PDNA

GOBIERNO DE
EL SALVADOR

Evaluation of the effects, impacts and needs El Salvador is facing due to the double incidence of the COVID-19 pandemic and the tropical storms Amanda and Cristóbal

EL SALVADOR 2020

EXECUTIVE SUMMARY

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Presentation

The Government of the Republic of El Salvador, in order to respond to the areas affected in the emergency caused by tropical storms Amanda and Cristóbal, in addition to the confluence of the COVID-19 pandemic, made the decision to conduct a Post-Disaster Needs Assessment, which will allow to quantify the effects of both events. El Salvador is the first country in Latin America to achieve this combined event analysis. With the assessment, the recovery costs that the rehabilitation and reconstruction of the country would entail are estimated, using to this end the Post-Disaster Needs Assessment (PDNA) methodology, developed jointly with the European Union, the World Bank and the United Nations System. The foregoing is based on an offer and a working relationship that has been developed and strengthened with the United Nations Development Program (UNDP) and the agency's experience in areas of response and recovery from disasters.

The assessment process was technically conducted by a United Nations System team, with the UNDP acting as technical coordinator of the exercise, and by a group of experts from the European Union and the World Bank. This great effort occurs at a time when El Salvador and the entire world are still going through the COVID-19 pandemic, so the entire assessment process was carried out virtually (team training, meetings and the subsequent discussion of the assessment coordination team). On the part of the Government of El Salvador, the assessment was led by the Ministry of Economy and the Secretariat of Trade and Investments of the Presidency of the Republic, and technically supported by a team made up of over 60 focal points from 23 public institutions.

The approach included, by the different focal points of government institutions, the analysis and review of a set of data that shows pre-disaster conditions, and compared them with post-disaster conditions, in order to evaluate the effects and impacts of the phenomena that occurred, in order to determine a general recovery strategy. The methodology combined quantitative and qualitative data, in order to analyze and evaluate economic and human impacts.

We hope that this great effort, product of the coordinated inter-institutional work between the Central Government and the different participating international cooperation organizations, will allow us to begin preparing our strategy with a recovery framework, to define the next steps to follow on the road to the reconstruction of El Salvador. This is of great relevance, since El Salvador is a country that is constantly exposed to natural events that,

due to its vulnerability, significantly impact it, so it is important to work on the country's resilience to face and mitigate the impact of future events that may take place, so that its people do not have to continue suffering the consequences of these situations.

It is, therefore, a task with a national scope that is in our hands now; an effort of this Government that seeks the benefit of Salvadorans, the ultimate goal of our actions. Today, more than ever, we are convinced that this work cannot wait, and we must, as a mandate, continue this process begun with the Post-Disaster Needs Assessment that we present below.

Acronyms

BCR: Central Reserve Bank

CPI: Consumer Price Index

DIGESTYC: General Directorate of Statistics and Censuses

FGR: Attorney-General's Office

FOPROMID: Civil Protection, Prevention and Disaster Mitigation Fund

ILO: International Labor Organization

ISSS: Salvadoran Social Security Institute

ITCZ: Intertropical Convergence Zone

MAG: Ministry of Agriculture and Livestock

MARN: Ministry of Environment and Natural Resources

MINEC: Ministry of Economy

MINSAL: Ministry of Health

MPI: Multidimensional Poverty Index

MPHS: Multipurpose Household Survey

MSME: Micro, Small, and Medium-sized Enterprises

ORMUSA: Organization of Salvadoran Women for Peace

PDNA: Post Disaster Needs Assessment

PHEIC: Public Health Emergency of International Concern

UNDP: United Nations Development Program

VAT: Value Added Tax

WHO: World Health Organization

WMO: World Meteorological Organization

Preface

This analysis is part of the evaluation of the effects, impacts and needs El Salvador is facing due to the double incidence of the COVID-19 pandemic and the tropical storms Amanda and Cristóbal. The Post-Disaster Needs Assessment (PDNA) Methodology is used to estimate the costs of the combined effect of the two conjunctures, in terms of damages, losses and additional costs, as well as the cost of the combined needs for a comprehensive and resilient recovery in the face of future crises.

The time frame in which this analysis is made considers its beginning in mid-March 2020, with the emergence of COVID-19, and its ending with the presence of storms Amanda and Cristóbal in late May and early June 2020. The rise of these storms changed the forecasts to face the pandemic and the measures implemented to that date and put the resilience capacity of the Salvadoran population to a test. This forces us to carry out an unprecedented analysis in which the effects of the two catastrophes are separated, while their interaction is captured.

El Salvador is the first country in Latin America, and one of the few in the world, to carry out a combined analysis of the effects of both phenomena. The study represents a notable contribution to the recovery needs assessment practice in situations that will surely recur and become more complex with COVID-19 and the potential impact of other natural hazards, such as heavy rains, hurricanes, seismic and volcanic activity, among others.

The estimated needs derive from the effects that confinement and containment measures that the management of the pandemic required until May 2020: the loss of income, the increase in costs to ensure the provision of sectoral services and the unexpected costs that had to be incurred for respond to the pandemic. These needs increased with the arrival of tropical storms, which added a scene of destruction of infrastructure and physical assets and increased economic losses in various sectors.

This evaluation was led by the Government of El Salvador, through the Ministry of Economy (MINEC) and the Secretariat of Trade and Investments of the Presidency of the Republic. It also had the support of the United Nations System, the World Bank and the European Union, as part of its tripartite agreement. The general coordination and technical direction of the process were in charge of the United

Nations Development Program (UNDP), and with the active participation of sixty technicians and government officials from the governing entities of twelve socioeconomic sectors and two cross-cutting areas analyzed. Due to mobility restrictions due to the pandemic, the evaluation was carried out virtually, between July 11 and September 25, 2020.

This report is organized as follows: 1) An executive summary that allows the reader to focus on the most relevant aspects of the context, sectorial effects, human and macroeconomic impact, recovery needs per sector and brief guidelines for its implementation; 2) The elements to formulate a national recovery strategy that includes a vision, guiding principles and five strategic lines with their budget and potential action lines; and 3) A section of next steps recommended by the participants to continue this process.

Key findings

The total[1] estimated damage in all the sectors analyzed amounts to US$106.71 million, of which 35.0% corresponds to the public sector and 65.0% to the private sector. The[2] total losses, on the other hand, amount to US$2,824.78 million, of which 22.0% correspond to the public sector and 78.0% to the private sector.

Damages in the social sector are concentrated in **housing** (81.0%) and are linked to tropical storms Amanda and Cristóbal; while **health** losses (86.0%) are linked to the COVID-19 pandemic. In the infrastructure sector, damages are concentrated in **transportation** (86.0%) and **power outages** (67.0%). In the productive sector, **commerce** was mostly affected (39.0%), followed by **services** (29.0%) and **industry** (22.0%), in all cases due to the effects of COVID-19.

These effects, expressed in terms of losses and damages generated by tropical storms Amanda and Cristóbal, together with the COVID-19 pandemic and pre-existing socioeconomic inequities, have contributed to widening the gaps, if the five indicators of human impact suggested by the PDNA methodology are taken into consideration: living conditions, employment and livelihoods, gender equity, food security, and social inclusion. Similarly, the Salvadoran economy is expected to contract, which would deteriorate the country's macroeconomic conditions and induce reductions in production and income levels, and, therefore, in consumption, investment, and import/export capacities of companies.

The recovery needs[3] estimated by the PDNA amount to US$1,211.6 million, reflecting the interventions required to repair or rebuild infrastructure and physical assets with enhanced measures that are in line with the principles of rebuilding to something better and disaster risk reduction to ensure future resilience.

The social sector is the one with the greatest needs, a total of 75.0%. For this percentage,

1/ **Damages:** Cost of repairing or replacing infrastructure and physical assets to their pre-crisis situation.

2/ **Losses:** Cambio de flujos económicos relacionados con los ingresos no percibidos, los costos adicionales y gastos extraordinarios requeridos para prestar o acceder al servicio.

3/ **Recovery needs:** Costs required for a physical reconstruction in improved conditions and for socioeconomic recovery that improves the quality of life of the affected people.

US$473.3 million are required for education; US$283.7 million for health; US$121 million for housing; and almost US$14 million for culture. In this sector, additional US$20 million have also been considered for a bond aimed at reducing the negative impacts on people who fall into poverty. These are linked to the need to relocate, safe housing and the continuity of support in health and education in the face of the post-COVID-19 reality (health measures, non-face-to-face education that requires technology and equipment).

To face the complex situation, five strategic intervention lines are suggested, in which the identified needs are grouped: 1) Governance; 2) Economic recovery; 3) Risk reduction, resilient infrastructure and decent housing; 4) Technology and innovation; and 5) Welfare, protection and social inclusion. It is suggested that the findings of this evaluation be used to formulate solid action plans that make it possible to address the needs identified, in order to address the most urgent ones in the short term and consider longer term ones for later stages.

Context Analysis

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COVID-19 in El Salvador

On December 31, 2019, Chinese health authorities informed the World Health Organization (WHO) about a pneumonia outbreak in the city of Wuhan, event that marked the beginning of public policy responses worldwide. On January 7, 2020, the WHO reported that a new strain of coronavirus group 2B was identified, from the same SARS family, whose genome sequencing had been carried out and was named SARS-CoV-2. Faced with the spread of the disease, the WHO declared a Public Health Emergency of International Concern (PHEIC) on January 30, 2020. The rapid spread of COVID-19 caught the medical and scientific community, government authorities and the population itself by surprise.

In January, the Presidency of the Republic of El Salvador and the Ministry of Health (MINSAL), with the support of the Pan American Health Organization (PAHO), took actions to contain and respond to COVID-19.

On March 11, 2020, the WHO declared COVID-19 a pandemic, and called on countries to activate and expand their own response mechanisms. On the same day in El Salvador, in addition to the suspension of classes and entry of foreigners from abroad, the Salvadoran president, Nayib Bukele, sent a request to the Legislative Assembly to declare a state of emergency and exception in the country, which was approved days later.

On March 18, 2020, with a state of emergency already in force, the first positive case was confirmed in the country. Then, reports and guidelines of varying order and technical level were drawn up: medical treatment of cases, epidemiological surveillance, strengthening of diagnostic and laboratory capacity, health personnel protection policies and risk communication to the community. Case zero originated from the arrival of a person from Italy, and was located in the municipality of Metapán, department of Santa Ana.

The reopening of the economy began on June 16, and the full reopening on August 24 was, at which time the Central Government issued an official statement[4] in which it called on the Salvadoran population to abide by the biosecurity measures during the economic reopening, in order to protect its health and life. Additionally, information was provided on the strengthening of the public health network and the validity of the 7 Points Plan.[5]

El Salvador was one of the first countries in Latin America and the Caribbean that activated solid measures and actions to contain the COVID-19 pandemic, which had an impact on slowing down, at least initially, contagion and

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4/ Available at https://covid19.gob.sv/gobierno-del-presidente-nayib-bukele-hace-un-llamado-a-la-poblacion-a-acatar-las-medidas-de-bioseguridad-durante-la-reapertura-economica/

5/ On August 10, the President announced the 7 Points Plan, which basically poses: 1. The country has a thousand free beds to care for patients infected with COVID-19; 2. Random and massive COVID-19 tests will be taken, which will allow to establish the areas of El Salvador where there is a greater number of infections; 3. Sending medicines to people who present coronavirus symptoms to

TABLE 1

Comparison of cases in SICA countries

Country	Number of cases			Deaths		
Record Date	**31/05/20**	**30/06/20**	**30/07/20**	**31/05/20**	**30/06/20**	**30/07/20**
Belize	18	24	48	2	2	2
Guatemala	4,607	16,930	47,605	90	727	1,835
El Salvador	2,395	6,173	15,841	44	164	430
Honduras	4,886	18,082	40,460	199	479	1,214
Nicaragua	885	2,017	3,080	35	74	116
Costa Rica	1,022	3,130	16,344	10	15	125
Panama	12,531	3,686	62,223	326	604	1,349
Dominican Republic	16,908	31,816	66,182	498	733	1,123
Total	**43,252**	**109,858**	**251,783**	**1,204**	**2,798**	**6,194**

Source: COMISCA, 2020.

fatality rates,[6] compared to the countries of the region. As of May 31, there were 2,395 confirmed cases and 44 deaths in El Salvador, figures that, compared to the Central American countries and the large countries of the continent, Brazil and Mexico, result in a very low fatality rate: 1.8%[7] (Table 1) (Chart 1).

By the end of June, despite the fact that infections doubled in the Central American

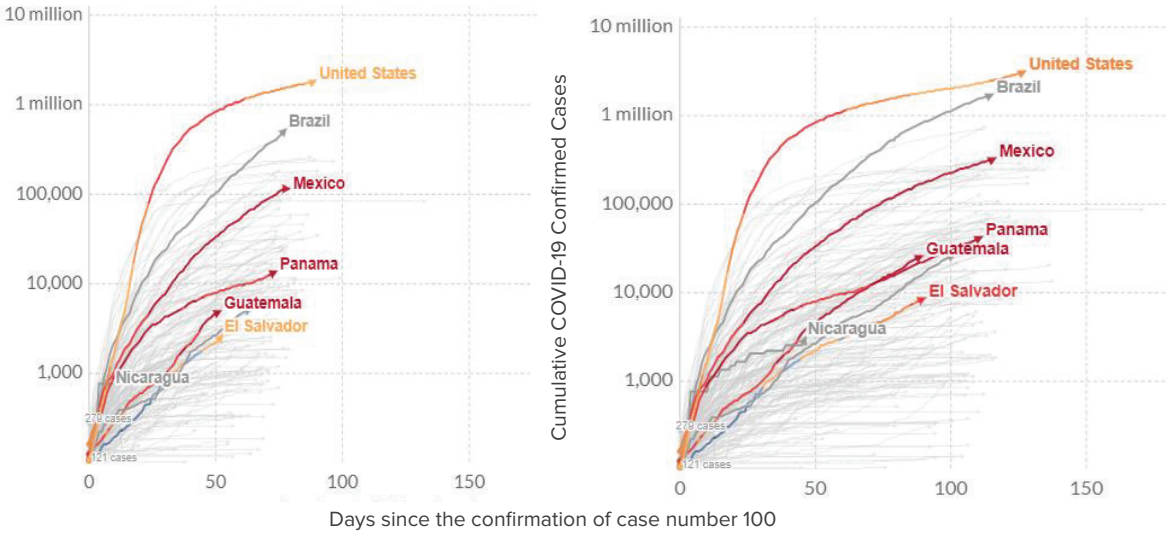
their homes and report it to number 132, which aims to lower the mortality of the virus and decongest the health system. 4. "Personal clusters" are established, a group of ten people in "a bubble", who do not belong to the family group and who can meet and go out together, but only among themselves, that is, they do not have contact with other people, only the ten members of that group; 5. Continuity of the delivery of food packages by the Government, to alleviate the crisis generated by the paralysis of the country due to the pandemic; 6. "Immunity card" for people who have already overcome COVID-19, who will be able to mobilize as they wish after having overcome the disease; 7. Hiring 100% of people who have overcome coronavirus to deliver drug kits and government food packages, with a remuneration of US$500.

6/ **Contagion:** A case where a person is confirmed to have the virus, even when asymptomatic; meanwhile, mortality refers to the number of deaths in relation to those infected.

7/ **Mortality:** Ratio of deaths with respect to confirmed cases. The figures are available on the portal https://covid19.gob.sv/

FIGURE 1

El Salvador: Trend of confirmed COVID-19 cases in May, June and July 2020



Source: Taken and adapted from the Our World in Data portal: https://ourworldindata.org/coronavirus

region (from 43,252 to 109,855),[8] the average fatality decreased slightly (from 2.78% to 2.55%). In this context, with the strong impact of tropical storms Amanda and Cristóbal, the trend of confirmed cases in El Salvador was increasing. It is important to highlight that this situation occurred in the context of the beginning of the economic reactivation (Figure 1).

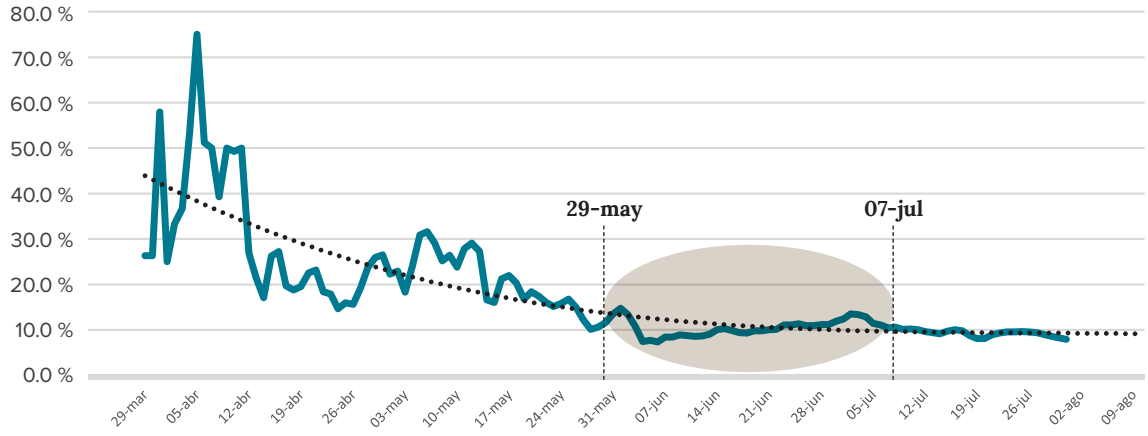
In the days following the occurrence of tropical storms Amanda and Cristóbal, the growth rate of the cases was exponential: it took an increasing turn and a trend that remained constant in the following weeks (Figure 2).

Thus, the number of positive cases infected by COVID-19 by the end of June increased to 6,173 cases, while the deaths totaled 164, therefore, the fatality rate increased to 2.66%, which at that date was even slightly higher than the Central American average 2.55%.

8/ The figure includes the five Central American countries and the Dominican Republic. Source: COMISCA.

FIGURE 2

El Salvador: Growth rate of cases every third day



$y = -2E\text{-}07x^3 + 0.0254x^2 - 1117.8x + 2E+07$

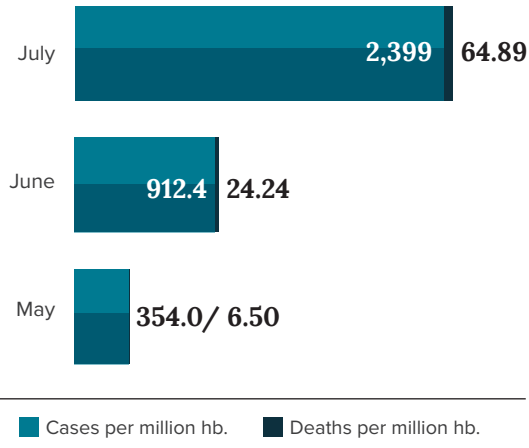
$R^2 = 0.6656$

Source: Estimate on data registered up to June 2020 by PAHO/WHO: Coronavirus Disease (COVID-19), Situation Reports (https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports).

Initial cases and the spread of infections accelerated in recent months, reaching an R0[9] of 1,1 (1–1,2) new infections per patient.[10] This was reflected in July, when 15,841 confirmed cases and 430 deaths were recorded. These figures indicate the transit of 354 confirmed cases per million inhabitants on May 31, to 2,399 by the end of July; and the deaths from 6.5 per million inhabitants in May, to 65 by the end of July (Chart 3).

FIGURE 3

El Salvador: Monthly cumulative rates of confirmed cases and deaths from COVID-19 as of May 31, June 30 and July 30, 2020 (per million inhabitants)



Source: Own elaboration, with data from the portal https://covid19.gob.sv/

9/ The basic reproduction number R0 is considered as the average number of new cases generated by a given case (base) throughout an infectious process.

10/ Figure obtained from the study of the Center for the Mathematical Modeling of Infectious Diseases, London School of Hygiene and Tropical Medicine: https://epiforecasts.io/covid/posts/national/el-salvador/

The pandemic is expanding in cities with the largest population size, which is why COVID-19 cases are located mainly in the department of San Salvador, with around 51.3% of cases for the month of May, and 41.47% for July 2020. With infections on the rise, between May and July, the rate in San Salvador went from 696 to 3,403 cases per million inhabitants; followed quite far by La Libertad, with 12.44% of the national total; and San Miguel, with 9.73%.

Likewise, the characterization of those infected by the end of August in El Salvador showed that 47.0% are women and 53.0% are men; while the 20-39 age group observed the highest percentage of infections (41.4%), followed by the 40-59 group (40.3%). Similarly, 89.5% corresponded to local cases and 0.5% to imported cases,[11] with an important group of imported cases stranded that reached 10.0%, of which a third belonged to the Central American region. Given that the infections trend has not abated, this initial and limited evaluation in time does not reflect the totality of the effects up to the end of the pandemic.[12] Regarding the handling of corpses, one of the most complex issues of the pandemic, was assumed by the municipalities, which developed rigorous security protocols, with sufficient spaces available for burials.

As already mentioned, El Salvador is already in a stage of full opening. In the future, the country faces an uncertainty situation regarding the post-pandemic phase and the economic, social and human effects that are not yet fully dimensioned. The trend shows opportunities and risks, and presents a series of proposals to face the needs identified, in order to better face the continuation of the response and reactivation, with a view to a sustained recovery and thus avoid a worsening of the poverty gaps, inequity and food insecurity in the country. This recovery will have to be framed within the development priorities outlined by the new Government and in the search for resilience against future risks.

Tropical storms Amanda and Cristóbal

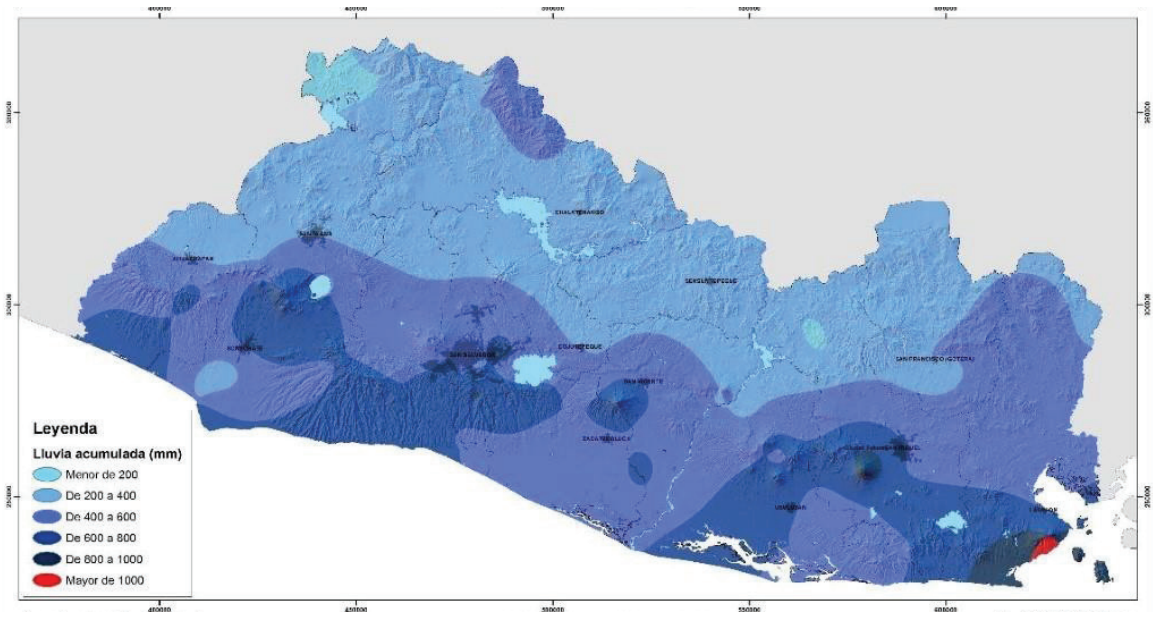
Between May 29 and June 7, 2020, a low pressure system south of the coasts of El Salvador and Guatemala started temporary rains in El Salvador, the low pressure strengthened to Tropical Depression DT2-E, which in its displacement to the north, before making landfall on the coast of Guatemala, on Sunday, May 31, 2020 around 3:00 a.m., it reached the category of Tropical Storm, AMANDA. Said system made landfall on the coast of the department of Santa Rosa, Guatemala, west of the border with El Salvador, being the

11/ A third of which comes from the Central American region: https://covid19.gob.sv/

12/ For still changing figures, you can consult the official portal of the Presidency of the Republic of El Salvador (https://covid19.gob.sv/) that of the World Health Organization (PAHO/WHO) (https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/) or other portals, such as Worldometers, Johns Hopkins Coronavirus Resource Center and Our World in data (Owid).

FIGURE 4

Rain accumulated in El Salvador due to storms Amanda and Cristóbal. Period: 7:00 am on May 29, to 7:00 am on June 7, 2020



Source: MARN.

cloud bands of the Tropical Storm those that directly impacted with strong winds, mainly in the early hours of the morning and on Sunday May 31, as well as heavy rains in El Salvador, on their way to Guatemala on Sunday.

Between June 4, 5 and 6, Tropical Storm Cristóbal moved through the Gulf of Mexico, which remained in the Intertropical Convergence Zone (ITCZ) over Central America and displaced abundant humidity and temporary rainfall over the country during all these days, with emphasis on the coastal area and volcanic mountain range of the national territory.

The rains associated with these events were counted in nine days from the measurements recorded at 7:00 am on May 29, 2020, and that ended at 7:00 am on June 7, 2020. Rain was generalized at a national level, with the most significant accumulations along the coastal and central strip of the country, as well as throughout the eastern zone. The maximum accumulated in the nine days of the storm was recorded at the Volcán Conchagua Station, department of La Unión, with a record of 1,087.1 mm. The second maximum was recorded at the San Miguel Volcano Station 2, with a record of 979.8 mm. In third place was the Panchimalco Station, with a cumulative 837.0 mm.

The day with the highest accumulated rainfall was May 30 (rain recorded from 7:00 am

on May 30 to 7:00 am on May 31, 2020). The national average of rainfall in the nine days of the event was 490.6 mm, which corresponds to approximately 27.0% of the annual rainfall, according to the 1981-2010 standard (1,784 mm). In terms of annual rainfall, from January 1 to June 7 it adds up to 677 mm. When comparing the first 10 days of June with the standard, there is a difference of 280 mm, which corresponds to 70.0% over the standard (June 10 standard: 397 mm).

As of June 7, at least eleven meteorological stations reached with this event over 40.0% of the expected annual rainfall. In the first six days of June, with the storm event active, 93.0% of the expected monthly rain was reached, with a cumulative amount of 302 mm (rain expected in June: 322 mm).

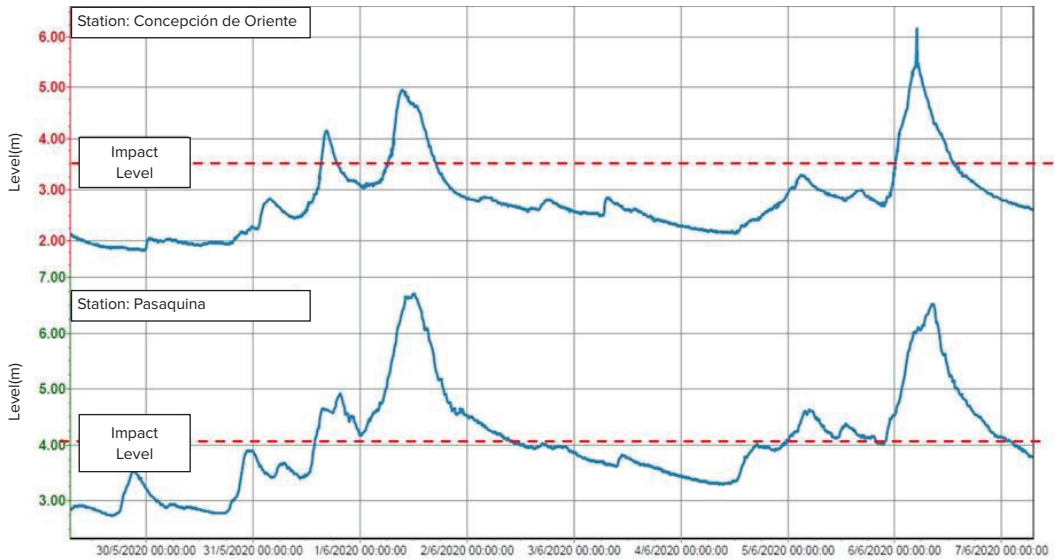
Floods

During the period in which this report was drafted, the atmospheric conditions described favored main and short-distance rivers to experience floods and overflows, causing urban flooding in homes, access roads and main roads, and rural flooding in communities, farmland, paddocks and land communication routes.

The areas most affected by river overflows and floods were located in the coastal zone of the country, in addition to affectations in the Metropolitan Area of San Salvador. Rainfall in transnational basins, including those of the Goascorán, Paz and Lempa rivers, caused significant increases in their main rivers, causing them to overflow in low-lying areas (Fig. 5).

FIGURE 5

Precipitation record in the Goascorán river basin



Source: MARN, presentation of hydrometeorological aspects due to Amanda and Cristóbal for PDNA.

The overflow of the Goascorán River and significant increases in the Paz River stand out at the Hachadura Station (maximum level reached: 4.20 m), causing the temporary closure of the Las Chinamas border with the neighboring country of Guatemala. The river Grande de San Miguel stands out, registering maximum levels of 9.0 m (reference level: 7.7 m) at La Canoa Station, causing the breakdown of two dams built to mitigate overflow risks. This caused the temporary closure of the Litoral highway, between km 139 and 140.

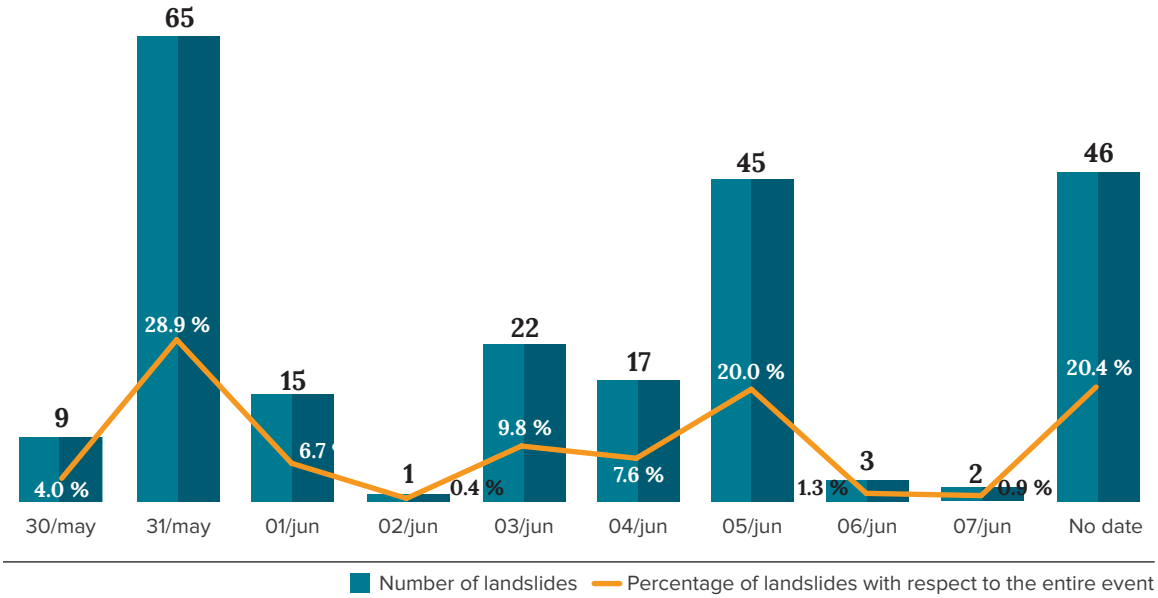
Likewise, in the Banderas, Mandinga and Apancoyo rivers, overflows were registered in communities in the Sonsonate coastal area, causing damage to homes, agricultural areas and access roads. Other short-distance rivers experienced flash overflows that caused flooding in low-lying areas. The chart illustrates the flow reached in several rivers that exceeded their overflow levels and impact.

Landslides and collapses

The maximum precipitation intensities exceeded 2 mm/min, reaching the maximum intensity in Izalco, of 4.3mm/min. In landslide-prone areas, the maximum intensity was recorded in the Bálsamo mountain range, with 3.4mm/min in the Panchimalco sector, in the period from May 30 to 31.

FIGURE 6

Landslides recorded between May 30 and June 7



Source: DOA–MARN, DOA impact forecasts, presentation for the PDNA.

The accumulated precipitation maximums and intensities that were registered along the volcanic chain contributed to the percentage of humidity rising to saturation levels. The critical landslide-prone areas were, for this event, those that reached most of the accumulated maximum precipitation and maximum humidity levels, between 93.0% and 99.0%. Landslides resulted from these conditions throughout the period (Figure 6).

A temporary event during the first days of the rainy season in the country, such as the one that occurred, determines an unfavorable scenario for the rest of the period. The typical heavy-intensity rainfall in the country would increase the threat levels for landslides and the probability that they occur and have impacts on infrastructure, livelihoods and populations.

This local condition is clearly linked to global conditions. As the World Meteorological Organization (WMO) has pointed out, 2020 remains one of the warmest years on record. The two storms in El Salvador add to the many extreme weather events this year, ranging from scorching temperatures and wildfires to devastating floods and marine heat waves.

Immediate Response

21 To COVID-19

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To COVID-19

- Reduced mobility, confinement of people returning to the country, isolation of infected people, and health and protection measures.
- On March 11, 2020, suspensions of classes and entry of people from abroad were declared. President Nayib Bukele sent a request to the Legislative Assembly of El Salvador, for it to declare a state of emergency and exception in the country, which was approved in the following days.
- On March 18, 2020, the first positive case in the country was confirmed and guidelines were issued for the medical treatment of cases, epidemiological surveillance, strengthening of diagnostic and laboratory capacity, and policies for the protection of health personnel and risk communication to the community.
- Support mechanisms are defined for the most affected families through the delivery of a cash bonus of US$300 in a single installment, at an estimated total cost of US$450 million, for approximately 1.5 million households.
- Delivery of 3.8 million solidarity baskets that included a provision of food in kind, in part using the food provided for the School Feeding Program administered by the Ministry of Education, Science and Technology (MINEDUCYT).
- The Government developed a series of programs to guarantee the liquidity of the financial sector and provide relief to micro, small and medium enterprises (MSMEs) through loans through public banks, in addition to the US$600 million trust.
- During the first quarter of the year, the Central Reserve Bank (BCR) approved the repeal of the rule that obliged financial institutions to maintain a reserve of 3.0% of liquid assets, freeing up US$500 million for commercial banks, cooperatives, corporate savings and credit, and federations.
- The Economic Response and Relief Plan of the Government of El Salvador in the face of the National Emergency against COVID-19, among other measures, establishes that natural and legal persons directly affected can defer payment of utilities such as water, power and telecommunications, as well as well as loans services, and the extension of the term to file and pay taxes.
- The latest issuance of debt through bonds will be used to support the private sector and economic reactivation. According to Decree No. 640 of the Legislative Assembly, the US$600 million will be allocated to the construction of the trust for the economic recovery of companies registered as employers in the Salvadoran Social Security Institute (ISSS) and informal companies affected by the pandemic.[13]

13/ It is not immediately available. It must still be ratified by the Legislative Assembly, together with the respective budget reallocation.

To tropical storms Amanda and Cristóbal

- The Ministry of Interior and Territorial Development (MIGOBT) managed with the National Civil Protection Commission the allocation of funds of the Civil Protection, Prevention and Mitigation of Disasters Fund (FOPROMID), for the acquisition of goods and services for emergency care, for the operation of the shelters enabled, as well as for supplies, equipment and infrastructure necessary to support operations to assist people affected by this event.
- The shelters necessary were immediately arranged to provide temporary shelter to over 10,000 people sheltered at the highest peak of the pandemic.
- On the part of the Salvadoran Government, food packages were delivered to households at a national level, with the aim of reducing food insecurity caused by the loss of resources that families faced due to the confinement measures taken to combat the contagion curve of COVID-19 and the ravages due to the storms.
- In addition, different agencies carried out interventions on issues regarding food assistance, violence prevention, education for childcare, among others.

Estimate of the recovery needs due to the double impact of the Amanda and Cristóbal storms in the midst of the COVID-19 response

25 Methodological aspects

26 Combined effects of COVID-19 and the tropical storms

29 Human impact

37 Macroeconomic impact

40 Recovery needs

Methodological aspects

In order to estimate the recovery needs that arose in El Salvador as a result of the measures adopted to face the COVID-19 pandemic and those additional ones that arose due to the impact of Amanda and Cristóbal storms, the Post-Disaster Needs Assessment (PDNA) and Recovery Planning methodology was used, promoted jointly by the European Union, the World Bank and the United Nations System.

The PDNA Methodology considers the context prior to the event. In this case, the existing situation when tropical storms Amanda and Cristóbal impacted the country. This context is strongly influenced by the measures that had to be adopted to contain the spread of COVID-19 throughout the Salvadoran territory, in particular the social, economic, cultural, financial and political conditions, which will allow an analysis of the gap generated between the situation before and after storms.

The evaluation focused on twelve different socioeconomic sectors grouped into three broad categories: Social sector (health, education, housing and culture), Productive sector (agriculture, commerce, services, industry and tourism) and the Infrastructure sector (water and sanitation, power and transport). Additionally, the analysis of two key cross-cutting aspects is included: gender and employment and livelihoods.

The simplified PDNA process (Figure 7) considers five key steps: The context analysis already discussed; the identification of the effects of the disaster, including the estimation of costs related to sectorial damages and losses; an analysis of the impacts caused in the short, medium and long terms, caused precisely by these effects; estimation of recovery needs; and the formulation of strategic guidelines for a resilient recovery, first at a sectorial level and then at a national aggregate.

FIGURE 7

PDNA process followed in El Salvador

The three key concepts to understand the global results achieved in the assessment, which are presented in the next section of this document, are:

- **Damage:** Cost of repairing or replacing infrastructure and physical assets to their pre-crisis situation.
- **Losses:** Change in economic flows related to foregone income and the additional costs and extraordinary expenses required to provide or access the service.
- **Recovery needs:** Costs required for a physical reconstruction in improved conditions and for socio-economic recovery that improves the quality of life of the affected people, a resilient recovery (building back better).

Once the effects produced by both COVID-19 and tropical storms Amanda and Cristóbal have been identified, the methodology allows the analysis of the general human impact, including the projected impact on multidimensional poverty and income levels in the country, gender equality and social inclusion; as well as the potential macroeconomic impact, particularly in relation to economic growth, flow of remittances and trade balance.

Based on the analysis of both the effects of the events (damages, losses and additional costs) as well as the impact of the disaster, the needs and recovery cost of the country are estimated. Recovery needs include the interventions necessary to rebuild the physical infrastructure affected by the storms in the different sectors analyzed, under improved conditions; this would reduce vulnerabilities and increase their resilience to future similar events. It also covers the recovery of livelihoods and other human impacts identified, including an estimate of the cost to achieve the proposed recovery. The recovery needs in each of the sectors are estimated for the short, medium and long term.

A participatory process with over 60 institutional delegates allowed the identification of five priority strategic lines for recovery, as well as the vision proposed for recovery as the national goal to be achieved, together with the guiding principles and solid action lines. The recovery needs expressed in each of the sectors are integrated according to the strategic lines proposed, in order to visualize the national aggregate.

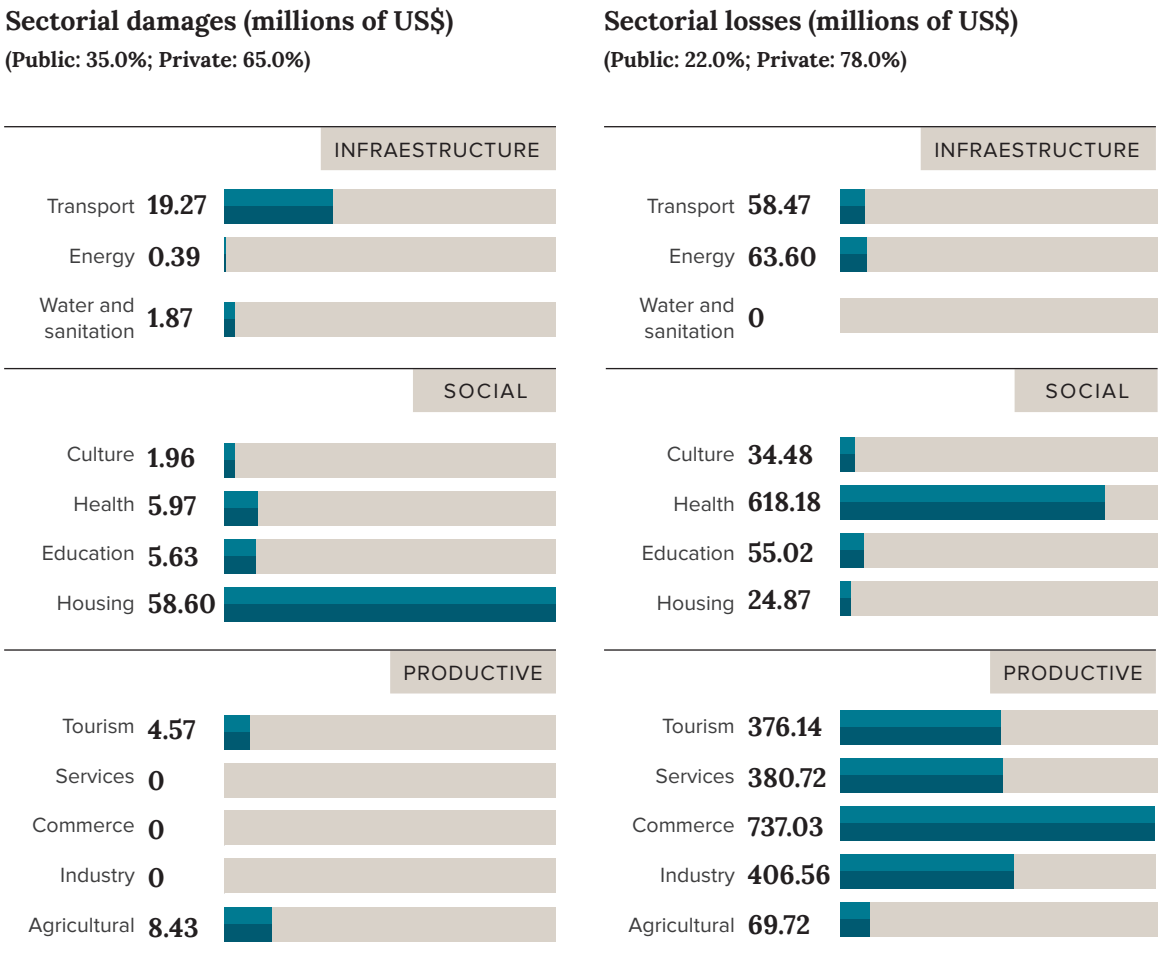
Combined effects of COVID-19 and the tropical storms

It is worth noting that neither the COVID-19 pandemic nor the containment measures implemented have affected infrastructure and physical assets in the sectors analyzed. Storms Amanda and Cristóbal are the cause of the partial or total destruction of the physical infrastructure, which in turn generates changes in the economic flows associated with income loss due to the impossibility of providing the service, and the additional costs required to ensure the provision and access to said goods and services.

With this background, the total damages and losses suffered by each of the sectors analyzed in the PDNA are summarized (Figure 8). The total damage is estimated at US$106.71 million, of which 35.0% corresponds to the public sector and 65.0% to the private sector. The total losses amount to US$2,824.78 million, of which 22.0% correspond to the public sector and 78.0% to the private sector.

FIGURE 8

Summary of sectorial damages and losses (COVID-19 and tropical storms)



Note: Services, commerce and industry sectors did not report damages to their infrastructure generated by tropical storms Amanda and Cristóbal.

In the social sector, the damages are concentrated in housing (81.0%) and are linked to tropical storms Amanda and Cristóbal, while the losses are concentrated in health (86.0%) and are linked to the COVID-19 pandemic. In the infrastructure sector, damages are concentrated in transportation (86.0%) and power outages (67.0%). In the productive sector, commerce was most affected, representing 39.0% in losses, followed by services (29.0%) and industry (22.0%).

As can be seen from Table 2, losses, which include foregone income, additional costs and unexpected expenses to maintain the provision of and access to goods and services during the COVID-19 pandemic, were also concentrated in the private sector, as they represented US$1,958.80 million, coming mainly from the productive sector (US$1,767.40 million), mostly from industry, commerce, and services. While the public sector accounted for US$611.32 million, which were mostly losses in the health sector (US$512.84 million).

Table 3 summarizes the damages and losses generated by tropical storms Amanda and Cristóbal. The damages were concentrated in the private sector, US$69.47 million; in the housing subsector, the social sector is the one with the highest contribution (US$58.6 million). In the public sector, damages amounted to US$37.23 million, with Infrastructure (US$21.15 million) being most affected, narrowed on the transportation subsector with US$19.27 million. Private sector losses total US$231.63 million, coming mainly from the productive sector (US$202.66 million) and narrowed on the tourism subsector (US$158.17 million). While the public sector only had losses of US$23.06 million, which are mainly from the health sector (US$12.52 million). Industry, commerce and services did not report any damage from the storms.

TABLE 2

Losses due to COVID-19 in all Sectors

	COVID-19 (March-May 2020) million US$		
Sector	**Losses**	**Public**	**Private**
Social	**688.28**	**573.99**	**114.29**
Health	605.65	512.84	92.81
Education	51.92	40.45	11.47
Housing	20.39	20.39	-
Culture	10.32	0.31	10.01
Productive	**1,767.50**	**0.10**	**1,767.40**
Agricultural	25.22	0.10	25.12
Industry	406.56		406.56
Trade	737.03		737.03
Services	380.72		380.72
Tourism	217.97		217.97
Infraestructure	**114.33**	**37.22**	**77.11**
Transport	54.53	30.34	24.19
Power	59.80	6.88	52.92
Water and Sanitation	-		
Total	**2,570.12**	**611.32**	**1,958.80**

TABLE 3

Damages and losses caused by tropical storms in all sectors

	Tropical storms Amanda and Cristóbal (million US$)					
Sector	**Damages**	**Public**	**Private**	**Losses**	**Public**	**Private**
Social	**72.17**	**13.56**	**58.60**	**44.26**	**21.34**	**22.92**
Health	5.97	5.97	-	12.52	12.52	-
Education	5.63	5.63	-	3.10	3.05	0.05
Housing	58.60	-	58.60	4.49	4.05	0.44
Culture	1.96	1.96	-	24.15	1.72	22.43
Productive	**13.01**	**2.52**	**10.48**	**202.66**	**-**	**202.66**
Agricultural	8.43	0.16	8.27	44.50	-	44.50
Tourism	4.57	2.36	2.21	158.17		158.17
Infraestructure	**21.53**	**21.15**	**0.39**	**7.74**	**1.69**	**6.05**
Transport	19.27	19.27		3.94	1.25	2.69
Power	0.39	-	0.39	3.80	0.44	3.36
Water and Sanitation	1.87	1.87		-		
Total	**106.71**	**37.23**	**69.47**	**254.66**	**23.03**	**231.63**

Human impact

Background: monetary and multidimensional poverty in El Salvador

El Salvador's population was 6.7 million people in 2019. Out of this total, 4.1 million reside in urban areas, and 2.6 million in rural areas. 47.1% are men (3.2 million), and 52.9% are women (3.6 million). In demographic terms, 51.4% of the population is under the age of 30, while 13.6% is over 60 years old(DIGESTYC, 2019).

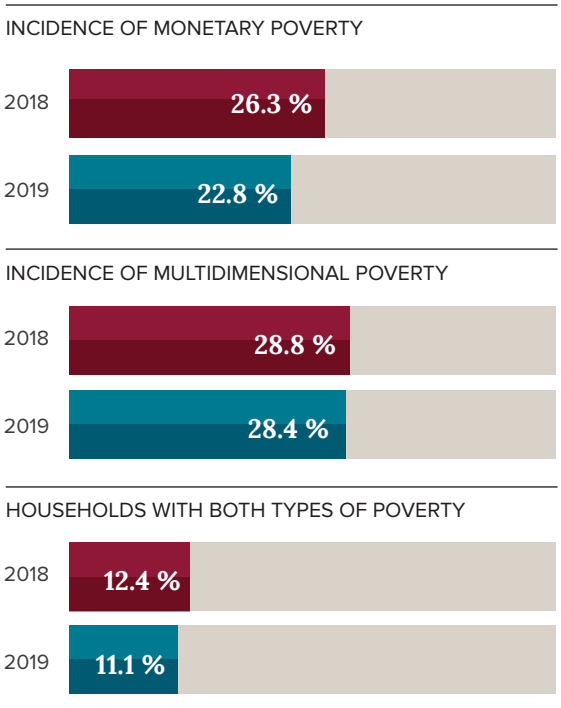
Living conditions in El Salvador prior to the COVID-19 pandemic and tropical storms Amanda and Cristóbal reflected significant challenges in terms of human development and poverty. As of 2019, 11.1% of households fell within the income poverty and multidimensional poverty categories.

The proportion of households in a situation of monetary poverty in El Salvador decreased by 3.5 percentage points, from 26.3% (5.7% extreme poverty, and 20.6% relative poverty) in 2018 to 22.8% (4.5% extreme poverty, and

18.3% relative poverty) in 2019, equivalent to 442 thousand households or 1.5 million people. This has resulted in a decrease of 49,040 households and 254,778 people living in poverty in recent years (DIGESTYC, 2019). Out of these, 4.5% live in extreme poverty, while 18.3% live in relative poverty. In rural areas, 24.8% of households live in poverty, of which 5.2% liv in extreme poverty, and 19.6% live in relative poverty. In urban areas, 21.7% of households live in poverty: 4.1% live in extreme poverty, and 17.5% live in relative poverty.

FIGURE 9

Incidence of monetary and multidimensional poverty (% of households), 2018 and 2019



Source: UNDP (2020), base MPHS 2018 and 2019.

While for 2019, 28.1% of Salvadoran households live in multidimensional poverty; that is, they have an average of eight deficiencies within the twenty indicators of the five welfare dimensions (education, housing conditions, work and social security, health, utilities, food security and quality of habitat). This is equivalent to 543,875 households, that is, about 2.1 million people in the country live in poverty, with significant deprivations. Urban multidimensional poverty represents 17.5% of urban households and 46.0% of rural households. 74.0% of households headed by women have between one to three deprivations, and of these there are 230 thousand households with dependents between 0 and 17 years of age (UNDP, 2020).

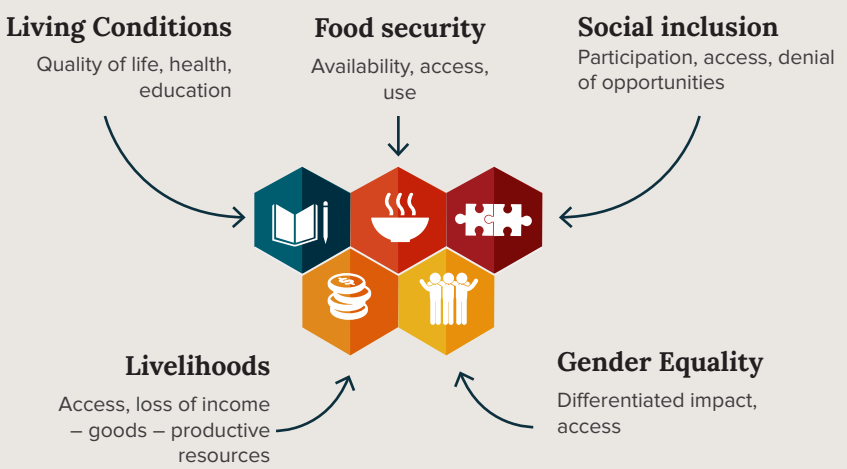
Impact generated by the pandemic and tropical storms on the salvadoran population

To analyze the impact that the combination of the two crises had on individuals and families, microsimulations of the impact on monetary poverty were carried out and the measurement of the Multidimensional Poverty Index (MPI) available to El Salvador was used.[14] In this way, it was possible to know the baseline or situation of the fami-

14/ To simulate the macroeconomic shock of the impact of COVID-19, the microdata of the MPHS 2019 were used and five assumptions were established of how household income would be affected by the crisis: See section on microsimulations. The estimate was made in the month of September/20.

FIGURE 10

PDNA indicators for human impact analysis



lies before the pandemic in at least six key indicators related to deprivation in terms of access to drinking water, access to health services, overcrowding, access to sanitation, underemployment and access to social security.

On its side, the PDNA Methodology suggests the analysis of human impact around the five key aspects (Figure 10). Depending on the type of crisis being analyzed, on the availability of information and on the ability to provide the indicators suggested, human impact experts select the most reliable variables for analysis. In the case of El Salvador, the information available was sufficient and it was possible to count on the invaluable experience of the General Directorate of Statistics and Censuses of the Ministry of Economy (DIGESTYC), an institution that contributed significantly to this evaluation. Table 4 summarizes the main findings of this analysis, according to the indicators pointed out.

Table 4 summarizes the main human impact indicators identified in the different sectorial analyzes prepared for this study. For more details, see the chapter on human impact, in the second part of this document. Tropical storms Amanda and Cristóbal, added to the COVID-19 pandemic and pre-existing inequities, have contributed to widening the gaps in all indicators (Table 4).

TABLE 4

Summary of human impact indicators

Human impact
Life conditions[15]
• 23,855 homes suffered some level of damage (18.0% severe, 28.0% moderate, 54.0% mild) due to the storms[16] • 71 thousand families were affected by the storms[17] • 11 thousand people were sheltered in the second week of June[18] • Increase of 6 thousand COVID-19 cases and 164 deaths by the end of June/2020[19] • 5.4 million outpatient consultations not attended to the month of July/2020, in relation to the same period in 2019[20] • 555 schools with storm damage as of May 30, 2020[21] • 16,131 students dropped out of higher education institutions as of May/2020[22]
Employment and livelihoods[23]
• The average salaries of ISSS contributing workers experienced a reduction of -6.4%, between January and June 2020 • 70,427 formal jobs lost in the private sector, between February and June 2020[24] • 628 thousand new people living in poverty (30.3% households) • 276 thousand new people living in extreme monetary poverty (7.2% households)
Food Safety[25]
• 182 thousand new people living in severe food insecurity between December/2019 and May/2020 • 336 thousand people with severe food insecurity in municipalities affected by the storms • The price of the basic urban food basket increased by US$9 and the rural one, US$7.4 compared to June/2019 • 20,000 households with low food consumption as of May/2020

15/ Ministry of Housing, Directorate of Civil Protection (DGP) and Government of El Salvador.
16/ Housing Sectorial Report, PDNA 2020 in El Salvador, p. 10.
17/ Housing Sectorial Report, PDNA 2020 in El Salvador, p. 10.
18/ Housing Sectorial Report, PDNA 2020 in El Salvador, p. 11.
19/ Health Sectorial Report, PDNA 2020 in El Salvador, p. 1.
20/ Health Sectorial Report, PDNA 2020 in El Salvador, p. 11.
21/ Education Sectorial Report, PDNA in El Salvador, p. 4.
22/ Education Sectorial Report, PDNA in El Salvador, p. 13.
23/ ISSS.
24/ Employment Sectorial Report, PDNA in El Salvador, p. 1.
25/ Data obtained from WFP: Food and Nutrition Security Situation, Tropical Storm Amanda Emergency. Report No. 2, June 4, 2020. WFP: Food and Nutrition Security Survey, COVID-19. Follow-up No. 1, May 2020. And from the Rapid Assessment of Food and Nutrition Security against COVID-19.

Human impact
Gender Equality[26]
• Overload generated by gender roles, which adds to the workload, to the home, to the care and to the accompaniment at school in an adverse context that ignored the care needs at the start • Impact on economic activities in which women are mostly involved: Trade and services in the informal sector • Impact on the already scarce resources they have, such as time, access to employment and services and income that enhance their autonomy, among others • 2,427 cases of violence against women[27] • 11,485 unintended pregnancies due to lack of contraceptive drugs (UNFPA, June 2020) • In the health field, it has impacted on the continuity of services provided to women, such as sexual and reproductive services, which shows as unwanted pregnancies
Social inclusion[28]
• 18 thousand women are part of the health personnel • From January to June, 258 pregnant girls (10-14 years) and 6,581 teenage pregnancies have been registered • Increase in youth unemployment • Hospital saturation made it difficult to access outpatient consultations • People with disabilities or elders are more vulnerable to chronic diseases and COVID-19 infections and face greater job insecurity and informality

Impact on the most vulnerable groups

Although the impact of the events is generalized throughout the Salvadoran territory, there are particular social groups that demonstrate significantly high levels of vulnerability, since these people are generally neglected, stigmatized or may face difficulties in accessing comprehensive services that facilitate their recovery.

Girls, boys and adolescents: They are considered to be more vulnerable, as they are overrepresented within households living in poverty. The percentage of monetary poverty in households with children and adolescents was double that of households made up of adults (36.1% vs. 18.3%).

Youth: This group also faces vulnerabilities, as it is stigmatized by the strong waves of violence that characterize the country, which influences youth employment rates to decline and their opportunities are limited. In addition, the pandemic could deepen the need for them to seek employment so much, probably at the cost of dropping out school, and at

28/ UNDP, with the support of ISDEMU.
29/ Gender Report, PDNA in El Salvador, p. 3.
30/ DIGESTYC, MINEDUCYT, FGR, Hospital de la Mujer.

the same time increase the difficulty for youth to find a job.

Women: In the period from January to June 2020, violent deaths of women amounted to 57 cases. Over 50.0% (1,087) of complaints filed for sexual violence crimes are against girls and adolescents (FGR, 2020). The Ministry of Health has reported that the pregnancies of girls between the ages of 10 and 14 have increased by 78.16% from April to June, which means 118 new cases. Furthermore, 37.0% are underemployed, 70.5% in the informal sector, and receive an average monthly salary of US$306, 22.0% lower than that of men.

Elders: Four out of ten live in homes with a roof made of inadequate materials; seven out of ten reside in the urban sector; and only one in ten is economically active. In addition, 66% of older adults suffered from high blood pressure in 2015 and 34.5% from chronic kidney disease, conditions that make them more vulnerable to COVID-19 infections.

People with disabilities: This group faces a double vulnerability, as 54.0% of people with disabilities were women, and 38.0% were 65 years or older in 2015. 34.8% have at least one chronic disease, and the monthly income of a person with disabilities is less than that of a person without disabilities.

Impacts identified due to COVID-19 and the storms on gender equity

Tropical storms Amanda and Cristóbal amid the COVID-19 pandemic have contributed to deepening pre-existing gender inequalities. On the one hand, they had an impact on the economic activities in which women are mostly involved, such as hotels, restaurants, industry and construction, which account for more than half of the women employed (62.8%). 79.5% of working women are employed in the tertiary sector, compared to 49.5% of men (DIGESTYC, 2019), a sector that is estimated to have the strongest economic impact derived from the pandemic. In addition, inequalities have worsened in the multiple duties of women, due to care responsibilities; thus, women dedicate five hours, compared to two hours for men (there is a gap of three hours) (Ministry of Economy/ DIGESTYC, 2017[29]).

Reported violence against women has experienced a sustained reduction in the first half of the year. The projected registered homicide rate by the end of 2020 is 3.0 for women (Infosegura,[30] August 2020). 2,427 acts of violence against women were reported, and only a substantial increase in acts related to the dissemination of pornography was reported. 85.1% of the victims are young women (32.3%) and adults (52.8%). During the mandatory quarantine period, the capacity of the institutions of the justice and security sector to continue providing access to justice to women victims was reduced and, in the same way, they were afraid to go out

29/ At the moment, there is not a more recent survey on time use..

30/ Evidence-based Citizen Security Information Management Program, supported by USAID and UNDP: https://infosegura.org/en/

to report, which has had a significant impact in the reported figures. These services have recently been adapted to continue providing services to Salvadoran women and girls who are victims of violence.

The Online Morbidity System (SIMMOW for its acronym in Spanish), the National Health Services Network, in the period from January to June 2020, registered 258 pregnant girls aged 10 to 14 years, while in ages 15 to 19 there were 6,581 pregnancies (MINSAL Health Establishment Network, June 2020). According to ONUMUJERES, these situations should be understood as results of sexual violence.

Impacts identified due to COVID-19 and storms on employment

The COVID-19 pandemic and tropical storms Amanda and Cristóbal will have an impact on the labor market and the livelihoods of the working population, which can be seen in the short, medium and long term, based on the immediate effects in the loss of work hours and work income.

Between March and June 2020 there is evidence of a loss of 70,427 formal jobs in the private sector, which is equivalent to approximately 7.9% of all workers in the formal sector as of February 2020. The most affected branches of activity are construction (25.3%), real estate activities (15.7%), manufacturing industry (11.6%), agriculture and livestock (11.6%), commerce, restaurants and hotels (10.5%) and professional activities (9.5%)). In addition, the average salaries of ISSS contributing workers experienced an average reduction of -6.4% between January and June; the commerce sector being the one with the greatest reduction in salaries (-17.1%), followed by industry (-13.9%) and construction (11.3%) (ISSS, 2020).

Due to the paucity of data, time, and context in which the assessment was conducted (COVID-19 times), it is difficult to assess the impact of the pandemic and tropical storms on informal workers. However, preliminary estimates indicate that the fall in sectorial production may have caused a loss of 89,347,000 workdays among informal workers, equivalent to 487,900 full-time jobs. Consequentially, affected workers could have foregone up to US$1.861 million in personal income. The sectors where most of the informal economic activity was interrupted are commerce and tourism (33.0%), agriculture (21.0%), construction (15.0%) and manufacturing industries (13.0%).

However, the effects of unemployment and income losses are differentiated, highlighting and deepening existing inequalities and vulnerabilities, with special emphasis on the situation of informal workers, women and young workers, and the older adult population that is still working actively. According to the International Labor Organization (ILO) (2018), 76.2% of all hours of unpaid care work are assumed by women, which is aggravated by confinement measures. Similarly, for 2019, the national unemployment rate was 6.3%, while the youth unemployment rate amounted to 13.4% (DIGESTYC, 2020). This trend has not reversed since the crisis. In addition, young people also tend to be

employed in low-productivity sectors and in the informal sector, for which they face, like women, double inequality.

Likewise, a characteristic of the precariousness of the Salvadoran labor market is that very few people can face long periods of unemployment (or zero income), so many people, faced with unemployment, started informal enterprises. The 2013 Longitudinal Survey of Social Protection indicates that of the unemployed (45.0%) remain unemployed for two years: 38.8% are employed in the informal sector and only 16.1% are able to return to the formal labor market after 24 months.

Microsimulation

Microsimulation techniques were used to evaluate the possible distributional impacts of the economic crisis due to the containment measures of COVID-19. The microsimulation seeks to answer the question of how much income poverty could rise in the face of a GDP contraction with no close antecedents in the Salvadoran economy.

To simulate the macroeconomic shock of the impact of COVID-19, the microdata of the MPHS 2019 were used and five assumptions were established of how household income would be affected by the crisis:

01 An annual contraction of remittances of -2.8%.
02 A 33.3% contraction in the income of independent workers, equivalent to losing four months of income due to confinement measures.
03 That the loss of formal jobs estimated by the ISSS would imply an increase of 0.8 percentage points (pp) in the unemployment rate, and around 20,422 workers would transition from formality to informality.
04 A 6.4% reduction in the income of workers dependent on the private sector, due to suspensions or other measures adopted by companies.
05 An increase in the prices of the basic food basket of 3.5% in urban areas and 1.9% in rural areas.

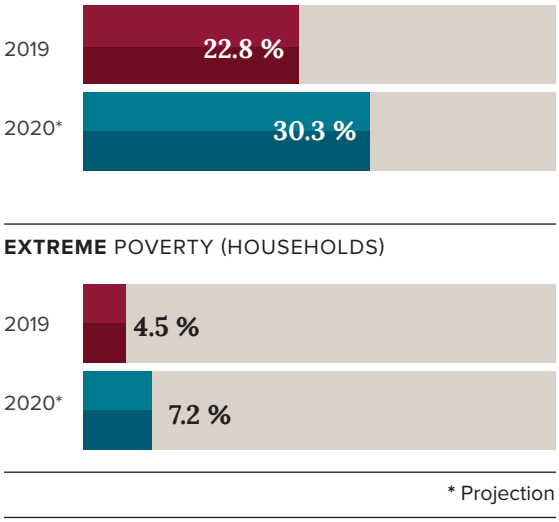
The main results of this microsimulation show that these five shocks to household income would imply that the incidence of income poverty in households could go from 22.8% in 2019 to 30.3% in 2020, an increase of 7.5 percentage points, equivalent to 144,993 new households living in poverty, and equivalent to 627,820 new people living in poverty.

The incidence of extreme poverty would increase by 2.7 percentage points, going from 4.5% in 2019 to 7.2% in 2020, equivalent to 51,750 new households living in extreme poverty and 275,594 new people living in extreme poverty.

When evaluating the sex of the head in poverty in 2020, 37.2% of poor households would have female heads, and 62.8% would have male heads; however, there is no evi-

FIGURE 11

Results of the monetary poverty microsimulation



Source and elaboration: DIGESTYC (2020).

dence that poverty incidence rates are differentiated by the sex of the household head.

Finally, the results of this simulation are subject to the performance of the economy in the last semester of the year: If the magnitude of the recovery is high, the results in poverty may be lower, as well as the impact of possible recovery policies.

Macroeconomic impact

The adverse effects on the country have motivated, in the short term, that the policy priorities are oriented to alleviate the continuous human and health costs, and to mitigate the economic losses of the most vulnerable; and in the medium and long term, the need for governments to reaffirm a credible commitment to promote sustainable public policies and undertake the necessary reforms to reinforce growth prospects when the pandemic is under control and the crisis subsides.

Impact on economic growth 2019-2020

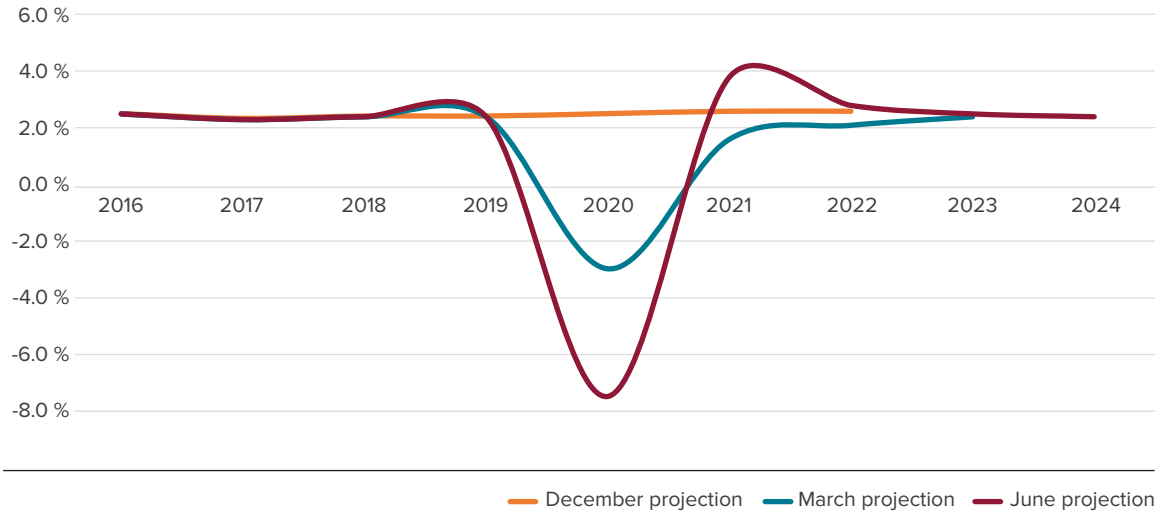
Due to the impact of the COVID-19 pandemic and its deepening due to tropical storms Amanda and Cristóbal, the Salvadoran economy is expected to contract significantly. According to estimates by the BCR, there are various explanatory factors for the downward projection of economic growth in El Salvador, in an estimated range between -6.5% to -8.5%, among which are: The current uncertainty atmosphere regarding the duration of the coronavirus (vaccines), global macroeconomic expectations and those of the main trading partners, and the improvement in the conditions that affect aggregate demand.

Over the months, economic evolution predictions or scenarios have changed from a growth scenario, following the 2019 trend, to an increasingly pronounced decline.

It is important to bear in mind that the ongoing pandemic, in addition to the damage to human health, is also generating a serious deterioration in the macroeconomic conditions of the country, inducing reductions in production and income levels, and, therefore, in consumption and investment expenses

FIGURE 12

December/2019, March/2020 and June/2020 scenarios. Percentage change rate



Source: BCR.

and the export and import capacities of companies, factors that reduce the population's welfare.

Impact on external sector indicators

The double confluence of domestic lockdown and the international situation leads to a deterioration of the external sector, with a sharp decline in exports and imports and a growth forecast in the trade balance deficit of 11.6%. The same, traditionally offset by the strong remittances sent by Salvadorans abroad, will only be partially moderate, since these have also had a fall, although its trend is estimated not to be so negative.

Exports: El Salvador's accumulated exports as of August 2020 totaled US$3,093.3 million, decreasing by US$984.7 million compared to the same period in 2019, with a year-on-year variation of -24.1%. This can be explained by the fact that one of the most important sectors for the external sector, the manufacturing industry, which, including maquila, only exported US$2,940.8 million, which generates a year-on-year variation of -24.9%, equivalent to US$975.6 million less compared to the previous year.

Imports: As an effect of the confinement and the fall in industrial, commercial and service activities, a fall in imports is also expected, which, however, will not prevent, as indicated, an increase in the deficit in the trade account.

Remittances: Family remittances received by El Salvador totaled US$3,635.6 million in

the first eight months of 2020, decreasing by US$62.7 million compared to the same period in 2019, which is equivalent to -1.7%. Despite the year-on-year drop of -40.0% in April and -18.0% in May, in recent months there are factors that have favored the accelerated recovery of remittances, such as the fact that 15.1% of senders work in essential activities such as health, personal care and cleaning activities, according to the Sixth Survey of Family Remittances, carried out by the BCR in the United States, in 2018.

Inflation: The annual variation rate of the Consumer Price Index (CPI) in August 2020 was -0.3%, two tenths lower than the previous month. The accumulated variation of the CPI throughout 2020 has been -0.4%.

Impact on tax revenue

According to the BCR, the fall in Gross Domestic Product (GDP) will be the main responsible for the fall in tax revenue and will increase the fiscal deficit by approximately 4.0% with respect to GDP, which reduces the already limited fiscal space and the indebtedness level increases as a counter-cyclical fiscal policy measure to address the emergency and the reactivation of the economy.

The estimated revenue loss at the close of the fiscal year is estimated at US$960 million relative to the budget. Total revenue will contract with respect to the budget, from US$6,371.9 million to US$5,410.9 million, largely due to the stoppage of productive activity as an effect of COVID-19, which has increased the slowdown of the economy with respect to estimates for the first quarter.

Recovery needs

The recovery needs estimated by the PDNA amount to US$1,211.6 million, reflecting the interventions required to repair or rebuild infrastructure and physical assets with enhanced measures that are in line with the principles of rebuilding to something better and disaster risk reduction to ensure future resilience.

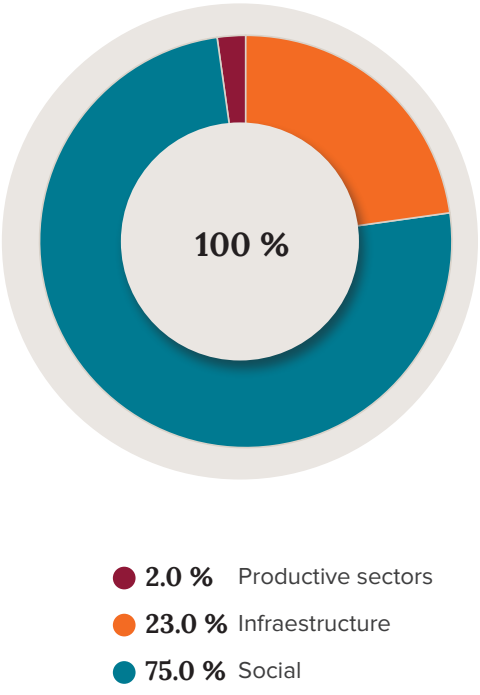
The social sector is the one with the highest percentage of needs to be financed (75.0%), of which US$473.3 million are required for education; US$283.7 million for health; US$121 for housing; and almost US$14 million for culture. These are linked to the need to relocate, safe housing and the continuity of support in health and education in the face of the post-COVID-19 reality (health measures, non-face-to-face education that requires technology and equipment). In this sector, additional US$20 million have also been considered for a bond aimed at reducing the negative impacts on people who fall into poverty.

TABLE 5

Summary of needs per analysis sector

Sector	Needs (Million US$)
Social	**912.79**
Health	283.70
Education	473.34
Housing	121.00
Culture	13.85
Social protection*	20.90
Productive	**19.17**
Agricultural	14.59
Tourism	4.58
Infraestructure	**279.65**
Transport	277.39
Energy	0.39
Water and Sanitation	1.87
Total in US$	**1,211.61**

*Health and education bonus for the new poor



In the productive sectors, the storms did not generate greater additional needs, since the Government has been implementing support for the economic reactivation due to COVID-19 for an amount of at least US$1 billion (includes financing for the informal sector, subsidy for the employment of MSMEs, payment to private sector suppliers and refund of VAT on exports). The circumstances of small producers in the agricultural sector requires special treatment, since they were affected by tropical storms, as detailed in the sectorial report presented in the second part of this document.

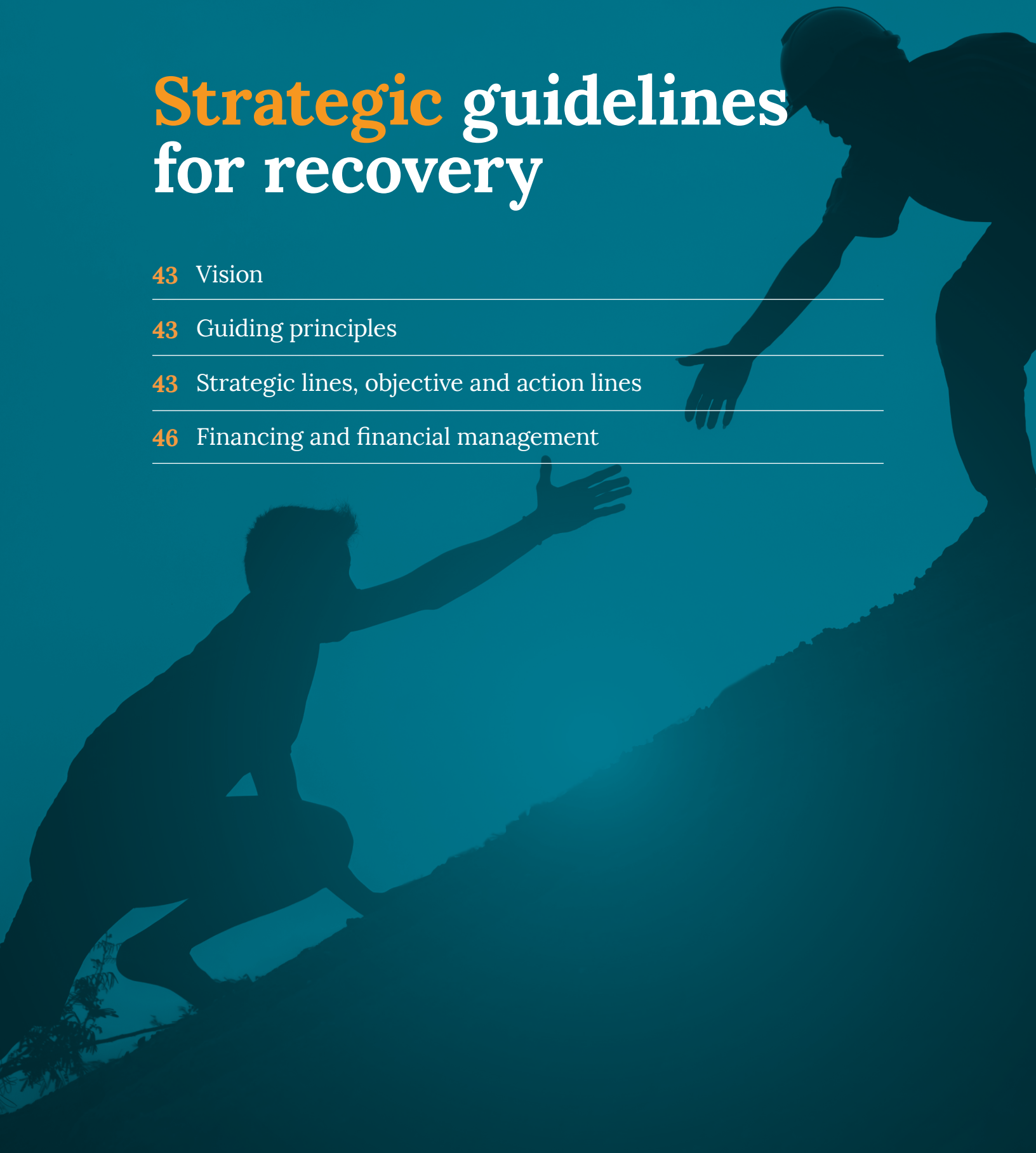
Strategic guidelines for recovery

43 Vision

43 Guiding principles

43 Strategic lines, objective and action lines

46 Financing and financial management



Through a participatory process with the 60 institutional delegates that participated in the assessment, in two consecutive workshops the key elements that will allow the country to advance in the formulation of a comprehensive recovery strategy were discussed and agreed upon.

This is how a vision, four guiding principles and five strategic intervention lines were formulated, in which all the sectorial needs and their cost were grouped. Each of these elements are detailed below.

Vision

The working groups formulated four proposals that included key considerations for recovery, including citizen participation, especially that of the most affected groups: Avoiding risk reconstruction, integration of different levels of government, among others. The consensus proposal for the vision says:

"The recovery after COVID-19 and tropical storms Amanda and Cristóbal will strengthen resilience, social inclusion and sustainable development according to the 2030 Agenda, speeding up inter-institutional coordination and flexibility, avoiding duplication of functions in risk management and prevention. It will be a participatory and inclusive process, to leverage the cultural diversity of El Salvador, to address the gaps, shortcomings and pre-existing needs in the communities".

Guiding principles

In the same way, the four principles prioritized by the participants were selected from among twelve options proposed by the different working groups:

- **Social inclusion and Gender equity:** Take into account both the needs and the differentiated effects of the vulnerable population, including boys, girls and adolescents, youth, elderly people, women, people with disabilities, indigenous and Afro-descendant populations, in order to "leave no one behind."
- **Inter-sectorial and Complementary:** Promote links with the different government levels at a territorial and sectorial level, to ensure good coordination from a national level to a local level and an efficient recovery process that avoids duplication of interventions.
- **Comprehensive risk management:** Ensure that recovery interventions are aligned with the country's environmental and territorial ordering, to avoid the construction of vulnerabilities and ensure the construction of resilience.
- **Transparency and Accountability:** Promote transparent resource management and implementation of the strategy, facilitating citizen control of the efficient use of resources.

Strategic lines, objective and action lines

The five selected strategic lines are described below, with their respective objectives and action lines: 1) Governance; 2) Economic recovery; 3) Risk reduction, resilient infrastructure and decent housing; 4) Technology and innovation; and 5) Welfare, protection and social inclusion.

Governance

Strategic objective

Streamline inter-institutional coordination and flexibility, avoiding duplication of functions in risk management and prevention in a participatory and inclusive process.

Action lines

01 Strengthening of governance mechanisms and territorial management in El Salvador.

02 Strengthening of inter-institutional coordination on emergency and disaster response issues.

03 Implementation of public policies aimed at the control and use of land.

04 Strengthening of institutional regulatory frameworks.

05 Implementation of communication and information dissemination strategies on issues related to risk mitigation and attention at a national level, including training programs in risk assessment, management and administration with an interdisciplinary, multithreat and multidimensional vision.

06 Creation of the systematization of damage assessment, for a coordinated and precise information gathering, with adequate disaggregation per gender, age, etc.

07 Facilitate foreign investment and exports in the country as sources for the creation of jobs.

08 Facilitate trade, through simplified and clear information and procedure systems to boost the economy, strengthening the capacities of SMEs and MSMEs.

Economic recovery

Strategic objective

Boost the country's economic activities in an inclusive and comprehensive manner, ensuring the sustainable operation of the productive value chains, through the development of human capacities, quality work and the incorporation of new and better technologies that respect the environment.

Action lines

01 Ensure the provision of financial and/or material resources for the economic activities that the country demands for its recovery.

02 Promote activities that generate national production chains and promote demand.

03 Facilitate the universal use of clean energy at affordable costs.

04 Expand and strengthen markets and the demand capacity of the population in El Salvador; promote labor markets that include a diverse population, especially vulnerable groups; and facilitate the formalization of the existing informal sector.

05 Strengthen technical support to companies, to increase their competitiveness and productivity.

Risk reduction, resilient infrastructure and decent housing

Strategic objective

Avoid the reconstruction of preexisting vulnerabilities of a physical, social and institutional nature. Ensure that investments, which are generally high when it comes to basic social infrastructure and housing, are safe and contribute to risk reduction in the country.

Action lines

01 Repair, reconstruction and maintenance of sectorial infrastructure, including service networks.

02 Review of the post-disaster care policy for homeless families.

03 Development of guidelines for relocation and resettlement of communities located in places of non-mitigable risk.

04 Foster resilience from infrastructure planning to operation/functioning.

05 Special treatment of cultural heritage.

06 Guarantee the provision of basic services and amenities, improving the habitat and guaranteeing its sustainability.

07 Special considerations for the access of the most vulnerable families/communities, including the indigenous population, cultural bearers, Afro-descendants, women, girls and boys, the elderly and people with special abilities.

08 Promote the comprehensive concept of risk reduction and building resilience for all social and productive sectors, including activities related to the socio-economic aspects of productive sectors, such as agriculture, tourism, formal and informal trade, among others.

Technology and Innovation

Strategic objective

Reduce the digital and connectivity gap by strengthening human capital, facilitating connectivity and access to information, raising awareness and generating an innovation culture to promote human, technological, and social development, in order to make viable the needs for post-pandemic recovery from COVID-19.

Action lines

01 Strengthen human capital for the development and use of new technologies, applications, virtual platforms and other tools (ICT).

02 Expand the coverage, access and connectivity of the population to networks and digital platforms.

03 Implement a technology literacy strategy for students, public and private workers and the community in general.

04 Promote innovation as a fundamental pillar for social and productive transformation, through coordinated and multisectorial actions that allow problem-solving through research and development of technologies, among other aspects, such as new materials, adapting production methods and social interactions to COVID-19 processes.

Welfare, protection and social inclusion

Strategic objective

Help the social and human recovery of the population in vulnerable conditions that has been affected by both COVID-19 and tropical storms Amanda and Cristóbal, so that they can have access to basic services, means of subsistence and food security, taking their differentiated needs and impacts into account.

Action lines

01 Protect basic health services for the population.

02 Guarantee the provision of educational services to the population, especially children and adolescents.

03 Protect people and guarantee the enjoyment of rights of the vulnerable population.

04 Ensure food security.

05 Guarantee other basic public services (transport, water, sanitation and power).

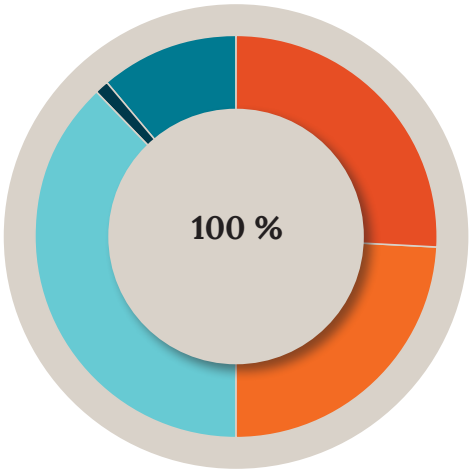
Financing and financial management

Based on the results of the PDNA, five action lines have been determined within the strategy for financing the Recovery and Reconstruction Program of the sectors. The largest item will be allocated to risk reduction, resilient infrastructure and decent housing (38.0%), with the aim of improving the living conditions of people who were affected by the storms and lost their homes.

Recovery implementation needs to be supported by the mobilization of funds and coordination mechanisms that channel the funds to the implementing entities in a timely manner. Recovery can be financed through government funds, international aid, private sector financing, and community contributions. To manage the recovery in a holistic manner, it is recommended that the Government have an effective mechanism for tracking funds budgeted as extra-budgetary, along with a robust public financial management system, which would increase the confidence of potential donors and help mobilize additional funds for recovery.

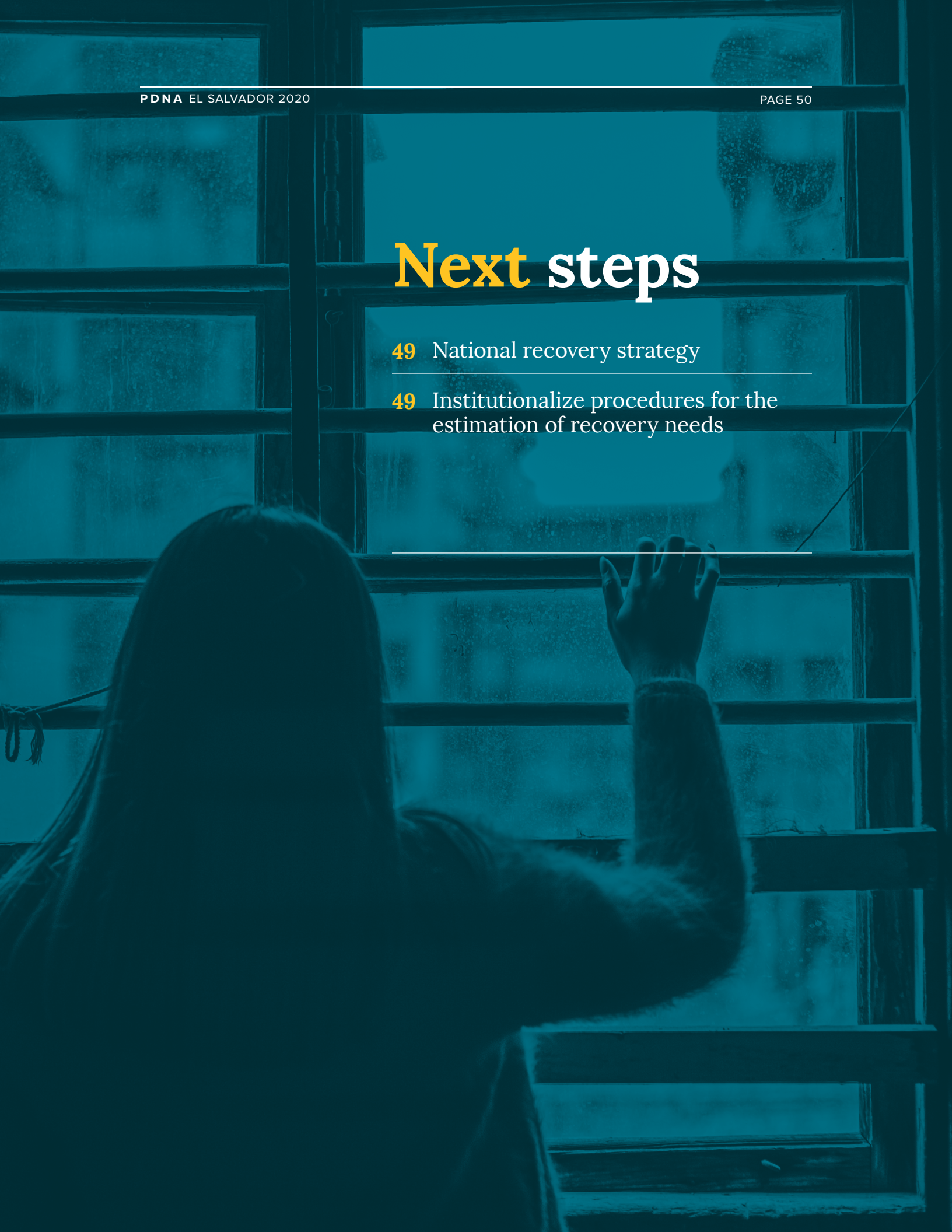
TABLE 6

Financing needs per strategic line



Strategic line	Amount (Million US$)
Economic recovery	289.83
Risk reduction, resilient infrastructure and decent housing	454.25
Governance	14.39
Welfare, Protection and Social inclusion	146.62
Innovation and technology	306.62
Total	**1,211.61**

- **26.0 %** Technology and innovation
- **24.0 %** Economic recovery
- **38.0 %** Risk reduction, resilient infrastructure and decent housing
- **1.0 %** Governance
- **11.0 %** Welfare, protection and social inclusion



Next steps

49 National recovery strategy

49 Institutionalize procedures for the estimation of recovery needs

National recovery strategy

Methodologies such as the Post-Disaster Recovery Needs Assessment (PDNA) provide a solid foundation for quantifying recovery needs and formulating comprehensive recovery strategies. The PDNA offers the opportunity to go beyond estimating the costs required for recovery: It can lead to the formulation of a realistic recovery framework, based on national priorities and capacities.

The vision, guiding principles and the proposal of the five strategic lines of intervention together with their budget are the starting point for the formulation of a solid action plan. Other aspects that the recovery framework promotes is the identification of an entity that leads the recovery process, which may be a line ministry, or an agency created expressly for that purpose.

The governing bodies of recovery in El Salvador can help the Government develop a framework that adopts a programmatic approach to identify priority sectors that are critical to restoring the livelihoods of the population and ensuring the economic reactivation of the country. Such a framework would allow for holistic recovery management, where the activities of government agencies, communities, and non-government entities complement each other under a government-led scheme.

Since a significant portion of recovery activities are carried out by non-governmental entities, an inclusive recovery process would help avoid duplication of tasks and gaps. For example, certain geographic areas and sectors could be assigned to individual donors, NGOs and implementing partners, in coordination with the recently created national cooperation agency.

The lead entity or agency would oversee the development of the recovery framework and play a critical role in its implementation. The lead agency could also play a central role in coordinating, supervising, and monitoring and evaluating (M&E) the progress of the recovery.

Institutionalize procedures for the estimation of recovery needs

The exercise to estimate recovery needs caused by the overlap of two critical events, such as the COVID-19 pandemic and tropical storms Amanda and Cristóbal generated great interest among the government technical teams assigned to this process. The motivation that this participatory process has generated should be channeled towards an institutionalization of the procedures based on a methodological adaptation adjusted to the national reality and that responds better to a process of strengthening institutional capacities to respond to different crisis and emergency scenarios than to reactive responses to the crisis, where everything is more urgent, it is carried out in any way whatsoever and without any methodology, among others.

A review of the procedures for recording, handling and processing information can

significantly speed up the process of estimating damages, losses and recovery needs, by having harmonized procedures that reduce the time for these estimates. In the same way, prior agreements for the exchange of information, pre-agreed formats, standardized procedures and memorandums of understanding between the different ministries, can make the difference to optimize these mechanisms. Having well-trained inter-agency and multi-sector teams can significantly contribute to improving preparedness, needs assessment, recovery planning, and the implementation of comprehensive recovery programs.

A country like El Salvador, which is regularly affected by the impact of various natural hazards, not only related to the climate, but also others of geophysical origin, such as earthquakes and volcanic eruptions, could institutionalize these efforts.

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PDNA

Evaluation of the effects, impacts and needs El Salvador is facing due to the double incidence of the COVID-19 pandemic and the tropical storms Amanda and Cristóbal

EL SALVADOR 2020

EXECUTIVE SUMMARY

This analysis is part of the evaluation of the effects, impacts and needs El Salvador is facing due to the double incidence of the COVID-19 pandemic and the tropical storms Amanda and Cristóbal. The Post-Disaster Needs Assessment (PDNA) Methodology is used to estimate the costs of the combined effect of the two conjunctures, in terms of damages, losses and additional costs, as well as the cost of the combined needs for a comprehensive and resilient recovery in the face of future crises.

El Salvador is the first country in Latin America, and one of the few in the world, to carry out a combined analysis of the effects of both phenomena. The study represents a notable contribution to the recovery needs assessment practice in situations that will surely recur and become more complex with COVID-19 and the potential impact of other natural hazards, such as heavy rains, hurricanes, seismic and volcanic activity, among others.

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