

Dr. Farouk El-Baz

## A Development Corridor for Egypt and Beyond

*This is the edited transcript of the presentation of Farouk El-Baz to Panel 2, “Physical Economy: Developing the Noösphere,” of the Schiller Institute’s Nov. 12, 2022, Conference, “The Physical Economy of the Noösphere: Reviving the Heritage of Vladimir Vernadsky.” Dr. El-Baz is a Research Professor and Director of the Center for Remote Sensing, Boston University; Adjunct Professor of Geology at the Faculty of Science, Ain Shams University, Cairo, Egypt; formerly a leading geologist in the NASA Moon program; and Senior Advisor to the former Egyptian President, Hosni Mubarak.*

*The video of Dr. El-Baz’s presentation is available [here](#). The full conference is [available](#) on the Schiller Institute website.*

Thank you very much. I would like first to thank both Rachel Brown and David Dobrodt for all their help, which made everything very easy for me. I am delighted to address you today, because of the importance of talking about science as it applies to human beings, as it applies to the people who live at that time.

I began to look at the western deserts in Egypt at the request of President Anwar Sadat. He called me in and said that the population of Egypt is surrounding the Nile Valley, and we are going to live on top of each other. Sadat said that he would like to think about Egypt putting 2 million people in the Sinai, and 3 million in the eastern desert, and 4 or 5 million in the western deserts, but we don’t know how to do that. He told me, you are the man who has been studying deserts in India and China and everywhere; you tell me where to put these numbers of people in the deserts of Egypt, because we’ve got to get away from the Nile as the only focus.

He was right, because he had the vision, and he certainly was right that people cannot live on top of



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each other like that in a very small area of the land.

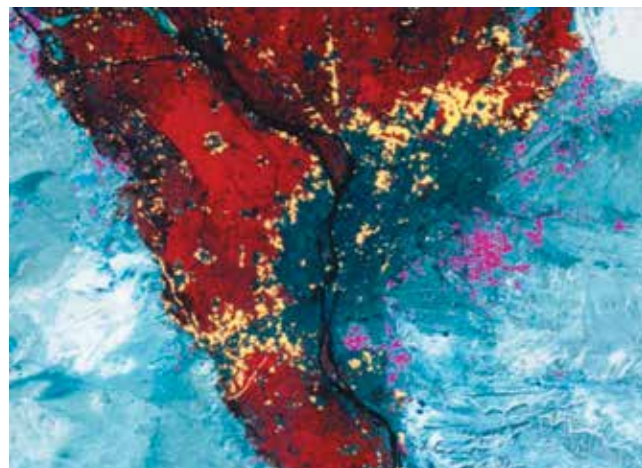
I will give you an example. In **Figure 1** you can see the gray patch; this is the first part of the Nile Delta, the southernmost part of the Nile Delta. At the very bottom you can see the Nile River, with its boundary of cultivated land. All the red is cultivated land. The chlorophyll in the plant itself is what gives us this red in the multi-spectral image, and the gray patch in the middle of the picture is the city of Cairo. All of the yellow around it is

the growth of that city in 10 years. So, the city is growing like an amoeba, consistently growing over agricultural land. Look at the 10-year growth, which is all marked in yellow. So, in 100 years, what would it be, if every ten years it would continue grow in the same way?

I began to think that it is impossible to think about Egypt living in the same small land area, especially now, as the population of Egypt has reached 104 million people living on top of each other, and not just

FIGURE 1

The Southernmost Part of the Nile Delta



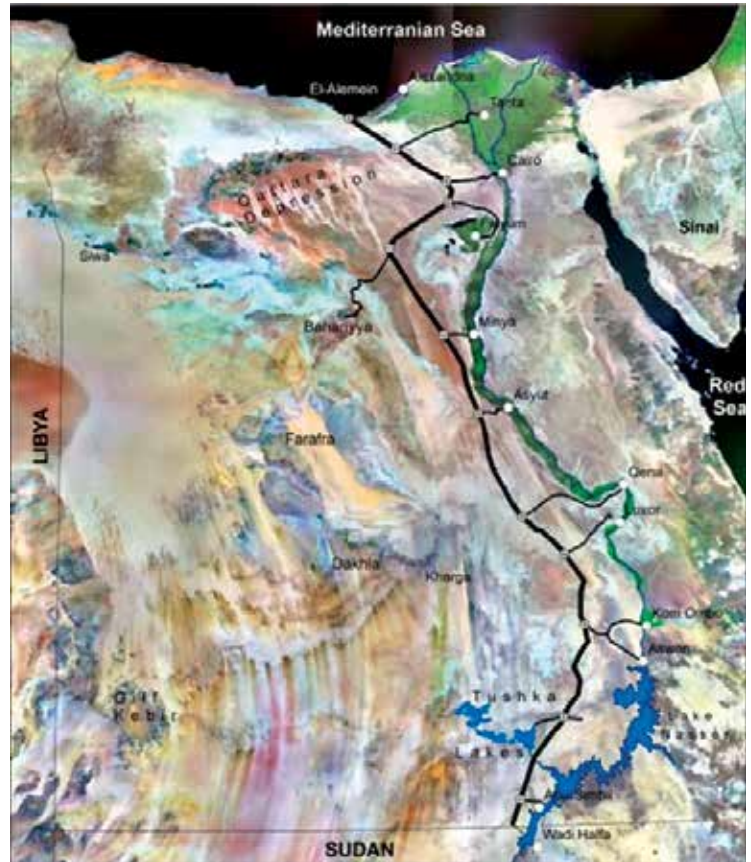
on top of each other; they are building living quarters over agricultural land, which means that they no longer can produce the food they require. For instance, right now, Egypt is in the bottom of the pit, because it used to import wheat and other grain from Ukraine. And Ukraine can no longer send or sell goods abroad. The seas around Ukraine are controlled by Russian advancement, so there is no wheat to be given to much of the population's needs. So, it is a disaster, really, which means that people should think about what is it that we can do to utilize more of our land for living, rather than living on top of each other within the Nile Valley like that.

This is when I began to think that maybe we can go into the desert. I began looking at the deserts, using satellite images, and we found water here and there, groundwater, so that we thought maybe some people can come in here. But, no one in Egypt would think about living away from the Nile.

Actually, one time, I was at an oasis doing field work, and one of the people we hired to help us in the field, to help us set up tents and everything, came to tell me, "I can't go with you tomorrow." I said, "Why?" He said, "Because my younger brother died, and we have to bury him tomorrow." I said, "We can wait for you to bury him, and then we'll go." He said, "No, we can't bury him here. We have to bury him in Qift." I knew that Qift is a town or village along the Nile, and we are in the middle of the desert, at the Kharga Oasis, way away from the Nile—400 miles away from the Nile. So, I said, "You're going to take your brother who died, his remains, to be buried next to the river?" He said, "Yes." I said, "Why?" He said, "Qift is our city; this is not our place, our place is by the Nile."

So, even after death, they still consider they have to bury their dead right by the Nile, not where they were living in the middle of the desert at the oasis. So, I said, people are not going to move away from the Nile at all to live. President Sadat thought he was going to be able to move people all over the place, and millions would live away from the Nile. So, I thought, let us at least allow them to *build* things and factories and whatever they want to do—universities and schools, hospitals, and everything—away from the agriculture of the Nile,

FIGURE 2  
The Development Corridor



so they can save the agricultural land for agricultural production. This is when I thought, okay, then we have to move their *thinking* a little further away from the fertile land of the Nile.

So, I thought of something which I called the development corridor. (See **Figure 2**.) If we have from each and every big town in Egypt, a road going west toward the western desert, because the western desert is only flat. In other places, the deserts are full of mountains, you cannot really develop in it. But the western desert is flat, and you can move westward there. The darker area just southwest of the green Nile Delta, is the former delta of the Nile. The area that you can see is like a delta shape, and right next to the river. It's a former delta. So, this is delta now, and this is the former delta right here. So, southwest of the present delta.

I thought if, from the town of Tanta, from Cairo, from Faiyum, from Minya, from all of these major

towns along the Nile River, we have roads going out this way and we connect them with a main [north-south] highway going from Alamein, west of the Delta, west of Alexandria, all the way to the south like that, parallel to the Nile, but giving us space, all of this area west of the existing living area in Egypt would be developed, some for agriculture, some with maybe industry, some with maybe the universities, some with hospitals and whatnot. So, the development can be extended.

By how much? The area where all Egyptians live today, all of the towns, and villages, and factories and whatever it is, it is 7.5 million square kilometers. But the area I have extended, marked by with this black line, which is the proposed development corridor, that expands the living area by 1.5 times. This extended area is 10.5 million square kilometers. So, it is expanded by half the amount of the existing living area in Egypt. And that's the only way to do it.

You can do that, as shown in **Figure 3**, which is a schematic detailed diagram of a small section of a development corridor running parallel to the Nile.

If you think of the Nile River being to the right of the pictured area, you have an east-west connector as shown in the diagram, and a north-south superhighway. You would have a railroad, and an electrical line, and water pipeline to allow the area between this new central corridor and the Nile—an area which would be 20, or 40, or in some cases 10 or 5 kilometers from the Nile—to be developed by building towns and villages and hospitals and universities and other productive facilities and infrastructure.

That's why I thought a development corridor could increase the land area of Egypt that is now being used. The area now that is utilized completely is 7.5 million square kilometers; the area that the development corridor would extend comes to 10.5 million square kilometers; meaning 1.5 times addition to the existing area now.

In **Figure 4**, we see marked in white, the new areas that can be opened up for habitation along the development corridor. The red areas are the deposits of the former Nile. The old red spaces are actual Nile deposits, but all the areas marked

FIGURE 3  
**Schematic of a Development Corridor**

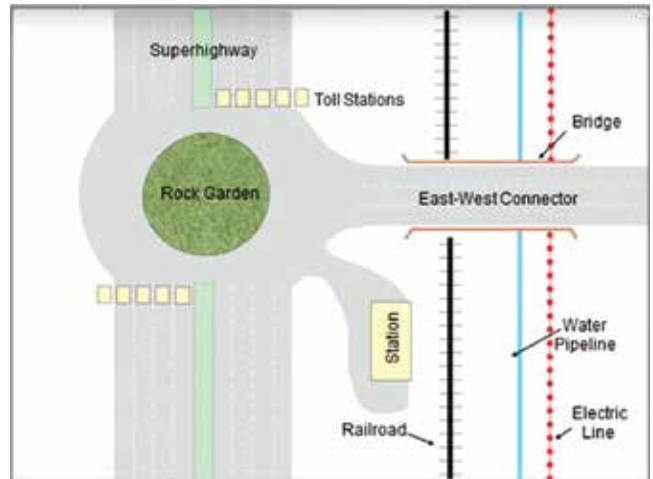
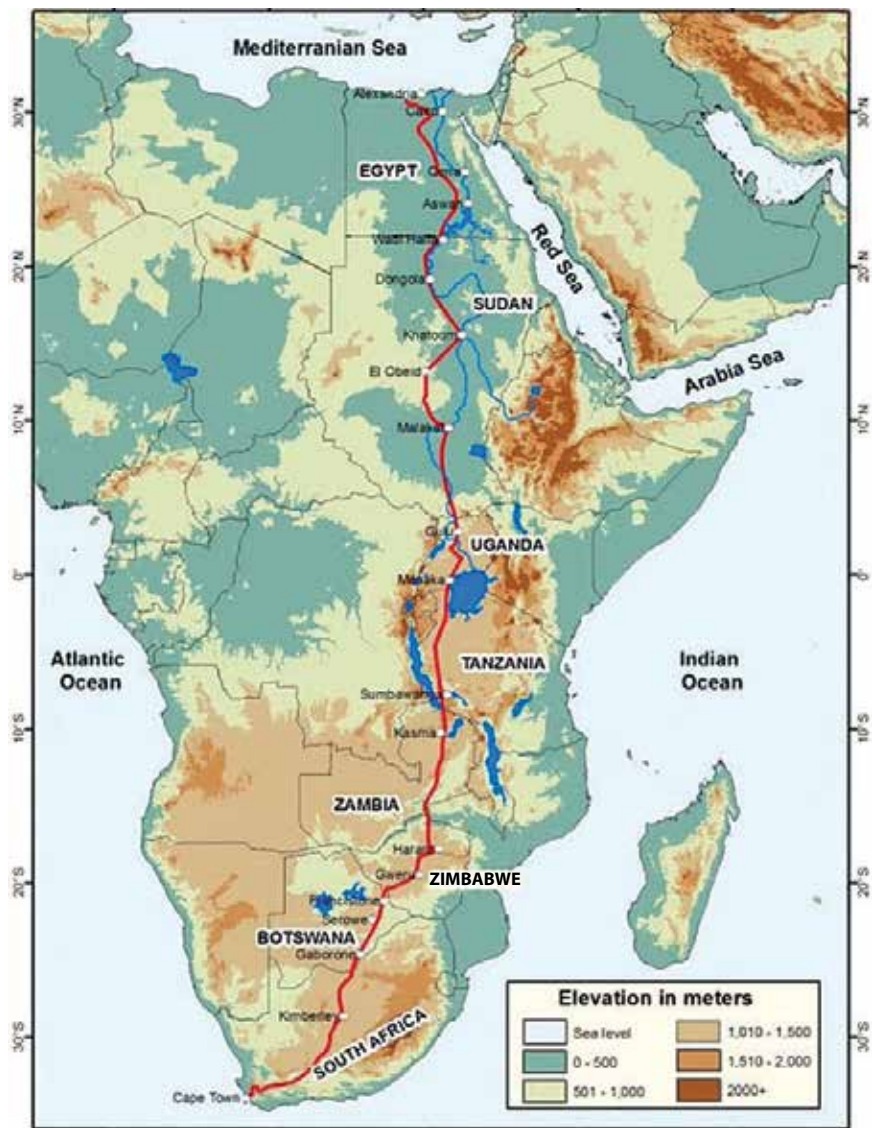


FIGURE 4  
**New Areas Opened for Development**



FIGURE 5  
**Extended Development Corridor**



in white are absolutely flat regions that can be utilized for agricultural development and for building all kinds of things, in the north and all the way down along the route of the Nile, with larger areas in the south near the Aswan Dam and Lake Nasser. There are lots of flat areas with good soil that can be expanded for food production.

Now look at **Figure 5**, a map showing this corridor beyond Egypt. I thought if we can do this, extending

that line all the way through Africa, all the way to Cape Town, South Africa. There is really no easy way from Europe to Africa, or from the East—from India and so on, back to the northern parts of Africa.

If we do this in Egypt and extend it all the way through East Africa, it can be the connection between all of Africa—all of East Africa at least—to Europe, and a gateway for all of Europe to anywhere in Africa, if we have the ease of transportation provided by this development corridor. I talked about the corridor in Egypt a great deal, and the now President of Egypt, Abdel Fattah el-Sisi, called me in before he became President, and he told me straight out that he had put the development corridor in his election campaign, and his plan for Egypt when he would become President. But up to now, nothing has been done.

So, I really think it is something that should be given great attention, not just for the sake of Egypt now, but for the sake of East Africa in the future. It is a way to limit people taking over agricultural land, and instead move all kinds of structures, industries, buildings, and building cities in these newly opened up areas, rather than continuing to encroach on now actively cultivated agricultural land. That land is the only source for their food. Right now, Egyptians are

in a deep mess because the food that they had been importing from Ukraine is now not available. There is no peace without being able to eat.

So, as far as I'm concerned, the development corridor is the only way out for all of Egypt and maybe the only way out for all of East Africa, to live nicely, and to be able to communicate with the West and have space for industry and everything else, leaving agricultural land for food production.