

# Effects of typhoon sendong in cagayan de oro essay



**ASSIGN  
BUSTER**

I. Objective II. Introduction III. Causes IV. Family a. A First Hand Experience on Typhoon Sendong b. Effects and Costs c. Revenues or Sources of Funds d. Recovery V. Local a. Costs b. Revenues or Sources of Funds VI. National a. Costs b. Revenues or Sources of Funds VII. Phases of Recovery a. Disaster Response and Recovery b. Reconstruction c. Prevention, Mitigation and Preparedness VIII. Analysis and Conclusion IX. Exhibits X. Sources I. Objective To properly account for the value lost to Sendong as well as the costs in relation to the reparation of the damage brought about by the event itself.

II. Introduction December 16, 2011. Typhoon Sendong devastated the Philippines with its power as it went straight through Northern Mindanao. Infrastructures were destroyed, lives were lost, and dreams were shattered. It was a catastrophe that shocked not only the country, but the whole world. Cagayan de Oro and Iligan, cities known to be rarely hit by typhoons, were, in this case, the cities directly hit and damaged by the said storm. Sendong came at the dead of the night thus being the main reason that the victims were unprepared.

Sendong's havoc was manifested with an unprecedented flash flood that wrecked the houses and claimed the lives of many, leaving a trail of sorrow in the affected areas. It was a tragic event that did not only arouse the sympathy of the world but also the good within each Filipino that they would be there for each other at a time of grave need. Just as fast as the flood came, help was also received. The following days after the flood were days in which Cagayan de Oro's unity was clearly manifested amongst its citizens.

Families, friends, neighbors, and even strangers all helped each other out purely out of willing the good out of the other. Help also came right away from our fellow Filipinos from other parts of the country, as well as the rest of the world in the form of donations. But sadly, all these help and donations could never bring back what was lost. Nothing will be able to bring back the lives they once had and the loved ones they lost. It is an event that will forever scar the hearts of the victims, Cagayan de Oro, Philippines, the world. III. Causes Fingers were pointed as people began asking what caused the calamitous event.

Some blamed the excessive logging of forests in the northern and central regions of Mindanao coupled with the topography of this region, situating the two cities as basins to which the water from the higher regions flow out to, resulting to the devastating flood that occurred. Some blamed PAGASA for not giving enough warning over the storm that was to occur and making errors in calculating Sendong's power and trajectory. And lastly, the local government of Cagayan de Oro city for apparently not taking any actions so as to mitigate the damage of the incoming storm.

It is to be noted that typhoon Sendong was considered a "weak" storm as meteorologists may have it, but the rainfall amount it brought, just like that of Ondoy, was extreme. Cagayan de Oro City had a total of 180mm of rainfall in just one day, significantly higher than the monthly average of 117mm based on statistical data from PAGASA Lumbia station for the years 1977-2005. It has been observed that the forests located near Cagayan de Oro might have drastically deteriorated and has led to the city's vulnerability to

floods, land-slides, and other disasters caused by the excessive and illegal cutting of trees.

This was evidenced by the logs which poured along with the flood which are apparent results of illegal logging. Water, which fell over the 400km radius of Sendong, all poured onto the low-lying cities of Cagayan de Oro and Iligan as the trees that once served as our protection from such forces of nature were cut down. The situation in Iligan and Cagayan de Oro were drastically worsened as the large logs found adrift with the current made the flood more destructive as the logs rampaged with the current destroying even solid concrete.

The logs found with the current are seen as evidence for the assertion of deforestation being the cause of the disaster. Flaviana Hilario, also added that what mainly caused the disaster was the topography of the affected areas being like basins that were filled with much water. The local PAGASA station was also placed in the hot seat as they were bombarded with criticisms of not having done their job properly as they were not able to deliver the warnings ahead of time.

They were quickly defended by Benito Ramos (executive director of NDRRMC) reasoning that they have worked hand in hand with Pagasa, disseminating information over the matter since the 14th of December. This was confirmed by Presidential Communications Development and Strategic Planning Undersecretary Manuel L. Quezon III. Ramos further reported a problem with the alert systems in Cagayan de Oro and Iligan since they were

not used. This was because the alert systems were designed to be used only on signal number 3 or above situations.

Ramos also admitted the failure of NDRRMC to utilize its SMS warning system so as to warn the public through the use of text messaging. City administrator and disaster incident commander, Grecilda Joson, admitted the City Hall did receive advisories and recommendations of MGB-10 (The Department of Environment and Natural Resources' Mining and Geosciences Bureau). " Yes, we received the warnings but the people living in the flood prone areas continuously ignore our warnings. However we warn them, they seem not worried at all," Joson reasoned out. Joson further added that they have been up all night, monitoring the storm that night.

This shows that the government did have knowledge over the impending storm and its possible dangers. Although it was much worse than what they were expecting. Lack of actions taken by the local government is evidenced by the ongoing performance the weekend night cafe despite the warnings of a signal number 2 storm on the way. With all due respect to our local government, their failure to act or to convince the residents was a determinant of the extent of damage caused by Sendong. It also manifests their lack of political will. If only proper measures were taken, lives would have been saved and less damage would have been caused.

As to their claim that they did try warning the residents, it was met with protest as many of these residents claim that no warning came to them at all. In the long range prospects, the government had long had knowledge of areas considered as hazard prone to floods. " The city governments

(Cagayan de Oro and Iligan) have earlier been provided the results of the geohazard assessment and the geohazard maps prepared by the DENR-MGB," officer-in-charge regional director Alfredo Relampagos said. This was in response to the 2009 flood resulting into the displacement of 200, 000 individuals. IV. Family a. A first hand experience on typhoon Sendong

December 16 was the last day of our class before Christmas vacation. I left for school early that day because I started feeling sick. The rest of the day felt like any other ordinary day. It started raining early in the afternoon. We knew that it was due to the typhoon that had struck Mindanao. Only my mother and I were left at home that night together with our five dogs. I slept early that night at around 9: 00 pm. At 10: 00 pm when I was about half asleep, we heard a loud explosion in the far distance. Everyone was curious about it but no one knew yet what it was. My mother woke me up at 1: 00 am in the morning.

The electricity was down and water was seeping through the floor. My mother could not open the screen door. I forced it open. A lot of water suddenly rushed in pushing us backwards. The water outside was already at chest level. Screams and cries for help were everywhere. Everyone was in the same dilemma. It was then that I realized we were in deep trouble. Only we could help ourselves. The water was rising at an incredible rate. We swam towards the grills and slowly made our way towards the roof while our dogs followed. When we got up on the roof we found that most of our neighbors were already on the roof.

I prayed hard hoping that the water would stay below the roof level and thank God it did. It was an unthinkable event. It felt like I was still dreaming hoping that I would wake up but reality is harsh. I had to stay up all night soaking wet in the cold rain for six hours. At around 7: 00 am in the morning the water subsided and people began climbing down only to find the extent of the damage the flood has caused. The mud on the streets was up to the knee. Everything was a mess. Household furniture and appliances were everywhere. A few blocks away, eleven cars piled up on top of each other.

Two of our neighbors across the street died. They were not able to get out on time. As I walked the mud filled streets of Balulang, I saw that every one was in the same situation. Every house was damaged, dead bodies were lined up on the streets, and everyone was in a state of disbelief. b. Effects and Related Costs This disaster cost us our time, belongings, money and effort. Most of our belongings were damaged and some were washed away. Our television was already thrown away. Our stereos and video players were also disposed off. A lot of our clothes were washed away and some can never be used again.

Our sofa set is beyond repair so we threw it away. My personal Computer which I recently bought five months ago was also damaged. Total costs in damaged and lost items are estimated to be P80, 000. We also spent about P15, 000 for transport and rent when we transferred temporarily to Malaybalay. We still haven't fixed our house yet so it will probably cost us more for repairs, renovation and new furniture and appliances. These new expenses will affect our day to day budget but thankfully we also received

donations from friends and families. Fortunately for us our home was still in one piece.

The newly bought refrigerator was also repaired. We also had household items that survived like kitchenware, the dining table and beds. It was painstakingly hardy to clean off the mud but fortunately our relatives sent people to help with the cleaning. Most of the time was spend on cleaning. I also had to look for a temporary place for the family to stay. This whole event also cost me my vacation. I had to spend Christmas carrying water and New Year arguing with my dad. The traumatizing experience, exhaustion, and stress from this calamity can never be summed up in financial terms. .

Revenues or Sources of Funds We did get a good amount of donations. The first we received was supplies and food from World Vision. They were the first to respond to us since my sister is an employee. A few days after the event, relief goods were given daily to affected areas. We received a lot of canned goods, clothes and drinking water. Our relatives also sent people to help us clean the house. Total cash received is estimated to be around P60,000 from family and friends. d. Recovery My family is still recovering from the incident.

We are temporarily staying at Malaybalay because most houses for rent in Cagayan de Oro have already been occupied. We also brought along the stuff that survived. I actually had no time to rest because by the time we settled in our new house class had already started. We were relieved to get out of Balulang. Even today, the streets are still filled with mud. A lot of houses are still abandoned. People are still cleaning their homes. We plan to



wait for awhile before we go back and fix our house. The first plan we had in mind was to build a second floor just in case another flood comes.

I believe an event like that will not happen so soon but it doesn't mean that it will never happen again so it is best to prepare. V. Local The city of Cagayan de Oro, being situated at Northern Mindanao and being directly on the path of the deadly typhoon, ended up having many of its barangays, that were situated near rivers, in ruins as the water rose up to wash up everything it caught up with. a. Effects and Related Costs Initially, the instant visible effect of the disaster would be the destruction of infrastructures, mostly residential in nature, which were located near the riverbanks of Cagayan de Oro River.

Damaged houses reached a total number of 19, 952 of which 7, 317 were totally destroyed and the remaining 12, 635 received partial damage. According to NDRRMC as of January 21, 2012 8: 00 am, the total cost of the damage brought on infrastructures, which includes bridges, roads and other public properties, health facilities and schools, and agriculture, which includes crops and fisheries, amounted to P 943, 275, 838. No data, however, was provided as to the cost of the damage dealt on housing infrastructures in Cagayan de Oro. The second and probably the worst damage Sendong brought was that of the death toll.

Sendong left Cagayan de Oro with a total of 737 people dead, which was mostly composed of women and children and only 424 of which has been identified. Injured individuals were also found to have reached 146 cases. 38, 236 families made up by 342, 400 individuals were known to have been

affected or displaced. Sendong also cost the city its water supply as the city's water district main production plant in Macasandig was completely submerged. The facility supplies around 40% to 50% of the water needs in the entire province.

The bulk supplier, which is the source of about 30% of the water supply in CDO, has also been suspended. The delivery has been suspended because the bridge crossing where the supply is supposed to pass going through our take off point has also been damaged. This has brought a total shortfall supply of around 70 to 80% here in Cagayan de Oro as stated by Ladele Sagrado, information officer of Cagayan de Oro Water District, which was reported by abs-cbnNEWS. com as of December 19, 2011. Such affected the entire city and worsened conditions as one of the basic needs of man has become unavailable.

Sendong is also responsible for the outbreak of the Leptospirosis virus which was declared by DOH on January 1, 2012. This caused the admission of 258 individuals to the hospital, 8 of which died of this illness. In response to this, 5, 776 individuals in Region X were given DOXYCYCLINE (Leptospyrosis Vaccine). This is based on the Department of Health's documentation over the matter. Other diseases common during the aftermath were cases of tetanus, polio and measles. Medical issues such as acute respiratory infections, diarrhea and fever have also been found to be common concerns in the evacuation centers.

The untimely event also brought a great deal of instability as to the local economy of Cagayan de Oro. Industries skyrocketed as fast as some

<https://assignbuster.com/effects-of-typhoon-sendong-in-cagayan-de-oro-essay/>

industries plunged. One of the first industries to get affected was the fish industry. This was mainly because of the engrossing thought and the ungrounded fear that the fish might have taken in human flesh and that diseases might be contracted from which. Laundry shops, bottled water, junkshops and auto repair shop businesses have been know to have obtained much profit during the aftermath of the Sendong. b.

Revenues or Sources of Funds From the report of Xavier University, " Tabang Sendong," as of January 12, 2012, the total cash donations received was P 33, 353, 053. 96. NDRRMC, as of January 21, 2012, also declared costs of assistance of the following offices: DSWD - P 31, 943, 854. 63; LGU - P 901, 000; and DOH - P 16, 509, 730. 59. Thus the total amount of cost of assistance that Cagayan de Oro City has accumulated is P 82, 707, 639. 18. Note however that this amount does not include other undeclared amounts of aid that has been done by private organizations. V. National a. Effects

A total of 815 barangays, 57 municipalities, 8 cities, 13 provinces and 7 regions were said to have been affected. As of January 21, 2012, damages incurred as to the agricultural sector and infrastructures amounting to P1, 633, 283, 487. 00 of which 1, 360, 335, 647. 00 is attributable to infrastructures and the remainder of which to agriculture. This is according to SitRep no. 42 issued by the NDRRMC. It is to be noted however that this excludes the value of houses lost. The total number of damaged houses amounted to 52, 435, of which 14, 883 were totally damaged and the remainder only incurring partial damage.

The severe damage brought on to the agricultural sector is projected to have a detrimental effect on exports as it may cut off agricultural exports by 5-10 percent, domestic demand by 10-15 percent and lastly domestic trade by about 10%. It is also estimated that the Sendong tragedy will cost the country a decline of 0.181 in its GDP. This estimate is according to the National Economic and Development Authority (NEDA).

b. Revenues and Sources of Funds As of the 4th of January 2012 - The Department of Foreign Affairs (DFA) said today that as of January 3, it has received advice that a total of US\$19,272,349.7 in donations and pledges was received for the victims of tropical storm Sendong (Washi). The amount includes those from Filipino communities, Philippine Embassies and Consulates General around the world and private individuals/groups. It does not include donations or pledges without equivalent monetary value, or those given to the United Nations flash appeal. It is broken down to US\$8,324,285.22 in cash, US\$5,354,063.95 in kind and US\$5,594,000 in pledges. Top donors include the United States (US\$100,000 in cash and US\$5.4 million in pledges), Australia (US\$1,015,246.2 in cash and US\$304,600.82 in kind), China (US\$1.01 million in cash), Czech Republic (US\$894,000 in cash), Republic of Korea (US\$500,000 in kind and US\$110,000 in pledges), Indonesia (US\$310,000 in cash and US\$200,000 in kind) and New Zealand (US\$500,000 in cash). Other foreign donors include Japan (US\$320,163.09 in kind), Spain (US\$261,470.66 in cash), Ireland (US\$130,807.66 in kind), Malaysia (US\$100,000 in cash), Singapore (US\$38,714.37 in cash and US\$21,533.57 in kind), Chile (US\$25,000 in cash), Thailand (US\$100,000 in cash), Denmark (US\$52,783.82 in cash), Belgium (US\$130,562.8 worth of pledges), Italy (US\$645,150 in kind), Switzerland (US\$320,714.98 in cash)

<https://assignbuster.com/effects-of-typhoon-sendong-in-cagayan-de-oro-essay/>

and Oman (US\$2, 909. 65 in cash). New donors include the European Union (US\$3, 876, 958. 81 in kind), Laos (US\$15, 000 in cash), Hong Kong (US\$257, 000 in cash), Taiwan (US\$12, 993 in cash), Germany (US\$651, 193. 36 in cash) and Luxembourg (US\$46, 744. 61 in cash). Additional assistance were provided by Japan (US\$2 million in cash), while Belgium has fulfilled its previous pledge of US\$130, 568. 58 in cash and added US\$391, 461. 09 in cash to assist the victims. Filipino communities around the world have also sent in their assistance.

The Filipino community in the U. S. Northeast has sent in US\$11, 170 in cash coursed through the Philippine Consulate General in New York, while other members of the Filipino in the U. S. collected US\$8, 287. 80 in cash. The Filipino community in Guam donated US\$3, 956 in cash, while the Laguna Association of Guam gave US\$500 in cash. Other Filipino communities who have provided assistance include US\$1, 000 in cash from the Filipino community in Malaysia, US\$3, 921. 45 in cash from the Filipino community in France, US\$1, 094. 25 in cash from the Filipino community in Myanmar, US\$2, 275. 0 in cash from the Filipino community in Xiamen and US\$195. 95 in cash from the Philippine Consulate General in Barcelona. , the Filipino community in Hawaii (US\$30, 000 in cash and US\$14, 000 in pledges), the Philippine Embassy in Tel Aviv and the Filipino community in Israel (US\$807 in cash), the Philippine Embassy in Wellington and the Filipino community in New Zealand (US\$1, 000 in cash), the Philippine Embassy in Washington, D. C. (US\$1, 670 in cash) and the Filipino community in Ottawa (US\$1, 000 in cash). The Filipino community in the United States Northeast has also provided an additional US\$4, 800 in cash.

Private individuals and businesses have also donated to the cause. Russian businessmen gave US\$20, 000 in pledges, and the Dalai Lama Trust also provided US\$50, 000 in pledges. The Chinese Chamber of Commerce in Guam provided US\$14, 420 in cash, and the Philippine Consulate General in Guam collected money from various individuals, which totaled US\$2, 895. International organizations have also stepped in to help. Last December 22, the United Nations launched a consolidated flash appeal for humanitarian assistance with the humanitarian community and the Philippine Government for Sendong victims amounting to US\$28, 576, 819.

The International Organization for Migration (IOM) has an initial appeal of US\$50, 000, and that their Philippine office has a team who conducted needs assessment in Mindanao and is providing relief support. Currently, a four-member delegation from the Organization of Islamic Conference (OIC) is now in the Sendong-stricken areas to assess the devastation wreaked by the storm, and also to look into how member-states could extend assistance to the affected communities. VI. Phases of Recovery a. Disaster Response and Recovery

The local government was not the first and was late to respond in the aftermath of typhoon Sendong. Fortunately enough, many have had the initiative to extend help as soon as they got knowledge. One of those who first initiated the help to those people directly affected by the catastrophe is Xavier University, care of Kristohanong Katilingban sa Pagpakabana - Social Involvement Office (KKP-SIO). Rescue operations were satisfactorily prompt enough to respond and were able to rescue a lot of needy individuals.

A lot of help and response also came from willing private individuals whose help proved to be more than essential to the success of the rescue operations. Evacuation centers and temporary housing projects followed such response operations. Cagayan de Oro City, itself, had a total count of Evacuation Centers of 32 as of January 21, 2012 8: 00 am. However, problems were faced even within the Evacuation Centers as diseases were rampant and spreading around. Medical missions were also done by DOH and other privately practicing professionals as a response to this need.

As to the basic necessities, the evacuation centers are said to have more than sufficient amounts of food, water and clothing, thanks to the donations from concerned individuals and funds from the government. b.

Reconstruction ABS-CBN NEWS reported as of December 30, 2011 that the World Bank on Friday said it released \$500 million to help the Philippine government's recovery and reconstruction efforts in areas affected by tropical storm Sendong. But this act was greatly criticized by Kalikasan PNE, since they pointed out that humanitarian assistance should come in the form of unconditional aid.

They added that this would only further impoverish the Filipino economy. The city government of Cagayan de Oro, on the other hand has also agreed to grant businesses, who were adversely affected, relief from unpaid real property penalties and surcharges. It is noted also that private businesses have been doing their best efforts to extend its assistance to all affected families, especially their employees and workers. Aside from this, the government is engaging in various projects of relocation, livelihood and housing as to help reconstruct what was lost to the flood.

<https://assignbuster.com/effects-of-typhoon-sendong-in-cagayan-de-oro-essay/>

Private firms have also been doing its best as they too, are conducting their reconstruction projects. San Miguel has, for example, unveiled their largest ever corporate social project of building about 5, 000 houses for those who ave lost homes. It is estimated to cost about P500M. c. Prevention, Mitigation and Preparedness Preparation has never been new to every country in dealing with disasters or catastrophe. Yet in spite of this familiarity, there are a thousand lives that were lost in the Philippines. This just shows how the country lacks preparedness with regard to responding towards disasters, specifically the local government.

PhilSTAR reported as of December 31, 2011 12: 00 am that President Aquino has directed the release of P1. 6 billion to the Department of Science and Technology (DOST) to tap state-of-the-art technology for more accurate weather and disaster information and improve the government's disaster planning and response system. The said fund will be used to the Nationwide DREAM Program that will acquire latest technologies that will produce detailed topographic information that will enable the creation of more accurate flood inundation maps. Sunstar reported s of January 05, 2012, that Senator Loren Legarda, through via text message to them, that the country has already the law in its place and what is just needed is the political will to be pro-active and invest in disaster mitigation. There are ways to prevent disasters or catastrophe threats and Manila Observatory stated 7 ways to reduce disaster risk which are very important to address climate vulnerability in our country and these are the following: 1. Improve our disaster plans. 2. Have proactive warning systems. 3. Institute a nationwide emergency response. 4.



Cancel the permits and operations of big commercial logging firms in addition to the logging moratorium. 5. Stop the liberalization of the Philippine mining industry. 6. Impose a moratorium on the construction of new coal power plants. 7. Reduce poverty. Prevention measures encompass those activities that aim to avoid events such as these from happening again. It is not only an option but an absolute need for the citizens of Cagayan de Oro. The first measure should be that of preventing people from staying in areas known to be geologically hazardous. A map of places known to be of such nature is provided for in the exhibits.

If given the benefit of the doubt that calamity fund for Cagayan de Oro City is lacking, it is to be adjusted, as urged by EU Ambassador Guy Ledoux and Belgian embassy First Secretary Jozef Naudts, that the city would set aside a 5 percent of the local government's annual budget for disaster reduction and emergency response. It was rumored that people said they were not properly informed by the local government and also the local government said that they too were not properly informed but despite it, this should not be the case wherein a very number of lives were lost.

As to preparedness, the law creates Local Disaster Risk Reduction and Management Offices in local governments that will identify hazards in their areas, inform residents of these hazards, and train local emergency response teams in case calamities strike and this should have save the lives that were lost during the strike of typhoon Sendong. VIII. Analysis and Conclusions In sum, the said causes are actually a series of events that have all lead to the disastrous event.

It starts with the topography of the northern regions of Mindanao being in a form that allowed the water from the surrounding mountains to drain through the Cagayan de Oro River. With this being the case, Sendong, carrying an extremely large amount of rain water, posed a great threat especially that our forests, being our greatest protection against floods, have been abused. In fact, alleged illegal loggers were recently caught around the areas of Bukidnon on September 2011. Global warming has also played its role. Cagayan de Oro has been known to be very much less likely to have storms.

In fact it is a very rare event for Cagayan to have floods. But recently it has had 2 great floods in the past 3 years. However, decades ago, on 1916, Cagayan de Oro also experienced a flood as great as that of Sendong's. This perhaps changes the idea that it was caused by global warming. However, we cannot deny the frequency of the occurrence being evidence of climate change. Philippines have also contributed more to global warming. The government has already placed Waste Management Act, adopting the "Green" policies, for the country, sadly, such act is poorly implemented.

PAGASA, even though their reports were known to be late in providing a lead time of at least 36 hours, they still managed to relay the information in time to take actions. However, the local government, not being able to take appropriate actions to counteract the storm's approaching havoc, left the city at a very vulnerable state. And as the people took their rest unaware of what is to come, Sendong's wrath was unleashed as the massive flash flood we know and saw that destroyed the lives of many Kagayanons.

A question arises as to how it developed into a flash flood considering that if it was purely just out of rainwater. Some speculated that dams from upstream may have given way so as causing a rapid rise in water just as what happened. It was also asserted that large logs from areas above formed temporary dams as they were washed down, accumulating the water and thus releasing them with one great blow. These accounts are currently being investigated under the orders of the president. However, the main culprit that is supposed to be blamed for all of these is basically being unprepared. This event drastically changed the everyday life of both the affected and unaffected citizens of Cagayan de Oro. Damage brought on to infrastructures, businesses and livelihoods were so great that there is an expected decline over Cagayan de Oro's economy for the coming quarters. The aftermath of the flood also caused a shortage of the city's water supply which considerably altered the lifestyle of Kagay-anons in the following weeks. Also, some businesses skyrocketed as their services became an utmost need during the aftermath.

Some of these businesses include those of junkshops, drinking water, laundry shops and auto repair shops. At the same time, some business sectors suffered a great drop in revenues just as the fish industry did because of the fear that the fish may have had intakes from man and that diseases may come from them. The radical effects of the economy were so great that they are estimated to affect the National GDP for the whole year of 2011 by a decrease of 0.181. The direct and indirect damages are also expected to reduce economic growth by 0.115 percentage points of GDP.

In the course of the disaster, the efforts so displayed by our government as to respond and rescue were generally satisfactory. It is also worth noting that, a large portion of gratitude is owed to those citizens who have risked their lives in the rescue effort. Shelters were then also quickly prepared so as to accommodate the growing number of affected citizens who were as of the moment in need of shelter. Also, the government was also quick enough to provide medical missions so as to respond to medical issues that have contracted and those that might be contracted.

Relief goods quickly flooded in from the local, national and even international levels, thus being able to respond to the immediate needs of the people such as food, clothing, water and shelter. In response also to the water loss, the local government distributed water throughout the city through the use of mobilizing water containers and fire trucks and designating water stations from which people could fetch water from. Reconstruction efforts and projects have been planned and are soon to be in place so as to provide shelters and further aid to the affected individuals.

Help is also extended to affected businesses through providing incentives, discounts and other forms of aid by the government. Part of this is the agreement of the government to give relief from unpaid real property penalties and surcharges. The Oro Chamber of Commerce is also on the move so as to help the businesses in reconstructing the devastated businesses through financial assistance. In addition to this, private firms have also been on the move to help. San Miguel Corporation for example has recently unveiled its plan to donate P500M for a housing project for 5, 000 families.

<https://assignbuster.com/effects-of-typhoon-sendong-in-cagayan-de-oro-essay/>

The devastation that occurred was largely attributed to being unprepared. Laws already existed that prevent disasters or catastrophe threats as stated by Sen. Loren Legarda. The real problem is the political will to implement these laws. The government realizes this and is taking appropriate actions to correct such now that they know the extent of damage calamities can give if caught unprepared. Now that Cagayan de Oro knows which areas are prone to flooding, they should relocate residential areas located on hazard zones to safer locations. Strict implementation is the key to future preparations. IX.

#### Exhibits

A. PAGASA's projected trajectories from the 15th of December to the 18th. This shows the preliminary projections of PAGASA and how they were mistaken. Thus causing PAGASA's late advisory. [pic][pic][pic] [pic] B. Area housing damage rating by municipality (legends provided for at left side) C. Geohazard areas of Cagayan de Oro (Legends as to degree of danger provided for at the right side) D. Data on affected population from NDRRMC E. Data on the cost of damages incurred on infrastructure and agriculture from NDRRMC F. Data on affected barangays, families, and persons from NDRRMC [pic] [pic] [pic] [pic] X.

Sources A presentation on Sendong by: RICARDO A. MERCADO PRSD  
Mindanao PAGASA DOST, El Salvador CITY NDRRMC Update Sitrep No. 42 re  
Effects of Tropical Storm " Sendong" (Washi) and Status of Emergency  
Response Operations <http://newsinfo.inquirer.net/114061/%E2%80%98sendong%E2%80%99-moved-too-fast%E2%80%94pagasa> <http://www.batangastoday.com/pagasa-weather-forecast-storm-sendong-to-affect-15-southern-areas/19521/> <http://www.abs-https://assignbuster.com/effects-of-typhoon-sendong-in-cagayan-de-oro-essay/>

[cbnnews.com/nation/12/19/11/sendong-worlds-deadliest-storm-2011](http://cbnnews.com/nation/12/19/11/sendong-worlds-deadliest-storm-2011)

[https://ateneophysicsnews.wordpress.com/2012/01/05/tropical-storm-](https://ateneophysicsnews.wordpress.com/2012/01/05/tropical-storm-sendong-washi-manila-observatorys-report-no-1/)

[sendong-washi-manila-observatorys-report-no-1/ ttp://newsinfo.inquirer.](http://newsinfo.inquirer.net/114061/%E2%80%98sendong%E2%80%99-moved-too-fast)

[net/114061/%E2%80%98sendong%E2%80%99-moved-too-fast](http://newsinfo.inquirer.net/114061/%E2%80%98sendong%E2%80%99-moved-too-fast)

[%E2%80%94pagasa http://www.abs-cbnnews.](http://www.abs-cbnnews.com/nation/regions/12/28/11/sms-warning-system-not-used-sendong-ramos-says)

[com/nation/regions/12/28/11/sms-warning-system-not-used-sendong-ramos-](http://www.abs-cbnnews.com/nation/regions/12/28/11/sms-warning-system-not-used-sendong-ramos-says)

[says http://www.abs-cbnnews.com/-depth/12/21/11/nasa-sees-poor-](http://www.abs-cbnnews.com/-depth/12/21/11/nasa-sees-poor-warnings-deforestation-behind-sendong-disaster)

[warnings-deforestation-behind-sendong-disaster http://www.abs-cbnnews.](http://www.abs-cbnnews.com/nation/regions/12/19/11/sendong-victims-cdo-suffering-water-shortage)

[com/nation/regions/12/19/11/sendong-victims-cdo-suffering-water-shortage](http://www.philstar.com/Article.aspx?articleId=763606&publicationSubCategoryId=63)

[http://www.philstar.com/Article.aspx? articleId=](http://www.philstar.com/Article.aspx?articleId=763606&publicationSubCategoryId=63)

[763606&publicationSubCategoryId= 63 http://www.sunstar.com.](http://www.sunstar.com.ph/cagayan-de-oro/local-news/2012/01/02/senator-calls-stronger-disaster-preparedness-198502)

[ph/cagayan-de-oro/local-news/2012/01/02/senator-calls-stronger-disaster-](http://www.sunstar.com.ph/breaking-news/2012/01/05/legarda-law-disaster-preparedness-already-exists-198965)

[preparedness-198502 ttp://www.sunstar.com.](http://www.sunstar.com.ph/breaking-news/2012/01/05/legarda-law-disaster-preparedness-already-exists-198965)

[ph/breaking-news/2012/01/05/legarda-law-disaster-preparedness-already-](http://www.arkibongbayan.org/2011/2011-12Dec25-Sendong/sendong.htm)

[exists-198965 http://www.arkibongbayan.org/2011/2011-12Dec25-](http://www.arkibongbayan.org/2011/2011-12Dec25-Sendong/sendong.htm)

[Sendong/sendong. htm http://www.goldstardailynews.com/northern-](http://www.goldstardailynews.com/northern-mindanao-x/6224-misor-loggers-charged-in-bukidnon.html)

[mindanao-x/6224-misor-loggers-charged-in-bukidnon. html http://socyberty.](http://www.nababaha.com/flood/cagayandeoro/cagayandeoro.htm)

[com/issues/global-warming-in-the-philippines/ http://www.nababaha.](http://www.nababaha.com/flood/cagayandeoro/cagayandeoro.htm)

[com/flood/cagayandeoro/cagayandeoro. htm http://philippinehistory.](http://philippinehistory.ph/tag/cagayan-de-oro/)

[ph/tag/cagayan-de-oro/ http://www.gov.ph/2012/01/05/donations-for-](http://www.gov.ph/2012/01/05/donations-for-sendong-victims-total-19-27m/)

[sendong-victims-total-19-27m/ http://www.nababaha.](http://www.nababaha.com/flood/cagayandeoro/cagayandeoro.htm)

[com/flood/cagayandeoro/cagayandeoro. htm](http://www.nababaha.com/flood/cagayandeoro/cagayandeoro.htm)

<https://assignbuster.com/effects-of-typhoon-sendong-in-cagayan-de-oro-essay/>