

What is a

DaLAA?

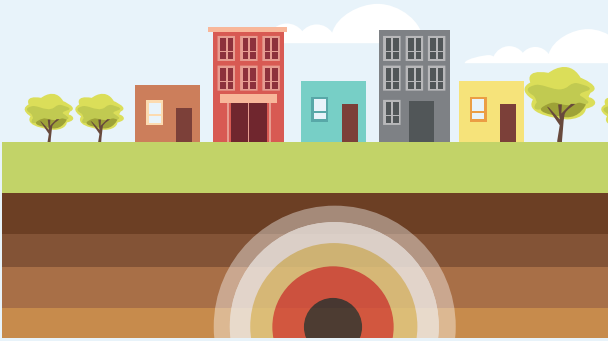
Damage and Loss Assessment



UNITED NATIONS

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On our planet, natural phenomena occur which can cause human catastrophes. We can divide these natural phenomena into four categories:



1. Seismic and volcanic events that generate from deep within the earth; some examples include geological faults, tremors, tsunamis, lava flows, ash fallout, projectiles and explosions.



2. Geological or hydrological hazards which occur on the earth's surface such as avalanches, landslides, rock falls or submarine landslides.



3. Hydrometeorological events such as hail, hurricanes, fires, tornadoes, desertification, drought, river flooding and storm waves.



4. Bacteriological or viral events that can cause epidemics not only among humans, but also in flora and fauna.



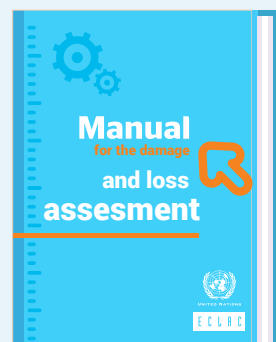
When these natural phenomena occur and impact a vulnerable population, we call it a disaster. In a disaster, human lives are lost, and damages occur resulting in costs and materials losses.

1. WHAT IS A DALA?

The Economic Commission for Latin America and the Caribbean (ECLAC) is a pioneer in disaster assessment. The first assessment took place in 1973 after the earthquake in Managua, Nicaragua.



With the experience of more than a hundred assessments in 28 countries throughout the region, ECLAC developed a methodology...



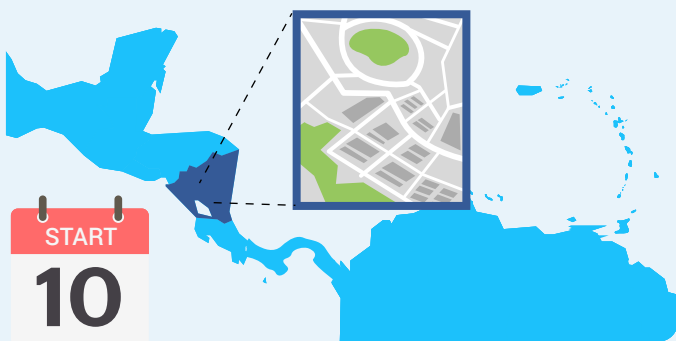
...which is included in the Damage and Loss Assessment (DaLA) Manual.

The assessment of a disaster is based on information from the following sectors:



Estimated Impacts of the Disaster

The estimated impacts of the disaster, that is damages, losses and additional costs, should be presented geographically (by province, department, state, region) according to the geographical/political boundaries within the countries or institutional sectors (public or private).



One of the first tasks of the assessment is to precisely delineate the disaster area. It is also desirable to establish the start and end dates of the assessment.



We will begin by explaining what damages, losses and additional costs are.

For example:



A hurricane makes landfall in a country and the winds and rains cause damage to the population, services and infrastructure.



As a result of the winds and rains, power poles and electric wires fall in the affected area.

Damages

These are the losses expressed in monetary terms that the assets of each of the sectors suffer during the loss.



In order to calculate the damage, the country's authorities will have to compile, in detail, the quantity, material, location and estimated value of each of the poles and meters of cable affected and then calculate an estimated replacement value of each one.

This exercise is carried out for each affected sector such as housing, schools, hospitals, roads, crops, etc....

Losses

These are the assets that are no longer produced and services that are no longer provided from the time the disaster occurs until full recovery and reconstruction is achieved.

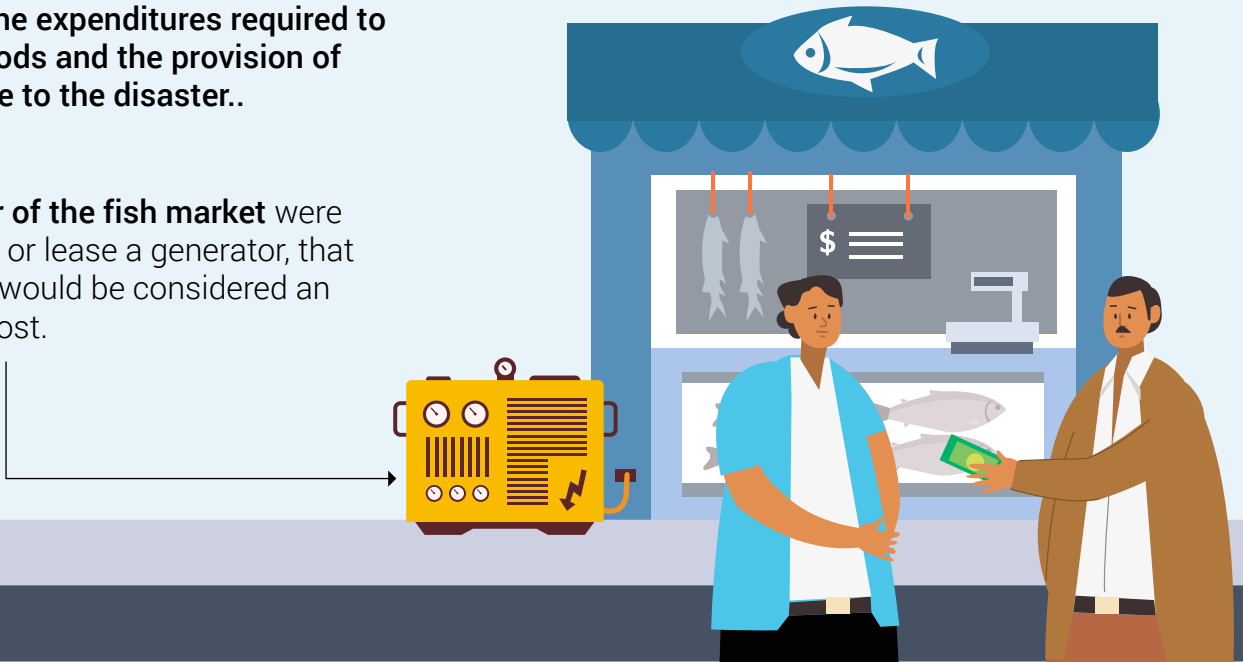


In our example, the losses are the **sum of product** that a fish market stopped selling, the workers' wages and the value of the food that spoiled.

Additional Costs

These are the expenditures required to produce goods and the provision of services due to the disaster..

If the owner of the fish market were to purchase or lease a generator, that investment would be considered an additional cost.



The DaLA methodology evaluates or measures five sectors:

1. Social Sector

This is the most sensitive sector of a disaster because it has to do with the population. It identifies and quantifies the people killed, injured, displaced, sheltered or missing in the impacted area.



Special effort is made to make women and different age groups (children, young people, adults and the elderly) visible. A record is also made of occupation, level of schooling and other data points that are considered relevant.

In the social sector, the economic impact on housing, health and education is also quantified.



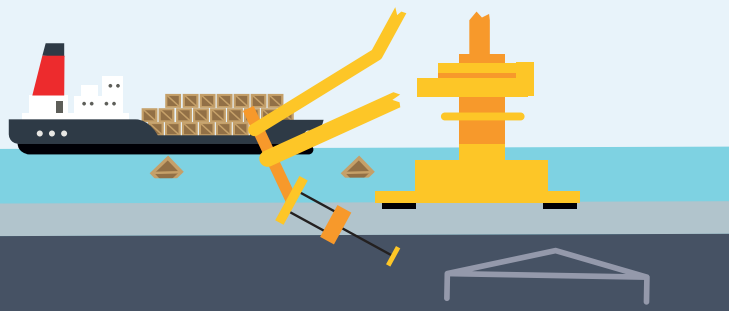
2. Productive Sectors

In the **productive sector**, the impact on agriculture and livestock, tourism and commerce, and industry or mining, as appropriate for each country, is also evaluated.



3. Infrastructure Sector

The **infrastructure sector** quantifies the impact on roads, bridges, transportation, energy, water and sanitation or infrastructure areas that have been affected.



4. Cross Sectors (Environment and Gender)

The effects on the **environment** are evaluated and women are made visible in each sector.

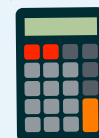


5. Macroeconomic Sector

Once the effects have been assessed, the impact of the disaster on variables such as GDP, household income, public finances, inflation and the balance of payments is estimated.



GDP



2. WHAT PURPOSE DOES IT SERVE?

The assessment of a disaster is key input for the reconstruction plan. It contains a sectoral and geographic estimate of the costs of the event and this information serves as a basis for the reconstruction plan. The reconstruction plan should include risk reduction measures that the country will undertake to minimize the consequences of future disasters.



It is useful for international financing agencies to have an objective estimate of the costs of the disaster and, consequently, to grant loans for reconstruction and other types of support.



It serves to allow governments, with the support of the United Nations, to organize donor conferences.



In the event of a disaster, transparency is very important. A DaLA allows the population to know which regions and sectors of the country were most affected.

3. HOW DOES IT WORK?



At the express written request of the affected government a petition for an evaluation is submitted to ECLAC.

The evaluation is carried out once the emergency phase is over.

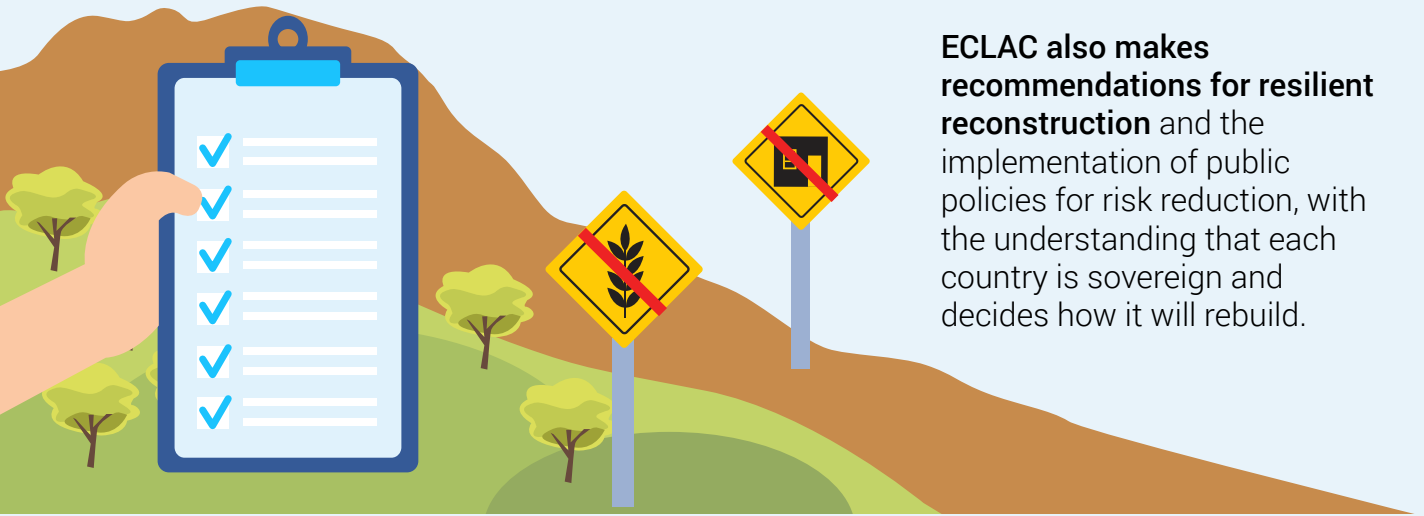


A multidisciplinary team from ECLAC goes to the affected country and organizes teams composed of officials from the country and one ECLAC specialist for each of the affected sectors. There are as many teams as there are sectors.



Once the teams have compiled and delivered all the information, broken down by sector, ECLAC integrates it, aligning it to make an economic estimate of the damages, losses and additional costs of the disaster and delivers it to the government.





ECLAC also makes recommendations for resilient reconstruction and the implementation of public policies for risk reduction, with the understanding that each country is sovereign and decides how it will rebuild.



By carrying out a DaLA assessment alongside the country's officials, ECLAC seeks to transfer knowledge so that, when a natural phenomenon with catastrophic effects occurs again, the country will have people trained in applying the methodology. At the same time, ECLAC officials learn about the institutional, geographic, demographic and cultural characteristics of each country.

Natural phenomena will continue to occur and, due to climate change, will be increasingly intense, dangerous and costly. ECLAC recommends that countries design and implement public policies that reduce vulnerability, poverty and inequality of the population and promote resilient and sustainable reconstruction.



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