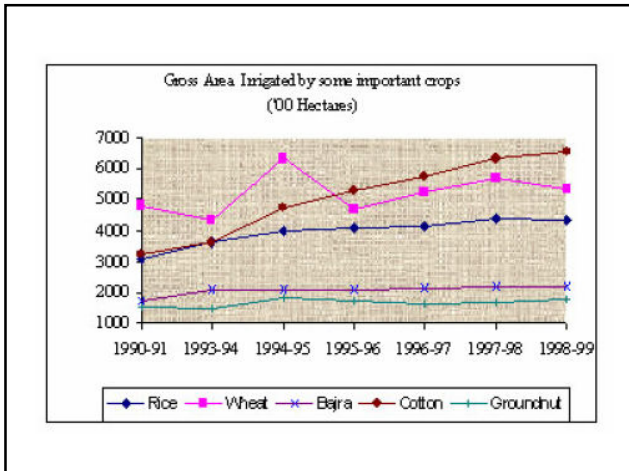




Average production in lakh tonnes and area in lakh ha in Gujarat

Sr. No.	Name of Crop	Ten years average	
		Area	Production
1	2	3	4
<b>A Kharif Season</b>			
1	Paddy	6.78	9.99
2	Bajra	10.52	9.17
3	Jowar	3.26	2.16
4	Maize	3.90	5.32
5	Tur	3.76	2.84
6	Green Gram	1.62	0.60
7	Math	0.58	0.17
8	Black Gram	1.08	0.56
9	Groundnut	17.95	14.36
10	Sesamum	3.01	1.26
11	Castor	3.76	6.64
12	Cotton	17.95	14.79
13	Guarseed	1.79	0.66
<b>Total Kharif</b>		<b>75.96</b>	<b>68.54</b>
<b>B Rabi Season</b>			
1	Wheat(Irrigated)	4.80	12.40
2	Wheat(Un-irrig.)	1.01	0.53
3	Jowar	0.71	0.62
4	Gram	0.93	0.65
5	Rape & Mustard	3.07	3.58
6	Isabgul	0.34	0.13
<b>Total Rabi</b>		<b>10.86</b>	<b>17.90</b>

INDEX OF AGRICULTURAL PRODUCTION  
(Base: Triennial ending 1991-92 = 100)



Live stock

Item	Unit	Year		
		1999-00	2000-01	2001-02
1	2	3	4	5
Milk	Lakh Tonnes	52.55	53.17	58.76
Eggs	Lakh Nos.	4771	3460	3701
Wool	Lakh Kgs.	26.46	27.40	28.08

MILK PRODUCTION  
(In 100 Tonnes)

## High tech areas

- Biotechnology and genetic engineering
  - Enhanced productivity
  - Resistance to biophysical stresses
  - Reduced input costs
  - Genetic improvements through tissue culture
  - Disease and pest resistant crops
- Tissue culture
- Green houses
- Bio fertilizers
- Post harvest technology
- Tapping non conventional energy resources
- Multi disciplinary approach
- Cost benefit analysis

## Some schemes in high tech agriculture

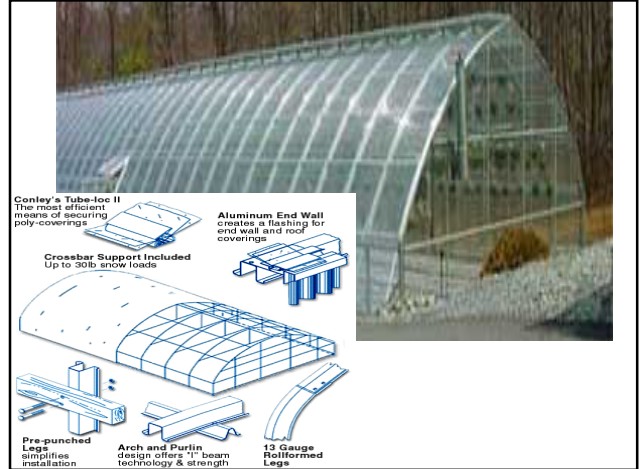
- Export of flowers
- Export of fresh mangoes
- Pre cooling of fruits for export
- Cold storage
- Fruit and vegetable processing
- Oil seed processing
- Vermicomposting / Organic Agriculture

## Value addition

- Change the cropping pattern of high yield crops
- Raise the productivity of the crops
- Shift from food crops to cash crops
- Establish of process and preservation units
- Creating the marketing and information system for export
- Framing of export friendly policy
- Lease waste land to big corporations who can grow agriculture on commercial lines and help neighbor agriculture in initiating high tech agriculture
- Farm enterprises- New Concept

Tissue culture

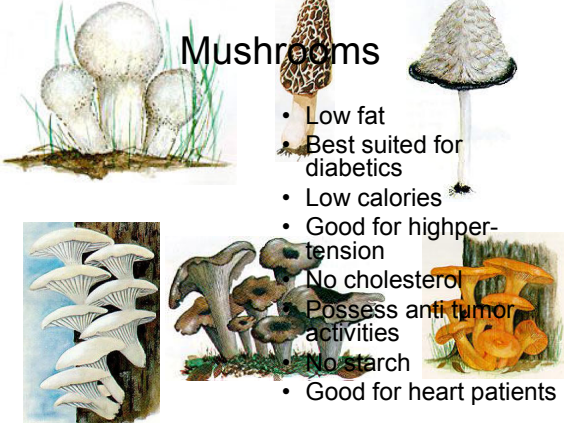




- ## Green house technology
- Green house methodologies provide
    - Protection to crops grown under extreme weather conditions
    - High sensitive fruits, vegetables, flowers
    - High value crops
  - Strategies
    - Infrastructure facilities to be provided
    - Scientific persons availability
    - Quality standards to be adopted
    - Cooperative basis to be developed
  - Constraints
    - Cost is very high
    - Plant acclimatization
    - Delayed approval from Government
    - Lack of technologies
    - Choice of crops
    - Lack of knowledge for green house agri business

### With and with out Green houses

Type	Crops	Yield Tons per ha
Open field	Tomatoes	60-80
Green house	Tomatoes	200-300
	Cucumbers	100-140
	Cabbage	70-100



### Mushrooms

- Low fat
- Best suited for diabetics
- Low calories
- Good for highper-tension
- No cholesterol
- Possess anti tumor activities
- No starch
- Good for heart patients

### How to grow straw mushrooms

- Minimum temp 30 deg c
- Thatched sheds- Requires shady space
- Spread paddy straw about 25 kgs on the wooden planks
- Spread spawn on the bed
- The bed should not be too dry or too wet
- Mushrooms start showing after three weeks
- One ton paddy straw shall give 120 kg fresh mushrooms
- The average cost of production is Rs 20 / kg
- The average selling price is about Rs 35 /kg

### Food processing Industry

- Raw material
  - Procurement of fruit and vegetables
- Infrastructure facility
  - On farm storage
  - Package station
  - Quick transport
  - Cold chains
- Processing
  - Primary processing
  - Value addition

### Market potential for processed product of major fruits in Gujarat

Sr.No	Particulars	Domestic	Export
1	Mango	Good	Excellent
2	Banana (Puri ketchup)	Limited	Fair
3	Papaya ( _Pulp, titifruity)	Good	Good
4	Lemon, lime	Good (Pickle)	Fair( pickle, juice, concentrate)

### Out put of horticultural products

Sr.No	District	Area(ha)	Production ( Mt)
1	<b>Mango</b>		
	Valsad	28200	282000
	Junagadh	6500	65000
	Surat	3500	35000
2	<b>Chikoo</b>		
	Valsad	5400	64800
	Surat	1800	21600
	Bhavnagar	1200	14400

Sr.No	District	Area(ha)	Production ( Mt)
3	<b>Citrus</b>		
	Surat	5000	100000
	Kheda	6000	120000
4	<b>Banana</b>		
	Surat	7000	280000
	kheda	8100	324000
	junagad	1600	64000

Sr.No	District	Area(ha)	Production ( Mt)
1	<b>Onion</b>		
	Bhavnagar	17800	409400
	Junagadh	2200	50600
2	<b>Tomato</b>		
	Kheda	2000	30000
	Valsad	2000	30000
	Surat	1500	22500

Sr.No	District	Area(ha)	Production ( Mt)
1	Cumin		
	Bhavnagar	21200	10600
	Junagadh	1700	850
2	Isabgul		
	Bhavnagar	400	248
	Junagadh	200	124
	Sabarkantha	800	496
	Khed	450	279

