

PADDY CULTIVATION

(The Cultivation Sheet in respect of the *maha* 1939-40 paddy crop at the Experiment Station, Anuradhapura, is reproduced below, as we believe that it will be of interest to the readers of *The Tropical Agriculturist*.)

In *maha* 1938-39, the average yield of paddy per acre was 44 bushels 1 measure and the cost of cultivation per acre was Re. 1.39 (the area cultivated was 36 acres), while in *maha* 1939-40 the average yield per acre was 53 bushels 12 measures and the cost of cultivation per acre Re. 1.05 over a total area of 41 acres under cultivation.

It will be observed that, in arriving at the cost of production, allowance has been made for overhead charges, *i.e.*, the salary of a conductor and the depreciation of implements and animal labour. It is noteworthy that the cost of manures and manuring amounted to Rs. 11.75 per acre or about one-fifth of the total cost of production. The yield obtained on the relatively poor soil at this station indicates how well worth while was this expenditure.—Ed. T. A.)

Division : Northern.

Name of Station : Experiment Station, Anuradhapura.

Acreage under Paddy : 41 acres.

Season : *Maha* 1939-40.

Variety of Paddy : (a) Sudu Heenati 10 $\frac{1}{5}$ acres
 (b) Pachai Perumal 3 $\frac{2}{5}$ „
 (c) Vellai Illankalayan 27 $\frac{2}{5}$ „

I.—LABOUR.—

Operation	Men	Women	Boys	Total. Cost per	
	at 60 cts.	at 30 cts.	at 45 cts.	Rs. c.	Rs. c.
1. Nurseries for transplanting	9 ..	— ..	3 ..	6 75..	0 16
2. Ploughing and mudding ..	147 ..	— ..	9 ..	92 25..	2 25
3. Work on bunds and channels ..	100 ..	63 $\frac{1}{2}$..	29 $\frac{1}{2}$..	92 32..	2 25
4. Mamotyng of unploughable area ..	11 ..	— ..	4 ..	8 40..	0 20
5. Harrowing ..	99 ..	— ..	16 ..	66 60..	1 62
6. Levelling ..	162 $\frac{1}{2}$..	— ..	40 ..	115 50..	2 82
7. Applying manures ..	8 $\frac{3}{4}$..	— ..	— ..	5 25..	0 13
8. Cutting, transporting and applying green manures	— ..	— ..	— ..	— ..	—
9. Sowing or transplanting ..	8 $\frac{3}{4}$..	224 ..	— ..	72 45..	1 77
10. Weeding, thinning out and filling vacancies ..	— ..	152 ..	— ..	45 60..	1 11
11. Irrigating and watching ..	356 $\frac{1}{2}$..	— ..	— ..	213 90..	5 22
12. Scaring birds and monkeys	— ..	117 ..	— ..	35 10..	0 86

Operation	Men at 60 cts.	Women at 30 cts.	Boys at 45 cts.	Total. Rs. c.	Cost per Acre. Rs. c.
13. Harvesting ..	112 ..	104 ..	— ..	98 40..	2 40
14. Transporting and stacking	142½..	132 ..	37 ..	141 75..	3 46
15. Threshing and winnowing	199½..	143 ..	53 ..	186 45..	4 55
16. Drying, measuring and transporting to store ..	102 ..	— ..	— ..	61 20..	1 49
17. Pest and Disease Work ..	— ..	— ..	— ..	— ..	—
18. Contribution to Communal works ..	— ..	— ..	— ..	— ..	—
19. Fencing including repairs	— ..	— ..	— ..	— ..	—
II.—SEED.—86 bushels at Re. 1·75 per bushel				150 50..	3 67
III.—MANURES.—(1) <i>Artificial Manure</i> : 43 cwt. of Nicifos at Rs. 11·08 per cwt. including transport ..				476 44..	11 62
(2) <i>Cattle Manure</i> ..				— ..	—
(3) <i>Cattle Penning Charges</i> ..				— ..	—
(4) <i>Other Manures</i> ..				— ..	—
IV.—DEPRECIATION ON IMPLEMENTS				67 32..	1 64
V.—COST OF ANIMAL LABOUR ..				152 46..	3 72
VI.—OVERHEAD CHARGES : Salary of Conductor for 5 months at Rs. 42·50 per month ..				212 50..	5 18
VII.—MISCELLANEOUS.—(1) <i>Cost of String</i> : 20¼ lb. of theda rope and 3¾ lb. coir string at 12 cts. per lb. ..				2 88..	0 7
(2) <i>Cost of Kerosine Oil</i> : 21½ bottles at 15 cts. per bottle ..				3 22..	0 8
TOTAL COST OF PRODUCTION				2,307 24	56 27

TOTAL YIELD.—	Maha 1939-40.		Maha 1938-39.	
	Bus.	Meas.	Bus.	Meas.
(a) Suduheenati ..	392	17	2,188	22½
(b) P. Perumal ..	50	11		
(c) Vellai Illankalayan ..	1,745	26		
YIELD PER ACRE.—				
(a) S. Heenati ..	38	15	53	12
(b) P. Perumal ..	14	26		
(c) Vellai Illankalayan ..	63	23		
COST OF CULTIVATION PER ACRE..			Rs. c.	Rs. c.
COST OF PRODUCTION OF ONE BUSHEL PADDY ..			56 27 ..	61 18
			1 5 ..	1 39

Straw.

Yield of Straw : 40 tons 10 cwt. (i.e., 30,240 bundles of 3 lb. each).

Value of Straw : Rs. 453·60 (i.e., Re. 1·50 per 100 bundles—local rate).

Value realized by Sale of Straw : Nil.

Approximate value of Straw used at Station :—

(1) For thatching sheds	Rs. c.
(2) For feeding cattle, &c.	50 0
			403 60
			453 60

Remarks.

Cost of Production has come down from Re. 1.39 during *maha* 1938-39 to Re. 1.05 during *maha* 1939-40 due to :—

- (1) Bigger yield obtained during *maha* 1939-40.
- (2) No re-ploughing was possible because of delay in giving water for *maha*.
- (3) Weeding cost was reduced as there was no trouble from irrigation water as the *maha* cultivation was done under Nuwarawewa high level sluice only by the Experiment Station.

The very poor yield obtained from Pachai Perumal was due to a bad attack of *Piricularia oryzae*.

Cattle penning was done with no costs to the station. For the privilege of grazing, owners of cattle penned the cattle in plots where they were asked to.

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Cost of Animal Labour.

I.—Bulls.

Description	A	B		C	D		E	F	G	H	I	Nett Cost for <i>maha</i> 1939-40 Season $\frac{G \times I}{H}$		
	No.	Cost of each.		Estimated length of life years.	Depreciation per annum $\frac{A \times B}{C}$		Food cost per annum.	Cost of cattle-keepers per annum.	Total cost per annum $D + E + F$	No. of working days per annum.	No. of working days for <i>maha</i> 1939-40 Season.			
		Rs.	c.		Rs.	c.	Rs.	c.	Rs.	c.		Rs.	c.	
(a) Amritmahal bulls Nos. 176 and 177	2	150	0	8	37	50	86	60	34	36	210	32	66	96
(b) Kangayam bulls Nos. 165 and 166	2	80	0	8	20	0	86	60	34	36				
(c) Ditto No.168	1	90	0	8	11	25	43	30	17	18				
(d) Ditto No.170	1	62	50	8	7	81	43	30	17	18				
Total ..													66	96

II.—Buffaloes.

(a) Buffaloes Single	8	25	0	8	25	0	—	146	0	171	0	Per two seasons	Per one season	85	50
(b)															
(c)															
(d)															
Total ..														85	50

Total cost of bulls and buffaloes for *maha* 1939-40 season Rs. 152.46.

