and the articulation of actors to strengthen the pulperías (mini markets) in aspects of disaster risk reduction and economic development.

The system of drainage provision and maintenance includes the analysis of the risk of landslides and floods and their link to the lack of a functioning storm drainage system. It proposes the identification of the potential of implementing drainage systems for disaster risk reduction in developing neighborhoods. Promotes a model approach for water boards to expand their functions with the provision and maintenance of drainage and compliance with the legislation that controls them. Promotes a municipal approach to lead the provision and maintenance of drainage for developing neighborhoods with the coordination of civil society entities and community organizations. Promotes the articulation of competent and relevant actors to generate sustainability over time.

The early warning system comprises the sum of policies, strategies, instruments, and specific actions related to the identification and monitoring of hazards, vulnerabilities and risk, the design and implementation of alerts or alarms related to the imminent occurrence of hazardous events, preparations for emergency response and their implementation.

Early warning and early action systems have been recognized as necessary for risk reduction due to the breadth of disaster preparedness actions.

According to international standards, early warning and early action systems comprise four components that ensure mechanisms for timely and effective response to disasters; these are defined as

- 1. Knowledge of risk
- 2. Monitoring and forecasting
- 3. Communication and dissemination
- 4. Response capacity.
- Knowledge of risk: Risk assessment provides essential information for prioritizing mitigation and prevention strategies and the design of early warning and action systems.
- Monitoring and forecasting: Monitoring and forecasting systems must have the capacity to provide timely information as well as estimates of the potential risk faced by communities, economies, and the environment.

- -Dissemination and communication: Communication systems are necessary to get warning messages to potentially affected locations to alert government, regional and local agencies. The message needs to be reliable and simple to be understood by authorities and the public.
- Response capacity: Good governance coordination and appropriate action plans are key to effective early warning. Also, public awareness and education are key to mitigating disasters.

Urban planning includes the potentialities and conflicts of the urban territory and the interaction of the different critical socioeconomic systems that are manifested in the development processes of the municipality and its neighborhoods. It includes the analysis of the main causes of land use problems that generate different types of conflicts.

This approach proposes the insertion of a strategy for the incorporation of urban planning in the municipality of the Central District and other cities of interest. Special interest is maintained in the reconfiguration of informal neighborhoods to facilitate their inclusion within the urban project of the municipality. The articulation of competent and relevant actors is promoted to generate sustainability over time.

Achieving together is an initiative of change for community development, which seeks to unite the efforts of different sectors so that, through interventions to change the image of housing, improve services and critical spaces, it can generate interaction between neighbors in the neighborhood, improving their cohesion and strengthening leadership and volunteerism of children and youth through neighborhood art and disaster risk reduction actions.

Young people in their different ways of expressing themselves and connecting with their neighborhood become social authors that strengthen their values of cooperation and coexistence, allowing them to discover the potential for their integral growth, favoring their communities and raising the self-esteem of them and their neighborhood.

2. Scope of the Evaluation

The evaluation should be organized around the OECD evaluation criteria below, with suggested research questions.

Relevance: Is the program in line with national and international priority concerns? Were the objectives in line with international standards in this sector, (if any)? Did this program effectively reach the most vulnerable households? Did the project address the priority needs of the affected population? What foundations were laid at the local and national level for the

implementation of Resilient Neighborhood? What internal or external factors contributed to and/or limited the institutionalization of this approach?

Effectiveness: Were the monitoring mechanisms effective in providing timely data to inform programming decisions? To what extent did the project meet its objectives and achieve results? To what extent did the project achieve its intended results? What were the results in relation to the established indicators? Are there any negative or unintended effects because of this project? To what extent has the project contributed to reducing disaster risks in the project's urban communities? What aspects of the Resilient Neighborhoods Approach were most effective? What aspects of the Resilient Neighborhoods Approach were least effective? What factors influence the effectiveness (or lack thereof) of urban DRR programs using the Resilient Neighborhoods Approach?

Efficiency: What evidence is there that efficiency was pursued in the program design? Were outputs delivered on time? Was technology used to improve efficiency? What have been the outputs/agreements reached in the urban resilience workshops promoted by the project?

Sustainability: To what extent did the program use established institutions/mechanisms to ensure sustainability at the end of the project? To what extent were relevant partnerships/capacities developed to ensure sustainability? Was an exit strategy developed to ensure sustainability? What capacities were strengthened at local and national levels to take appropriate urban risk reduction and preparedness measures in poor urban settlements? To what extent were relevant partnerships/capacities developed to ensure sustainability? To what extent are communities able to integrate DRR practices and take ownership of the Resilient Neighborhoods Approach? What barriers exist to the use of the Resilient Neighborhoods Approach? To what extent are municipal and national authorities mainstreaming and institutionalizing the Resilient Neighborhoods Approach? What evidence (including, but not limited to, changes in policy or urban planning) exists that municipal and national authorities are managing urban risk differently because of the USAID/BHApromoted Resilient Neighborhoods Approach to urban DRR? What facilitating factors and what factors that impede success contribute to the sustainability of the Resilient Neighborhoods Approach?

Evaluation Project Tasks

- 1. Refine the Evaluation Objectives and primary research questions in consultation with the GOAL management and technical team.
- 2. Incorporate specific research questions related to the strategic areas of the program.
- 3. Design and test an evaluation methodology and tools to address the specific Objectives and individual evaluation research questions.

- 4. Conduct research and secondary data collection, including the use of GOAL project monitoring data, to identify gaps in data coverage and knowledge.
 - 5. Collect primary data to establish and quantify GOAL performance against selected program indicators and criteria described above.
 - 6. Provide a draft report to GOAL and AMDC program management that will include recommendations for maximizing social effects.
 - 7. Facilitate a workshop to validate the evaluation results with GOAL, AMDC and partner staff and other stakeholders.
 - 8. Incorporate the comments from the validation workshop into the draft report and prepare the final report. The final report should describe both the results of the evaluation and provide actionable recommendations for future project improvements.
 - 9. Semi-structured interviews will also be conducted with key stakeholders at the municipal level to deepen their perception of the application of the Resilient Neighborhoods approach at the municipal level.
 - 10. The recommendations and lessons learned documented at the end of the evaluation process will be disseminated to relevant stakeholders -at local and national level- to continue contributing to and improving collective efforts to reduce disaster risk in Tequcigalpa's informal settlements.

3. Methodology

A recommended methodology is detailed below, although the tools and final methodology will be determined by the evaluator and will be in accordance with the tasks mentioned above, which will be reviewed and approved by GOAL.

GOAL recommends mixed methods (using qualitative and quantitative techniques for data collection) that can quantify impacts and achievements against the intended outcomes and objectives.

3.1 Planning

- Review key internal and external documents.
- In collaboration with the MEAL Coordinator and the Associate Program Director (ACD-P), refine and finalize specific evaluation questions to be explored from the scope described above.
- Propose to the MEAL Coordinator and the program team the appropriate methodology to be developed in the context to evaluate the project and address the OECD evaluation criteria.
- Prepare an outline of the data collection methods required and the relevant survey templates and participatory data collection guides to be used for data collection.
- Develop a work plan that includes the key milestones required for data collection so that the MEAL coordinator can organize the logistics.

- Hold a brief planning meeting with all members of the evaluation team, including the MEAL Coordinator and relevant program teams, to review and revise questions as needed for the data collection tools.
- Coordinate with the MEAL Coordinator on training and recruitment of data collection staff and use of mobile data collection for the proposed survey tools and qualitative guides, as primary data collection will be necessary for the study.
- -Hold a brief workshop with the MEAL program team to communicate the evaluation methods, objectives and results. This will include a brief description of the proposed evaluation questions and methods.
- -Analysis of the data, preparation of the report, preparation of the summary of findings and dissemination.

3.1 Secondary Data Collection

Requires review of all documentation generated by the project.

3.2 Primary Data Collection

The primary data collection areas include the following intervention territory, detailed below:

Central District Municipality.

Neighborhoods (9):

Ulloa Sector (3): José Ángel Ulloa, José Arturo Duarte and Nueva Providencia.

- 2. Villa Nueva Sector (2): Villa Nueva and Los Pinos.
- 3. Las Brisas Sector (3): Las Brisas, Betania and Nora de Melgar.
- 4. Berlin

GOAL through the MEAL team has quantitative data that have been collected throughout the project that should be considered by the evaluator.

GOAL recommends the use of mixed methods (using both qualitative and quantitative techniques for data collection). A balance between quantitative and qualitative methods is expected to better understand the mechanisms that produce certain results or prevent greater results.

3.3 Data Analysis

GOAL expects all quantitative data to be rigorously analysed and to be representative of the project area within the reasonable limits and constraints of the context.

Qualitative data should also be rigorously analysed and should focus primarily on developing a deeper understanding of program relevance, and provide recommendations to improve or strengthen the effectiveness, efficiency, and sustainability of program outcomes.

4. Presentation of findings, documentation, and suggestions

This consultancy will have a duration of 90 working days. The findings of the evaluation should be shared with GOAL in the following formats:

- Closing workshop with GOAL staff to present findings and receive feedback.
- Agreed lessons learned and best practices that can be incorporated into project sector programming.
- Agreed recommendations that will inform and improve GOAL's future programmatic strategy, with action items.
- In digital format, the draft evaluation report is provided to the MEAL Coordinator, Program Manager and Country Director for their comments and feedback, one week after the conclusion of the field visits.
- In digital and printed format (1 copy in English and Spanish) Final Evaluation Report - The report should be clear and concise (1-30page format) and should include the following sections.
- 1.Cover page
- 2. Table of contents
- 3. Executive summary (maximum 3 pages, written in such a way that it can be used as a stand-alone document to share with stakeholders).
- 4. Introduction/Background
- 5. Methodology,
- 6. Outcome organized around the OECD evaluation criteria, 7.
- 7. For each system and others of a general nature:
- i. Analysis of the results
- ii. Lessons learned
- iii. Best practices
- iv. Recommendations.
- 8. Annexes:
- i. Terms of reference
- ii. Evaluation work plan
- iii. List of persons consulted
- iv. Statement of documentation reviewed
- v. Photographs of the evaluation process
- vi. Statistical results (if applicable)
- vii. Templates of data collection tools used,
- viii. Summary of survey results (including some contextual phrases on project implementation by respondents),
- ix. Any other relevant material
- x. Summary of the Power Point presentation including mainly items 6 and 7.4.

DELIVERABLE 1: Presentation of main results.

DELIVERABLE 2: Final evaluation report.

5. Dissemination of Results

Results and recommendations will be made available to interested parties at the discretion of USAID/BHA, AMDC and local GOAL management. The final report and primary data collected will become the property of USAID/BHA.

Following the presentation of the results led by the consultant team, the GOAL team will develop workshops to share the results of both this external evaluation and the internal evaluation with leaders and other key stakeholders at the community level, delivering copies of the documents in each of the intervention neighborhoods. If certain sections of the evaluation are deemed useful or informative to the broader humanitarian community as lessons learned or opportunities to improve programming, the full report will be made public on the Development Experience Sharing Center. As USAID guidelines state, before being made publicly available, evaluation reports should be adjusted to remove information that falls within one of the "principled exceptions to the presumption in favor of openness" set forth in OMB Bulletin 12-01, "Guidance on Collection of U.S. Foreign Assistance Data." 1

Annex 2: Startup report

1. INTRODUCTION

1.1. Subject and objectives of the evaluation

Goal has requested an external evaluation of the program "Resilient Neighborhoods Building Resilient Cities through Neighborhoods", which is implemented in 8 neighborhoods of the Central district of the Department of Francisco Morazán, Honduras. The Program has been implemented by GOAL and distinguishes the following sectors of accompaniment: (1) Natural and technological risks, which seeks to improve the capacities of the Municipal Mayor's Office of the Central District, hereinafter AMDC; (2) Shelter and settlement, which seeks to reduce high-risk vulnerability by strengthening municipal processes and improving coordination among stakeholders for the provision and improvement of housing and water management; (3) Economic recovery and market system, to strengthen the resilience of small businesses so they can provide critical services in emergency situations and after recovery; (4) Risk management policy and practice. This seeks to facilitate the adoption of resilient neighborhood as a policy within the AMDC municipality and other key national and local stakeholders in the framework of the Making Cities Resilient campaign; (5) Water, Sanitation and Hygiene, which sought to promote personal hygiene behaviours and infrastructure management.

The evaluation examines the extent to which the program has contributed to the achievement of the specific objectives and measure the achievement of the indicators formulated for each sector. These specific objectives are related to the strengthening of capacities so that:

- <u>AMCD and communities:</u> can assess and prepare for geological and hydrometeorological disasters.
- <u>Leaders:</u> Achieve coordination among stakeholders to facilitate the provision and improvement of social housing and improved surface and wastewater management.
- <u>Small Businesses</u>: can continue to provide critical services in emergency and post-recovery situations.
- <u>AMDC</u>: adoption of Resilient Neighborhood as a policy within the AMDC municipality and with other key stakeholders at the national and local levels.
- -<u>Families:</u> Adopt personal hygiene behaviours and infrastructure management.

This final evaluation is an obligation under the agreement between USAID and GOAL, which serves as accountability to the donor, to GOAL International and national GOAL and to the various stakeholders that support the program, among which are: the AMDC, neighbourhood leaders, among others. The evaluation also must formulate recommendations and lessons learned that can be used to further develop new projects or programs.

The evaluation should formulate answers to the evaluation questions presented in the ToR that refer to the different OECD DAC criteria: relevance, efficiency, effectiveness, sustainability, relevance, and impact, with an additional question on the impact of the COVID_19 crisis on the implementation and effectiveness of the program. Priority attention should be given to the analysis of effectiveness.

1.2. Limitations

This assessment faces several constraints:

Covid-19 - The assessment will be conducted in a situation characterized by the COVID-19 pandemic. This has implications for the organization of the assessment and security measures. We anticipate some difficulties in data collection due to COVID-19. SEDC applies the principle of "Do No Harm" and expects the consultant to do likewise. They will also have the responsibility to identify the most appropriate methods and actions considering their own and the respondents' safety and to adapt the methodology accordingly. Sufficient flexibility will be provided to organize and carry out the evaluation activities, respecting national and local COVID-19 regulations. If necessary, the evaluation consultants may be obliged, in some colonies, to resort to online interviews and focus groups.

While recent evaluation work has shown that this still yields valuable information, some of the informal interactions and observations of the real situation on the ground are lost if many activities must be conducted online.

Gangs - The program is implemented in eight neighborhoods with serious security issues. This complicates the evaluation process in different ways. To the extent possible, the evaluation will use information through personal interviews and focus groups and in cases where this is not possible, the use of a platform will be used to collect information.

2. EVALUATION FRAMEWORK

The ToR questions have been further developed, based on the desk review, monitoring, and inception workshop data, into an evaluation framework. The evaluation framework consists of five evaluation questions (EQs), for each of which several judgment criteria are formulated. For each of the judgment criteria, guiding sub-questions or pointers are identified that specify what type of information will be sought. Evaluators will also be alert to unanticipated and unplanned results. The framework is complemented by sources of verification. The framework guides data collection, but the extent to which indicators are addressed. Not all items will be relevant to the sectors. Therefore, the framework only provides an overview of potential points of interest to be discussed with the different stakeholders to be interviewed.

Based on the assessment matrix, interview guidelines will be developed. The interviews will be semi-structured; the interview questions are structured around a set of themes and a series of open-ended questions. The evaluation matrix also serves as an analytical framework for processing the data from the desk study, interviews, and surveys. The combination of information sources (triangulation) will provide the data to assess the judgment criteria of this evaluation matrix.

The evaluation questions contained in the ToR refer to the five OECD DAC evaluation criteria + one specific question on COVID-19 crisis management. The priority question concerns the evaluation of program effectiveness. In the evaluation framework we present five evaluation questions, of which the first three concern the analysis of effectiveness. We have distinguished between (PE1) interventions to strengthen the capacities of communities to assess and prepare for geological and hydrometeorological disasters; interventions focused on strengthening municipal processes and improving coordination stakeholders for provision and improvement of social housing and improvement of surface and wastewater management; interventions to strengthen the resilience of small businesses so that they can continue to provide critical services in emergency and post-recovery situations; actions to facilitate the adoption of Resilient Neighborhood as a policy within the AMDC municipality and with other key stakeholders (national and local); interventions to promote personal hygiene behaviour's and community infrastructure management. (PE2) addresses efficiency, (PE3) sustainability. The elements of the SPs with respect to relevance

and impact have been integrated into (SP1 to SP3) on effectiveness. The question on the influence of the health crisis is integrated in (SP2).

Evaluation question one: Local level: local leaders To what extent has the program contributed to the processes of developing the capacity of community leaders to be more effective in geological and hydrometeorological disaster preparedness and the promotion of personal hygiene behaviour's and community infrastructure (effectiveness, indications of impact, relevance). Local level: Community enterprise: contributions to community enterprises to provide critical services in emergency and recovery situations. Institutional Level: Program contributions to AMDC response in geological and hydrometeorological disaster assessment and preparedness, coordination in the provision and improvement of social housing, improvement of surface water management, wastewater management in municipal processes and coordination among stakeholders to generate adequate response, developing processes leading to the adoption of a AMDC policy.

Rationale

These evaluation questions address the analysis of effectiveness, which requires an analysis of the degree to which specific objectives are met in the areas set out in the design. The design establishes objectives that make clear the change sought. For the analysis of effectiveness, we will evaluate objectives in these different areas of change from the indicators.

The evaluation criteria refer to these different domains of change: Local Level:

- Examines results with respect to <u>strengthening capacities of leaders and community</u> to assess and prepare for mitigation of geological and hydrometeorological catastrophes
- Examines the effect of capacity building on <u>outcomes with beneficiaries and/or target</u> <u>members/groups</u>, in terms of training, shelter and risk mitigation infrastructure, market system rehabilitation, microfinance, access to sanitation infrastructure.
- It examines the <u>results of capacity building to the AMDC</u>, in terms of capacity building for adjustments in policy frameworks or institutional procedures, shelter design, settlement and risk mitigation.
- It addresses the question of relevance which is limited to the question to what extent the program responds to the (changing) needs and concerns of the target population (AMDC and neighborhoods).

Assessment criteria	Sub-questions and indications
1.1The extent to which the program responds to the needs of the target groups (relevanc e).	 - the support provided by the program is based on an assessment of municipal and local needs and an analysis of capacity problems by community leaders and authorities. - The capacity development support provided by the program is assessed by the beneficiaries (leaders and AMDC) as relevant. - The support considers the opportunities and challenges they face. - The issues addressed by the AMDC are assessed by the target groups as relevant and responsive to their needs. - The concerns and needs of both men and women are considered.
1.2. Enhancing the capabilities of leaders, community and AMDC.	 Level of implementation of programmed activities and validation of progress reported according to indicators at sector level. Evidence of changes and adoptions at local level (procedures, management, policies, and strategies,). Evidence of changes at the AMDC level (Policies, implementation, legitimacy, ability to influence policies, participation). Improved gender sensitivity or gender mainstreaming (internal and external) at the local level and since the integration of the AMDC, evidence of change in gender roles and norms Evidence of contributing and explanatory factors Presence of other unexpected results
1.3. Improved performance in terms of capacities of leaders, families, AMDC (training, counseling, infrastructure development, etc.).	 Level of implementation of programmed activities and validation of progress reported according to indicators at the level of specific objectives by sector. Quality of services perceived by beneficiaries (leaderscommunities). Improved knowledge to reduce the impact of hydrometeorological events, for disaster response and recovery, early warning response, mitigation, and disaster management, disaggregated by gender. Increased community participation in risk management Evidence of contribution to changes at AMDC level in outgoing authorities and readiness in current ones (agenda setting, dialogue, political will) Evidence of contribution to changes at community level from leaders (plans, participation, willingness, change of practices) Evidence of a move towards more equal participation of men and women in all activities. Evidence of contributing and explanatory factors Presence of other unexpected results

Indications of impact in terms of institutionalizati on of practices in urban disaster risk reduction using a neighborhood approach in the framework of "Resilient Cities"?

- Indications of the effect of the planned objectives
- Indications of impact from the most significant changes for leaders and families in each neighborhood.
- Indications from the institutionalization of practices in urban disaster risk reduction using a neighborhood approach in the framework of "Resilient Cities" from the AMDC or the conditioning factors for its implementation.
- Indications of contributing and explanatory factors
- Presence of other unexpected results

Sources of information:

- Available M&E data and document review.
- Community workshops
- Semi-structured interviews
- -Focus groups with members, local neighborhood beneficiaries, and local stakeholders

Evaluation question two: To what extent have the resources (funds, expertise and time, etc.) and strategies developed by the program contributed to the achievement of the expected objectives in a timely and cost-effective manner, relative to the options available in the context (efficiency)?

Rationale

Evaluation question two refers to efficiency. As defined by CAD, efficiency refers to the extent to which the intervention produces, or is likely to produce, results in a cost-effective and timely manner. "Economical" refers to the conversion of inputs (funds, expertise, natural resources, natural resources, time, etc.) into outputs, outcomes, and impacts in the most cost-effective manner possible, relative to the options available in the context. "Timely" refers to meeting the established timelines or timelines reasonably adapted to the requirements of the changing context: "To what extent have the resources and strategies developed contributed to the achievement of the planned objectives?". The focus is on the choice of resources and strategies, which is already assessed in the effectiveness questions.

The evaluators propose to focus more on the appropriateness of resources and strategies and to add some elements related to cost-effectiveness and timeliness. We also propose to add two other PEs that refer to other factors that also influence the optimal use of resources and strategies to achieve the expected results, namely the level of collaboration and coherence and the level of management (JC4.3). The assessment of the level of collaboration and its contribution to effectiveness involves collaboration between the different actors directly involved in the program. The question on the response to the ToR COVID crisis is integrated in this evaluation question under PE2.

Assessment	Sub-questions and indications
criteria	•
4.1. The appropriate strategic decisions have been made to achieve the objectives and indicators established in the design.	 The implementation of actions to support capacity building (topics: geological and hydrometeorological disaster management, development of risk mitigation infrastructure, rehabilitation of market processes, risk management practices, sanitation infrastructure, water supply and hygiene, etc.) has been discussed and agreed with leaders and AMDC. The expertise employed (formation of specialized technical team from GOAL.) was relevant to the realization of the expected results. The quality of the technical expertise provided by the program is rated as high by community leaders and AMDC. Combination of strategies applied by leaders and AMDC to achieve the objectives. Ratio between the influence of national policy and its influence on the achievement of the specific objectives planned the return on total investments versus direct beneficiaries. Financial execution is efficiently planned and executed (procedures, transaction costs, timeliness,). There is a budgetary flexibility that increases the effectiveness and efficiency of financial assistance. Other factors contributing to and explaining efficiency gains.
4.2. Collaboration and Coherence	 -Level of complementarity and collaboration between AMDC and program beneficiaries. - Value added in implementation: evidence of coherence, synergy or complementarity with other USAID projects. -Factors explaining the level of complementarity and how they have been addressed during program implementation.
4.3. Internal program management	During program implementation, the opportunities and bottlenecks of the context are considered. A tight, enforced, and respected monitoring and evaluation system. The extent to which program interventions have been appropriately tailored in response to the COVID-19 pandemic and its impact on program effectiveness
Sources of inf	ormation:
- Data available	from M&E.
- Workshops	
-Semi-structure	d interviews

Evaluation Question Three: To what extent are the changes produced by the program sustainable?

Rationale

This evaluation question refers to sustainability. According to the CAD definition, sustainability analyzes the extent to which the benefits of the intervention will persist or are likely to persist. This includes consideration of the financial, economic, social, environmental and institutional capacities of the systems needed to maintain the benefits over time.

Assessing the sustainability of benefits at the target group level is a priority in this evaluation. The target group is the community families, leaders and the AMDC team. We propose to make a distinction between these different levels. The evaluation of financial and institutional sustainability is more relevant at the AMDC level; the evaluation of social sustainability is more relevant at the level of the final beneficiaries (PE3).

Assessment criteria	Subpreguntas e indicaciones
5.1. Financial sustainability (of changes at the leader and AMDC level)	 -Adequate financial resources are available to continue implementing the risk management infrastructure approach and actions. - Adequate financial resources are available to maintain the training processes and infrastructure development developed. - Explanatory factors
5.2. Technical/ institutional sustainability (of changes at the leadership and AMDC levels)	 Capacity changes are supported by leaders and the AMDC (the latter from an accompanying interest). Response and strategy developed are integrated into the AMDC's structure and policies. Level of ownership and commitment among outgoing and incoming AMDC authorities. explanatory factors
5.3. Social sustainability (of changes at the level of final beneficiaries/leaders and communities)	 The skills and competencies acquired by leaders are evaluated as relevant and can be applied in practice. The AMDC is committed to following the process of adopting the Resilient Neighborhood model. Explanatory factors
5.4. Sustainability of results at the AMDC and local level	 Evidence of willingness of new AMDC authorities to implement policies, procedures that contribute to the development of resilient neighborhoods. Evidence of adequate allocation of resources to comply Evidence of support for the political discourse and proactive attitude of municipal authorities in favor of Resilient Neighborhoods. Explanatory factors

Sources of information:

- Available M&E data and document review.
- Workshops
- Semi-structured interviews
- Focus groups with members, beneficiaries

Annex 3: Instruments developed by the Project

Instruments/tools	Adopted by AMDC/Others	Adopted by the neighborhood	
EWARS Operation	CODEM	CODEL, business network	
Weather stations network	CODEM-COPECO	CODEL	
SIMRET platform in operation	AMDC-UMGIR		
Law and regulation to promote the protocol for message broadcasting (telephony)	CONATEL, COPECO y CODEM		
Methodology/ Simplified response preparedness plans	CODEM UMGIR	CODEL	
Best practices in home improvement		CODEL	
Drainage supply and maintenance systems	UGASAM, AJAASFRAM	JAA	
Drainage master plans	SEDECOAS	JAA (4 plans)	
Portfolio of project profiles	CODEM	CODEL	
Contingency plans and DRR measures	AJAASFRAM, CODEM	JAA (4 plans)	
Community works for DRR	CODEM, UGASAM	CODEL	
Businesses with continuity and contingency plans		Negocios resilientes	
Installation of information boards	COPECO- CODEM	CODEL	

Instruments/tools	Adopted by AMDC/Others	Adopted by the neighborhood
Contingency Plan for the Villanueva Fair	CODEM	CODEL
Institutional diagnosis and urban territorial planning with three strategic lines of action	DUSIR, DOT	
Implemented multipurpose cadastre system	Catastro	
Preparation of PMRRD-B	DUSIR	Five Neighborhoods- CODEL
Proposal for neighborhood reconfiguration	DUSIR	Three Neighborhoods- CODEL
A plan for neighborhood reconfiguration	DUSIR	One neighborhood- CODEL
Orange Book (Neighborhood Configuration Manual)	DOT	
Community risk management plans (16)		CODEL JAA
Family risk management plan		Families
Disaster resilience analysis tool for communities	CODEM IDM	
Methodology of Elaboration of the Municipal Land Management plan (update)	DOT- DUSIR	CODEL
HRC methodology	UMGIR-COPECO	
Database of trained neighborhoods	CODEM	
Common Alert Protocol (CAP).		CODEL

Instruments/tools	Adopted by AMDC/Others	Adopted by the neighborhood
Practical guide to resilient business		Businesses
Practical guide to social housing		CODEL
Practical guide Early Warning and Action System SAAT for landslide and floods	UMGIR, CODEM	
Achieving Together practical guide		CODEL
Practical Guide for Drainage Provision and Maintenance		CODEL
Urban planning practical guide	DOT	
Systematization of the project Operationalizing a Neighborhood with an approach to Urban Disaster Risk Reduction in three high-risk neighborhoods in Tegucigalpa.	All units of the AMDC	Project team
Case study: Delivery of vouchers in neighborhoods served by the Resilient Neighborhood project.		Project team
Project baseline		Project team
Risk Analysis/Protective Measures for Groups in Vulnerable Situation	All units of the AMDC	Project team
Gender and Protection Strategy		Project team
Case Study: Protecting Natural Buffer Zones to Enhance Ecosystem Protective Functions	CODEM	

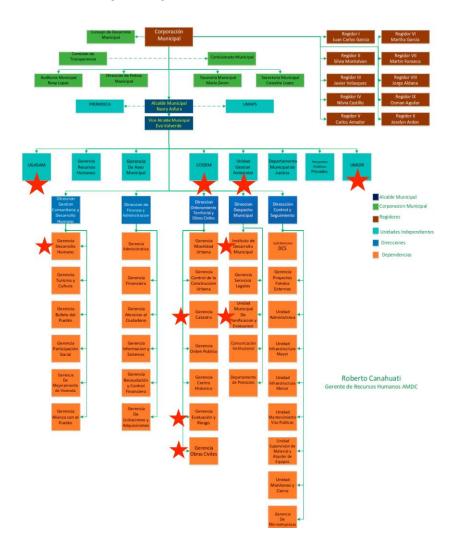
Instruments/tools	Adopted by AMDC/Others	Adopted by the neighborhood
Business Categorization Tools		Business Network and Project Team
Case study for strengthening financial capacity for resilience.		Business Network
Strengthening financial capacity for resilience.		Business Network
Business continuity plan.		Business Network
Sustainable business plan.		Business Network
Practical guide provision and maintenance of drains.		JAA
Water quality plan in Water Management Boards, drainage provision and maintenance system.		JAA
Case study organizing for resilience.		CODEL
Case study strengthening institutional capacity for resilience		CODEL, JAA
Methodological guide for the preparation of the PM-RRD	CODEM	CODEL
Methodological script for the intervention of public community spaces.	All units of the AMDC	
Prioritization process for community infrastructure works drainage provision and maintenance system		CODEL

Instruments/tools	Adopted by AMDC/Others	Adopted by the neighborhood
Methodological guide for the elaboration of the family risk management plan		CODEL
Facilitator's guide for the development of workshops for the elaboration of a community risk management plan.		CODEL
Neighborhood Configuration Manual	CODEM	CODEL
Community Risk Management Plan		CODEL
Family risk management plan.		CODEL y familias
Territorial Information System 2 (Multifinality Cadaster)	DOT	
Municipal Risk Management Policy with a focus on Climate Change and Land Management	Todas las dependencias de la AMDC	
Master Plans for Disaster Risk Reduction: Barrio Villanueva Sur		CODEL
Disaster Risk Reduction Master Plans: Barrio Villanueva North		CODEL
Disaster Risk Reduction Master Plans: Barrio Sector Ulloa		CODEL
Disaster Risk Reduction Master Plans: Los Pinos Neighborhood		CODEL
Disaster Risk Reduction Master Plans for: Barrio Altos de Los Pinos		CODEL
La Duarte Disaster Risk Reduction Master Plans		CODEL
Neighborhood Reconfiguration Plans		CODEL

Instruments/tools	Adopted by AMDC/Others	Adopted by the neighborhood
Pilot Plan for sustainable, inclusive, and resilient urban development in the Mirador de Oriente and Nueva Oriental sectors.	DOT	
Action plan for the strengthening of the DOT and its management	DOT	
Manual for the generation of urban development plans for the D.C. at the sector/neighborhood level.	DOT	
Manual for the regularization process of informal settlements.	DOT	
Methodological Guide for the generation and monitoring of territorial indicators of the D.C.	DOT	
Forums on Sustainable Urban Development with a focus on Integrated Risk Management.	All the units of the AMDC	
Diagnosis for the strengthening of the DOT and its management.	DOT	
Updating and expansion of the urban perimeter	DOT	
Practical Guide - Resilient Business		Business network
Practical Guide - Social Housing	CODEM	CODEL
Practical Guide- Early Warning and Action System (SAAT) for Landslides	UMGIR-CODEM	
Practical Guide - Achieving Together		CODEL
Practical Guide - Provision and Drainage Maintenance		JAA
Practical Guide - Urban Planning	DOT	

Instruments/tools	Adopted by AMDC/Others	Adopted by the neighborhood	
Inclusion as a pillar of the Resilient Neighborhood Project intervention (draft version)	CODEM	Team of the project	

Annex 4: Figure 1: Organizational Chart of AMDC



Annex 5: Indicator framework with findings and analyses

SECTOR 1: NATURAL AND TECHNOLOGICAL RISKS.

Table 1 Comparison of indicators sector 1: Natural and Technological Risks.

ible 1 Companson of indicators sector 1: Natural and Technological Risks.					
Indicator	BL	Final Ev	Good/V ery good	Proble ms	Deficie ncies
Sector 1	S	ub-sector:	Geologica	l hazards	5.
Number of people benefiting from geological disaster related activities, by sex	0	41,872			
2 Number of geological policies or procedures modified because of the activities to increase preparedness for geological events.	0	3			
3. Number of people trained to reduce the impact of geological events, by sex	3,51 4	6,132 (3390 W & 2742 M)			
Sector 1	Sub-sector: Hydrometeorological Hazards				Hazards
4. Number of people who will benefit from proposed hydrometeorological activities, by sex	0	16,934(8 ,580 W & 8,354 M)			
5. Number of hydrometeorological policies or procedures modified as a result of the activities to increase preparedness for geological events.	0	1			

Indicator	BL	Final Ev	Good/V ery good	Proble ms	Deficie ncies
6. Number of people trained to reduce the impact of hydrometeorological events, by sex	0	3,951 (1871 M y 2080 W)			
7. Percentage of TARGET population who report that they feel their community is well prepared to respond and recover in the event of a disaster.	0	80 %			

1. FINDING

A. Sub-sector: Geological hazards:

- Indicator 1: This exceeded the number of beneficiaries by 127 per cent over the target (33,035), with 52 per cent women and 48 per cent men participating.
- Indicator 2: Three procedures were implemented: the establishment of EWAS in neighborhoods, the formation of CODEM and simplified plans.
- <u>Indicator 3:</u> The number of people above the target of (3,514) exceeded by 175%.

B. Sub-sector: Hydrometeorological Hazards:

- Indicator 4: The population has been benefited with SAAT actions through alerts, issued by CODEM from local measurements, complemented with information from weather stations. It was an opportunity to calibrate the maps of the SIMRET platform. Alerts exceeded the target by 115 per cent (14,664).
- <u>Indicator 5</u>: It was realized with the installation of 14 hydrometeorological stations carried out on the Choluteca river.
- <u>Indicator 6</u>: The number of beneficiaries increased by 152 per cent over the target (2,597), with a higher participation of women by 53 per cent compared to 52 per cent.
- <u>Indicator 7</u>: 80 per cent of communities are prepared²⁷ to respond and recover in the event of disasters.

 27 EWAS components: Risk awareness, monitoring and forecasting, communication and dissemination, and responsiveness

2. ANALYSIS

A. Sub-sector: Geological hazards

- Indicator 1: The installation of an inclinometer and piezometer to facilitate the monitoring of earth movements has strengthened the SAAT, although a module on the SIMRET slip platform is not yet available. At the neighborhood level, the strengthening of the SAAT (11 sirens and 8 rain gauges) made it easier to identify families at risk. Meanwhile, drainage works and DRR measures have been significant, so that the population assumes greater awareness of the risk by adopting prevention. The survey of the evaluation identified that 88.10% of beneficiaries consider that their home is now safer, 73.13% value that the mitigation works (ditches) have reduced risks and 95% know the main threats due to landslides and floods in their neighborhoods.
- <u>Indicator 2:</u> Strengthen the four components^[1] of the SAAT of 8 neighborhoods intervened, contributes to guarantee local prevention and feed the SIMRET platform to its functionality. The formation of CODEM has been crucial for strengthening its operational capacities and developing the capacities of CODELs, so that they in turn have 27 simplified plans placed in neighborhoods that are highly known among the beneficiary population (95%).
- Indicator 3: CODEM training at the 10 CODELs at the 3 levels, basic, intermediate and advanced, provides local technical capabilities that have also reached the sectoral brigades, mainly composed of young people, who provide support and assistance when necessary. They are those who strategically, it is expected, will be part of the generational relay and who have managed to develop three campaigns of preachers, reaching an average of 5,040 homes, web promotion to 5,436 followers. This direct linkage of young people to CODELs in campaigns has a significant impact on access to knowledge about risk and ways of acting locally. 69.64% know what to do if the neighborhood alarm is activated and 93.45% know what to do to reduce the risk of threats in the event of landslides and/or floods in their neighborhood.

B. Sub-sector: Hydrometeorological Hazards:

- <u>Indicator 4:</u> The participatory approach and mechanisms used to transmit information have been effective. It is a sample of the knowledge acquired by the population since CODEL, whose work is positively valued at 72.92%.
- Indicator 5: UMGIR staff are prepared for the management and use of the SIMRET platform, with seven products (flood maps), relevant to mitigate and reduce risks due to flood threats and increase community resilience. Undoubtedly, the strengthening of EWAS in the neighborhoods has improved the knowledge of risk. A tool highly valued by the beneficiaries is the campaign of preachers: because they convey a message according to their understanding and reality, there is a positive response and acceptance of the population because they know each other and encourages more community dialogue. In total, 93.45%²⁸ of the beneficiaries know what to do to reduce risks and threats in the event of landslides and/or floods.
- <u>Indicator 6:</u> It shows us clearly that the contribution of the project has been significant in terms of knowledge about the risk (96.67%)²⁹ and the functionality of the local structure (CODEL with work plan) with clear communication and responsiveness.

SECTOR 2: SHELTER AND SETTLEMENTS.

Table 2 Comparison of indicators sector 2: Shelter and settlements

Indicator	BL	Final Ev	Good/V ery good	Proble ms	Deficie ncies
Sector 2	Sub-s Mitig	sector: She	Iter and Se	ttlements	Hazard
8. Number of shelters incorporating DRR measures	0	437			
9. Number of settlements adopting DRR measures.	0	10			

²⁸ Survey applied to families during the evaluation process March - April 2022

²⁹ Survey applied to families during the evaluation process March - April 2022

Indicator	BL	Final Ev	Good/V ery good	Proble ms	Deficie ncies
10. Number and percent of people retaining shelter and settlements DRR knowledge two months after training, by sex	0	270 (113%) (80 M=29.25 %) and W 190=70.7 4%)			

1. FINDING.

C. Sub-sector: Shelter and Settlements Hazard Mitigation

- <u>Indicator 8</u>: Number of housing (shelters) exceeded target 430 by 102%.
- <u>Indicator 9</u>: The number of settlements planned was 8 and increased to 10. (125%)
- <u>Indicator 10:</u> The number of people exceeded the target by 113 per cent (240 =115M and 125 W).

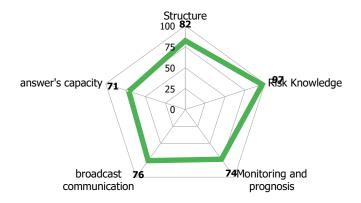
2. ANALYSIS

D. Sub-sector: Shelter and Settlements Hazard Mitigation

Indicator 8: The project in partnership with AMDC and other relevant actors made 437 improvements to resilient housing infrastructure in six neighborhoods³⁰. Within the framework of the alliances, it managed to mobilize US\$ 492,312.34 (L 12.65 million lempiras) and introduce 1,211 improvements, reaching 1,211 families, the most referent being ensuring the availability of water (water harvesters) 74.40% and electrical improvements in 14.61%.

³⁰ Nueva Providencia, José Ángel Ulloa, José Arturo Duarte, Villanueva, Berlin, Altos de los Pinos y los Pinos.

Graph 2: Communities prepared to respond and recover in the event of disasters



- Indicator 9: Among the measures promoted by the project and the AMDC are the design of five master drainage plans, four contingency plans, five investment and sustainability plans, as well as five JAA marketing plans. In this process, the Projects Executed by the Community (PEC) have been of great value, under which 3,988 meters of storm drainage works have been built, 700 ml of access stands and pedestrian footprints, contingency plans: five Neighborhood Master Plans for Disaster Risk Reduction (PMRRD-B), leaving the community with a portfolio of profiles of priority community infrastructure projects, for the management of community organizations (JAA and CODEL). It was concluded with the improvements of the GISCLOUD platform (geoinformation layers) for cadastral purposes.
- <u>Indicator 10:</u> The performance rates of the JAA have been significant, since from 51.48% in 2019, it increased in 2021 to 76.78%. At the field level, the population's evaluation of performance was 74.62%, measured from these criteria: organizational, planning, service delivery, administration, accountability and information management. In relation to the campaign with visual support, the beneficiary population managed to remember 70% of the knowledge imparted in the previous two months.

SECTOR 3: ECONOMIC RECOVERY AND MARKET SYSTEMS

Indicator	BL	Final Ev	Good/V ery good	proble ms	Deficie ncies	
Sector 3	Sub-sector: Market System Rehabilitation.					
11. Amount of market infrastructure rehabilitated by type (e.g., miles of road, number of bridges, square meters of space, and other)	0	328				
12.Total number of critical market actors (e.g., producers, suppliers, traders, processers) directly assisted through market system rehabilitation activities	0	438				
13. Estimated number of vulnerable disaster-affected individuals indirectly assisted through market system rehabilitation	0	53,941				
14. Total USD amount channelled into the program area through sub-sector activities	0	US\$ 72,339				
15. Total USD value of vouchers redeemed by beneficiaries	0	US\$ 54,737				
Sector 3:	Sub-sector: Microfinance					
16. Number of people, by sex, or MSEs newly receiving financial services or continuing to receive financial services due to USAID/OFDA support	0	306 (M=124 & W= 144				

Indicator	BL	Final Ev	Good/V ery good	proble ms	Deficie ncies
17. Percentage of financial service accounts/groups supported by USAID/OFDA that are functioning properly	0	118 %			

Table 3 Comparison of indicators sector 3 : Economic recovery and market systems.

30. FINDING.

A. Sub-sector: Market System Rehabilitation

- Indicator 11: According to the meal plan and USAID guidance, this
 indicator measures the number of small businesses where the
 identified structural improvements have been implemented and
 prioritized in the business plans (improvement of stands, ditches,
 electrical installations, smoke detectors and fire extinguisher).
- <u>Indicator 12:</u> The number of market players exceeded the forecast by 175% (250), including product suppliers, processors, intermediaries and traders.
- <u>Indicator 13</u>: This exceeded the target in 180% (30,000) people.
- <u>Indicator 14:</u> Planned investments were achieved 100% above target (US\$ 71,000).
- Indicator 15: The total value used in redemptions amounted to 100% of the established target (US\$ 54,000)

B. Sub-sector: Microfinance

- Indicator 16: The total number of people expected to have access to financial services in 150 exceeded the target by 204 per cent.
- <u>Indicator 17</u>: people linked to businesses with access to functioning financial services exceeded the target of 60 per cent by 197 per cent.

31. ANALYSIS.

A. Sub-sector: Market System Rehabilitation.

- Indicator 11: The project carried out 250 monitoring and contingency plans, in which the main measures to be implemented to improve business resilience were identified. In this regard, it should be noted that despite its growth, 91% opted to diversify more in terms of products and services.
- Indicator 12: The project served 394 businesses focusing mainly on improvements. In this sense, 358 coupons were granted for their strengthening, with groceries and equipment according to the need of each business. This equipment also contributed to the operation of the SAAT with the improvement of the electrical system of 70 shops, fire extinguishers for 200 and the installation of 250 information boards in the same number of businesses. At the level of performance of resilient businesses, this has also improved from 41% in 2019 to 59% in 2021 based on the criteria of: administration, sales, operations, management, and household well-being.
- Indicator 13: An average of 53,940 people have benefited³¹ from the businesses served by the project. The work carried out with these actors facilitated that during the crisis of hurricanes ETA and IOTA, food rations were organized, and they supported 88 families (equivalent to 440 people) who were in the different shelters of Tequcigalpa.
- Indicator 14: The project made an investment of US\$327,348.08 equivalent to 2.8 million lempiras in the construction of 21 works related to mosaic in stands, community murals, because community, reaching 4,504 people, of which 51% were women³²
- Indicator 15: 361 businesses (91%) increased their operational capacities, diversifying their products and services to increase their resilience. The businesses that complied with the training, took advantage of 194 coupons of L.10,000.00 (USD 420.00) in species or products related to their ventures; in other cases that capital was invested in equipment necessary to improve the conditions of the business. As a capitalization strategy and analysis through the continuity plan, the revolving fund is created. To give sustainability to businesses, the SMART company was formed by 97 businesses with the aim of generating opportunities for economic development through the marketing and distribution of products.

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 $^{^{31}}$ The 394 businesses serve between 20 - 25 families each, providing critical services and basic basket products at fair prices.

³² Data analysis final report.

B. Sub-sector: Microfinance

- Indicator 16: Through alliances with the previous government Solidarity Credit Program and the Chorotega cooperative, a community savings and credit fund was strengthened that provides this service to business owners with amounts not exceeding L 5,000.00. Since the strategy of capitalization of coupons and member savings, it has been possible to create a capital of US\$ 4,458.00 (L 107,000) that is not yet defined to operate as a credit.
- Indicator 17 It is important to mention that the functionality of the businesses under adequate internal control of them, depends a lot on the entrepreneurial vision of its owner. It should be noted that for many it meant an opportunity for economic and personal growth from the training received. One impact on sales and income has been the pandemic due to the contraction of the economy in families.

SECTOR 4: RISK MANAGEMENT POLICY AND PRACTICE.

Table 4 Comparison of sector 4 indicators: Risk Management Policy and Practice

Indicator	BL	Final Ev	Good/V ery good	proble ms	Deficie ncies
Sector 4	Sub-sector: Awareness/Mobili		Building ization	Con	nmunity
18. Number of people participating in training, by sex;	0	6,415 (M=2,977 W=3,3438)			
19. Percentage of people trained who retain skills and knowledge after two months	0	65 %			
20. Percentage of attendees at joint planning meetings who are from the local community.	0	37.5 %			

Indicator	BL	Final Ev	Good/V ery good	proble ms	Deficie ncies
21.Early warning system in targeted community is in place for all major hazards with appropriate outreach to communities (Y/N).	0	8			
22. Percentage of community members who received at least one early warning message from at least one source prior to a disaster occurring.	0	100 %			
Sector 4	Sub-s	ector: Capac	city Buildin	g/Trainin	g
23. Number of people trained in disaster preparedness, mitigation, and management, disaggregated by sex;	0	636			
24. Number of trainings conducted	0	41			
25. Number of people passing final exams or receiving certificates, by sex	0	362			
26. Percentage of people trained who retain skills and knowledge after two months	0	87 %			
27. Number of students educated on DRR, by sex	0	5,012 (2,571 W and 2,441 M)			

32. FINDING

A. Sub-sector: Building Community Awareness/Mobilization

- <u>Indicator 18</u>: Indicator exceeds target (3,859) by 166 per cent.
- <u>Indicator 19</u>: This indicator was reached 108% from the comparisons made by the program.
- <u>Indicator 20</u>: Community participation has been high (195%) and acceptable over the planned 30%.
- <u>Indicator 21</u>: 100% communities with EWAS.
- <u>Indicator 22</u>: 267 per cent of community members have been reached with alert messages.

B. Sub-sector: Capacity Building/Training

- <u>Indicator 23</u>: This indicator was achieved with 159% of the target of 400, with a participation of 55% of women.
- <u>Indicator 24:</u> A total of 41 trainings were conducted, representing 103 per cent of the target (40)
- Indicator 25: 139 per cent certified against target (260)
- Indicator 26: 145% of the expected 60% were trained to retain knowledge.
- <u>Indicator 27</u>: This indicator met 100% of the target for training young people. 51.37% involved training for women.

33. ANALYSIS

A. Sub-sector: Building Community Awareness/Mobilization

- Indicator 18: The JAA and CODEL led the training process by training preachers, who led three home hygiene information campaigns with handout information and kits. The linkage of the schools together with a SCALL strategy with washing stations was relevant since the information was channeled from the children to the home. In this line, alliances (UGASAM, DECOAS, CRH and Health Center) were crucial to reach more population than expected.
- <u>Indicator 19</u>: Among the most ingrained knowledge, the simplified plan (63.58%) stands out not by name, but by the guiding role, to identify where the risks and information about the EWAS are (69.64%). They know what to do when the alarm goes off, where the shelter is located, and how the shelter is organized.)
- <u>Indicator 20</u>: There is an active participation of women, being an essential aspect, the strategy to take into account their needs, adjusting available schedules and days to ensure their continuity.

- Indicator 21: Educational centers are key allies for capacity-building processes in DRR, because they can develop preventive actions not necessarily from the established curriculum. Given the lack of basic sanitation in these centers, the SCALL strategy has significant contributions in sanitation for the CAY.
- Indicator 22: CODEM played a key role with the newsletters produced during the emergency. CODEL, for its part, contributed to the local mobilization with the activation of the siren. With Eta and Iota, SINAGER was activated for general alerts to the population. For now, progress has been made on the Common Alert Protocol (CAP), which has been worked on jointly by CONATEL, COPECO and CODEM in the drafting of the law and regulations, which will promote the protocol on the dissemination of messages through mobile telephone companies. This protocol has not been included in the legal framework of SINAGER due to political situations.

B. Sub-sector: Capacity Building/Training

- Indicator 23: When assessing the training processes, the participants point to CODEM for its contribution to the daily work, which has allowed them to consolidate the processes of strengthening CODEL and the operation of a EWAS at the neighborhood level. In this interrelation of benefits related to the development of capacities, the evaluation team for consolidation and accompaniment purposes, highlights the technical role of the UMGIR³³ that is aimed at specializing in the improvement of its systems, which will help the DRR to make decisions of prevention and organization of the city.
- <u>Indicator 24:</u> In the life of the project, 41 training days were developed, protection of vulnerable groups, Community First Aid, ICC, SCI, Human Rights and Gender.
- Indicator 25: Among the participants in the training processes, 260 people (135 women and 125 men) were certified, largely professionals from the different municipal offices.
- Indicator 26: A reflection on the knowledge about this indicator is that in the learning of populations with low levels of schooling, the natural or specific conditions of the environment must be taken into account; therefore, the preachers as a methodological strategy is effective, because it seeks to establish a relationship of application of the knowledge learned from their realities. Regarding the performance of the CODELs, this increased from 57% in 2018 to 80% in 2021, according to the criteria of: organization, risk knowledge,

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 $^{^{}m 33}$ The assessment team observed on-site the teams and the capacity of the technicians responsible

- monitoring and forecasting, communication, and dissemination, as well as response capacity.
- <u>Indicator 27:</u> Within the campaign of preachers, first to ninth grade students were also trained on prevention in disaster risk reduction issues. A total of 4,497 students participated.

SECTOR 5: WATER, SANITATION, AND HYGIENE (WASH)

Table 5: Comparison of sector 5 water, sanitation, and hygiene indicators.

Indicator	BL	Final Ev	Good/V ery good	proble ms	Deficie ncies
Sector 5	Sub-sector: Sanitation Infrastructure				
28. Number of people directly benefitting from this sanitation infrastructure program.	0	1,285(66 8 W y 617M)			
Sector 5	Sub-sector: Hygiene Promotion				
29. Number of people receiving direct hygiene promotion (excluding mass media campaigns and without double-counting).	0	1,083			
Sector 5	Sub-s	ector: Wat	er Supply		
30. Number of people directly utilizing improved water services provided with OFDA funding.	0	4,410 (2,293 W y 2117 M)			
31.Average liters/person/day collected from all sources for drinking, cooking, and hygiene	0	20			

Indicator	BL	Final Ev	Good/V ery good	proble ms	Deficie ncies
32. Percent of households targeted by WASH program that are collecting all water for drinking, cooking, and hygiene from improved water sources	0	98 %			

34. FINDING:

A. Sub-sector: Sanitation Infrastructure

 <u>Indicator 28</u>: The number of people benefiting from infrastructure exceeded the target by 214%

B. Sub-sector: Hygiene Promotion.

 <u>Indicator 29:</u> The number of people receiving hygiene promotion exceeded the target by 181%

C. Sub-sector: Water Supply

- <u>Indicator 30</u>: The number of people exceeded the target by 501 per cent out of 773 planned.
- <u>Indicator 31</u>: 133 per cent of this indicator was achieved as access to 15 liters per person was expected.
- <u>Indicator 32</u>: 98 per cent of the target of 770 households was achieved.

35. ANALYSIS:

A. Sub-sector: Sanitation Infrastructure

 Indicator 28: The technical and material assistance of the AMDC through the UGASAM and the support of SANAA with machinery, legal authorization and advice, in addition to qualified and unskilled labor of the community, which allowed the construction of the Wastewater Collector System of the Ulloa Sector. This extends from the lower part to the upper part, to collect the effluents that infiltrate the soil; the collector system was reviewed and validated by AMEXID and IMTA. The work indirectly benefited 3,125 people.

B. Sub-sector: Hygiene Promotion.

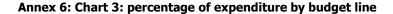
 Indicator 29: Hygiene promotion campaigns were promoted and designed by the technical committee of the project; with them the knowledge of the JAA and AJAASFRAM Network was strengthened. The JAA led the process of training the population on the promotion of hygiene through the "preachers" who delivered flyers, posters, and hygiene kits to families.

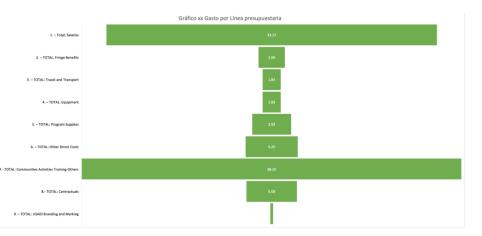
C. Sub-sector: Water Supply

- <u>Indicator 30</u>: These works consisted of the construction of a basic sanitation system composed of biodigesters connected to an artificial wetland. As a complementary work for the proper functioning of the sanitation system, the water service pipeline was built³⁴, leaving this infrastructure under the administration of the JAA.
- Indicator 31: Under a sample of the final BL, it was identified that people collect on average 20 L/w/d; 5 liters more, compared to 2020. It should be noted that in these areas, the drinking water service is accessible in certain areas, the other families buy it or collect it by rain.
- <u>Indicator 32:</u> According to the final BL, 97% of households collecting water from SCALLs that is used for cooking, drinking and/or hygiene, or reusing it for cleaning, sanitary and plant irrigation.

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 $^{^{\}rm 34}$ Driving line of the drinking water system from the storage tank of the system.





Annex 7: Team comments to the evaluation document

1. Page 15: 2.3.1 Sustainability Results. Institutionalization. GOAL Comment: The previous section they had on: 70% of the AMDC units were directly involved and 80% of the directorates were linked with seven internal units could be included.

Response from the team evaluated: Integrating the internal units of the AMDC is an activity, it does not imply a result of institutionalization. Institutionalization is related to processes that were adopted and implemented even without the execution of the project. For this reason, it will appear on page 33 Effectiveness analysis number 68.