During the course of my presidency, I made climate change a top priority, because I believe that, for all the challenges that we face, this is the one that will define the contours of this century more dramatically perhaps than the others. No nation, whether it’s large or small, rich or poor, will be immune from the impacts of climate change. We are already experiencing it in America, where some cities are seeing floods on sunny days, where wildfire seasons are longer and more dangerous, where in our arctic state, Alaska, we’re seeing rapidly eroding shorelines, and glaciers receding at a pace unseen in modern times.

Over my eight years in office, we dramatically increased our generation of clean energy, we acted to curtail our use of dirty energy, and we invested in energy efficiency across the board. At the 2015 climate change summit in Paris, we helped lead the world to the first significant global agreement for a low-carbon future.

But here’s the thing: even if every country somehow puts the brakes on emissions, climate change would still have an impact on our world for years to come. Our changing climate is already making it more difficult to produce food, and we’ve already seen shrinking yields and spiking food prices that, in some cases, are leading to political instability. And when most of the world’s poor work in agriculture, the stark imbalances that we’ve worked so hard to close between de-
veloped and developing countries will be even tougher to close. The cost will be borne by people in poor nations that are least equipped to handle it. In fact, some of the refugee flows into Europe originate not only from conflict, but also from places where there are food shortages, which will get far worse as climate change continues. So if we don’t take the action necessary to slow and ultimately stop these trends, the migration that has put such a burden on Europe already will just continue to get worse.

Now, the good news is that there are steps we can take that will make a difference: in the United States, we have been able to bring our emissions down even as we grow our economy. The same is true in many parts of Europe. Take food production, for instance. It’s the second leading driver of greenhouse gas emissions, second only to energy production. But we have already identified ways in which we can address this challenge. The path to a sustainable food future will require unleashing the creative power of our best scientists, and engineers and entrepreneurs, backed by public and private investment, to deploy new innovations in climate-smart agriculture. Better seeds, better storage, crops that grow with less water, crops that grow in harsher climates, mobile technologies that put more agricultural data – including satellite imagery and weather forecasting and market prices – into the hands of farmers, so that they know when to plant and where to plant, what to plant and how it will sell.

All these things can help to make sure that food security exists in poor countries, but it can also help us ensure that, in producing the food that we need to feed the billions of people on this planet, we’re not destroying the planet in the process.

A part of this is also going to be wasting less food. We have to create a food culture that encourages a demand for healthier, more sustainable food. In fact, making sure people have healthy food to eat alleviates a lot of the medical cost that we’re seeing increasing in the advanced world, and if we’re able to reduce our healthcare costs, that in turn will allow us to divert those resources into further relieving poverty in many parts of the world. When families get the nourishment they need, we see education outcomes rise, we see healthcare costs fall, and we see economic activity improve; and when, in the United States, the number one disqualifier for military service is obesity, we might even be able to strengthen our security as well.

So the good news is that we’re starting to see a better way to feed a growing planet, combat hunger and malnutrition, put healthy food on the table and save our environment. And none of this is impossible. We can look at the successes we’ve already made: in just the past decade, the number of undernourished people in the world is down by more than 160 million.

I do not believe that any part of the world has to be condemned to perpetual poverty and hunger. And I do not believe that this planet is condemned to ever-rising temperatures. I believe these are problems that were caused by man, and they can be solved by man.

I’m fond of quoting the words of Dr Martin Luther King Jr, who believed that there is such a thing as being too late. When it comes to climate change, the hour is almost upon us. If we act boldly and swiftly, if we set aside our political interests in favour of the air that our young people will breathe, and the food they will eat, and the water they will drink; if we think about them and their hopes and dreams, then we will act, and it won’t be too late. And we can leave behind a world that is worthy of our children, where there’s reduced conflict and greater cooperation – a world marked not by human suffering, but by human progress.

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Food has not been the focus of climate change discussions as much as it should have been. Part of the problem is that we haven’t publicised the impact of food production on greenhouse gas emissions. People naturally understand that big smokestacks have pollution in them – they understand air pollution, so they can easily make the connection between energy production and greenhouse gases. Most people aren’t as familiar with the impact of cows and methane. So part of the problem that we need to address is just lack of knowledge in the general public. Keep in mind how long it took to educate people around climate change, and we still have a lot of work to do.

Part of it is that food is a very emotional issue. Because food is so close to us, and it’s part of our families, and it’s part of what we do every single day, people are more resistant to the idea of government or bureaucrats telling us how to eat, what to eat, how to grow it. The truth is that agriculture communities in every country are very strong, politically. Historically, in the United States, the one area where Democrats and Republicans agree is on the agriculture committee, be-
cause they usually come from agricultural states, and they are very good at joining across party lines to protect the interest of food producers.

If you combine all those things with the fact that the system is so uneven – there are countries that just need more food, and there are countries where there is a glut of food – it makes for a difficult political dynamic in which to shape rational policy. Now, having said that, this is an area where we are starting to see some progress. In the United States, one of the things that we tried to do is to work with farmers to think about how they could produce the same amounts of food more efficiently, with fewer greenhouse gas emissions. And what I’ve always said is that if you want to make progress in this area, you have to take into account the interests of the producers themselves. Farmers work hard, and especially with small farms, or family farms, they feel that they are always just a step away from losing everything.

Obviously, a large portion of agriculture is dominated by agribusiness, but to the extent that you can show small- and medium-sized farmers ways to do things better that will save them money – or at least doesn’t cost them money – they’re happy to adopt some of these new processes. But if what they see is that you are putting the environmental issues as a priority over their economic interest, then they’ll resist.

That’s true in advanced countries, and it’s also true in poor countries. My father is from Kenya. The first time I visited, I was speaking to some conservationists who were very upset because some of the game parks were being encroached upon by farmers – either the Maasai with their cattle, or subsistence farmers who were slashing and cutting down the ecosystem. And my sister – who’s from Kenya and has a less romantic view about animals and game parks – said: “Well, if all the money from the game parks is going to the tour agencies in Nairobi and not going to the farmers next door, then of course they are not going to care. But if they see some economic interest in helping to conserve this land, they’ll participate.” And that, in fact, has been the case. Where you’ve seen success in conservation, it’s because you’ve brought in the local farmers and you’ve taught them how this is better for them. So that has to be a top priority. If we’re going to be successful, we have to engage producers.

We also have to engage consumers. My good friend Sam Kass cooked for us at the White House, and helped to shape America’s nutrition policy. He worked with my wife to promote healthy eating, and most of the impact he had was not legislation, it was raising awareness with parents about what unhealthy eating was doing to their children, and showing how millions of young children could eat healthier meals. The key is giving people good information. We can make progress in educating the advanced world about the need to reduce, just for dietary reasons, the amount of meat that people consume at any given meal, particularly if it’s wasted. When you have fresh food, you are less likely to waste it, because it doesn’t last as long – you buy it on the day that you are going to eat it and you use it. We’re seeing businesses in the United States trying to come up with efficient, smart ways in which people can have the convenience of fast food, but with the food being healthier, and as a consequence, less is wasted.

If people feel as if they don’t have control over their lives, or that their children don’t have a good future, then they will resist efforts to deal with climate change because right now they’re concerned about feeding their child. It’s a luxury to worry about climate change; you have to have enough to eat before you start worrying about what’s going to happen to the planet 30 years from now. If we do not pay attention to increasing inequality – and the fact that technology and globalisation are accelerating – there will be a backlash.

Technology is making many sectors of the economy far more capital-intensive and far less labour-intensive. We saw it in manufacturing, but it is now moving through large portions of the service and managerial sectors as well. This is going to be a major problem in the advanced world, and over the long term, in the developing world as well. It’s one of the things I worry about most, because work does not just provide income – it also provides people with a sense of dignity and status in their society. I am certain that in many countries in the Middle East, for example, or in south Asia, part of the problem that leads to radicalisation and conflict is having large numbers of unemployed young men who don’t have anything to do – that lack of meaning and purpose will channel itself in unhealthy ways.

The best example of the kinds of issues that we’re going to face comes from driverless cars. Driverless cars are coming. The technologies are here and eventually the regulatory barriers are going to break down. The truth is that we can create a system of driverless cars that are safer, more fuel efficient, and more convenient. But in the United States alone, there are 3 or 4 million people who make good livings just driving. And where are they going to work, if suddenly trucking and buses no longer need drivers? We have to anticipate those things now.

My guess is that, ultimately, what is going to happen is that everybody is going to have to work a little bit less, and we’re going to have to spread work around more. But that’s going to require a reorganisation of the social compact. That
requires that we change our mindset about the link between work, income and the value of people in the teaching profession, or healthcare, or certain things that cannot be done by AI or a robot. And one of my goals as president – one of the goals of every leader of every country right now – was thinking about that time 20 years from now, or 30 years from now, when technology will have eliminated entire sectors of the economy.

How do we prepare for that? How do we start creating, or at least having a conversation in our society about making sure that work and opportunities are spread, and that everybody has the chance to live a good and fulfilling life, rather than having a few people who are working 80 or 90 hours a week, and making enormous incomes, and then a large portion of redundant workers that increasingly have a difficult time supporting families. That’s not a sustainable mechanism for democracy and a healthy society.

The people who know me best would say

I have not changed much since I became president. And I’m happy about that. One of the dangers of being in the public eye, being in the spotlight, being in positions of power, is how it will change your soul. There is an expression: you start “believing your own hype” – you start believing that you deserve all the attention. I actually found that I became more humble the longer I was in office. But I also think that I became less fearful. When you are young, you feel like you have something to prove, and sometimes you worry about making mistakes. Once you’ve been president of the United States, then a) you’ve made a mistake every day; b) everybody has seen you fail, and large portions of the country think you’re an idiot – but it’s a liberating feeling when you realise, “OK, I’m still here, I still wake up every day, and I still have the opportunity to do some good”, so that as time went on, I got rid of some of the anxieties that come with youth.

When I was president, wherever I’d go, I would always meet with young people. And it would always give me energy and inspiration to see how much talent and sophistication and optimism and idealism existed among young people in the United States, all across Europe, all across Asia, Africa and the Middle East. The problem is that so often, young people’s voices aren’t heard, and when they want to get involved in issues, they don’t know how, and they don’t have the tools.

So I and others have been talking about how we can create an effective network of global activists – some of whom are in politics, some of whom are in business, some of whom are in journalism or working for NGOs – and provide them with the tools, the training, the networks, the relationships, the funding, so that they can be even more effective. That’s probably what I’m going to be spending most of the next 10 years on. I have a lot of grey hair now. People always ask me, “Oh, Mr President, you know, we need you, we want you to get involved”, and I’m happy to get involved, but the greatest thing I think I can give is to make sure that somebody who is 20 years old, or 21, or 25 – who is ready to make their mark on the world – I can help them, so that they can take it to the next level.

When I was young, I gave my mother a lot of headaches. I wasn’t always the best student, and I wasn’t always the most responsible young person. It wasn’t until I got to college that I began to think about many of the broader issues that the world was facing, but the moment for me in which I started to understand leadership was when I moved to Chicago. I had been inspired by the civil rights movement, and I wanted to be involved in some way in bringing about change. I got a job working with low-income communities, and what I learned was that the mark of a good leader is somebody who is able to empower other people. So often we think of leadership as somebody at the top who is ordering other people around. But it turns out that – for me, at least – what made me understand leadership was when I could see somebody who thought they didn’t have a voice, or that they didn’t have influence or power, and teach them how they could speak up about the things that were affecting their lives.

When we think about issues like food security or climate change, ultimately politicians can help guide policy. But the energy to bring about change is going to come from what people do every day. It’s going to come from parents who are concerned about the kind of impact climate change may have on their children, or from enlightened business people who say: “How can we use less energy in producing the products that we are making?” It’s millions of decisions that are being made individually that end up having as much impact as anything, and that’s certainly true in our democracies.

People have a tendency to blame politicians when things don’t work. But, as I always tell people, you get the politicians you deserve. And if you don’t vote and you don’t participate and you don’t pay attention, then you’ll get policies that don’t reflect your interests.

We have an expression in the United States:

“The squeaky wheel gets the oil.” It’s certainly true that politicians and governments respond to people making noise and making demands, and sometimes, if certain groups have not been heard before, they have to get the attention of those in power.
But the biggest mistake sometimes made by activists – when I was an activist, sometimes I made this mistake – is forgetting that once you’ve got the attention of the people in power, then you have to engage them. So you have to do your homework and you have to have facts, and you have to be willing to compromise and not expect that you’re going to get 100% of what you want, because – at least if you’re in a democracy – your demands may clash with the demands of someone else. It’s very important to be willing to put pressure on government but it’s also important to propose concrete solutions, to take what you can get and then try to make more progress after that.

The second thing that is increasingly important is how to shape public opinion. It is very important for people who are interested in issues like climate change or inequality, or whatever it is that you care about, to find effective ways to speak to the public and to change public opinion. Abraham Lincoln used to say: “With public opinion there’s nothing I cannot do, and without public opinion there’s nothing I can get done.” And I’ve learned that first-hand myself.

We need to find ways to speak to young people who are getting all their information off a phone, and will not sit down and read a 50-page report. You may have two minutes to get your message across, or five minutes, and they may be more interested in a video than they are in reading a text. You’ll need to create a strong, truthful, powerful message that leads them to action – that’s something I’m going to be spending a lot of time thinking about.

Young people are more conscious today, they are more innovative, they are more entrepreneurial. Because they are more sceptical of government and politics, it seems as if a lot of people think: “That’s a dirty business, I don’t want to go into it, who wants to be criticised and attacked all the time?” So you’re seeing a lot of people who want to change the world thinking that maybe the best way to do it is by going into business or non-profit organisations.

If I were an entrepreneur today, trying to make money and sell my products or services, I would want to understand this youth market. They want to do the right thing, too. If they find out that what you’re selling isn’t good for the environment, or what you’re selling is not good for people, or if they hear that you do not treat your workers well, and do not pay them a decent wage, and don’t provide decent benefits, that can affect your brand. And so part of what has changed is the nature of the entrepreneurs themselves, who may be more socially conscious, coming into their business. Even if you don’t care about these issues, your customers care. And you’ve got to be paying attention to that.

You get the politicians you deserve. And if you don’t vote and you don’t participate, then you’ll get policies that don’t reflect your interests.

Adapted from a talk given by Barack Obama at the Seeds & Chips Global Food Innovation Summit. Seeds & Chips is one of the world’s foremost food innovation events, a showcase for cutting-edge solutions and outstanding talent. Details: seedsandchips.com