

## AGRICULTURE IN CALIFORNIA.

California is a state in North America in the United States of America on the western coast of USA to the Pacific Ocean and is the largest state.

California is bordered by Oregon State to the north, Pacific Ocean to the West, Mexico to the south, Arizona and Nevada to the East. Latitudinally California lies between 32°N–42°N of the equator and longitudinally between 115°W–125°W of the Greenwich meridian.

## THE RELIEF OF CALIFORNIA.

Generally California is divided into three major relief physical regions or divisions and these are;

### THE WEST COASTAL RANGES.

This is bordering the Pacific Ocean and is broken through by one major route of transport which is sometimes called the Golden Gate at San Francisco town. It consists of folded mountains which run parallel to the Pacific Ocean coast at an altitude of 2000m above sea level with the cities of San Diego, San Angeles, San Jose etc.

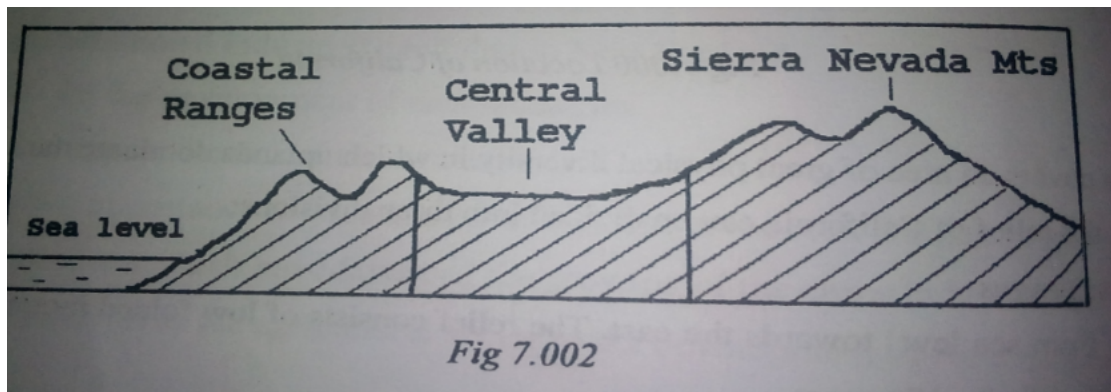
### THE CENTRAL VALLEY OF CALIFORNIA.

This is a valley and a low land in the middle of California between the coastal ranges and Sierra Nevada mountains consisting of thick and deep layers of fertile alluvial soils which are eroded from the coastal ranges and Sierra Nevada mountains. It forms the agricultural land for California and with rivers such as River Sacramento, Joaquin.

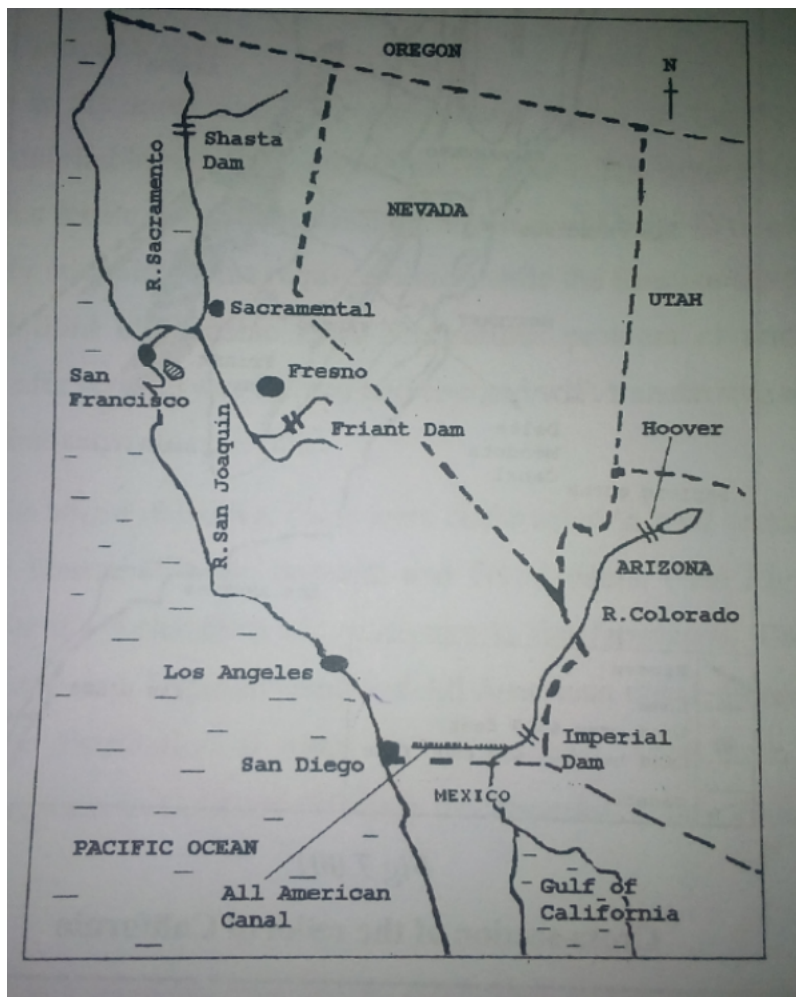
### THE SIERRA NEVADA MOUNTAIN RANGES.

This is a physical relief region located in the Eastern part of California bordering Nevada and Arizona States to the East. It is hilly and mountainous with its highest peak at Whitney range. It is 2000m–4500m above sea level.

A CROSS SECTION OF CALIFORNIA.



SKETCH MAP OF CALIFORNIA .



### SOILS IN CALIFORNIA.

Many parts in California especially in the central valley are with fertile alluvial soils and these soils make the best farm land. The imperial valley in California and the central valley among other valleys are with alluvial soils that favour crop growth when irrigated. Other areas with fertile soils are Death valley, Coachella valley, Baker field.

### NATURAL VEGETATION IN CALIFORNIA.

California has a variety of natural vegetation types which has been influenced by numerous climatic types such as desert and temperate climates. The natural vegetation of California is composed of scattered forests on the slopes of Sierra Nevada mountains and coastal ranges. The scrubs, short trees, scattered trees due to the aridity conditions e.g unreliable rainfall, very hot temperatures.

### CLIMATE IN CALIFORNIA.

California is dominated by Mediterranean type of climate. However there are other types of climate experienced such as desert climate, sub tropical climate etc. This is due to latitudinal location of California which is of 32°N–42°N of the equators. The coastal areas and North of California receives much rainfall especially in winter while some parts of California are dry hence receiving rainfall at a long time (unexpected). The interior and the south of California receive little or unreliable rainfall because of the desert climatic conditions.

### OUTLINE SKETCH MAP OF CALIFORNIA.



## AGRICULTURE IN CALIFORNIA.

California is a good example of a region that has developed its agricultural sector despite of the hostile climatic conditions ( unfavorable climate). Agriculture in California has developed by use of a large scale of irrigation farming.

### IRRIGATION FARMING.

This refers to a modern form of agriculture which involves the artificial application of water in the crop farms/fields in areas where there is low and unreliable rainfall with little moisture content to support the growth of crops.

### MAJOR IRRIGATION FARMING AREAS IN CALIFORNIA.

✓ The central valley. ✓ Imperial valley. ✓ Baker field.

✓ Death valley. ✓ Yucco valley. ✓ Coachella valley.

Crops grown on irrigation farms in California are citrus fruits such as oranges, pineapple, grapes, lemon, apples.

Other crop grown include cotton, vegetables e.g tomatoes, cabbage, carrots. Cereals like wheat, maizes etc.

Water for irrigation is got from rivers like Sacramento, San Joaquin, Colorado, Salinas which is transferred to irrigation farms by use of

1) irrigation canals such as Delta, Mendocino, Colorado, aqueducts.

2) use of aqueduct.

A aqueduct is a water pipe line which transfers water over a long distance to irrigation farms e.g San Diego aqueduct, California and Colorado aqueduct.

3) Construction of dams for irrigation e.g imperial dam, Friant Shasta dam.

### MARKET GARDENING.

This refers to the growing of fruits and vegetables for the selling but near marketing centres.

Characteristics of market gardening

✓ it specializes in the growing of fruits and vegetables.

✓ there is use of fertilizers to maintain the soil fertility.

✓ some irrigation is carried out onto the crops.

- ✓ it requires highly skilled labor.
- ✓ application of mechanisation.
- ✓ the farms are near market centres.
- ✓ it requires advanced technology e.g green house system.
- ✓ it requires a lot of capital to purchase fertilizers.

#### **LIVESTOCK REARING/ FARMING IN CALIFORNIA.**

Livestock farming in California is carried out on ranches in areas where irrigation farming is not carried out. However livestock is also frequently raised/kept on irrigated pasture. Cattle ranching is the important activity in some of the dry and sparsely populated areas. Livestock is kept for dairy and beef products in the central valley.

#### **FACTORS OR CONDITIONS WHICH HAVE FAVOURED THE DEVELOPMENT AND GROWTH OF AGRICULTURAL SECTOR/LIVESTOCK REARING/ARABLE FARMING/MARKET GARDENING IN CALIFORNIA.**

##### **Physical factors.**

\* Existence of water bodies around California e.g Pacific ocean, R. Sacramento, Colorado which provide water for irrigation in the agricultural centres like San Diego, San Francisco.

\* Cool temperature in California which attracts settlements that provide labour in agricultural sector.

\* Variety of valuable and commercial agriculture products in California e.g animals and crops which has helped agriculture industry to compete on world market.

\* Large extensive land in California e.g in central valley, Coachella valley which is used to set up farms in the agricultural sector.

\* Reliable rainfall in California which favours the growth of crops and pasture for animals to feed on.

\* Gentle relief in agricultural areas in California e.g in central valley which favours the setting up of agricultural farm structures.

\* Fertile alluvial soils in agricultural areas in California e.g Coachella valley which favour the growth of crops and pasture for animals to feed on.

### **Human factors.**

\* Skilled labour in California e.g farmers ,farm managers who have helped to do work in agricultural farms.

\* Sufficient capital in California e.g from government and investors which has been used to pay workers,taxes and buying machines used in agricultural sector.

\* Efficient and reliable transport networks in California e.g,roads which are used to connect agriculture centres to market areas.

\* Favourable and supportive government policy in California e.g provision of loans to Farmers, provision of farming land which has helped to attract investors and market to fishing industry.

\* Presence of wide and ready market in California e.g domestic and international levels eg Europe, Asia which has helped to buy agricultural products.

\* Advanced and modern technology in California e.g use of tractors which has simplified work and production in agricultural farms.

\* Sufficient power supply in California e.g HEP generated from rivers like r.sacramento which is used to run machines on agricultural farms.

\* Intensive agricultural research in California e.g on market control,pest and disease control which has helped to improve on quality of agricultural production.

\* Political stability in California e.g police that keep law and order which has attracted investors and market to set up modern agricultural farms.

\* Presence of many agro based industries in California eg food processing industries which help to process agricultural products into quality products.

\* Presence of agricultural cooperative in California which help farmers to access loans and market

\* Modern advertisements in California e.g through internet which has helped to attract market and investors to the agricultural sector.

## **CONTRIBUTIONS/IMPORTANCE/BENEFITS OF THE AGRICULTURAL SECTOR TO THE DEVELOPMENT OF CALIFORNIA.**

\* It has provided employment opportunities to the people of California e.g farmers veterinary doctors, farm Managers, drivers which has earned them income.

\* Agricultural sector has provided raw materials to industries e.g agro based industries which has been used to manufacture other products e.g juice,butter.

\* It has generated revenue to the government of California which has been used to development infrastructures like roads, schools and hospitals.

\* Agriculture industry has promoted infrastructural developments in California e.g school roads which have improved standards of living in California.

\* It promoted diversification of the economy in California e.g setting up of agriculture centres national wide which has reduced on over depending on few sectors in California.

\*Agricultural sector has promoted urbanisation in California e.g through infrastructural developments like roads this has led to development in the country.

\* It has promoted foreign exchange and currency in California e.g with Europe, Asia which has helped to settle international debts and infrastructural developments.

\* Agricultural industry has promoted international relations through trade between California with others like Europe Asia which has helped to promote peace and unity in the region.

\* It has provided market to others sectors in California e.g engineering industry which has helped others sectors earn income for development.

\* Agricultural industry has promoted the development of others sectors within the economy in California e.g tourism which has encouraged development in British Columbia.

\* It has promoted education and research e.g Universities and colleges in California which has helped students to acquire knowledge and skills about agriculture Field.

\* Agricultural industry has provided food to the people of California e.g fish which helped them to improve on their balanced diet in form of proteins.

## **PROBLEMS AND CHALLENGES FACED BY THE FISHING SECTOR IN CALIFORNIA.**

- \* Exhaustion of soil due to monoculture.
- \* Unfavorable climatic conditions e.g winter which interrupts agricultural activities hence limiting production.
- \* Competition from other countries dealing in agricultural products e.g Europe Asia which leads the sector to losses and limits production.
- \* High costs of transport in California due to perishable nature of agricultural products e.g in aeroplane to European market this has discouraged transportation of products.
- \* Limited skilled labour in agricultural sector this has made work and production difficult in California agricultural sector.
- \* Unsupportive government policy e.g high taxation in California which has discouraged investors and market to agricultural sector.
- \* Occurrence of accidents while carrying out agricultural activities in California which has caused injuries and death hence discouraging production.
- \* Political instability especially strikes among farmers which has discouraged investors and market to agricultural sector.
- \* Labour migration to other sectors e.g mining which has slowed and discouraged the agricultural activities.
- \* Low levels of technology e.g duplicated fertilizers which make work and production difficult in agricultural sector.
- \* Competition within the economy with other sectors e.g mining which leads to underfunding of agricultural sector by the government and labor migration hence limiting production.
- \* Soil infertility caused by soil erosion this has also led to low production of agricultural products in California.
- \* Pest and diseases which attacks crops and animals leading to low yields and low production.



## **WAYS OF IMPROVING OR SOLUTIONS TO THE PROBLEMS FACED BY FORESTRY SECTOR IN CALIFORNIA.**

\*Mechanisation such as use of machines should be used to solve the problem of shortage of skilled labour.

\*Application of fertilizers to improve soil fertility.

\*Use of protective equipments like helmets and gum Boots to minimize the occurrence of accidents on farms.

\*Practicing of mixed farming to over come soil exhaustion.

\*Construction of modern transport networks to easy the transportation of agriculture products to market centres.

\*Modern advertisements to compete on the world market with other countries.

\*Use of advanced technology to solve the problem of low levels of technology.

\*Intensive research on agricultural issues to improve on the quality of production and getting of market.

\* Improvement on workers conditions in agricultural farms to solve the problem of labor migration to other sectors.

\* Intensive modern advertisements through internet to access market for agricultural products.

## **PROBLEM RESULTING OR CAUSED BY THE MINING SECTOR TO THE HUMAN AND PHYSICAL ENVIRONMENT IN CALIFORNIA.**

### **Problems on the Human environment.**

- ✓ Accidents occurrence during farming leading to injuries and loss of lives.
- ✓ Labour migration in other sectors leading to labor shortage in other sectors eg fishing.
- ✓ rural urban migration which leads to over population in the agricultural towns.
- ✓ Displacement of people leading to creation of unplanned settlements eg slums.
- ✓ Regional imbalance in the country which leaves agricultural towns more developed than other towns without agricultural activities.
- ✓ urban related problems like prostitution which increase high crime rates in agricultural towns.
- ✓ profit repatriation by foreigners since they own majority of the extensive farms which leaves the country underdeveloped.

### **Problems on the Physical environment.**

- ✓ Pollution by agricultural industries in form of air,water, sound and land pollution which cause diseases to the living organisms in the environment.
- ✓ Exhaustion of soil due to over production.eg monoculture.
- ✓ Destruction of natural vegetation to set up farms that leads to increased soil erosion, global warming.
- ✓ Application of pesticides and insecticides kills soil organisms which leads to soil infertility.

