

**Homework 3 Solar Power Africa
Due Monday September 11, 2023**

- 1) Sudan was the largest country in Africa by land mass before the 2011 breakoff of South Sudan. South Sudan has 11 million people (same as Ohio) and 8 million in need of food aid according to the UN. The average age is 25. The north of Sudan is Arabic and dry and borders Egypt sharing the Nile which runs from Khartoum to Cairo. South Sudan is tropical with a large swamp formed by the White Nile, running from Kenya. South Sudan produces about 30,000 barrels of oil per day which is piped to Port Sudan on the Red Sea with Sudan taking 50% of the revenues for this transport, about \$1M/day. Sudan had a recent coup where a dictator/autocrat was replaced by a military junta after a popular rebellion (somewhat like Egypt's Arab Spring). Currently, two military groups are conducting a brutal war in Sudan (~1M dead), South Sudan has also been in a simmering civil war since its inception (300,000 dead). The Sudanese people in the north have connections with Ethiopia and Egypt while the South Sudanese are more connected with Kenya. South Sudan is an example of a place in dire need of assistance but that is too dangerous for most direct interactions.

The NBA player Luol Deng was a refugee from South Sudan. He tells his story in a video clip this week, <https://www.aljazeera.com/program/generation-change/2023/9/3/luol-deng-uniting-a-country-through-basketball> . If you are interested, watch this clip, or some of it, and comment on his description of aid to South Sudan, comparing builders of a basketball court and builders of a national team. In a country with 75% starving, is building a national basketball team appropriate or a good use of the money?

- 2) We heard from a Nigerian graduate student on Tuesday this week and from Beth Wilson's visit to Ghana last week. Comment on what you got out of these two presentations. Compare these two West African countries that share the Gulf of Guinea, Ghana with 30 million (similar to Texas in population) and Nigeria with 250 million (close to the US population). Particularly, do these places need our assistance and what form could assistance take?
- 3) On Thursday Tony Ranieri and his team from Solar is Freedom will talk with the class. Tony is a very successful entrepreneur in renewable energy. With about 1/50 homes in Ohio having installed solar panels the growth potential in the region seems impressive. Comment on what it took for Tony to turn an idea into a successful and expanding business. Also, any other comments on Tony's presentation.