Case Study of a Successful Paddy Cultivator of Pudukkottai District, Tamil Nadu

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Agricultural development depends upon a number of factors like irrigation (Dhawan, 1989; Panda, 1985) quality of land, capital and knowledge (Hanumantha Rao, 1980, pp. 6-7) of the farmers, use of modern inputs (V.K.R.V. Rao, 1989), intensity of use of new technology components (Athreya et al., 1990), status of farmers, the existing condition of the extension services (Hanumantha Rao, 1988), education and availability of communication (Dasgupta, 1989), size of land, the ecological condition of the land (Athreya et al., 1986) and regional and climatic conditions (Hanumantha Rao, 1989)

No doubt, the success of the individual farmer naturally depends upon the above-mentioned components. Whereas it does differ from one farmer to another in general, it also varies from crop to crop in particular, because a number of conventional and non-conventional methods of production and scientific innovations often affect the farmers at each and every stage of farm activities. Though there are a number of factors, the success of the individual farmer is more predominantly determined by his overall management of the farm-it includes the allocation of time on farm activities, his own labour spent on his land, method of cultivation, etc. This paper presents a case study of a successful farmer in Pudukkottai district of Tamil Nadu.

A successful farmer, namely, Karuppiiah of Kalangudi village of Vallathirakottai (P.O.), Pudukkottai district of Tamil Nadu has been selected purposively from the paddy crop competition winners’ list of 1989, produced by the office of the Joint Director of Agriculture (JDA), Pudukkottai.

Farming Activities of the Area

Vallathirakottai area is predominantly characterised by the widespread use of deep borewell irrigation. Perennial water supply could be got and no scarcity of water is experienced. The important crops cultivated in this area are paddy, sugarcane, groundnut and plantain. Three paddy crops can be cultivated in a year with the help of borewell water supply. This area has been selected as a Special Rice Production Area (SRPA) by the Government of Tamil Nadu.

Socio-Economic Conditions of the Farmer

A striking feature is that the farmer belongs to the scheduled caste community. He has got one acre of wet land and does not possess any borewell. He actually fetches water for hire from the nearest borewell owner. He and his wife are illiterates. They have four daughters, all in the school going age. He is always concerned and attached mostly with the crops and works on the farm daily. This village is a remote one, having poor road transport

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facility. People have to walk three kilometres to buy agricultural inputs and even necessary consumer goods. The majority of the population in the village belongs to the scheduled caste.

History of the Farmer

Before 1985, Karuppiah was not interested in farm activities because he did not have his own land and assured irrigation water facility; only one crop had been cultivated in a year. He had not devoted much of his time to cultivation because of the uncertainty in yield, low prices of the product and low remuneration. During the early eighties he purchased one acre of land for Rs. 25,000. Now (in 1990) that piece of land is worth one lakh of rupees. It may not be an exaggeration to say that this is mainly because of the impact of assured borewell irrigation. After the introduction of borewell in this area in 1985, Karuppiah started giving more time and attention to farming activities. Now three paddy crops could be cultivated by him in a year. It implies that assured water supply made a farmer to work actively and thereby raise agricultural productivity.

Management and Supervision

Besides supervising and managing, Karuppiah also works with other labourers on the farm, which is one way of getting the work done quickly. Weeding, application of pesticides, method of ploughing and transplanting of seedlings are done as per his direction by other labourers. If he finds any plant disease or pest attack, he takes immediate corrective steps. Most of the decisions concerning his farm activities are taken by him with the help of his own experience. Sometimes he also consults the leading farmers of that area. According to his statement, he does not take seriously the recommendations of the Farm Demonstration Officer (FDO) as he says that the FDO’s recommendation does not help control the pests as expected. However, he finds the FDO’s recommendation relating to the seed varieties useful. He opines that the radio broadcast relating to agricultural activities is very useful for the management of many activities on his farm. It shows that experience and timely intervention are important factors determining the success of farming.

Sources of Finance and Services to Others

Though he is a small farmer, he does not face any financial problems. If he needs financial assistance, he gets it easily from the private moneylenders at 36 per cent rate of interest. He uses mostly his own resources for his agricultural activities. As far as services to the society or the agricultural community is concerned, he sells good quality seeds to the farmers at low price, compared with government seed centre’s price. He is also propagating the good method of cultivation to other farmers.

Investment, Technology Adoption and Business

Being a small farmer, he could not invest much. He has invested Rs. 3,000 on plough bullocks, Rs. 350 on hand sprayer and Rs. 250 on plough materials. Thus his fixed investment is about Rs. 3,600. His operating cost is around Rs. 3,500. Totally his investment on agriculture comes to around Rs. 7,000 only. It shows that when the size of farm is small, there is no need for heavy investment on agriculture.

As far as technology adoption is concerned, he uses all the new inputs like HYV seeds, chemical fertilisers (potash, urea, neem cake, etc.), pesticides, weedicides and sometimes
he uses crop tonic like SPIC sytozem. Regarding farmyard manure and other green manure, he expressed the view that without 25 cart loads of farmyard manure, he can not go for paddy cultivation. He considers both farmyard manure and chemical fertilisers important and he believes that without farmyard manure, fertilisers will not be beneficial to the crop. As already noted, he uses all inputs as per his own experience and depending upon the crop growth and condition.

He sells his produce directly to the local private merchant without any intermediaries. The price of paddy (per bag of 60 kg.) varied between Rs. 125 and Rs. 165 during 1989. Once he sold 50 bags of CR-1009 paddy variety seeds to the Government seed centre, for which he is yet to receive the full amount. Because of this reason, the farmer decided not to sell any seeds hereafter to the government’s seed centre.

Input and Output Pattern

It is already noted that he uses all inputs, both scientific and non-scientific and applies his own experience and makes his own decision. In fact, if the FDO recommends use of 75 kg. of urea for a particular crop, the farmer will apply 100 kg. or 125 kg., depending upon the growth or situation of the crop. In the same way, he applies pesticides three to four times for each crop without any consultation with the FDO. His cost of cultivation is nearly 30 per cent higher than that of the ordinary cultivator (see Table I) because he has applied more farmyard manure, chemical fertilisers and pesticides. His output has actually doubled as compared with the others. In 1989, he cultivated a paddy variety, CR-1009, which was bought from the government seed depot and also joined the paddy crop competition in Pudukkottai district, in which he reaped 3,600 kg. per acre, the highest yield for the entire district.

<table>
<thead>
<tr>
<th>Farm operation</th>
<th>Successful farmer [Karuppiah]</th>
<th>Ordinary farmer *</th>
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</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(Rs.)</td>
<td>(Rs.)</td>
</tr>
<tr>
<td>1. Land preparation</td>
<td>184.00</td>
<td>200.00</td>
</tr>
<tr>
<td>2. Seed cost</td>
<td>87.50</td>
<td>75.00</td>
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<tr>
<td>3. Sowing, planting, transplanting seedlings</td>
<td>175.00</td>
<td>160.00</td>
</tr>
<tr>
<td>4. Chemical fertilisers</td>
<td>628.00</td>
<td>400.00</td>
</tr>
<tr>
<td>5. Farmyard manure and green manure</td>
<td>1,000.00</td>
<td>600.00</td>
</tr>
<tr>
<td>6. Weeding</td>
<td>60.00</td>
<td>60.00</td>
</tr>
<tr>
<td>7. Pesticides</td>
<td>150.00</td>
<td>60.00</td>
</tr>
<tr>
<td>8. Irrigation</td>
<td>750.00</td>
<td>300.00</td>
</tr>
<tr>
<td>9. Harvesting</td>
<td>225.00</td>
<td>275.00</td>
</tr>
<tr>
<td>10. Threshing and winnowing</td>
<td>150.00</td>
<td>200.00</td>
</tr>
<tr>
<td>11. Other cost</td>
<td>100.00</td>
<td>200.00</td>
</tr>
<tr>
<td><strong>Total cost</strong></td>
<td><strong>3,509.50</strong></td>
<td><strong>2,530.00</strong></td>
</tr>
<tr>
<td>Total yield</td>
<td>3,600 kg.</td>
<td>1,800 kg.</td>
</tr>
<tr>
<td>Total price of paddy (at the rate of Rs.140 per bag of 60 kg.)</td>
<td>8,400.00</td>
<td>4,350.00</td>
</tr>
<tr>
<td>Paddy straw</td>
<td>500.00</td>
<td>400.00</td>
</tr>
<tr>
<td><strong>Total income</strong></td>
<td><strong>8,900.00</strong></td>
<td><strong>4,750.00</strong></td>
</tr>
<tr>
<td>Total expenditure</td>
<td>3,509.50</td>
<td>2,530.00</td>
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<tr>
<td>Net profit</td>
<td>5,390.50</td>
<td>2,220.00</td>
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</tbody>
</table>

* The cost structure of the ordinary farmer has been calculated from 10 random sample farmer's cost of cultivation data.
Factors Affecting the Success

The sample award farmer Karuppiah says that the following points can be taken into account for successful cultivation as well as for achieving higher productivity in agriculture.

1. Farmer should devote more time on farm activities; he should visit the farm and inspect the crop at least three times every day.
2. Farmer should apply more of his own labour.
3. Farm should be nearer to his residence; only then he can supervise easily. Or else, he should establish a hut near the field.
4. The land area should be minimum (maximum three acres) so that one can manage the farm easily and can attain higher productivity.
5. Regarding application of pesticides and fertilisers, the farmer should take timely action, otherwise it will lead to lower productivity.
6. Weed control is important, for which the fields should have always a minimum/normal water and when weeds are found between the crops, it should be removed immediately on the spot.
7. Excessive irrigation affects the yield considerably, so controlled irrigation is more important.
8. Farmyard manure is as important as chemical fertilisers. So the farmer should give equal value to both. Otherwise the yield will decline in future or yield stability will be affected.
9. Experience is more important than any other factor. Those who do not have experience can consult other farmers who have rich experience.
10. The existing pattern of extension services is not easily available. It is also tedious to learn and adopt their methods. The number of FDOs should increase, so that farmers can discuss easily with them.
11. Good quality seed may not be available to all and its price is also high. Sometimes, the seed authority forces the farmers to buy some items like weedicides, cholam and greengram which may not be needed immediately by them. This fact should be brought to the notice of the government.

Conclusion

From the above facts it can be concluded that the success of the individual farmer not only depends upon the new technology components but also on how a farmer allocates his own labour on farm activities, takes immediate decision and action on farm related problems, his experience in the field, use of farmyard manure along with chemical fertilisers and, above all, on the size of the farm. The success of the individual farmer depends more on the above stated factors than on the new agrarian technology components alone.

REFERENCES


