

Inject-S

A system for delivering sulfur fertilizer to enrich your soil

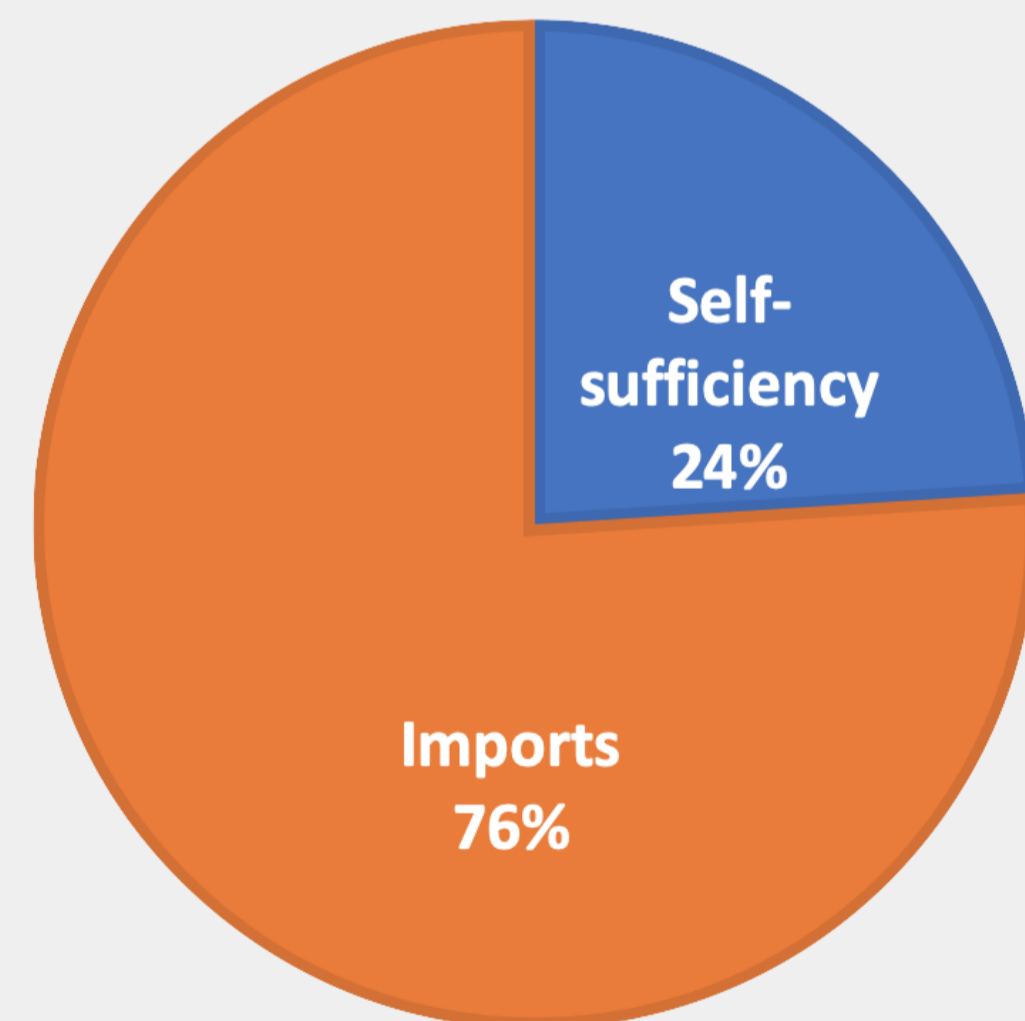
Objectives

- Create a greener environment in Qatar by using sulfur to help in crop growth and production.
- Increase self-sufficiency of Qatar growing its own vegetables to maintain food security.

Problem

Over recent years, there have been many developments to increase self-reliance in food security in Qatar. One way to help with this is to ensure the right kind of fertilizer is available to increase crop production and crop growth as well as to improve the soil quality. Moreover, Qatar is one of the biggest exporters of sulfur and everyday tons of sulfur are being produced here as a result of the petroleum extraction processes. Our idea is to use the sulfur being produced in making sulfur fertilizers since sulfur is one of the major nutrients needed by plants for their growth.

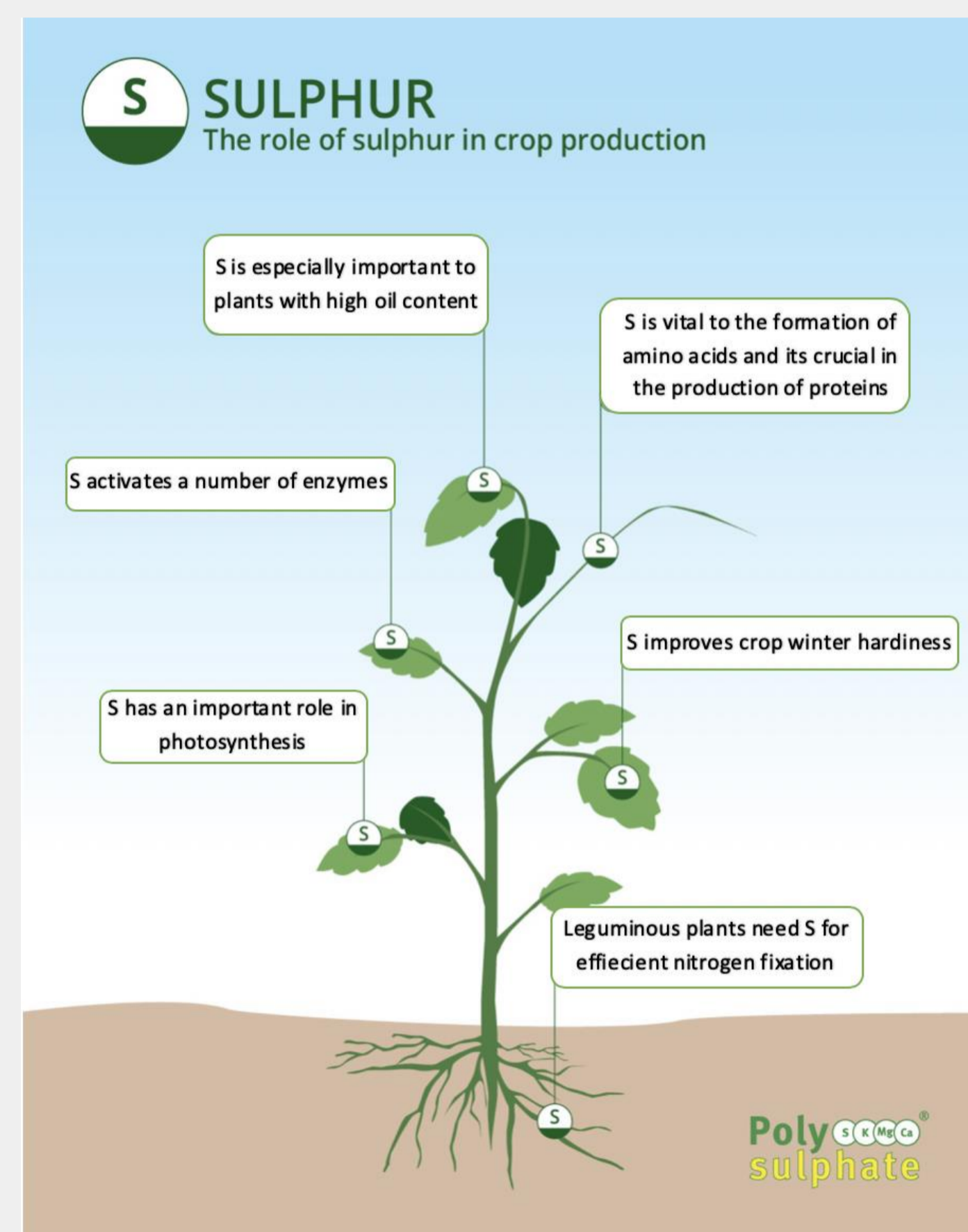
Current Market



So far, Qatar has achieved self-sufficiency by producing 24% of its own vegetables. In the next five years, the Ministry Municipality & Environment (MME) is looking to achieve 70% self-sufficiency. Increased soil quality can greatly help Qatar achieve this goal, and this is what we are hoping for with our product. [1]

Impact

We aim to provide the farmers and agricultural businesses in Qatar with a simple device that checks for sulfur deficiency in soil, then injects the soil with the recommended amount of sulfur fertilizer to increase the quantity and quality of the crops. Thus, this product will help farmers increase their production and their revenue, accordingly. Thus, helping the agriculture businesses in Qatar and get one step closer to self-sufficiency.

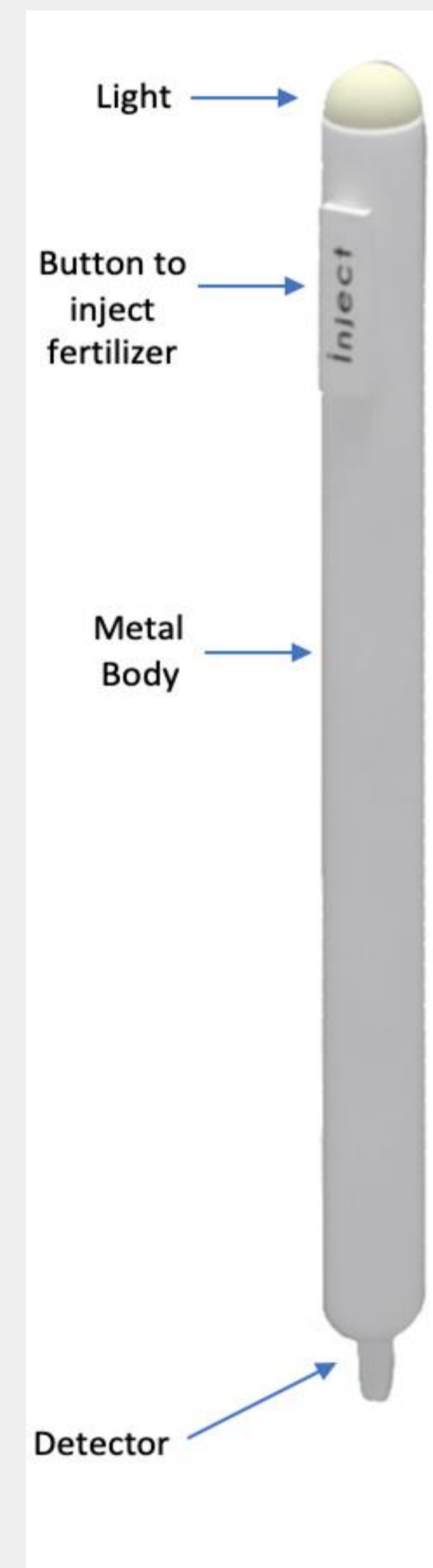


Source: Adapted from [2]

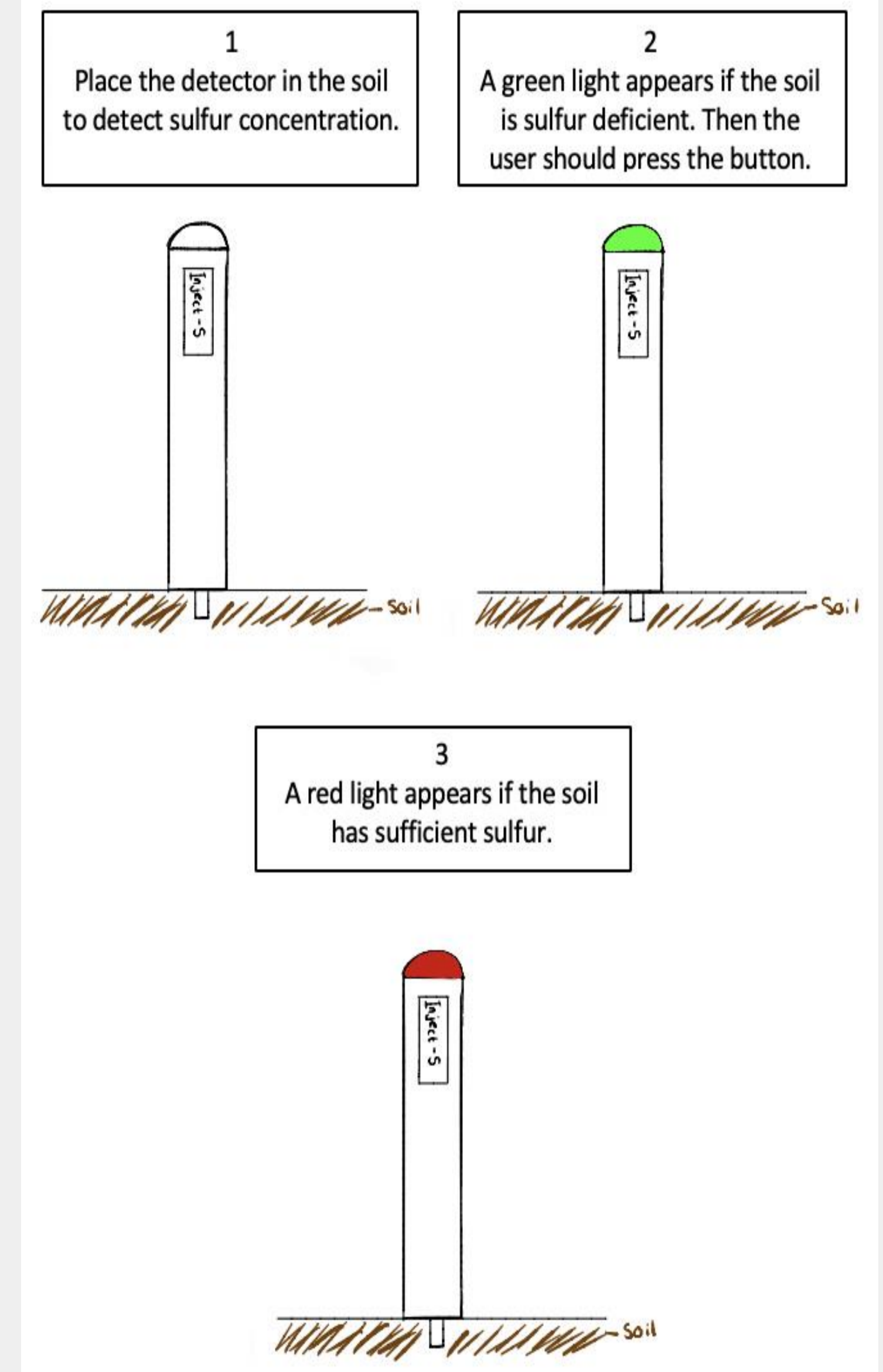
Target Companies

- QAFCO
- Agricultural and farming businesses
- Home/Individual Use

Prototype Design



How Does It Work?



References: [1] "Qatar has made great progress in achieving food security", *Qatar Tribune*, July 20, 2019. [Online] Available: <https://www.gulf-times.com/story/637023/Qatar-has-made-great-progress-in-achieving-food-se>
[2] The role of Sulphur in crops, *ICL fertilizers*, n.d. [Online] Available: <https://www.iclfertilizers.com/sulphur>