After the Tsunami: New Impetus for Disaster Reduction?

Most experts agree that for every dollar spent on disaster reduction, seven to ten dollars are saved in emergency relief and reconstruction. But floods, earthquakes and tsunamis continue to take a devastating toll on countries across the globe.

What measures can be taken to reduce the impact of natural disasters? What concrete measures came out of the recent Conference on Disaster Reduction in Japan? How can the same storm system cause massive floods in Haiti, while relatively little damage is done to the neighbouring Dominican Republic?

These are some of the questions explored in this edition of World Chronicle with Sálvano Briceño, Director of the Inter-Agency Secretariat of the International Strategy for Disaster Reduction.
JENKINS: Hello, I'm Tony Jenkins.

We all know that prevention is better than cure… but how many floods, earthquakes and tsunamis does it take before some serious measures are taken to prevent – or at least reduce – disasters? That’s what we’ll be talking about today with the Director of a UN office called the Inter-Agency Secretariat of the International Strategy for Disaster Reduction - Sálvano Briceño. Mr Briceño, welcome to World Chronicle… I think your office has a bit of a misnomer. You don’t actually reduce disasters, you reduce the effects of disasters, is that right?

BRICEÑO: That’s the idea. The concept is the reduction of risk and vulnerability to natural hazards. Of course natural hazards cannot be prevented, but disasters can be reduced if we reduce the vulnerability, which is what creates the disaster.

JENKINS: We are joined in the studio today by Joe Lauria of the Boston Globe and by Judy Lessing of Radio New Zealand and their both anxious to ask some questions, so I am going to throw it over to Judy straight away.

LESSING: Well thank you Tony. I’m very concerned about the question of the amount of money and supplies… and just plain people that we have to marshal, whenever there is a major disaster. You know the earthquake in Yeravan a few years ago, the earthquake in Bam in Iran and of course the tsunami. Now, surely this is sort of plugging up the hole once the real dam has gone. What do you do about that?

BRICEÑO: Well the first thing is, that most of the resources that respond to a disaster come from the local community themselves. It’s more than eighty percent of the response to the disasters is from local neighbours, the near by towns, or the same community itself. So those that fly from outside are more visible on the media. And that is why people think there is a lot. But there is more from the towns that are mobilized for these things. Some countries have very strong volunteer programmes that are organized to do this and many communities have lived – and your country, New Zealand, is one that has a wide range of experience in that regard; of mobilizing communities. So yes, there is a lot of mobilization of resources, but that also helps to enhance awareness and engage more in addressing these issues.

LESSING: But it’s still a lot of money to spend where it does not seem to be so cost effective, as having structures in place, warnings in place; so that in fact, people can anticipate what could happen.

BRICEÑO: Absolutely, and that’s the main purpose of our programme – of our strategy. That it makes much more sense to reduce risk and vulnerability than to have to
respond to disasters every time they occur. At this moment, I can tell you that there is about ninety percent of the resources that are being invested in dealing with natural disasters that go to response. Less than ten percent goes to risk reduction.

JENKINS: In other words, I think what you just said is that for every dollar you spend in preventing the effects of a disaster, in being forewarned if you like, you’re saving ten dollars in rescue operations later. I think I read that figure somewhere, is that right?

BRICEÑO: Well that is a complementary figure. That for each dollar you invest there is seven to ten that you can save in response; if you invest one in prevention. But of more concern is that more than ninety percent of resources actually available in the humanitarian sector are going only to provide relief. In other words, to do what you are saying, provide just food, shelter and medicine. Not reducing risk, not contributing risk.

JENKINS: Joe.

LAURIA: Those of us who study, or people who study American foreign policy, terrorism; on 911 when those planes were going into the building, they said that was Bin Laden and we knew this was going to happen – they weren’t surprised. And it has happened already to the Trade Center earlier. When that tsunami hit, were you surprised and do you think there was a lack of preparation for that? Where you aware of the lack of preparation? We know now there was no preparation. Were you aware of that at the time? Were you talking about it? Like people were talking about Bin Laden couldn’t hit America?

BRICEÑO: Certainly. For more than ten years now, there’s been plans for developing tsunami early warning systems in the Indian Ocean in the Caribbean, Mediterranean, all the regions that are at risk. Only the Pacific had been able to develop it because the tsunamis occur with more frequency. In the Indian Ocean, there’s a plan that had been already sponsored by our office, but also with UNESCO and other agencies because our role is mainly interagency, so we work with all the agencies. It had never been given a priority, because a tsunami had not occurred in that region for more than a hundred and twenty years. So, it is understandable that it was a surprise to everybody. For the scientists and the technical people, it was not…

LAURIA: …including you?

BRICEÑO: of course. Exactly. And we have been advocating for it for more than ten years.

LAURIA: Now you have criticized the Pacific system, it has not…

JENKINS: …it has holes in it…

LAURIA: …Not perfect.
BRICEÑO: It is not perfect. In the sense that, what is more or better prepared are the developed countries in the Pacific region. Countries like: Canada, like the United States, like Japan, like New Zealand, Australia. They are all very well prepared, even countries like Chile for example, have a good preparation. But if you go to the Central American countries or if you go to the Papua New Guinea or the smaller islands in the Pacific, they do not have the same type of preparations.

JENKINS: Pulling on from what Joe has been asking about being aware but not being prepared, he made the analogy to the 911 situation in New York City; I noticed that your office is not mandatory. In others words, you’re not funded out of the general budget of the United Nations. You’re sustained basically by voluntary contributions because if you don’t get the money, you cease to exist. You’re the one whose out there warning everybody that they need to start taking action. Do you think the message has got home? Is there any indication that you are going to be put on a budget now that your office will survive and grow?

BRICEÑO: Well that is our expectation. We do hope that the combination of the tsunami and two weeks later the World Conference on Disaster Reduction happening, which is a very unique and historic coincidence, will lead to more awareness. And that is precisely...

JENKINS: That may be your expectation but I mean have you been given any reason to believe that....

BRICEÑO: Well yes....

JENKINS: ...I mean, governments are coming saying yes, we’re going to do something like that....

BRICEÑO: No, definitely, definitely. There was a big awareness at the conference, which was a governmental conference, and this time it was more involvement by politicians if you want, or political representatives of the governments, rather than the technical and scientific. Representatives that were the ones that met ten years earlier met in Yokohama. So there was a big evolution on that, and we are seeing more response on that – yes.

LESSING: Was that partly because the Kobe Conference had been planned? Because you can’t just have a conference, it takes time and that it happened by coincidence to be just a few week after that tsunami in Asia.

BRICEÑO: Very big coincidence. We had been preparing it for more than a year and a half, almost two years. But remember that there have been other disasters. I mean Bam in Iran was a great eye opener for some governments, the floods in Haiti, the floods even in Japan, there were people dying a few months before the conference, in the Philippines, etc. There’s been...Grenada was totally destroyed by hurricanes. So the whole year has been full
of disasters that had been leading to more awareness and more involvements in the conference.

LAURIA: In a way you were lucky that the tsunami happened and that people were able to talk about it. To go back to my line of questions before... why were your warnings and other technical people ignoring the Indian Ocean?

BRICEÑO: Look, very simply... because it was not a priority. You can not expect these governments in poor countries that have so many priorities to deal with to give attention to something that has not happened in more than a hundred and twenty years.

LAURIA: What about the international community?

BRICEÑO: International community as I said earlier, are more involved, more interested in responding to disasters... have loads of money and loads of resources as you were saying to send immediately when there is a disaster, but very little to prevention and to risk reduction.

LAURIA: And the Mediterranean has no warning system?

BRICEÑO: They do have. They do have, tsunamis there don’t occur there with such intensity because there is less... they do occur with frequency – even more than in the Indian Ocean. But not with the same intensity because it is a smaller sea and the faults are not that big.

JENKINS: Now I think I see one potential problem in what you have been talking about, you’ve referred a couple of times to the earthquake in Bam in December 2003, I think it was twenty six thousand people killed there. Now, if memory serves me right – for either four days before or four days after, there was an earthquake of the same magnitude in Saint Robles in California - two people died. The conclusion your office drew from that, that the only difference was there was a building code in California that said your structures have to be safe and in Bam there wasn’t, and they used these mud brick buildings and people died through suffocation and what have you. You also said earlier, that I think the figure was eighty percent of resources that go to disaster preparedness come from the local community. Now there is a reason why somewhere like Bam doesn’t have the same sort of building codes as you have in California. You have a huge wealth gap, so even if you know, if you have this knowledge, what can a place like Bam do to prepare, to prevent something like from happening like this again in the future?

BRICEÑO: Well, it is important to recognize also that Iran, as a government, as a country, does have a lot of awareness on the subject. They have been working on prevention
for a long time. It was just very bad luck that Bam, was not one of the largest towns that is being managed.

**JENKINS:** It’s always the places that are not prepared and when the people least expect it…they get hit.

**BRICEÑO:** Absolutely. That’s the terrible thing. And now there is increased awareness of course in Iran about it, they’re doing a lot…they’re now even asking us to facilitate the development of a center that will provide more intensive training and awareness raising programmes in Iran. We’re doing it together with the International Federation of the Red Cross and Red Crescent Societies. There are some things going on with Iran that are interesting.

**LESSING:** You mentioned just a few minutes ago… you talked about Haiti and the floods and the Dominican Republic where the disaster didn’t hit the same way. Now, I know they are different parts of the same island but if you look at a map of the island, you will see that Haiti is practically without a tree…

**BRICEÑO:** That’s it…..

**LESSING:** …and the Dominican Republic has something like seventy two percent still in forest. I mean it’s quite an aggressive government programme and it has been going on for years. So that sometimes, in a sense, people whether they think about it or not, are making their own disasters.

**BRICEÑO:** But it’s almost always. That’s our point. That social and human vulnerability is the main cause of disasters. It’s not the natural hazard. And in the case of Haiti, it is the most exemplary because they’re same island, the same mountains and on one side they only have maybe ten or fourteen people die and on the other side, three thousand. It is mainly due to environmental degradation. Now the Dominican Republic has developed for some time, energy supply systems – where gas for example – has been utilized; Haiti has nothing like that, so they have to then cut down the trees. So it is a combination of things: it’s ignorance, it’s poverty, it’s lack of governance, but the international community could and should do more in Haiti.

**LAURIA:** Just back to Bam for a second. Isn’t UNESCO one of the other agencies getting in your way? Wasn’t it protected by UNESCO – some of those buildings? Or am I wrong?

**BRICEÑO:** All of UNESCO’s involvement in BAM is because it was an historic city, in Bam…

**LARUIA:** …It’s destroyed…
BRICEÑO: ...Which is protected by the World Heritage Convention...
LAURIA: That was destroyed....wasn't it?
BRICEÑO: ...it was destroyed – yeah.
LAURIA: So are they... Is UNESCO preventing buildings from being affected from more earthquakes...
BRICEÑO: ...UNESCO has a strong programme and we’re working with them.. They are one our most important partners and they are working very strongly to retrofit these old palaces and; the problem is that there are too many and it's a big effort.  So you never know when it’s going to hit.
LAURIA: So they keep the façade and build a new inside...
BRICEÑO: Yes, they’re doing it… they’re doing it, they’re taking it up.
LAURIA: Could I ask another thing?
BRICEÑO: Please!
LAURIA: I want to know about the state of the art of the science of predicting earthquakes right now and whether scientists share that internationally?  Do you have a problem with that?  Is there any problem with sharing?  Are they....
BRICEÑO: Look, as in all fields, there are many methods and beliefs and there are some scientists that are very focused on the technological approach to prediction.  This means having very good sensors, and having all the seismographs and all of that developed.  There are others that are more interested in the social behaviour or human behaviour and or even animal behaviour with regards to earthquakes.  Countries like China, the Philippines have some very interesting experiences of how, just by watching animal behaviour and by locating some very simple sensors that are very simple to do by the community, there could be some prediction of earthquakes.  And they have some very good examples of how they have managed it.  It is a bit like in health – modern technology and health prevail still over the traditional more natural way of health...
JENKINS: Let me just say..., that this is World Chronicle and our guest is Sálvano Briceño and we’re talking about the international strategy for disaster reduction.

VIDEO BEGINS:
We may not be able to counter the terrifying forces of nature – in spite of the best modern technology, but we can – so the experts tell us - mitigate the effects of the resulting disasters...

Learning to manage the impact of natural hazards is fundamental...
What precautions will save lives, minimize damage, and reduce economic disruption?

What are the lessons learned from previous efforts at reducing disasters?

What’s the link between development and disaster reduction?

These were all topics for discussion at the recent World Conference on Disaster Reduction in Kobe, Japan…

While some parts of the world are more prone than others to specific disasters – no matter where we live, statistical evidence shows that in our lifetime, each one of us will be involved in a natural disaster of some kind…

And the first thing you learn when you find yourself in such a terrifying situation is that it usually occurs when you least expect it…”

VIDEO ENDS:

JENKINS: We were talking earlier about how it happens when you least expect it. There have been cases during the recent tsunami, there were cases of people who hadn’t expected the tsunami and were able actually to save people’s lives because by chance, there was a guy up on a radio antennae, who saw the sea being sucked out and he shouted down to a guy who was passing on a moped – he said… go warn the villagers – that action alone saved fifteen hundred lives I think your office calculated. There was another example….perhaps you should tell us of a young girl – ten years old. Can you tell us about that one?

BRICEÑO: Yes, that was a very important example; where a young British student, ten years old, had just learned about what a tsunami was two weeks before going on holidays with her family to Puket. And when she saw the waters receding, she immediately warned her mother and explained to her what it was. The mother went and warned the manager of the hotel, and they managed to evacuate about a hundred twenty tourists in the hotel to higher grounds. So that shows the importance of education. What we always remember is that the tsunami may have killed a lot of people, but ignorance killed even more. And it happens with earthquakes, hurricanes, with floods, droughts – which is another big killer and that can easily be prevented, by the way, because it’s a slow onset.

JENKINS: It isn’t just about education. There’s an area I think Joe, Judy and I all want to get into which is….we started off by saying you can’t prevent disasters but in fact, as Judy said, we actually do create them in some ways. Haiti pulling out its mangrove swamps. The tsunamis in some of those islands were protected by coral reefs – the disaster would have
been a lot worse if the coral reefs had not been there. Coral reefs now are threatened with extinction because of the rising temperature in the sea. We are fooling around with our climate and creating disasters in a sense, creating more hurricanes and typhoons. Does your office have anything to say on that subject? Are you trying to hold governments, the feet of governments to the fire? For example, in the United States which so far hasn’t placed the same emphasis on global warming as say the British government; is that part of your function? **BRICEÑO:** Absolutely. That’s one of the main functions and we’re fully involved in the negotiations of the Climate Change Convention and now the Kyoto Protocol and the Inter-Governmental Panel in climate change. We’re part of those processes as well. However, it is important to clarify that while global warming is causing or is the source of increasing and intensity and frequency of some natural hazards – hydro-meteorological hazards – what is most worrying is the increase in vulnerability - and that is where we need to focus more because this is where the big, big threats are being developed.

**LESSING:** If you think about vulnerability, I can’t think of anything that would be more horrendous than a very large city….you take say Cairo, Mexico City a mega city, that’s bigger than we can contemplate. If you have a disaster, whether it’s a flood, an earthquake, whatever…you’ve got twenty odd million people and how do you deal with it?

**BRICEÑO:** Well, that’s the biggest threat that we have now. Almost all mega cities are located in disaster prone areas. Almost all – by coincidence: Mexico City, Bogotá, Istanbul, Shanghai, Mumbai, you name it. I mean Katmandu, even. What is most worrying, are cities that are growing very fast...and that unplanned growth is what is creating the biggest vulnerability. These cities are disaster prone not only for earthquakes but also for hurricanes, tropical cyclones in general and floods.

**LAURIA:** Some of the places you mentioned haven’t had a disaster in while, but we see repeated floods in Bangladesh or in the Mississippi plains, hurricanes in Florida. People keep moving back there and that upsets a lot of people, especially if their taxpaying money goes to pay for that – to help them relocate. Is there….is that all right? Is that a good attitude for people to have? Or are we being selfish by thinking that?

**BRICEÑO:** Certainly, human nature is basically selfish – although it also has the same capacity to be generous and express solidarity. So both things are very human.

**LAURIA:** Should these people move, is what I’m asking? Should they keep going back to where we know there is going to be another flood?

**BRICEÑO:** Look….It depends, it depends. There are many ways of dealing with it. For example, the Chinese have in some regions – some very ancient traditions where people have
a small house near the river because it’s clear and the soil there is the most fertile. So they need them to produce what they need to produce in agriculture, but they keep their main belongings and their main house uphill. So they only use this little house to live while they are planting, and harvesting, but then...they have their main belongings up hill. And every time there is a flood in the big river, they just move up and wait. There are ways of adapting. I can tell you many stories of adapting. My country Venezuela is called Venezuela because of little Venice; because Americo Vespucio who discovered it, saw the indigenous population built their homes on stilts. Because they were adapting to the rising levels when there were floods.

These Spaniards came and built differently.

**JENKINS:** But how do you adapt to the projected population growth of the planet of two and a half billion. Does your office have anything to say about that? Are you trying to do anything about that?

**BRICEÑO:** On....sorry?

**JENKINS:** Well the estimates are that the world’s population is going to grow...

**BRICEÑO:** Ah!...

**JENKINS:** ...By two point five billion.

**BRICEÑO:** Look, the issue is not population growth. There is space for a lot of people in the world. There are countries that are almost empty – starting with mine. The issue is not population growth, it’s urban growth. The issue is the big mega cities that are creating a big risk.

**LESSING:** Is it really? I mean, I’ve been reading a book recently by Jerrod Diamond called ‘COLLASPE’ and I am going to summarize it very badly. But one of the things he suggests in his conclusions is that nine billion people on the planet is just not possible because there are all sorts of things that we need. There isn’t enough sunlight to grow the food; there are not enough natural resources – never mind enough empty countries. I would agree with you, my own is pretty empty too – but he believes that the nine billion is just too many and will lead to more and more disasters.

**BRICEÑO:** Look it may be very possible. I’m not an expert or scientist in that field. But....and we are creating as we were saying before a lot of threats by changing the impact on the climate. So it is definitely important to look at those things. I also do believe that there is increasing awareness about them, and that’s what we’re working on. We do see some evolution on that, it’s just a matter – this is where we need the media to support and explain these things. I can give you one example. When the hurricane Jean hit Haiti, I remember one journalist saying “hurricane Jean killed three thousand people.” And we had to call them and
say ‘hey!, don’t make that mistake. It’s not the hurricane that killed the people, it’s their vulnerability. It’s the fact of having deforestation, etc., etc. Don’t blame it on a hurricane. The same hurricane didn’t kill anyone in Cuba because they were well prepared.

Lauria: Since we’re sitting in New York City here, is there any chance of a tsunami engulfing us at some point? Is the Atlantic Ocean prone to this?

Briceño: Certainly, not as much as the Pacific, not as much the Mediterranean or the Caribbean for example, which is a tsunami prone region. But there are other sources of tsunami that are not just earthquakes; and there are volcanic eruptions, landslides and there is a particular one that is sort of being monitored for a long time – the Canary Islands. They have big volcano that has big, big rocks inside that if by any chance the eruption of that volcano is very strong – as it is expected – those rocks will generate a tsunami. And that is in the Atlantic – and that’s just in front of the United States.

Lauria: Do we have a warning system here?

Briceño: I don’t know but I do believe there must be. I mean there is one in the United States for sure in California...

Jenkins: But with the Atlantic in between, we’ll see it coming...

Briceño: It will give time, it will give time.

Jenkins: Seismologist by the way, say that it’s not a question of ‘if’ that will happen but when. Will it take three eruptions in which case we’re looking at a couple of hundred years or maybe more? You’re talking about the need for people to become more aware of what you are doing. I know that shortly after this, you’re going to see former US President, Bill Clinton. Are you hoping to enlist him in this project of yours to get people to be more aware and to take preventative action?

Briceño: Certainly. First of all, in his mandate as Special Envoy of the Secretary-General, he has the risk reduction as one of his main mandates. So, we’re very much counting on that to engage him fully. But I’ve also seen in all his recent interviews when visiting the tsunami stricken areas, he has often referred to the need of education, coastal zone planning, environmental management. He has made some good references of his own knowledge, which shows that he is interested in those things.

Lessing: Joe just a minute ago was talking about what would happen to the East Coast of the United States should there be a tsunami - when and if. But, quite apart from tsunamis, we have a melting of the polar ice caps – North and South. Whichever way you look at it, the sea level is going up and so is its temperature. We’re losing ice. I’ve seen pictures on
television but are the policy makers, the people who actually make decisions taking this as seriously as I believe they ought to?

BRICEÑO: Very frankly, I do believe they could take it a bit more seriously. And I do believe there is a need for more international engagement on these things. The role of the UN that has been so criticized lately for other things… should be enhanced for these things. This is one of the few things in which the UN is the only body that can bring together the whole set of actors to decide on it.

LESSING: Because the country can’t do it by itself.

BRICEÑO: No country can work on these things alone. No one… not even the richest.

JENKINS: Unfortunately though, the UN has done something about it, it’s called the Kyoto Treaty and you say not even the richest… but the problem is…the richest isn’t involved in the Kyoto Treaty. And it produces twenty five percent of the gases that are causing global warming. The Bush administration doesn’t really seem to accept that there is such a thing as global warming. Are you having any success there?

BRICEÑO: Well, it’s not exactly like that. They do accept global warming; their discussion isn’t whether it is caused by human sources or is it just a natural process. They do accept and it is well accepted that global warming is a process. And they do work a lot on it – by the way. It’s just that it’s the source of the issue that’s being questioned by scientists.

JENKINS: Sálvano Briceño, I think we just realized what an enormous you have ahead of you. Thanks for joining us. Our guest today has been Sálvano Briceño -- Director of the Inter-Agency Secretariat of the International Strategy for Disaster Reduction. He was interviewed by Joe Lauria of the Boston Globe… and Judy Lessing of Radio New Zealand. I’m Tony Jenkins inviting you to be with us for the next edition of World Chronicle.

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