# Soil Types and Soil Suitability

The soil type of the municipality is of volcanic origin of alluvial deposit ranging from sandy loam to silt loam. It is classified into six major soil types which are best suited for agricultural purposes. The soil type consisting vast track of rice paddies located within the valley floor are Irosin Silt Loam and Irosin Sandy Loam with an aggregate area of 2,988 hectares or 21% of the total land area of the municipality.

Irosin Silt Loam is the soil type found mainly in the valley floor. This is the most extensive and important lowland soil of the municipality. It is easy to till and moderately drained. This soil type is conducive to various crops. Irosin Silt Loam is found in barangay Bagsangan, Batang, Monbon, Tinampo, San Pedro, San Julian, San Juan, San Agustin and Bacolod at an approximate area of 2,421.29 hectares or 17% of the town’s total land area. The Irosin Sandy Loam is basically the sandy soil of Irosin in the valley floor that adjoins the Irosin Silt Loam on the north. The soil surface contains gravel, which differentiates it from the Irosin Silt Loam. It is fairly well drained and can be found at barangay Bagsangan, Monbon and Mapaso.

Castilla Clay Loam has a relief from undulating, rolling to hilly areas. Surface drainage is excessive while the internal drainage is poor. This soil is located in Batang, Casini, Carriedo, Gabao, Gumapia, Liang, Tabon-tabon and Tongdol. The Annam Clay Loam soil type is well drained to excessively drained and fairly drained internally. It is subjected to erosion and should not be cultivated under clean tilled cropping system. It is found in barangay Gabao, Gulang-Gulang, Tinampo and Tongdol.

Bulusan Loam is well drained to excessively drained at the surface. The internal drainage is slow to fair. This soil may be planted to clean-tilled crops but appropriate conservation measures should be followed. Some sections of this soil type need intensive conservation measures whereas the roughly rolling and mountainous areas must be kept under good forest cover to prevent soil losses due to erosion. This soil type can be found in barangay Cawayan and Tabon-Tabon. The Bulusan Sandy Loam differs from the Bulusan Loam since the former is characterized by the sandy texture of the surface soil. It is well drained to excessively drain in the surface. This is found in almost all barangays except Bagsangan and Casini. Annam Clay Loam, Bulusan Loam, Bulusan Sandy Loam and Castilla Clay Loam can be found in all barangays covering an aggregate area of 11,414 hectares or 79% of the total land area of the municipality.

The soil bearing capacity in the urban area is 40.698 Paschal as registered in various soil capacity tests conducted by structural engineers in the preparation and design of big buildings in the municipality.

There are four land capability classes in the municipality they are A, B, D and M. Class A are found in 18 barangays with an aggregate area of 2,421.29 hectares. This land class is a very good land, which can be cultivated to a wide variety of crops and requires good management and simple farming practice. Class B lands is widely scattered and can be found in Gabao, Gulang-Gulang, Tinampo, Tongdol, Cawayan, Bagsangan, Mapaso, Monbon and Tabon-Tabon with an approximate area of 1,523.25 hectares. This land class can be cultivated safely in conjunction with good conservation practices. Class D is a fairly good land suited for pasture or forest and must be cultivated with extra caution, require careful management and complex conservation methods should be introduced for safe cultivation. This land type is concentrated in Batang, Casini, Gumapia, Carriedo, Gabao, Liang, tabon-Tabon and Tongdol.

Class M is widely scattered in 18 barangays and this land type is shallow and steep which can be severely to excessively erode. This is highly limited to pasture and forest and needs careful soil management practices.