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ECONOMY OF THE FARMER

By K. UNNI KRISHNA MENON, Dip. Agri., Madras Agricultural Department.

The depression is felt everywhere. The average farmer generally falls an easy victim to it because he is improvident, ignorant, conservative and uneconomical in his dealings. He is unable to say what his cost of producing 1000 lbs. of paddy is. Without exactly knowing what it is, he is selling the produce to the highest bidder who offers a price per cartload, say, 1000 lbs. The purchaser fully realises the fact that his prices are always lower than the ordinary wholesale market rates and he is sure of a margin of profit in his business. On account of the quick and easy transport facilities, the Indian producer who is following the time-honoured crude and apparently cheap but on the whole costly ways of farming, has to compete with the up-to-date civilised farmer of the West who adopts the latest labour-saving appliances in his production with due regard to economy. The civilised farmer always stops producing any commodity when he finds that the trade is not prepared to pay him at least his cost price. The Indian farmer not knowing what his cost price is and following his time-honoured ways and pinning his faith to the same old crops, does not know whether he actually loses or gets a profit when he sells his produce at a given rate per unit.

The land-owner and producer in South India are always finding fault with the high transport charges by rail etc., while none of them considers seriously as to how far, one can improve the methods so as to reduce one's cost of production.

As regards paddy cultivation, ploughing charges are saved by at least 20% by the use of improved implements which are more efficient. Cost of seed is reduced by 25% as the reduction of the quantity is found possible when improved strains of paddy are grown. No outside manure need be purchased and the manuring charges can be maintained where it was or reduced to almost nothing, if the ryot improves his ways of collecting and conserving cattle manure. This will enable him to improve the quality and increase the quantity of manure. The increase in manure supply can be about 50% and it will easily outgrow the effect of any other improvement adopted by the farmer. Taking the more prominent items alone into consideration, the position is as below:—

The increase for the improved seed alone is 10% of the yield. The increase of yield for the better manuring is not less than 50%.

It may be manuring over a larger area or more manure in the same area when the manuring is poor. Thus easily a careful ryot can increase his income by about 60% as shown above and reduce the expenditure by 10%.

The account will be roughly as below for a Tanjore ryot :-

10.00	P	resent cost.	Reduced cost.
Cost of ploughing	* ;	5-0-0	400
Cost of manure		8-0-0	8-0-0
Cost of seed ·		2-0-0	1-8-0
Cost of planting and thinning	*	2-8-0	2-8-0
Cost of weeding		2-0-0	2-0-0
	Total	20-0-0	18-9-0
		* The second	

Harvest is paid for in kind and hence not taken into account. Value of straw has been put as a set off against the assessment. The capital invested in the price of land is left out of consideration since the profits are due to it.

To calculate cost per unit of produce, cost of production may now be put down as Rs. 20 per acre for 1700 lbs. in Tanjore. That is equivalent to Rs. 11-12-3 for 1000 lbs. Cost of production as per improved methods is Rs. 18 per acre for 2720 lbs. yield per acre; it means Rs. 6-10-0 per 1000 lbs. Reducing it per kalam of 64 lbs. the cost of production comes Rs. 0-12-9 per kalam in the old way and Rs. 0-6-9 per kalam under the improved system.

Calculating the cost of production per unit must be the ordinary way that a ryot should adopt. The idea of calculating cost of cultivation per acre and yield in lbs. will give him no easy solution of the

problem as to whether he is a loser if he sells his produce in a particular market at a particular rate per unit.

By increasing the dose of manure or other treatments given at a heavy cost one ryot is able to increase his acre yield very considerably. Whether it is economical to do so is a question yet remaining unsolved. Calculating the cost of production per unit of the produce as above, will immediately warn the producer to remain within economic limits.

Therefore I suggest that calculations of the cost of production must not end with cost of production and yield per acre, but must proceed further and should be resolved into the cost of production per trade unit of any produce if the producer must know his own economic position at any stage. It is, I believe, the want of such a clear idea of the economic position that does not induce the average wet land farmer to go in for any crop other than paddy and adopt other improvements suggested by the Agricultural Department as rapidly as he should.

AGRICULTURAL METEOROLOGICAL PROBLEMS.

BY S. AUDINARAYANAN, M. A.

Agricultural meteorology deals with the influences of weather on vegetation, particularly on animal life, vegetable food and textile supplies of the nations of the world. That agriculture depends both on the climate and the periodical variations of weather is a well known fact. But the relations are very complicated and there is difficulty in separating the effects of the several factors. So much so, the progress made in applying the data in meteorology to the purposes of agriculture is not as much as might have been expected. The greatest obstacle to the progress is the great inaccuracy in the data expressing acreage and yield. The meteorologist engaged in the study of weather and crop relations is constantly confronted with the internal evidence of gross inaccuracies and lack of homogenity in acreage and yield values.

A definite advance seems to have been made by the establishment of the Agricultural Meteorological Section under the Indian Meteorological Lepartment. Their programme of work on the Research side includes the investigation of best methods and standardisation of those methods for the measurements of radiation, evaporation, soil temperature, and soil humidity so that these data may ultimately be systematically maintained in addition to those of air temperature, air humidity, rainfall, wind, sunshine etc. The Statistical Officer under the Imperial Council of Agricultural Research is travelling from province to province and is taking every effort to improve the defects in the collection of acreage and yield statistics. But the records at the several Agricultural Farms should be very accurate to be capable of yielding very good results.