Growing Upland Rice

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SIMPLE METHODS FOR DRYLAND (UPLAND) RICE CULTIVATION

Rice can be grown under two ecosystems or growing conditions. The first is Lowland or wetland (irrigated bunded, partially or fully puddled field) and the other is upland (rainfed, unbunded or bunded on flat or undulated field) or dryland field condition. Rice can be grown at altitudes from 0 – 600 metres above sea level for lowland climates and at mid-altitudes from 700 – 1300 metres above sea level for cool climates. Unfortunately in PNG there are very few locations in the country where irrigated rice can be grown. Rice and Grain Program try to encourage farmers to grow rice under dryland field conditions. The methods to grow rice under upland is simple like other grain crops like corn and are briefly described as follows:

Land selection and Preparation

Totally Rain fed rice crop without the use of irrigation with surface water is called charge 20 toes per kilogram. You may then enjoy eating your locally grown rice with your family.
harvested crop against the edge of an empty drum.

Drying
The paddy is the spread on a canvas for drying. Sun dry the paddy consecutively for five days under clear sun. Drying must be done properly because it will determine the quality of milling. If not dried properly you will find lot of the broken grains after it is milled. You can get a 50-Kg bag of paddy from a field of 200 m sq (10 x 20 m) equivalent to 2.5 t/ha. Mill the paddy just after drying or store the paddy in a dry place to do the milling when and where needed.

Storage
Storing of the dried paddy and the milled rice in proper safe containers is important to avoid rats from causing damage and losses. It is best to store you grains and dry paddy in large plastic containers.

Milling
Once the paddy is dried for almost five days it is then taken to the Rice mill for milling. Some rice milling machine owners may

Upland rice. The selection of area for upland rice cultivation is the most important factor for a successful upland rice crop. Therefore select areas with more frequent and well-distributed rains (preferably more than 1200 mm/annum). The areas with both the torrential and very poor rainfall distributions should be avoided for upland rice cultivation, because of more chances of crop failures. The field should be ploughed (15-22 cm deep) twice after an interval of at least a fortnight. For areas where there is no tractors to do ploughing soil can be prepared using hand spades and garden forks. This will facilitate double destruction of weeds and the fine tilth of the field.

Planting
Planting of rice should be done with the help of a drill at a plant to row distances of 20 cm, using seed rate of 80 Kg/ha. In PNG conditions, a dibbling stick (a stick sharpened at one end) may be as good as drill. The dibbling stick may be utilized to plant the seed at a plant to row spacing of 20 cm and 20cm between plants. Three to five seeds per hill should be planted at
a depth of about half of an inch. Planting should be done into the lines to make manual weeding easy. The seeds must be covered by soil using your foot or hands. This will save the seed from birds and rats.

**Fertilizer application**
Apply N, P, and K at the rate of 100:50:50 Kg/ha respectively. Apply all the P, K and 40% N at the time of planting followed by two top dressings (30% each) with the rest of N, after 30 and 50 days after the planting date.

**Weed Control**
Since under upland field condition weeds are a big problem, thus at least two-hand weeding should be done just before the two top dressings. Weed control must be done every 2-3 weeks manually using hand hoes or spades. Herbicides can also be used to make rice crop free from the weeds, it must be applied with due care because it can kill the rice plant.

**Harvesting and Threshing**
The rice crop may mature at 90 – 120 days and harvest the crop at maturity when 100% of the crop on the field turns yellow to light brown of the crop. Rice plant is harvested by cutting the base of the plant using the sickle. Threshing of the paddy can be done by striking the bundle of