

# To the Learned Members of the Society

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I can never forget it. It was like I was the lead actor of a Hollywood box-office hit movie. I felt like I was in the set of the Titanic. The sofa was at the dining area. The refrigerator was blocking our main door. My Civil Engineering book on Hydraulics had its pages wading in slow motion as if a Matrix special effects. Everything with specific gravity lighter than water were floating and the rest were sunk in our instant indoor swimming pool; and with just a toss of a finger, even the bulkiest furniture which needs at 4 people to move, could be accelerated easily to wherever you wish. Fortunately, my acoustic guitar that I bought from Tainan City in Taiwan was kept afloat on the sofa. I can never forget September 2009's typhoon Ondoy – the Philippine version of the US hurricane Katrina.

The fear of this recurring is inevitable. But I know something could be done to avoid this nightmare. I know we can do something. I know we could have a solution.

This is just one of the many calamities that could happen on earth. Earthquakes, tsunamis, landslides, avalanches, volcanic eruptions, extreme droughts, heavy torrential rains, among others are natural calamities that could also be intensified by human activities. Moreover, problems which are anthropogenic or human in origin include pollution (of air, water, and land), deforestation, extinction of species, over population, food scarcity, and even road accidents, corruption in the government, economic meltdown, just to list some, are problems of different sorts.

These scenarios are a problem to each one of us especially to the learned ones – those who are trained in the colleges and universities for a particular pursuit. For us, we know that there is a solution for every problem. We know that problems are but an inception, a start for a formulation of a solution, the road to invention and innovation, a jolt to our imaginative minds and our innate skills.

The problems we encounter could be if not completely eradicated, at least mitigated by using our gained knowledge and skills. Dams are created not just to solve the problems in flooding in the

downstream but also provide enough water for irrigation during times of no rain; and for the generation of electricity for the community. Floodways, dikes, barriers, keep water away from areas where people thrive. We are able to design and construct structures like buildings and bridges that are resistant to earthquakes, therefore saving lives. We are able to create technologies that could increase our crop yields, process our food, and fabricate the things that are necessary for our daily lives and even the ones that could ease our boredom like our celphones and computers! We discover and formulate medicines and vaccines to improve our health and well-being. We devise rules and processes to keep our government and businesses stable. We even go outer space and walk on the Moon!

Some solutions are, unfortunately, leading us to another problem - sometimes a more serious one. We solved our problem in transportation with our cars, jeepneys (a mode of transport in the Philippines), buses, airplanes, and ships. But we now have air pollution where emissions from these inventions are a major contributor to global warming. We develop lands – unspoiled lands - and now problems of deforestation, erosion, and species extinction are alarming. But, we always know, there is a solution.

And there is this new challenge to us. Nowadays, precipitation (e.g. rain) is in the extremes. Rainfall intensities are in their all-time high just as what we experienced during the typhoon Ondoy. Not just in my country but anywhere in the world even to the very place where you least expect it - there is flooding! On the contrary, when summer comes, extreme high temperatures are experienced causing drought, water scarcity, heat strokes, among others. These, we often relate to global warming, to climate change.

We are all aware of the issue on global warming. Some may argue that this could just be a natural phenomenon. Some may say that this could be a major shift from what we normally experience in nature. We may not be sure who has the right hypothesis. Nevertheless, we are very sure that something is getting abnormal to our environment; But, we always know, there is a solution.

However, some of our present solutions to problems are now failing. Our drainage systems, for instance, are now insufficient to handle the upsurge of floods. Our dams get empty when we know that they were designed to accommodate extreme droughts. Even in our modern times when we have fully automated our processes, our economy could meltdown. But, we always know, there is a solution.

We need to review and revise some of our models (e.g. simulation models), some of our designs and methodologies, some of our rules, and procedures to fit our present situation.

Solving most of the above-mentioned problems could not be done overnight. Sometimes mitigation is too late that an immediate but sustainable solution must be done - that is adaptation. For instance, if we could not immediately implement a way to divert the floods, at a minimum, households in areas that are affected should elevate their properties and be prepared if such events recur. We must always prepare ourselves for emergencies on whatever disaster comes.

We already have the solutions in our minds. We know how to eradicate, or to mitigate, or at least to create adaptive measures so as to solve these different sorts of problems that we encounter, that our community experiences, that the entire environment suffers. It is not a question of can we do this? Would it be economically feasible to do that? Do we have the resources to implement it? It is a question of shall we allow this to happen to us? To our neighbors? To the next generation?

What we need then is to use our God-given knowledge and wisdom. Therefore, I challenge every one especially the learned people to contribute to the society, to render their part and do what is morally right.