

Agriculture in California

Purpose: To show the student the major role that agriculture plays in the economy of California and the importance of the state as a major exporter of many foods, both fresh and processed. The "off" season provider will be stressed.

I. History

A. Early agriculture

1. Indians were not agriculturalists until the establishment of the missions.
2. First reports to America speculated that Cal. would never be self sufficient in agricultural products. Reason - summer drought, inconsistent precipitation. American agric. was not aware of the importance of irrigation.
3. First agriculture was mission crops and grapes for sacramental wine - the mission grape (imported) There are some native grapes but old world vines were preferred.
4. Livestock ranching most important in Mexican period.
5. Later grain products were grown extensively. A century ago Ca. was the leader in the U.S. in wheat production, today still in top 10.
6. Later agricultural exports spurred development of transportation.
7. Most important thing to agricultural success in Cal.= the establishment of Irrigation systems. The state has over 12.5 million acres of prime land with:
a. long growing season b. fertile soils
c. good drainage d. ample water supply e. microclimatic conditions f. minimal development costs (after Irrigation system finished) Allowed the state to become the #1 agricultural state in the U.S.
9. 1/3 of state = agricultural land, but only 1/10 is cropped. Most of state is pastoral - grazing most widely productive land-use in Cal.
8. Value and employment of state Agricultural production = #3 after aerospace and electronics.
a. Cal. provides 1/3 of nations fruits and nuts b. 1/3 of all vegetables c. many are off season to provide lettuce, celery etc. to the nation during the winter/spring etc. These crops are worth much more for sale during seasonal scarcity.

II. Overview (Ref. p 206 Table 10-1)

- A. More \$ made/year in agric. than in all gold taken in Gold R.
- B. Surpasses \$ made from minerals, lumber and fishing combined.
- C. A big problem = urbanization of prime lands. Oranges are not big anymore since best land for them is now covered by concrete.
- D. Tendency toward farm consolidation. 20% reduction in # of farms in first 1/2 of 1970's. Size of farms increasing (Table 10-2 p. 208)
- E. 16% of farms (the largest sized farms) did 87% of business (1974 data Cal. Atlas)
- F. Cal. accounts for 10% of nations agricultural production.
- G. 75 different crops are grown, and yields / acre for some are unmatched anywhere in the world.
- H. Ag. Exports = 1/8 of total value of all exports from California. This equals \$ 25 Billion in commodities in 1996.
For the 50th consecutive year California leads nation. Texas 2nd (13.1 Billion)
- I. Many ancillary jobs are created by the food production industry. For every farm related job there is about a 3/1 ratio of service related jobs. i.e. stores, machinery sales, metals and plastics (pipes), homebuilding, etc.
- J. Many jobs are seasonal and poor paying. Brasero program over in 1964. Some jobs lost (esp. in canning tomato picking) due to mechanical harvesting (U.C. ag. school) many people today do not have to migrate as in the past. Some unionization (U.F.W)
- K. Surprisingly only 2% of states workforce is directly engaged in farming (about 300,000; 1980) 2/3 as laborers, 1/4 owner/operators and tenant farmers, 1/10 as managers / researchers / developers.

III. COMMODITIES

A. LIVESTOCK PRODUCTS -

1. Beef and milk #1 and 2 in \$ for Calif.. California has surpassed Wisconsin as #1 dairy state in U.S.
2. Eggs - nations #1 producer
3. Turkeys - usually 1st or 2nd.
4. About 4 million head of beef and 1.5 million sheep in Cal. VERY LITTLE EXPORTED - Due to distances of markets, large local demand, perish ability.

B. FEED CROPS - MOST IMPT. FOOD FOR ANIMALS.

1. Feed Crops are grown almost everywhere in state = the reason for widespread success of beef & sheep industry. COVERS ALMOST 1/2 OF CULTIVATED LAND IN CA.
2. Imperial and Kern C. = 1st and 2nd in Alfalfa Prod.
3. CA. 1st. or 2nd. Hay
4. 2nd. to N. Dakota in Barley - 90% for feed 10% beer etc.
5. Corn for silage (feed) = \$100 million/yr.

C. FIBER FIELD CROPS

1. Cotton - 1 st. Texas 2nd. \$ value of cotton ranks 3rd. in the state behind beef & milk.
2. 1st or 2nd in U.S. Sugar Beets (Spreckels) and Rice
3. Irish Potatoes Ca. 2nd. (with Maine and Wash.) after Idaho in production.
(READ PP. 211-214 in Miller for more on Fiber Field Crops.)

D. VEGETABLES, CITRUS, AVOCADOS

1. Ca. grows widest variety in the country.
2. 1/3 of all veg. in U.S. grown in Cal.
3. Leads nation in many (see p. 206)
4. Truck corps (veg.) = 1/5 of states ag. revenue.
5. Leads nation in avocados, lemons, olives. 20% of nations oranges (Fla. = 70%).
READ pp. 214-220 for Ventura Example.
6. Tomatoes - not a vegetable = a berry two kinds: a) cannery and b) pole (for eating directly) Pole = hand picked ;
Cannery = machine Picked see Text . for discussion on picking machines and U.C. vs. pickers.

E. DECIDUOUS TREE CROPS

1. Ca. = #1 PEACH Producer, not Georgia, also #1 in ALMONDS, APRICOTS, NECTARINES, PLUMS, PRUNES, ENGLISH WALNUTS, and PEARS.
2. Cal. = almost 100% of processed walnuts in Western Hemisphere
3. Deciduous trees are found in more northerly areas where there is greater seasonality.

F. FRUIT OF THE VINE

1. Text gives nice narrative on wines and wine making. beg. p. 223+.
2. **Three types** of grape production
 - a) **drinking:** including grape juice, wine, and brandy
 - b) **table fruit** in season
 - c) **Processed:** including raisins (dried), canned (as part of fruit cocktail), frozen drinks
3. Thompson seedless is most used grape type for raisins and table use. Grown mainly in Fresno area, prefers high heat to get proper amount of sugar content and for drying.
4. Dry table wines are grown without irrigation in Val. surrounding S.F. (chiefly Sonoma, Napa, Santa Clara)
5. Sweet dessert and red table wines need higher alcohol content (sherry, or port) = irrigated lands in San Joaquin Valley and near L.A.
6. Cal. produces 40% worlds raisins, 15% worlds table grapes, and 3% of worlds wine.
7. Geography of grape growing. See p. 228 Fig. 10-18 & Table 10-5 p. 229 for classification of grape growing areas.
8. **Marketing Associations**
 - a) Theodore Kearney tried to start and later succeeded.
 - b) Sun-Maid Raisin Growers Cooperative (there are other types of co-ops like Sunkist in citrus industry)
 - c) **Has four functions:** 1) Growers own packing plants 2) establish standards of quality 3) advertising and promoting a controlled brand 4) develops aggressive personal sales force. So, for example: raisin growers market product exclusively through their cooperative.
 - d) **Note:** There are no marketing organizations for wine, but the 300 bonded wineries and 100 fruit distilleries in state account for the production of 80% of the American wine market.
 - e) Cal. wines best known for a light dry table wine from Napa Vintners.

G. OTHER CROPS

1. Cannabis sativa (Marijuana, pot, grass) Mulberry family
 - a. est. production 800 million to 2 billion (tax free) \$/yr.
 - b. mainly grown in northwestern counties (sinsemilla = seedless)
 - c. if larger value (2 billion \$/yr.) is taken then pot's value is up there with cotton and grapes as dollars earned / crop.
 - d. Cal. rapidly moving toward "self-sufficiency" in pot.
2. Turf Grass see text. used in urban areas, homes, golf c.
3. Christmas Tree Farming (silviculture) multimillion \$ ind
4. Energy Crops (text) turning plant sugars into alcohol for fuel. Only practical if cost for fuel really climbs.

IV. Summary of California Agriculture.

A. Hard to Predict

B. Some research predictions for the future.

1. moderate growth to meet increasing pop. demand.
2. growth in land under cult. = area around Central Valley
3. loss of land in central and southern coast due to urban growth.
4. food grains and citrus predicted not to grow.
5. beef steady, lower prod. in sheep, hogs, poultry and eggs
6. increase in dairy prod., tomatoes, sugar beets & cotton
7. no change in forest, nursery and greenhouse production
8. Greatest challenge =
URBANIZATION. Taking some of the best land out of production for housing.

END AGRICULTURE