434

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Food Industry Consultants

Wild Rice Sectoral Study for Northern Saskatchewan

– Final Report –

Prepared For:

The Wild Rice Study Management Team
Consisting of:
Saskatchewan Northern Affairs
Saskatchewan Agriculture and Food
Saskatchewan Environment and Resource Management
Saskatchewan Wild Rice Council

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Wild Rice Sectoral Study for Northern Saskatchewan

– Progress Report –

Table of Contents

Table of Contents

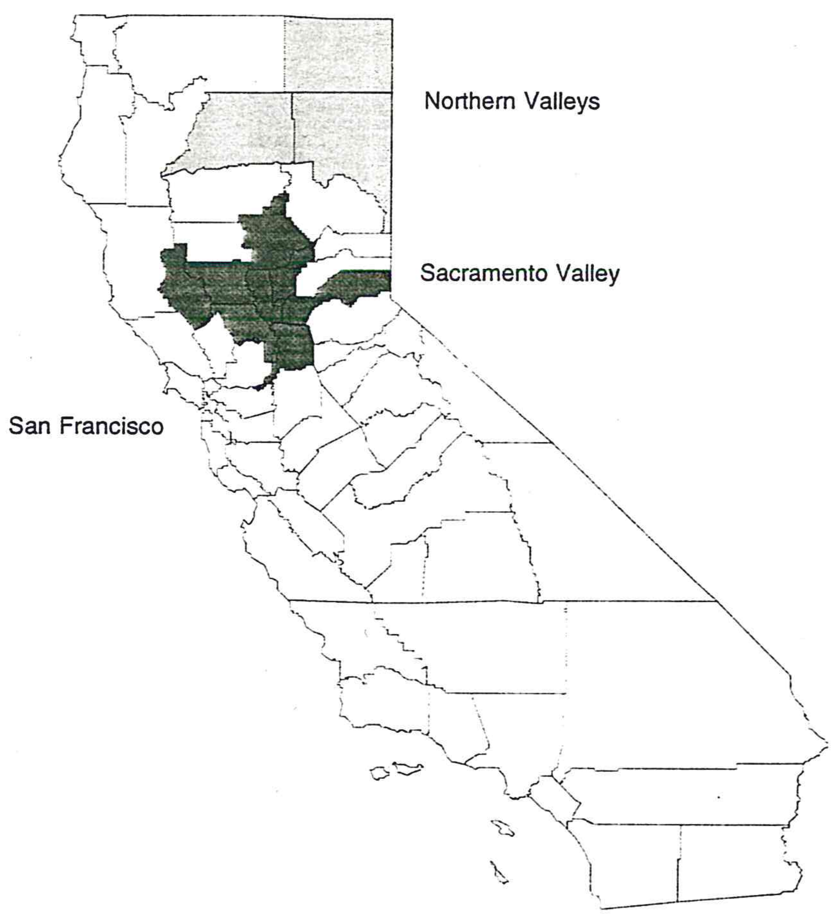
List of Tables

List of Figures

5.2.2 California

California's emergence as a wild rice producer has set the trend toward the crop becoming a commodity. There are two distinct wild rice growing regions in California. The Sacramento Valley production base represents a unique production zone in that the wild rice is planted each year. The northeastern California growing area is at higher latitudes and is more representative of the Minnesota paddy production system. The Sacramento Valley is also unique in that it is a white rice production zone. The ability of this area to switch between white and wild rice has been a concern to the wild rice industry because of the potential for significant acreage swings.

Figure 5-2 Location of California Wild Rice Production Zones



Economic Situation and Prospects of the California Wild Rice Industry
Daniel A. Sumner

Introduction and Context

The California wild rice industry is a small specialty industry covering about 10,000 acres of cropland in several northern counties of the State. Wild rice uses a small share of the available acreage and comprises a small share of the regional crop value, but it is important in some local areas and California produces a significant share of the total wild rice in North America. Unlike white rice, wheat, feed grains and cotton, wild rice has not been a part of the U.S. government farm subsidy program. In this way, it is similar to fruits, tree nuts, vegetables and other specialty crops in California.

This brief report summarizes the recent history and current situation of the crop and reviews various factors that will influence the economic prospects over the next several years[2]. We focus especially on factors that are likely to affect the total output from the industry.

Background on the California Wild Rice Industry

All the wild rice in California is produced in the northern part of the state. About half of the wild rice acreage is planted in the same region, the Sacramento Valley, where white rice is a major crop. Most of the rest of the wild rice acreage is planted in small valleys to the North, primarily in Shasta and Lassen counties. A small amount of acreage is west of the white rice belt. Within the Sacramento Valley, where there are many more acres of cropland and a large number of crops, wild rice represents a small share of acreage and crop value. In this region, the wild rice industry exists in conjunction with some very large and extensive crop industries. White rice, canning tomatoes, safflower, sugar beets, alfalfa, wheat and several others represent significant field crops in the region.

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2 As with many relatively minor crops in California, data on the industry are exceedingly difficult to acquire, and published government sources do not necessarily provide reliable statistics, especially on a county by county basis. What follows, then, is based only in part upon government data (contained in the reports of the California County Agricultural Commissioners).

The wild rice industry represents a profitable crop for a relative few growers (about 40 to 50 statewide). California is the home of a number of such niche crops. Indeed, one of the hallmarks of agriculture in the state is the production of over 250 separate crops, most of which individually contribute little to the aggregate value of California agricultural output. With an average statewide value of production of some $10 million, wild rice is in the same order of magnitude as radicchio and radishes. In counties north of the Sacramento Valley, wild rice is relatively more important because there are fewer crop alternatives and total agricultural output itself is small compared to the regions to the south.

Wild rice is grown with many production practices similar to those used for white rice. The fields are flooded and planted in the late winter or spring and harvested with much the same equipment as used for white rice. The planting period can range from February to June with the harvest ranging from early July to October. The growing season for wild rice is significantly shorter than for white rice. Nitrogen fertilizer is used but most chemicals used on white rice are not registered for use on wild rice. White rice yields typically range between 7,000 pounds to 9,000 pounds per acre, with market prices in the range of about $0.07 and $0.09 per pound (U.S.). Typical wild rice yields are in the range of 1,200 to 1,700 pounds per acre (green weight) with prices in the range of $0.50 per pound (U.S.). Thus, for white rice typical gross market returns are in the range of $500 to $800 per acre (U.S.). For wild rice typical gross returns are in the range of $600 to $850 per acre (U.S.). However, as discussed below, the U.S. Government rice program has affected the returns to white rice.

Wild rice acreage has varied over the past 15 years. It reached an early peak in 1985 and 1986 and then declined precipitously and remained low for several years only to rise in 1992 and 1993 and again in 1996 and 1997. This pattern appears in all information sources though there is little agreement about the absolute acres.

The most reliable data (see Table 5-4) appears to be those from the California Wild Rice marketing order, a state government-sanctioned group that collects fees from growers on a per acre basis and conducts a promotion program based on those assessments[3]. The acreage reported by the California Wild Rice Program reached 11,508 acres in 1992 with 49 growers participating. Acres then declined by more than 20%, reaching 8,281 in 1994 before rising gradually to 11,800 in 1997. Acreage in the three districts have followed roughly the same pattern with District 1 (the North Region) maintaining the largest area, almost 50% of the total, in each year. District 2 (mainly the Sacramento Valley area west of the Feather River) has maintained second position throughout the past five years.[4]

Production in the wild rice industry may be reported on a green basis or a finished basis. The crop is harvested with relatively high moisture content and must be dried and processed before further storage. In California, the farm price is typically quoted on a green basis assuming a standard two to one ratio of green to finished wild rice. There are no industry data on production per acre, price, or total value. Unfortunately, the data reported by County Agricultural Commissioners seems both internally inconsistent and, in some cases, implausible. Many of these numbers are also at variance with information provided independently by several industry experts. It is our assessment that they should not be used as an accurate reflection of the situation in the California wild rice industry. The acreage data reported by growers to their marketing order provides the basis for the California wild rice promotion efforts and we consider it to be substantially accurate. One industry observer noted, however, that since growers pay an assessment of $10 per reported acre they may report an under count of acreage by as much as 10%.

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3 Growers are required to report acreage and pay approximately $10 per acre into the promotion fund (which therefore has a budget of about $100,000 per year.

4 Mel Andrus, who is a long time leader in both the wild rice and white rice industries, manages the California Wild Rice Program. Mr. Andrus provided these data.

Table 5-4 California Wild Rice Acreage by District 1997

District 1 Shasta, Lassen and Modoc	5,461.0
District 2 Sutter (West of Feather River), Yuba, Butte, Colusa and Lake	3,412.9
District 3 Sutter (East of Feather River), Placer, Sacramento, Yolo, and remainder of the State south	2,906.0

Year	Acres	Number of growers
1986	10,976	46
1987	7,554	51
1988	7,140	45
1989	7,383	44
1990	7,718	36
1991	9,287	46
1992	11,508	49
1993	10,098	51
1994	8,281	44
1995	8,968	40
1996	10,800	45
1997	11,780	38

Source: California Wild Rice Program, Yuba City California.

As noted, average yield per acre and aggregate production data are not reported annually by industry sources and thus must be gathered on an informal basis. Industry sources suggest average yield per acre in California (green basis) has been in the range of about 1300 pounds to 1600 pounds per acre in recent years. Based on industry sources, aggregate production is in the range of 19 million pounds green weight for 1997.

Price data is also not available from official sources. However, industry sources state that a green price of approximately $0.50 per pound, based on a two to one green to finished ratio, has been standard for wild rice contracts in California in recent years. There is also some indication from more than one source, that the price of wild rice has been slightly higher in the Sacramento Valley than in the Northern counties. It is not clear why this price difference occurs or if it is sustainable.

Given our estimates of production and price, the estimate of total gross farm revenue of the California wild rice industry is approximately $9.5 million in 1997. Typical gross revenue has been in the range of $650 to $800 per acre in recent years. This is close to the average revenue for white rice.

Prospects for wild rice in California

The California wild rice industry uses a relatively small share of the potential acreage for which it is suited and, in the Sacramento Valley, wild rice also uses some of the same specialized equipment and cultural practices that apply to white rice. These facts have caused concern that the acreage of wild rice might be subject to large percentage shifts from one year to the next. Further, there is a concern that, since the California industry constitutes a large share of the North American wild rice industry, the result of large acreage swings would likely be large price swings in the opposite direction. These are legitimate concerns, but they should not be over-emphasized. Let us first look at the recent past.

1) In recent years almost all wild rice in California has been grown under a marketing contract. Growers have a destination for the major portion of the wild rice they grow well before harvest. This contracting system allows the acreage decision to be linked to demand prospects by the contract buyers. Further, because wild rice is storable, year to year fluctuation may be smoothed by carryovers.

2) The recent evidence is that acreage has not moved up and down drastically. There was a decline of about 20% over two years from 1992 to 1994 and a subsequent increase to the previous level over a three-year period, but these are relatively moderate changes that appear in other commodities.

3) The acreage and production increases in the past three years seem not to have been accompanied by substantial drops in the farm price paid for wild rice in California. Thus, the production increases have found a "home" without undue price pressure.

4) The largest region for wild rice production is Northern California (district one of the Wild Rice Program). This region has relatively few alternative crops and no production of white rice.

Looking now to the near future, we expect no wild swings, either up or down in wild rice production in the State. This is based in part on the evidence just given.

The wild rice industry is potentially influenced heavily by prospects for other field crops, especially white rice. These crops compete for acreage with wild rice and other crops that cover a much larger acreage. Thus, a relatively small percentage movement in acreage of wheat or white rice may entail a major percentage movement for wild rice in the opposite direction.

The economic prospects of the California white rice industry seem generally sound for the next several years. This conclusion is based upon detailed analysis presented in January 1998 by Sumner and Lee. They discuss farm program payments, supply conditions and the export and domestic demand situation and find that the economic basis of the industry is not without challenges, but is basically sound. On the demand side, reduced acreage and firm prices in the south provide strength in domestic demand for California rice. With respect to exports, sales to Japan under the Uruguay Round GATT agreement and prospects for sales to South Korea and Taiwan are encouraging.

The U.S. farm subsidy program for white rice, cotton, feed grains and wheat has potentially important implications for wild rice. Therefore it will be outlined briefly here. Beginning with the 1996 season, the U.S. farm program for rice was changed substantially by the Federal Agricultural Improvement and Reform (FAIR) Act. The past program contained many restrictions and producer incentives that regulated rice supply. There is now much less micro-management from the government.

The FAIR Act is best understood as another step in the decade-long process that made U.S. farm commodity programs more market oriented and allowed production to become responsive to market signals. The key provisions of the FAIR Act include the following:

- The deficiency payment program, including 50-85 program, was eliminated.
- Authority for an acreage reduction program was eliminated.
- The marketing loan program was retained with a national average loan rate of $6.50 per hundredweight (as under the previous program).

- As a replacement for the deficiency payments, new "production flexibility contract payments" were established. These new payments are based on the same acreage and yields as used under the deficiency payment program.

- Contract acres must be maintained in agricultural use. However, this land may be used for other agricultural activities (with several key exceptions).

- Farms may leave the program during the 7-year period, but once out of the program no farm may re-enter.

The FAIR Act provisions for rice reduced the total payments to the California rice industry compared to what was received in recent years (although not compared to what would have been received under the 1990 Act). More important are the supply effects of the new law, which allows producers significantly more opportunity to adjust their land use without affecting their government payment.

Prior to 1996, farmers in the white rice program could plant wild rice on a small share of white rice base without affecting the government payments they received. For 1996 and 1997, the land eligible for wild rice was expanded to the whole of the rice base. One might have expected that, with this planting flexibility, the acreage committed to white rice would have declined. The opposite occurred and acreage of white rice was in the range of 500,000 acres in both 1996 and 1997. There was an increase of about one to two thousand acres of wild rice in 1996 and 1997 compared to the prior two years, but it is hard to associate this to the change in the white rice program.

More important for current prospects of the wild rice industry is a recent change in the rules with respect to planting wild rice on white rice contract acres. The USDA Farm Service Agency Background documents states:

> *"The FY (fiscal year) 1998 Agricultural Appropriation Act provided that wild rice planted on contract acreage shall result in a reduction in PFC (program flexibility contract) payments per acre for each contract acre planted to wild rice."*

In explaining implementation of this rule the USDA document goes on:

> *"For FY 1998 only, if wild rice is planted on a farm having an approved PFC, the contract payment shall be reduced an acre for each acre planted to wild rice on the contract acreage. The reduction is based on the rate and yield of the enrolled crop with the lowest dollar value per acre."*

For 1998 the government payment for white rice will average about $200 per acre. Few growers will be willing to forego a rice payment to plant wild rice on this base acreage. Wheat and feed grain payments are lower, but growers will continue to look for acreage outside the government payment program for their wild rice.

The provisions in the FAIR Act apply to 1998, but it now seems likely that the restriction will continue. The law was politically favored by growers of wild rice who do not have a white rice base and it was considered a relatively small matter for white rice growers. The FAIR Act, in its current form, continues until 2002. This suggests that little white rice acreage will be converted to wild rice before that time, unless this planting restriction is relaxed. Industry observers do not see a dramatic decline in acreage of wild rice suggesting that relatively little government program acreage was planted to wild rice in the recent past.

Conclusions

The California wild rice industry has been relatively stable for a decade. There are fewer than 50 growers with an average of about 200 acres each. Growers contract production to a handful of buyers so that only a small share of the crop is grown under speculation. There are only three mills in the state and information in the industry is circulated informally.

Any small industry is vulnerable to large swings in production, and this remains a concern in the wild rice industry. Nonetheless, the industry seems well placed to continue on the path of the recent past.