

Mountain Terraces

IFUGAO, IFUGAO PROVINCE, NORTHERN LUZON ISLAND, NORTHERN PHILIPPINES. *The mountain terraces in the Cordilleras of northern Luzon have been included in the UNESCO World Heritage Sites list in 1995. Other groups like the Bontoc, Ibaloy and Kalinga also construct mountain terraces in the Cordillera mountain ranges.*



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THERE ARE TWO known methods of cultivation in Ifugao. One is the universal slash-and-burn gardening or swiddening, while the other method grew out of an early technology with the dry field cultivation of taro (*Colocasia esculenta* [L.] Schott). Some varieties of taro are grown wet in catch basins along mountain streams. The Ifugao elderly preferred these varieties. The catch basins gradually developed into small terraces. Actually, this type of taro cultivation, both dry and wet, can still be seen in the southern Cordillera ranges, especially in the province of Nueva Vizcaya among the I'wak and Ikalahan peoples. The Ikalahan are the same group as the Kalanguya, one of the subgroups of the Ifugao that live in the southern part of the province. The people known as Ifugao is actually not just one group but is made up of several. It has two major groups: the Tuwali and the Ayangan. A third is the Kalanguya, with a somewhat different language. Originally, the staple food of the Ifugao people were root crops, taro being one of the oldest and the most relevant in their rituals, even earning a ritual name. Rice came much later, but it became the prestige crop.

The earliest evidence for the existence of rice in the Philippines is between 2510 and 2130 B.C., dated from the husk of rice embedded in pottery excavated in the Manga Site in Andarayan, Cagayan province. Rice is a lowland crop. At some period of its life, it needs flooding in order to grow. Another peculiarity is that it needs to adapt to higher elevations. This is the reason why the yield of rice diminishes as the fields go higher. The agricultural technology of rice in Ifugao is basically lowland, adapted to the mountain terraces, with some forms of

adaptation that must have taken a great deal of time to develop.

As early as 1545-1000 B.C., there was already evidence of human occupation in the present town of Banaue. The presence of terraces was reported by the 7th century A.D., thru 1195 to 1380 A.D. in Bungahalian and Nabyun. But there was definitely a rapid expansion of terraces with rice cultivated between 1486-1788 A.D. in Bocos, Banaue.

The Ifugao terraces are not actually carved out of mountainsides. These are stone or earth walls slowly built up, while filling up the space between the wall and the mountainsides with different layers of rubble, grades of soil, water and impervious clay beneath layers of organic soil to prevent water loss in the paddy fields. Above the system of terraces are forests of trees that serve as watersheds, from which irrigation ditches are constructed from field to field, with the water finally draining off to rivers below. The terraces are fragile in construction. No draft animal, like a carabao, can be used to plow the field. Instead, the soil is cultivated by hand using wooden spades. Rice is planted at the beginning of the year and harvested about June – the opposite of lowland rice cultivation.

The fragility of the environment and human agricultural technology is reflected in the Ifugao culture's attempts to control these by means of the numerous rituals they associate with cultivation. For rice alone, there are at least twenty-two. This is not surprising since, the Ifugao traditional religion has a pantheon of deities composed of at least two thousand.