

DEPARTMENTAL NOTES

AGRICULTURAL PROGRESS AT TAMMANNEWA

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IN the village of Tammannewa, situated about 21 miles away from Anuradhapura on the Puttalam-Anuradhapura road, considerable progress has been made in the adoption of some of the methods advocated by the Department for the improvement of paddy cultivation, to merit a short note on this subject.

The following are the methods which the cultivators of this village have carried out on their fields :—

- (1) the introduction of the light iron mould board plough (Midget type) and the Burmese harrow,
- (2) the use of the village cattle in penning,
- (3) the application of *Tephrosia purpurea* (*S. pila*, *T. kavilai*) as a green manure.

For the maha season 1936-37, the whole extent of the *purana* or older fields of the village amounting to 27½ acres were worked with the Midget plough. Altogether seven ploughs were used for this purpose, of which six were loaned from the stock of ploughs purchased from the funds of the defunct North-Central Province Agricultural Society to be issued on loan to different cultivators, and one was an award made on the occasion of the Silver Jubilee of His late Majesty, King George V, to a Vel Vidane by the Village Committee of Wilachchiya Korale for keenness in the development of paddy cultivation in his area. Owing to the limited number of ploughs available it was not possible for the cultivators, much as they wished, to plough their *accre* fields (newer lands of one acre extent owned by each cultivator) of the village with this

implement and they were, therefore, obliged to resort to their own ploughs which are devoid of a mould board.

Following a demonstration with the Burmese harrow and the loan of one from the Department to the village, about nine acres were puddled and levelled—the areas mentioned below which were penned with cattle and manured with *pila*.

On a block of four acres in the *purana* fields, about 30 heads of cattle were penned daily for a period of about four months prior to the commencement of the *maha* cultivation operations. As there was no *yala* cultivation carried out this year in the village owing to the scarcity of water in the village tank, there was a certain amount of pasture available for the cattle to graze on for a few months. They were kept within this block which was enclosed by a barbed wire fence so that the penning might be more intensive but at night they were housed in *galas* and the manure collected from these were applied to the fields with an extent of $14\frac{1}{2}$ acres situated further away.

On a block of five acres adjoining the penned area there was a growth of *pila* (*Tephrosia purpurea*) which had formed an excellent cover during the dry season of the year. The attention of the cultivators was drawn to the value of this plant as a green manure which otherwise would not have been utilised for this purpose. During ploughing with the Midget plough, the *pila* was uprooted and when the fields were flooded subsequently for puddling the plants were kept submerged and allowed to decay. The block was then puddled with the Burmese harrow and the decaying *pila* incorporated in the soil.

Another block of four acres is being treated as a control to those in which cattle penning, the application of cattle manure from the *galas*, and the growing of *pila* and turning it into the soil were carried out. The yields of the various blocks will be recorded separately by the cultivators for their own information.

Considerable interest has been shown in these methods and it is expected that for the next cultivation season, several cultivators of this village will possess their own Midget ploughs and Burmese harrows and that the system of penning cattle both in the field and in *galas* and the use of *pila* as a green manure will become established practices in this village.