

Resilience is everyone's business

Experience and achievements of Mr. Marcelo Ebrard and his government, in the context of disaster risk reduction and Mexico City's participation in the world disaster reduction campaign titled "Making cities resilient: My city is getting ready!"

By Humberto Jaime

The goal of transforming one of the largest and most populous metropolis in the world in a green, safe and resilient space was one of the highlights during the term of Mr. Marcelo Ebrard as Head of Government of Mexico City between 2006 and 2012.

With an area of less than 1 percent of the national territory, Mexico City and its surrounding metropolitan area have more than 22 million people.

In 2010, Mexico City was acknowledged as one of the "role model cities" by the United Nations Office for Disaster Risk Reduction (UNISDR), in the context of the world campaign titled "Making Cities Resilient: My City is getting Ready!"

With more than 30 years in the public sector, a very well-known champion of the world campaign and current President of the Global Network for Safer Cities, Mr. Ebrard kindly met with us to share some of his achievements, challenges and personal vision on disaster risk reduction and on building resilience.



"Some policies are of important common interest and they have to involve everyone. It can't be just a government policy. That's true for water, for pollution reduction efforts in the city, and it's also true for resilience"

Marcelo Ebrard
President of the Global
Network for Safer Cities

-Mr. Ebrard, thank you so much for having us

-My pleasure. Welcome to our city.

- Please provide us with some context regarding Mexico City's risks. In addition to earthquakes, what other urban risks are you facing?

-The city has the seismic risk that you mention and the last major event was in 1985. We also have an active volcano, Popocatepetl I do not expect everyone to say this, but the volcano is very close to the city. In addition, we are facing the impacts of climate change because, in a nutshell, the city was built over a lake at a high altitude, and every rainy season it is difficult for us to drain the water. And rain patterns are changing: we have more rainfall in shorter periods of time and at the same time, but we are also having more prolonged droughts, which is another risk faced by the city. Another risk is that when you live in a city this big with so many potential problems, you can lose faith in yourself and in your future.

- This is a very demanding city and it must be stated that there is a close interaction between Mexico City and its surrounding metropolitan area.

-This is an experiment; the city is an experiment, not only because of the altitude aspect I already mentioned, but also because of its size. A total of 9 million people live in the city itself, but another 12 or 13 million live in the immediately surrounding urban areas. So we are talking about a little over 22 million people in the whole conglomerate, in a valley that probably doesn't cover 1 percent of the total area of the country.

-In 2010, during the World Congress on Cities and Adaptation to Climate Change, held in Germany, which also coincided with the launch of the world campaign "Making cities resilient: My city is getting ready!", you highlighted the urgent need to work together so that we could share how to reduce urban risk and save lives. How did you integrate this and how did this urgency become a reality in the daily activities of the Mexico City government?

-The first thing we did was to organize ourselves around one single overarching idea of resilience and to bring together all of the concepts of risk; because if you don't do it that way, you run the risk—and pardon the redundancy—of having disconnected, disperse actions, and dividing things up by sector, by theme.

You need to have a high level of cooperation, because, for example, in climate change, you can't reduce risks if you don't have many cities working together. That's why an international network of 300 cities was created. Every year, the cities report on what they are doing and they accept international verification. This was established in the "the Mexico City Pact" because the agreement was reached in this city.

Regarding urban risk and global experiences, we rely on the United Nations because of the way they have systematized a number of experiences and information on what has happened in other parts of the world. This can help us save lives, and that is the important thing.

We consider that these experiences are very important in the city's preparedness process, so that we don't make the same mistakes made in other parts of the world. All of this is part of one single overarching idea of how to build a resilient city and how each person participates in the process—not just the government, but also society.

- Did you start getting involved in this public agenda after the 1985 earthquake? Did it somehow influence you?

- The 1985 earthquake was a debacle that caused a huge amount of destruction in the city. I was a Unit Chief at the time, a very modest position within the Mexican Government, and we, like other youth and many others, were called to participate in the city's reconstruction program.

During the first year after the earthquake, the city experienced a huge process of housing reconstruction. A total of 40,000 houses were built and the process was being developed from different fronts. I had the opportunity to participate in the entire effort alongside many of my coworkers. So that is where I made my first contact. I was able to learn about many, many things that have to do with how you prepare for risks and what you should do when there is an emergency.

We learned a great deal from the experience of the 1985 earthquake, and I was tasked with the responsibility of organizing the first Civil Protection System to build our response capacity. Finally, once I was in the government, I could organize the city in the way I thought it needed to be organized, and things came together and I had the good fortune of having the support of the United Nations.



- Coordination and the fact that this is a cross-cutting issue have been highlighted. What government areas worked with a higher level of coordination to achieve these goals and in terms of the world campaign?

-We had six work teams with different responsible agencies. The first team was from the Finance and the Chief Clerk's Office, which has to do with all government resources (not only material but also human resources). Then there was the School of Public Administration which, along with the Civil Protection System, was responsible for training all public servants in many different areas. The goal was to have approximately 1,500 brigades of public servants in the city, prepared to be in less than one hour in any part of the city where there might be a problem.

Then there was the area of public security, which included a number of communications and transportation systems. This area had 35,000 officers, a fleet of eight helicopters, and medical rescue and emergency squads.

There were other areas grouped with the Secretariat of Public Security, such as firefighters, people in charge of communications and radio systems, etc. Another key area was the Secretariat of Health, which brought together all bodies that have immediate social responsibilities, such as all city hospitals and schools, and the local Secretariat of Education. Their tasks were related to establishing shelters in case of an emergency, as well as contributing to all aspects of integrated development.

As you can see, there are different responsibilities on the part of the government. We could say the bodies that worked most closely with the international areas were the School of Public Administration and the Secretariat for Civil Protection. They are the ones that have to train public servants and gain experience for the future.

-In 2006, when you were part of the city government during a third term of your party, in the lead by 20 percent, how did you integrate issues related to disaster risk reduction and resilience building?

-Within the body responsible for coordinating what we call civil protection, we created a secretariat. It is closely linked to what the international community has been developing regarding the concept of resilience. This was our starting point.

First, you need to have a coordinating body both with the capacity and the authority needed to avoid that it becomes an unimportant issue, especially because the tendency in complex city governments is to get absorbed in what is urgent, what matters right now.

You don't have enough time to think about what is going to happen in 2, 3, 4, 5 10 or 20 years. In fact, in my experience in the city government, I have seen how some issues related to, for instance, resilience, can easily be put in the back burner.

Then you must organize a government-level team because resilience is a cross-cutting issue. As such, it's not the task of a given government area but of the entire government, of all the entities that belong to the executive branch, in this case the mayor's office or the government of the federal district.

I must add that, in the case of Mexico, the city has the legal authority needed to do so. There are other cities in the world that do not have it because they follow other models.

Regarding the model of Mexico city, law enforcement, police forces, criminal investigation, the transport system –the metro— and all aspects related to an emergency fall under the Head of Government.

The city might have many different responsibilities in comparison to other cities in the world. To understand these responsibilities, we must know that the government of the Federal District has the legal power needed to organize all aspects related to emergency preparedness and prevention.

-This is a relevant issue and it needs continuity. How to ensure that actions will have continuity, regardless of a change of government or a change of party within the government?

- Fortunately, we don't have that problem here. First, the person who won the elections was part of the civil protection cabinet, which means that he has knowledge about the background.

Second, there hasn't been an abrupt change from one administration to the next because it's the same political party in office and you could say it's practically the same team. Of course there have been changes, but these have not been too drastic.

Public policy has not changed either. Sometimes, the worst thing is that people, budgets, and public policy all change. I don't see that on the horizon. In fact, I feel confident that we have continuity in the plans or, rather, the public policy that was designed for this objective. If there is no continuity, a large part of the efforts get lost.

Some policies are of important common interest and they have to involve everyone. It can't be just a government policy. That's true for water, for pollution reduction efforts in the city, and it's also true for resilience.

-Legislation for disaster risk reduction could provide support to this issue. In fact, the Latin American Parliament called for the creation of specific commissions, so that they could legislate on disaster risk reduction-related issues. You also have experience as a legislator. Have there been contributions or some progress in this regard?

-Legislation involves a number of sectors that make it possible for cities to increase their level of safety and build their resilience capacity. An example is existing construction standards. For instance, the Institute for Structural Safety was created with the purpose of ensuring that those responsible for building different types of buildings, both companies and their consultants, follow all structural calculation standards in case of earthquakes. This is one of the laws we currently have.

There are other rules that regulate what we do with rainwater in the city. We already know that huge construction projects are underway. For instance, a tunnel is being built to increase by 40 percent the city's drainage capacity, but there are also new laws and rules that force you to recover the city's rainwater.

Regarding the climate change act, the city was the first one, or at least one of the first ones to pass such a law. It lays out the rules of the game in order to reduce greenhouse gas emissions, and naturally, we also have a set of rules for civil protection. This includes the creation of its secretariat and a local civil protection law, which establishes most of its principles. In sum, there are significant efforts regarding legislation.

- We have talked about how to integrate the government team. How did you integrate other actors or decision-makers, such as the private sector?

- We created a citizen participation law where every *colonia*—that is every neighborhood— elects its own neighborhood representatives. They are elected, but they are volunteers. They make decisions every year about the budget for their neighborhood, and one of the things this network of citizen participation has worked on is the whole civil protection issue.

Another way of doing this was through our work with the chambers of commerce. In Mexico City, we have a social and economic council. There are also unions, businessmen, academia, all the government agencies, and the legislative and judicial branches. The council has taken on the important task that you mentioned.

We met with almost all the committees, and one of the topics of greatest importance to them, and to us, was the issue of how to prepare for a disaster. That was another way of integrating other stakeholders.

- Could we highlight the importance of creating or strengthening a citizen culture?

-Our natural tendency is to say “I don’t want you to worry me! I don’t like issues that are difficult to address. I know it is an earthquake-prone area but don’t remind me”. To break this inertia we address each activity area and make recommendations that are even playful or fun, intended for many community sectors, particularly children and youth. We have done well.

To answer your question, have we made some progress in raising awareness?... Yes. Are we done?... No, but we are on the right track. I think that we are better prepared today than we were a few years ago.

-We have talked about the progress made, what about existing hindrances?

- I would say that the main hindrance is that we have to compete with the issue of the current economic crisis, which monopolizes the attention of leaders and society at large. Hence, issues like the ones we are covering here are set aside. This could be a risk or even the greatest risk.

To a large extent, resistance to issues related to climate change and disaster preparedness stem from the economic crisis that started in 2008. All priorities were related to financial issues and, of course, the consequences of this crisis, such as employment, etc.

The challenge –or the problem- was how to promote topics such as climate change or disaster preparedness within an economic crisis scenario in Europe, the United States, China and the rest of Asia.

What was the solution we found? We worked a lot with our cities because that’s where the problems we are talking about happen on a daily basis. You have to face them, and I think this is clear to mayors and heads of government, despite the fact that we are facing an economic crisis.

-We examined some of the resilience building actions and Mexico City’s participation in the world campaign fostered by the UNISDR. What else needs to be done?

-Well, there are always things to do. What we lack most is time because it is almost impossible to finish everything you need to do, but one of the things that needs to be done during this and the years to come is for the city to present on what we have learned from this campaign so that our experience is replicable. We must consider what other cities have learned during this period as well, since this could also be replicable. This could be our next step.

We must also provide support so that this issue is included as a line item in national budgets. There should be funds available for cities to implement projects, for supporting and sponsoring cities with this type of programs. These actions should be taken worldwide.

-In November 2010 you were acknowledged as a champion of the world campaign “Making cities resilient: My city is getting ready!” because of your leadership and for advancing local actions to promote more resilient nations.

In your opinion, which was your main achievement or contribution to the campaign?

-We received a great deal of support from the United Nations so that we could develop what I call a “wider program” aimed at training a cadre of officials that work for the city government, so that they could respond to an emergency or a disaster. This is also related to the lessons learned in many disasters, which might be translated into saving more lives. We paid close attention to this topic.

We invited many other cities to participate so that they could realize that this is a central issue. There are cities that are not necessarily thinking about medium-term risks or that have not put in place this type of programs.

We held a dialogue with many cities around the same issue: climate change or risk reduction. That way we could share important experiences. I think that this was our major achievement between 2010 and 2012.



-All these measures have involved investments and budget availability, and not all of them are of the same size. Similarly, the campaign is designed in such a way that can be used in municipalities of different sizes and levels of income.

Do you have any recommendation in terms of the budget percentage or proportion that should be allocated to disaster risk reduction?

-I think it would be difficult to establish a fixed percentage or make a recommendation as we usually do, for instance, with the education sector —some 3 percent of the gross domestic product should be allocated to education—. It would be very difficult to calculate this proportion because each city has different levels and types of risks.

Regarding the risks faced by Mexico City, we must increase our draining capacity and that will cost \$11 billion. But not all cities have a similar risk or they are smaller, and instead of flooding they face other types of risks. This is why it is difficult to calculate a percentage for all budgets.

I must say the following though: In my opinion, a percentage that you can establish is that at least 60 percent of your response and resilience capacity will depend on the level of social participation and organization, and these two aspects do not cost much.

The remaining 40 percent represents your investment, but again, that 60 percent is how well your society is organized and how well organized you are to prevent an emergency and take action when one arises, as well as to organize and carry out reconstruction efforts after an emergency, if that's the case.

So the question would be how organized are you and the government, and how organized and prepared is your society. This, in my opinion, represents at least the 60 percent.

-Among the Ten Essentials of the campaign “Making cities resilient,” what is the one(s) that your government could advance most?

-I would say the one related to organization, the entire organization of the government and the whole system, and this may be seen through the progress made, especially in terms of people's participation.

The number of people that currently participate in the city, one way or another, in this type of activities increased exponentially.

The level of organization and training of public servants also increased quickly.

Regarding the Ten Essentials that you mention, these would be the two most important outcomes in Mexico City.



-Mr. Marcelo Ebrard, President of the Global Network for Safer Cities and former champion of the UNISDR world campaign “Making cities resilient: My city is getting ready!”, thank you so much for sharing your experience and for having us in a space that is a testament to a green city like yours.

-Thank you for being here. We are very excited about this type of initiatives and the fact that there is an increasing number of cities and countries worldwide that are listening and taking action.

A few hours after this interview, the Mexican National Seismological Service (SSN) reported an earthquake in Mexico City measuring 5.3 on the Richter Scale. The quake shook the capital city, activating its government response system.

“No damages in the preliminary monitoring report with C4 cameras, and no reports of emergencies except for the falling of one billboard,” tweeted the Federal District Head of Government, Miguel Angel Mancera.

In 2012, some [66 earthquakes](#) between 5 and 6.9 points of magnitude were recorded in Mexico which, according to the SSN, places this one in the median range in terms of intensity and frequency. For those of us who were still editing this article, however, it was a particularly interesting end to this memorable conversation.

ANNEX: KEY MESSAGES

The city is an experiment

Mexico City is an experiment not only because of its altitude but also because of its size. A total of 9 million people live in the city itself, but another 12 or 13 million live in the immediately surrounding urban areas. So we are talking about a little over 22 million people in the whole conglomerate, in a valley that probably doesn't even cover 1 percent of the total area of the country.

It's an earthquake-prone area, it's close to an active volcano, and we are also facing the impact of climate change. The city was built over a lake at a very high altitude; every rainy season, we have problems getting the water to drain. And rain patterns are changing: we have more rainfall in shorter periods of time now, and we are also having more prolonged droughts.

The other risk is that when you live in a city this big, with so many potential problems, you can lose faith in yourself and in your future.

The great earthquake of 1985

The earthquake of 1985 was a debacle that caused a huge amount of destruction in the city. I was a Unit Chief at the time and we, like other youth and many others, were called to participate in the city's reconstruction program. I participated in the entire effort alongside many of my coworkers. So that is where I made my first contact. I was able to learn about many, many things that have to do with how you prepare for risks and what you should do when there is an emergency.

We learned a great deal from the experience of the 1985 earthquake, and I was tasked with the responsibility of organizing the first Civil Protection System to build our response capacity.

An overarching idea of resilience

Once I was in the government, I could organize the city in the way I thought it needed to be organized, and things came together. I had the good fortune of having the support of the United Nations.

The first thing I did was to organize ourselves around one single overarching idea of resilience and to bring together all of the concepts of risk; because if you don't do it that way, you run the risk—and pardon the redundancy—of having disconnected, disperse actions, and dividing things up by sector, by issue.

You need to have a high level of cooperation, because, for example, in climate change, you can't reduce risks if you don't have many cities working together. That's why an international network of 300 cities was created. Every year, the cities report on what they are doing and they accept international verification.

All this is part of one single overarching idea of how to build a resilient city, and how each person participates in the process—not just the government, but also society.

When it comes to urban risk and international experiences, we rely on the United Nations because they have systematized a number of experiences and information on what has happened in other parts of the world. This can help us save lives... And that's the important thing!

In order to be well prepared, the city needs to have at least 1,500 brigades

We could say that the bodies that worked most closely with the international areas were the School of Public Administration and the Secretariat for Civil Protection. They are the ones that have to train public servants and gain experience for the future.

The School of Public Administration created a program for about 10,000 public officials. Why 10,000, you might ask? Because to be well prepared, the city needs to have at least 1,500 brigades.

We received a great deal of support from the United Nations to prepare what I would call the largest training program ever for city government leaders to deal with emergencies and disasters. It incorporated the lessons learned from many disasters and since that means saving lives, we put a lot of energy into the topic.

Resilience is a cross-cutting issue. It is a task that involves the entire government, all the agencies

A cabinet was organized along with the secretariat responsible for coordinating what we call the civil protection system. It is very closely linked to what the international community has been developing regarding the concept of resilience.

We had six work teams with different responsible agencies: The first team was from **the Finance and the Chief Clerk's Office** —which has to do with all government's resources; the **School of Public Administration**, which together with the **Civil Protection System** was responsible for training all public servants; the **Public Security** area which includes 35,000 officers; and the **communications and transportation system**; as well as the whole system of **emergency and rescue squads**.

Another key area was the **Secretary of Health**, which brought together all of bodies that have immediate social responsibilities; the local **Secretary of Education** and all aspects related to integrated development.

If there is no continuity, a large part of the efforts get lost.

Fortunately, we don't have that problem here. First, the person who won the elections was part of the civil protection cabinet. Second, there hasn't been an abrupt change from one administration to the next because it's the same political party in office and we could say it's practically the same team.

Public policy has not changed either. Sometimes, the worst thing is that people, budgets, and public policy all change. I don't see that on the horizon. In fact, I feel confident that we have continuity in the plans or, rather, the public policy that was designed for this objective.

The tendency in complex city governments is to get absorbed in what is urgent. What is urgent is what is on your plate today, and other relatively long-term topics like resilience, for example, can easily be put in the back burner.

You need to have a coordinating body that has the capacity and the authority to make sure the resilience does not get marginalized.

Resilience is a Common-Interest Policy

We drafted a citizen participation law where every *colonia*—that is every neighborhood—elects its own neighborhood representatives. They are elected, but they are volunteers. They make decisions every year about the budget for their neighborhood, and one of the things this network of citizen participation has worked on is the whole civil protection issue.

Another way of doing this was through our work with the chambers of commerce. In Mexico City, we have a social and economic council. There are also unions, businessmen, academia, all the government agencies, and the legislative and judicial branches.

We met with almost all the committees, and one of the topics of greatest importance to them, and to us, was the issue of how to prepare for a disaster. That was another way of integrating other stakeholders.

Some policies are of important common interest and they have to involve everyone. It can't be just a government policy.

That's true for water, for pollution reduction efforts in the city... and it's also true for resilience.

Have we made progress in raising awareness?... Yes. Are we done?... No, but we are on the right track. I think that we are better prepared today than we were a few years ago

Our natural tendency is to say “I don't want you to worry me! I don't like issues that are difficult to address. I know it is an earthquake-prone area but don't remind me”. To break this inertia we address each activity area and make recommendations that are even playful or fun, intended for many community sectors, particularly children and youth. We have done well.

And you always need more time. It is almost impossible to finish everything you need to, but one of the things that needs to be done during this and the years to come is for the city to present on what we have learned from this campaign so that our experience is replicable. We must also consider what other cities have learned during this period and that could also be replicable. This could be the next step.

We must also provide support so that this issue is included as a line item in national budgets. There should be funds available for cities to implement projects, for supporting and sponsoring cities with this type of programs. These actions should be taken worldwide.

Legislation for a safer, more resilient city

For instance, the Institute for Structural Safety was created with the purpose of ensuring that those responsible for building different types of buildings, both companies and their consultants, follow all structural calculation standards in case of an earthquake.

And naturally, we also have a set of rules for civil protection. This includes the creation of its secretariat and a local civil protection law, which establishes most of its principles.

Regarding the climate change act, the city was the first one, or at least one of the first ones that passed such a law. It lays out the rules of the game, in order to reduce greenhouse gas emissions.

Competing with the issue of the current economic crisis

I would say that this is the main hindrance, because it monopolizes the attention of leaders and society at large. Hence, issues like climate change or disaster preparedness are set aside. This could be a risk or even the greatest risk.

In 2008, all priorities were related to financial issues and, of course, the consequences of this crisis, such as employment, etc. The challenge was how to promote these topics within an economic crisis scenario in Europe, the United States, China and the rest of Asia. What was the solution we found? Work a lot with our cities.

How much to allocate to disaster risk reduction

It would be difficult to establish a fixed percentage or make a recommendation as we usually do, for instance, with the education sector —some 3 percent of the gross domestic product should be allocated to education—. It would be very difficult to calculate this proportion because each city has different levels and types of risks.

In my opinion, a percentage that you can establish is that at least 60 percent of your response and resilience capacity will depend on the level of social participation and organization, and these two aspects do not cost much.

The remaining 40 percent represents your investment, but again, that 60 percent is how well your society is organized and how well organized you are to prevent an emergency and take action when one arises, as well as to organize and carry out reconstruction efforts after an emergency, if that's the case.

In our cities, these problems are very common and you must address them. This is clear to mayors and heads of government, despite the fact that we are facing an economic crisis.

Citizen organization and participation was one of the major outcomes.

The number of people that currently participate in the city, one way or another, in this type of activities increased exponentially.

The level of organization and training of public servants also increased quickly.