Cassava grows best on loose, friable (easily crumbled) soils with an abundance of available nutrients. These soils give the roots enough room and nutrients to grow and expand.

**Soil Testing**

After selecting the site for planting, the first step is to get your soil tested. Soil testing is a service offered by the Ministry of Blue and Green Economy, Agriculture and National Food Security. The test will provide details on the pH and the nutrient availability of the soil.

Cassava can grow over a wide pH range, but the ideal is between 5.5 to 7.5. A simple soil test will determine the soil pH and this will guide you to the right soil and fertilizer treatments. Soils with a pH of less than 5.5 are acidic and a recommended practice is to incorporate limestone (lime) into the soil during land preparation.
**Liming the Soil**

Limestone is applied to soils, usually during land preparation (between 3 months and up to two weeks prior to planting) to raise the pH. The soil test will guide the type and rate of application of limestone to the soil.

**Organic Matter**

In Dominica, it is not a common practice to incorporate organic matter into soils for cassava cultivation. However, once available, you can incorporate this into the soil as it helps to improve soil texture and fertility. If you are using animal manure, ensure that it is cured properly before application, as it can burn the plant otherwise.

**Soil Erosion**

Most of the soils where cassava is grown in Dominica are gently sloping. To conserve soil and prevent erosion, you must always plough and ridge on slopes along the contour, rather than up and down the slope. This will slow the rate of water down the slopes, conserve topsoil and increase water infiltration.

**Water Management**

Due to an adequate amount of rainfall on the island, irrigation is not necessary. Cassava cultivation in Dominica can be entirely rain fed.

While cassava can tolerate drought or water scarcity, it is important that the crop has adequate moisture at crop establishment and for the first 3 months for root and shoot growth and tuber formation.

If you decide to irrigate the crop, a cost/benefit analysis should be done, as cassava is a low resource crop and setting up such a system can be very costly. The most cost-efficient system for cassava production is drip irrigation or fountain tubing. Overhead irrigation systems are a poor choice because the thick canopy of the plant can lead to high evaporation before water gets to the soil.

Two other strategies you can use to conserve soil moisture are mulching and intercropping.

**Mulching**

Organic mulch such as hay or live mulch such as peanuts can improve the water availability to the cassava plant. Mulching can also regulate the solar radiation penetrating the soil, thereby lowering soil temperature, reducing wind velocity, reducing evaporation from the soil and increasing relative humidity.

**Intercropping**

Intercropping is the growing of two or more crops in the same field at the same time. Intercropping adds to agro-biodiversity in the fields, contributes to sharing of nutrients between crops and helps in weed suppression.

This is not practiced in Dominica, but elsewhere it has been used quite effectively to conserve soil moisture, enhance soil fertility and also provide an income stream to farmers while they await maturity of the cassava crop. Research is needed to identify the best complementary crops for cassava in Dominica. In other parts of the world, maize, beans and selective herbs were suitable intercrops at the start of the cropping cycle.