

FAREED YASSEEN

Secretary General of the Iraq Pugwash Association, former Ambassador of the Republic of Iraq to the United States

I am happy to be here, and I am thankful for the invitation. A couple of years ago, I was asked to give a talk coinciding with the end of my tenure as Ambassador to the US on the outlook for Iraq and for Iraqi American relationships. I chose to talk about three topics that I think are obvious and concerning, and that are not addressed enough: demography, climate change and water scarcity. Now, having gone back to Baghdad and served as climate envoy, I still think these vitally important issues are not given the attention they should be given.

In terms of demography, Iraq had a population of 8 million during the 1960s when I was growing up. We just recently conducted a census, and we are now 45 million, and growing, not counting the Iraqi diaspora, and our birth rates are high, not only because of historic decreases in infant mortality, but also because of the government policies. Moreover, this population has changed: it used to be mostly rural but is now essentially urban because that is where government jobs, funded by Iraq's oil revenues, are located. Imagine the implications in terms of agricultural productivity.

Here's another set of numbers covering the same time span: the number of date palms we have in Iraq. When I was growing up the common wisdom was that we had 30-40 million date palms, so it theoretically made every Iraqi the proud proprietor of four or five date palms. Mostly because of the wars but also because of the other topic I want to talk about, water scarcity, we were down to 8 million at one point. The situation is a bit better now, but these numbers are very telling.

There are reasons for water scarcity, mainly three reasons: upstream dams, climate change, and inefficient water management. These need to be addressed, but in all cases, and even under the best-case scenarios, we have to revise the way in which we do agriculture. Iraq is where agriculture was invented but if we want to pursue it in the future, we have to reinvent it, as we can no longer use traditional methods (e.g., flood irrigation). Water scarcity is also partially responsible for the increasing levels of desertification seen in Iraq: we are losing around 250 square kilometers of land to desertification every year.

The other factor that plays in this is, of course, climate change. It is a reality in Iraq, it is a reality here in the UAE and as you may know, people have begun adapting to it. I need not remind you of what sadly happened at this year's pilgrimage with 1,300 victims of the heat. And climate change will remain a serious concern for this region even if the world achieves what it plans or hopes to achieve under the Paris Accord (capping the increase in temperature at about 1.5 degrees). Note that 1.5 is a global average; in our part of the world, the increase will be a multiple of that.

Heat waves like those we have seen in Baghdad or this part of the world, with several days in succession of temperatures exceeding 50 degrees centigrade, are going to be the norm and not the exception. That is all the more important in cities like Abu Dhabi and Dubai, and other cities on the periphery of the Gulf, because of the implications on the wet-bulb temperature. (This measure in a way is the heat equivalent of the windchill factor that all skiers are familiar with.) When wet-bulb temperatures reach 35 degrees, you cannot stay outside for more than six hours; you would die because you would be unable to regulate your inner body temperature. We are heading towards that, and people have begun paying attention. For example, oil companies use the term “purple flag days” to identify days during which their staff are prevented from going outside because their safety cannot be guaranteed. On such days, these companies raise a purple flag, for all their employees to see. Similarly, NATO in Iraq has developed the concept of “black flag days” when no soldiers will be sent out on mission, not only because of the heat risk to their lives but also because helicopters will not fly as readily when the temperatures are that high. Add to that, the fact that we might even get a rise in sea level on a time scale that could impact the design and location of key infrastructure. For example, a large hospital in Basra, which is supposed to last several decades, can no longer be built at or close to sea level, but on safer ground, at a higher elevation. These are things that we really have to take into account now.

That’s not all. Iraq is not only a country negatively affected by climate change. As an oil producing country, it will also be negatively affected by the measures taken to address climate change. There is, by the way, a very explicit mention of this situation in the UN Framework Convention on Climate Change in Article 4.8, which asks parties to the Convention to take into account these circumstances. So, we already have to prepare for the changing natural environment (climate change), but we all have to prepare for the changing economic environment (measures against greenhouse gases, decarbonization).

What is the solution, what can we do?

We must adapt and I think part of the solution is a return to our roots, for example to our traditional, vernacular architecture. The houses built by our grandparents were cooler and much more appropriate to this warm weather than our more modern buildings. We will have to revive our countryside and, as I said, reinvent agriculture, developing appropriate farming entities and using arrangements, systems, and structures that will allow the development an agriculture that can function in arid environments. Other speakers can tell you more about that, but the technologies to practice agriculture in arid environments are very well-developed and there are being relied upon entirely, in places like Australia, certain states in the United States and even Spain, our host country [the UAE] and Saudi Arabia. We have to look at the development of our economy beyond industrialization and revive our agriculture in ways that will allow us to adapt and become resilient.

And it will be better and easier if we do it together. At the UN General Assembly last year, Iraq’s Prime Minister launched an appeal ahead of COP 28 to the countries of the GCC and Iran to set up a negotiating group to look at how we can best defend our interests as a group and get the resources to adapt. I think that is the way forward, we have to do what we need to do on our own, but we also need to work together hand in hand.

**Adil Alzarooni, CEO of Al Zarooni Emirates Investments and Al Bidayer Holding,
Founder of Citizens School**

Thank you very much. Thanks for mentioning trying to control birth rates, here in the UAE we actually created a new ministry last week called the Ministry of Family and the purpose behind it is to increase our birth rate and bring the number back. I have looked through some numbers and 10% of the human population today is over 65 years old and that figure is expected to reach 25% by 2080, so 55 years from now.

Fareed Yasseen

Our problem is completely the opposite.

Adil Alzarooni

Yes. It had already started back in the sixties, but we are going to face a fall in global population. I think the bigger question is where the young are going to move to rather than how many more mouths there will be to feed. That would be a very interesting discussion to have. Thank you very much for bringing that in.