Lush green fields blanket northern Egypt’s Nile Delta, but the country’s agricultural heartland and its vital freshwater resources are under threat from a warming climate.

The fertile arc-shaped basin is home to nearly half the country’s population, and the river that feeds it provides Egypt with 90% of its water needs.

But climbing temperatures and drought are drying up the mighty Nile — a problem compounded by rising seas and soil salinisation, experts and farmers say.

By 2050, the region could lose up to 15% of its key agricultural land due to salinisation. The yield of tomato crops could drop by 50%, the study said, with staple cereals like wheat and rice falling 18 and 11% respectively.

In Kafr al-Dawar in the delta’s north, Egypt’s Irrigation Ministry and the United Nations are working on eco-friendly techniques like solar-powered watering that experts say emit less greenhouse gases and could help improve crop yields.

Egypt currently has two priorities when it comes to combatting its water scarcity dilemma: tackling overpopulation and defending the country’s interests against Ethiopia’s dam. Cairo fears Addis Ababa’s Grand Renaissance Dam will bring consequences downstream.