

effectiveness of the soil mulch as a means of conserving moisture. The nature of the crop as to its top growth or the spread of the roots might sometimes be a determining factor. If the top growth is such as, either because of the shade cast or its breaking action on the wind, to retard the drying up of the surface soil inter-cultivation after a heavy rainfall may result in the saving of the soil moisture and so benefit the crop provided, however, it does not cause injury to the roots. In the case of crops with extended root systems, the injury thus caused may outweigh the gain in soil moisture. In such cases inter-cultivation is best limited to the early stages of the crop.

Bare fallowing is often an effective means of adding to the store of water inside the soil and where the annual rainfall is insufficient for the successful raising of a crop, it has been found possible to obtain good crops by fallowing every alternate year or once in three years, the fallowed land being ploughed and harrowed at intervals so that the soil may receive and hold all the rainfall.

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A SHORT NOTE ON *PODU* CULTIVATION IN THE GOLUGONDA TALUK

(VIZAGAPATAM DISTRICT)

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Cultivation on the hill slopes is generally known as *podu* cultivation and it is largely done in the Agency tracts of this District and also in the plains where the forests are not reserved. Cultivation of these hill slopes is, of course, an evil as the rain water rushing down these deforested slopes, carry a lot of valuable top soil and deposit it in the lower levels of streams and the tanks they feed, or the lands they overflow into. Without giving much heed to this great evil, hill slopes are constantly being given on lease for this kind of cultivation, so much so, that most of the hills owned by private individuals are completely bare and are causing great havoc to the irrigation sources and lands commanded by them since the streams arising from these hills bring with them nothing but sand with their current, thus necessitating the investment of large sums of money at shorter intervals for the repairs of these irrigation sources. The cultivation of these *podu* lands is chiefly in the hands of poor ryots. In the lower slopes of hills in the Agency parts, the hill-men are, of course, obliged to adopt the system as there are no suitable lands for cultivation. But in the plains it is possible to stop the system provided the owners take a general interest and understand the danger of it.

Shrubs are cut from the middle of February to the middle of March and spread over the ground for drying till the beginning of May when they are set on fire. The shrubs that burn away deposit a thin layer of ash on the surface.

Just before the advent of the South West Monsoon, a mixture of 1 lb. *Peddaganti*¹ (long duration *Cumbu*) 4 lbs. of *Korra*,² (*Tennai*) and 2 lbs. of

¹ *Pennisetum typhloideum.*

² *Setaria italica.*

*Jonna*¹ (*Cholan*) per acre are sown broadcast, and the seed is raked up with a special iron implement of the type of pick-axe designed for the purpose. At this time any unburnt bushes and those that come up later on from the stumps, which might still appear green are removed and the areas are left to themselves. With the break of the Monsoon the seeds germinate and with the help of the light showers received thereafter the crops progress slowly.

Practically no after-cultivation is done except the cutting of bushes which might shoot up soon after the break of the Monsoon.

The *korra* crop gets ready by about the end of August when it is harvested. *Ganti* (*Cumbu*) and *Jonna* (*Cholan*) ripen off almost simultaneously about the end of November or beginning of December.

The yield is generally 80 to 100 *kunchams* or 600 to 800 lbs. per acre of the three grains (50 per cent *korra*, 30 per cent *ganti* and 20 per cent *jonna*) in ordinary seasons when the rainfall is normal. It is stated by the cultivators that the yield of *Ganti* and *Jonna* on the *podu* lands are sometimes better than in the plains. *Ganti* cultivated on the hill slopes has a larger ear-head compared with that in the plains, which is a short duration one with shorter ear-heads and coarser grain.

In the plains the *podus* are leased out at Rs 1-8-0 to Rs 2 per acre, but the general understanding is that any man that cultivates a *podu* individually should pay Rs 6 to Rs 8 per *podu* irrespective of its extent. If two people jointly do the same, they should pay double the amount. Each *podu* gets its turn once in ten years—that is, a *podu* cultivated this year will not be fit for cultivation for another nine years; by which time the stumps will grow up and the vegetation would become thick.

The average cost of clearance and other operations works out at Rs 13 to Rs 15 per acre; while the value of the yield will be about Rs 25 to Rs 30 leaving a margin of about Rs 12 to Rs 15; but as most of the operations are done by the cultivators themselves, the cost of cultivation is not much felt. The actual cash expenditure incurred by the ryot (including the assessment) will be about Rs 6 to 8 per acre, this being mostly necessary to cut the shrubs and to rake up the seed after sowing.

Andropogon Sorghum.