Rice is one of the most highly mechanized crops produced in California. Land preparation for planting is done with heavy machinery. Seeding, insect and weed control often are carried out by aircraft. Harvesting is done by large combines specially equipped with crawler tracks.

Rice is well adapted to the heavier clay soils, and those with impervious subsoil. A sufficient amount of inexpensive water is required to produce this crop profitably.

In Fresno County, rice is planted in late April and May, or early June following a barley crop. It is seeded by aircraft at the rate of 150 to 170 lbs. per acre. It will respond to the application of 60 to 90 lbs. of nitrogen per acre. Phosphorus may be needed in some areas. Unlike other crops, rice should be fertilized with the ammonium form of nitrogen fertilizers.

Draining the water off the rice field at the correct time is very important. The soil type and drainage facilities determine when the field should be drained. It should be scheduled so that by the time the rice is ready to harvest, the soil will be dry enough to support the combine.

Costs of production vary greatly from farm to farm; therefore, the actual cost to produce rice on any one farm may differ from the one here presented. Land values, taxes, water and labor costs vary from one area of the county to another.

The need for insect control, other than seed treatment, varies from year to year and from farm to farm. Sometimes it is not required. Severe legal restrictions on the use of 2,4-D herbicides in Fresno County prevent the control of broadleafed weeds infesting many fields. Therefore, neither weed control nor insect control were included as cost items in this work sheet.
This sample cost analysis work sheet is useful when planning a cropping program to estimate needed cash and to make production cost comparisons between two or more crops.

Yields per acre and the cost of water greatly influence the total cost to produce rice. Two tables were prepared which show costs of production at varying water costs and yields per acre.

Costs of Production of 4,000 lbs. of Paddy Rice Per Acre with Varying Water Costs

<table>
<thead>
<tr>
<th>Water Costs Per Acre</th>
<th>$15.00</th>
<th>$18.00</th>
<th>$22.00</th>
<th>$26.00</th>
<th>$29.00</th>
<th>$32.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Costs Per Acre</td>
<td>$142.80</td>
<td>$145.80</td>
<td>$149.80</td>
<td>$153.00</td>
<td>$156.80</td>
<td>$159.80</td>
</tr>
<tr>
<td>Costs Per 100 Lb. Sack</td>
<td>$3.57</td>
<td>$3.64</td>
<td>$3.74</td>
<td>$3.84</td>
<td>$3.92</td>
<td>$4.00</td>
</tr>
</tbody>
</table>

Costs of Production at Varying Yields with Water Costing $18 Per Acre for the Season

<table>
<thead>
<tr>
<th>Yield - Lbs. Paddy Rice Per Acre</th>
<th>3500</th>
<th>4000</th>
<th>4500</th>
<th>5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Costs Per Acre</td>
<td>$140.88</td>
<td>$145.80</td>
<td>$150.72</td>
<td>$155.65</td>
</tr>
<tr>
<td>Total Costs Per 100 Lb. Sack</td>
<td>$4.03</td>
<td>$3.64</td>
<td>$3.35</td>
<td>$3.11</td>
</tr>
</tbody>
</table>

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Available publications on Rice production:

* California Rice Production
* Establishing a Rice Stand
* Rice Fertilization
* Weed Control in Rice
* Water Management in Rice Production
* Green Manures and Crop Residues in Managing Rice Soils

Cooperative Extension Work in Agriculture and Home Economics, U. S. Department of Agriculture, University of California and County of Fresno Cooperating.