

Global Scenario ,market potential & Business opportunities in Essential oil, Fragrance & Flavour

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Trade in Medicinal & Aromatic Plants

- Mostly Dried form - (95-100%)
- Small & Medium Size Industry
- Cross Trading between Companies
- Original Source not Known

Essential Oils

Major Producers

Brazil

China

Egypt

India

Mexico

Guatemala

Indonesia

Consumers

United States of America

Western Europe

Japan



Largest Global Market Places

- China
- France
- Germany
- Italy
- Japan
- Spain
- United Kingdom
- United States of America



Global Essential Oils: An Overview

- *Nearly 300*
- *Only 50% is Cultivated*
- *Rest from by-products of a primary industry or are harvested from natural wild plants*
- *Total Production: 1,20,000 Tons*
- *Rs. 16000 Crores or 4 billion US dollars.*

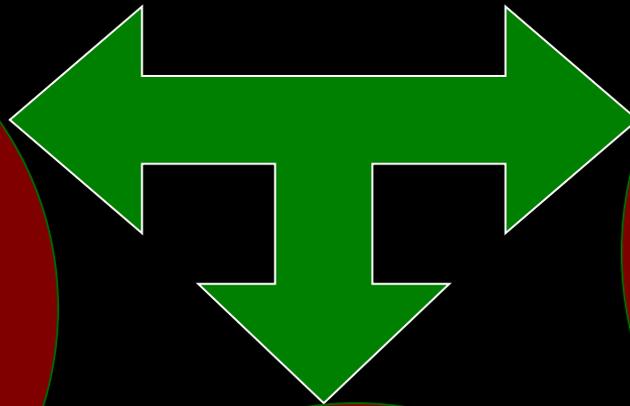
Out of these

- *110 essential oil comprises of 95% of global consumption in fragrance & flavour industry.*

Modes of Obtaining Natural Aroma Extract



Distillation



Solvent
Extraction



Expression

Types of Distillation of Essential Oils



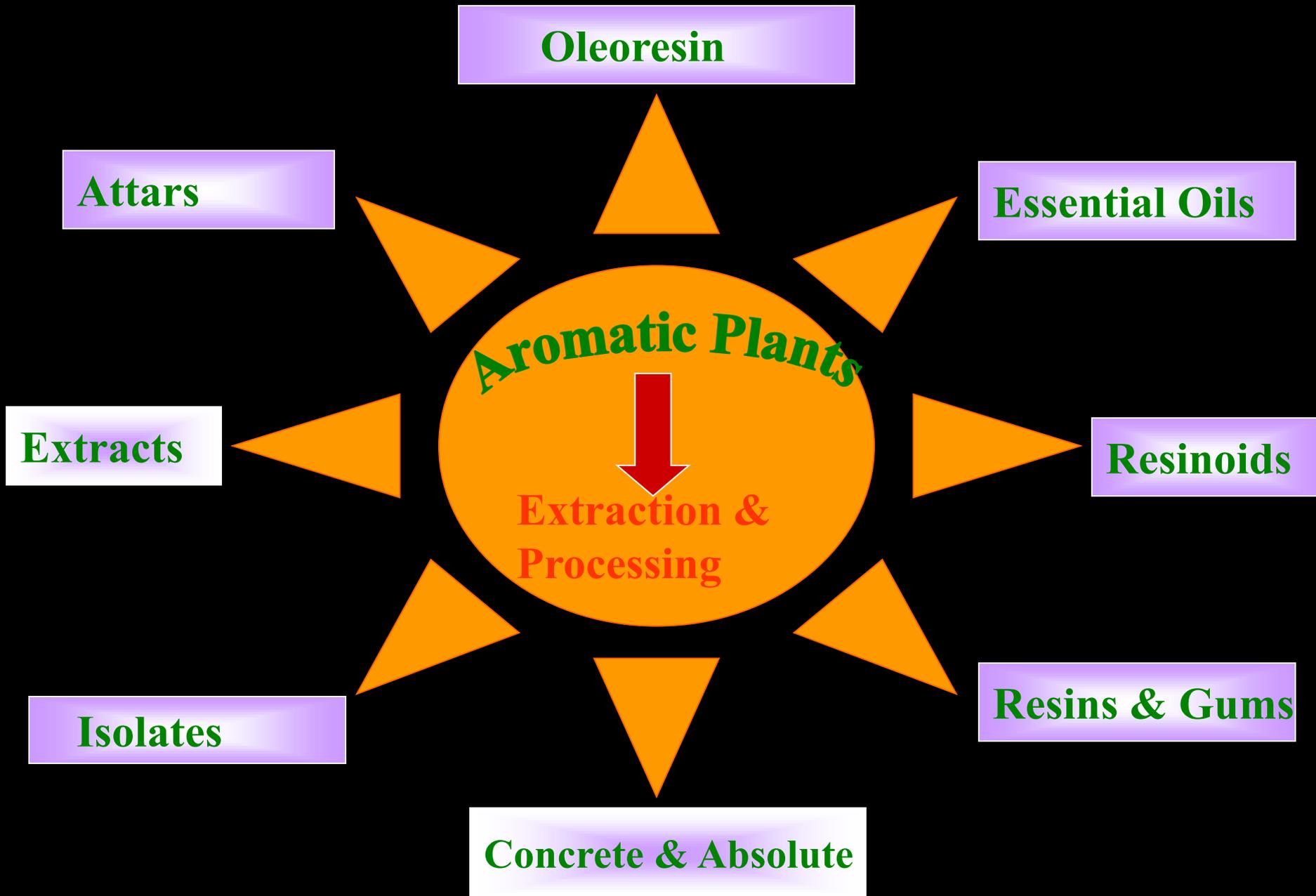
Hydro
Distillation
(Flowers)



Hydro-Steam
Distillation
(Herbs)



Steam
Distillation
(Woods)



World Trade in Essential Oils

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graph TD; A[World Trade in Essential Oils] --> B[Major oils]; A --> C[Minor oils];
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Major oils

Large Quantity

Low Price

10 Oils

80% Trade

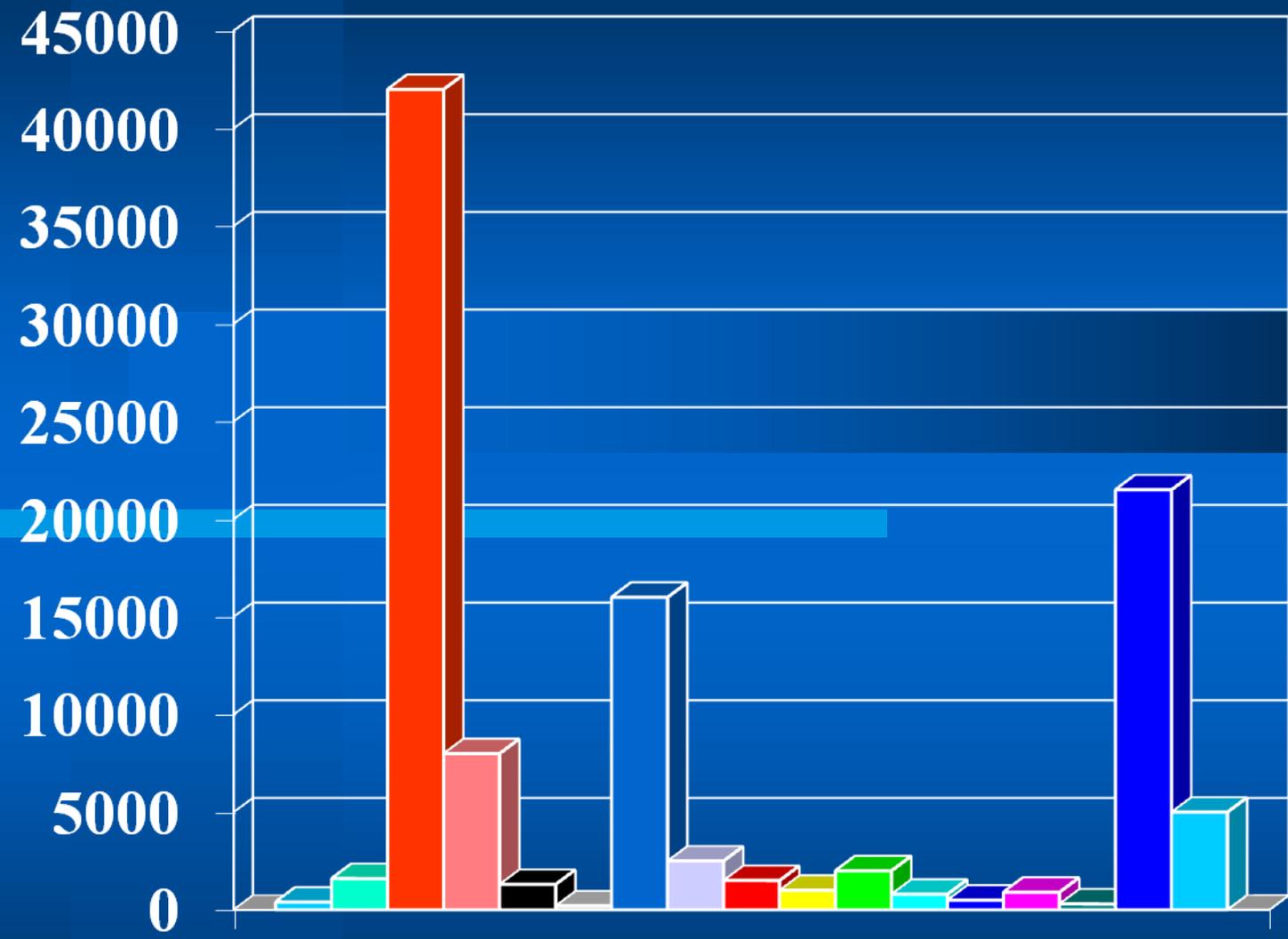
Minor oils

Small Quantity

High Price

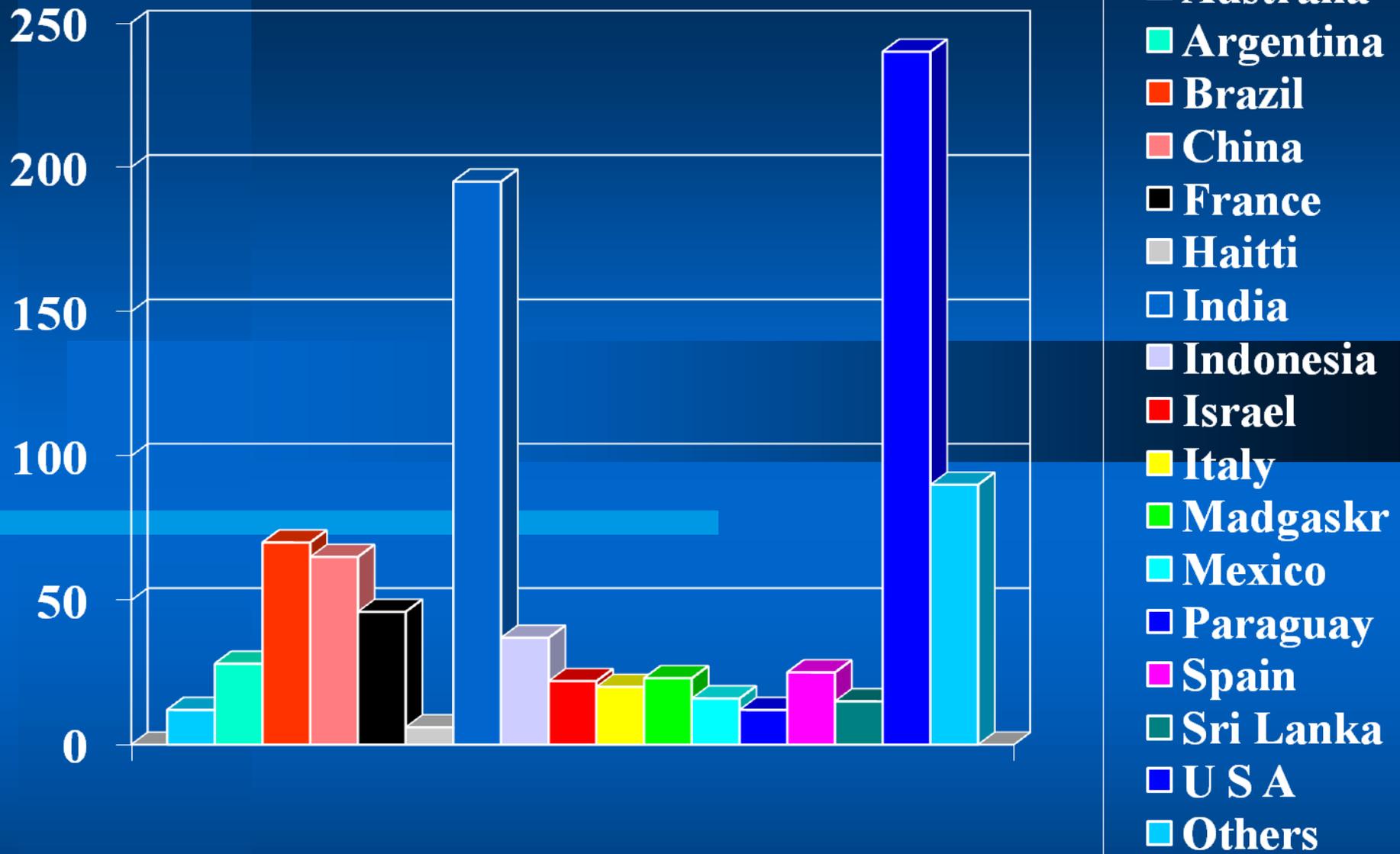
150 Oils

20% Trade



- Australia
- Argentina
- Brazil
- China
- France
- Haitti
- India
- Indonesia
- Israel
- Italy
- Madgaskr
- Maxico
- Paraguay
- Spain
- Sri Lanka
- U S A
- Others

World Estimated production of Essential oil is **1,20,000 Tons**



World Estimated production of Essential oil is **4 Billion US \$**

India – Major Exporter of

- **Spice Oleoresins**
- ***Mentha arvensis* (Menthol mint)**
- **Floral Absolutes**



India – Exports

- *Medicinal & Aromatic Plants*
- *Processed Plant Drugs*

To

75%

France
Germany
Japan
United Kingdom
United States
Switzerland

25%

Pakistan
Spain
Bangladesh

Major Essential Oil Produced in India

- Ajowan
- Angelica
- Artemisia
- Caraway
- Celeryseed
- Cinnamon Bark
- Citronella
- Coriander
- Cornmint
- Cumin
- Frankincense
- Ginger
- Lemongrass
- Patchouli
- Rose
- Sandalwood



Status of Major Essential Oil for Consumption in Fragrance & Flavour Industry

S. No	Name of oil	Annual global consumption (tons)	Country of Origin
1.	Orange oil	30000	Brazil, USA, Spain, Israel, Mediterranean countries
2.	Cornmint Oil	16000	India , China, Brazil.
3.	Spearmint Oil	1500	USA
4.	Peppermint Oil	4000	USA, India , China
5.	Texas Cedarwood Oil	2900	China, USA, Mexico, Central America.
6.	China Cedarwood Oil	800	-
7.	Citronella Oil	3000	Srilanka, China, India , Java, Taiwan, South & Central America

8.	Lemon-Oil	5000	USA, Italy, Argentina, Spain, Brazil.
9	Eucalyptus Oil	5000	Chinam Spain, Portugal, Brazil, Australia, South Africa.
10	Coriander Oil	700	Russia, Ukraine, Egypt.
11.	Litsea cubeba and Lemongrass oils	2200	China, India , West Indies, Central America, Africa.
12	Clove Oil	2200	Indonesia, Madagascar, Tanzania, Malayasia, Srilanka
13.	Sassafras Oil	1500	Brazil
14	Sassafras Oil	800	China.
15.	Patchouli Oil	900	Indonesia, India .
16.	Cedarleaf Oil-Thuja Oil	140	USA, Canada.
17.	Lime	1600	West India, Mexico, Iran, Brazil, USA

18	Camphor Oil	800	China, Taiwan, Japan.
19	Rosemary	300	Spain, Tunisia, Morocco
20	Star anise Oil	400	China, Vietnam
21	Anise Seed Oil	110	Eastern Europe
22	Mandarin & Tangerine Oils	300	Italy, Brazil, Spain, Argentina, USA
23	Vetiver Oil	260	Indonesia, Haiti, Reunion, India , China.
24.	Lavender Oil	420	France, Bulgaria, Tasmania, China, Maldeva.
25	Lavandin Oil	1200	France
26	Spike lavender oil	100	Spain
27	Petitgrain Oil	250	France, Italy, spain, North Africa.
28	Geranium Oil	600	China, Reunion, Madagascar, Egypt, India
29	Chinese cinnamon-Cassia Oil	180	China.

30	Nutmeg Oil	180	Indonesia, India , West India.
31	Grapefruit Oil	250	USa, Argentina, Israel
32	Dill seed, Weed Oil	140	India
33	Fennel Oil	120	China, Egypt, Greece.
34	Bergamot Oil	120	Italy, Brazil, Spain, Ivory coast.
35.	Tea tree Oil	250	Australia, Africa
36.	Ginger Oil	120	India , Malayasia, Taiwan, Australia, Fiji.
37.	Clary sage & Sage Oil	50	Russia, USA, Spain, France
38.	Pimento Oil	50	Jamaica
39	Thyme Oil	50	Spain, France, Morocco, Algeria
40	Marjoram Oil	50	Spain, Europe

40	Marjoram Oil	50	Spain, Europe
41	Basil Oil	50	Reunion, Comores, Madagascar, France Egypt, India
42	Juniper berry oil	50	Croatia, Nepal, Europe, USA
43	Celery Oil	50	France, India , Hollan, Hungary, China.
44	Palm rosa Oil	60	India , Seychelles, Pakistan, Comoro islands.
45	Rosewood Oil	100	Brazil
46	Sandalwood Oil	100	India , Australia, Indonesia
47	Srilanka cinnamon Oil	-	Srilanka, India , Seychelles, Madagascar, Comoro islands
48	Cardamom Oil	-	India, Gutemala.
49	Guiaac wood Oil	60	Paraguay, Argentina.
50	Gurjun balsam oil	-	South and East Asia
51	Labdanum Oil	50	Spain, Mediterranean countries

52	Laurel leaf Oil	-	Mediterranean countries
53	Ylang Ylang Oil	100	Java, Comoro islands, Madagascar
54	Chamomile Oil	50	Eastern Europe, Egypt, Italy, France, Morocco.
55	Aromoise Oil	15	Morocco, Germany, Hungary, India , China, Japan, France.
56	Tagetes Oil	-	Zimbabwe, South Africa, India
57	Tarragon Oil	10	France, Italy.
58	Galbanum Oil	10	Iran.
59	Worm wood oil	15	Italy
60	Davana Oil	3	India.
61	Caraway Oil	10	Asia, Europe, North Africa, USA
62	Cumin Oil	10	India , Egypt, Iran.
63	Ajwon Oil	-	India.

64	Bay Oil	20	West Indies, Dominica, South America
65	Valerian Oil	-	China, India
66	Tonka bean absolute	-	Venezuela, South America
67	Cade Oil	15	Portugal, Yugoslavia
68	Copaiba balsam oil	-	Amazon basin
69	Cypress Oil	-	France, Algeria.
70	Violet leaf absolute	-	France
71	Black currant absolute	-	Tasmania
72	Garlic Oil	-	China, Mexico, Egypt
73	Mimosa absolute	-	France, Morocco
74	Orris root Oil	5	Italy, Morocco
75	Hyssop Oil	-	Bulgaria, Europe
76	Perilla Oil	-	Japan.

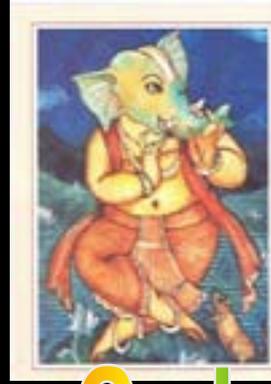
77	Savory Oil	-	Hungary, France, Yugoslavia, Germany
78	Catnip Oil	-	USA
79	Mellisa Oil	-	Bulgaria
80	Pennoroyal Oil	15	Europe
81	Muhuhu Oil	5	Kenya, Uganda
82	Yarrow Oil	-	Germany Hungary France and Yugoslavia
83	Calamus Oil	10	Europe, India
84	Cajeput Oil	50	Australia, Vietnam
85	Neroli Oil	3	Tunisia
86	Rose Oil	20	Bulgaria, Turkey, Morocco, France
87	Cassie absolute	-	Lebanon, Morocco, Egypt and France

88	Carrot Seed Oil	-	France, Hungary, Netherlands
89	Parsley Seed and Herb Oils	-	USA, Germany, France, Holland, Hungary, Egypt
90	Angelica root and seed oils	1	Europe
91	Lovage root, seed, herb oils	-	Belgium, Czechoslovakia, France, Germany, Holland, Hungary, Yugoslavia.
92	Celery herb oil	-	India , China, Netherlands, USA, Hungary
93	Agarwood Oil	-	India , Vietnam, Japan, Cambodia, Thailand.
94	Boronia Oil	-	Australia
95	Jatamansi Oil	-	India
96	Buchu Oil	-	South Africa
97	Jasmine absolute	15	China, India , Egypt, Morocco
98	Tube rose absolute	-	India , Egypt, France

99	Champaka Oil	1	India
100	Amyris Oil	-	Caribbean countries, Mexico
101	Cypress Oil	-	France Algeria
102	Carnation Oil	-	France, Italy, Egypt, Kenya.
103	Cubeb Oil	-	Srilanka, Sunda islands
104	Elemi Oil	-	Philippines
105	Nagarmotha Oil	-	India , Nepal
106	Costus root oil	-	India , Syria, Persia
107	Cistus Oil	-	Greek islands.
108	Cedar wood Oil	-	Central and South America
109	Cabreuva Oil	10	Brazil, Paraguay, Chile, Argentina
110	Ambrette Seed Oil	1	India

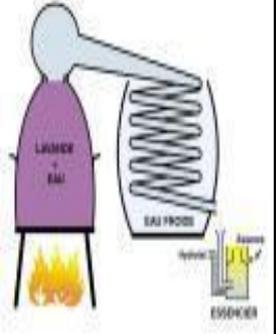
World's 20 Top Most Utilized Essential Oils

- Orange
- Cornmint
- EucalyptusCineole-type
- Citronella
- Peppermint
- Lemon
- Eucalyptus citronella type.
- Clove leaf
- Cedarwood (US)
- Litsea cubeba
- Spearmint
- Cedarwood (Chinese)
- Lavandin
- Sassafras(Chinese)
- Camphor
- Coriander
- Grapefruit
- Patchouli
- Sassafras(Brazil)
- Lime distilled(Brazil)



God

Has Created Scents



Man has Manufactured
Perfume



Perfume

Scents + Man

AROMATIC PLANTS



ROOTS

Vetiver, Angelica, Orris



WOODS

Sandalwood, Rosewood, Cedarwood



RHIZOME

Ginger, Nagarmotha,



BARK

Cinnamon, Cassia



FLOWER

Lavender, Rose, Jasmine etc.



SEEDS

Celery seed, Anise, Fennel, Nutmeg

AROMATIC PLANTS



LEAVES & FLOWERS Mint, Patchouli,
Geranium etc.



LEAVES & STEM Cinnamon, Patchouli,
Petitgrain, Geranium etc.



GUMS/EXUDATIONS Benzoin, Labdanum,
Myrrh, Styrax



FRUITS Lemon, Bergamot,
Orange etc.

As such

**Modes of
Utilisation of**

**AROMATIC
PLANTS**

Extracts

After
extraction

Utilisation of Rose

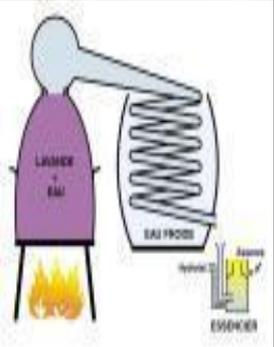


Gulab jal/
Rose Water

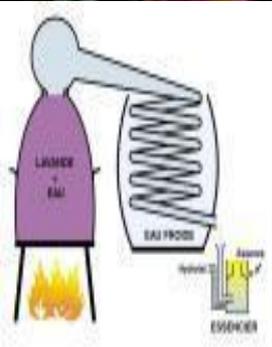
Gulkand/
Rose jam



Rose absolute/Rose oil



Utilisation of Natural Fragrant raw material in fragrance/flavour formulation



~10%

Quantitatively
Not Significant

Qualitatively
Significant



Pharmaceutical

Herbal Drug



Herbal Cosmetics

**Food
Products**
Salad
Gulkand
Jam/Cooking



**Aromatic
Plants
*as such***

**Fragranting
Environment/
Worship**
Agarbatti
Dhoopbatti



Cosmetics

Facepack



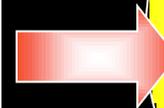
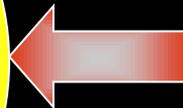
Hair/Body colour

Natural Colour

Saffron Red sandal Turmeric



**Aromatic
Plants
as such**



Respect/Love

Garland

Bouquet

Valentine Day



Miscellaneous

Rope, hat,

cooler



Ornamental

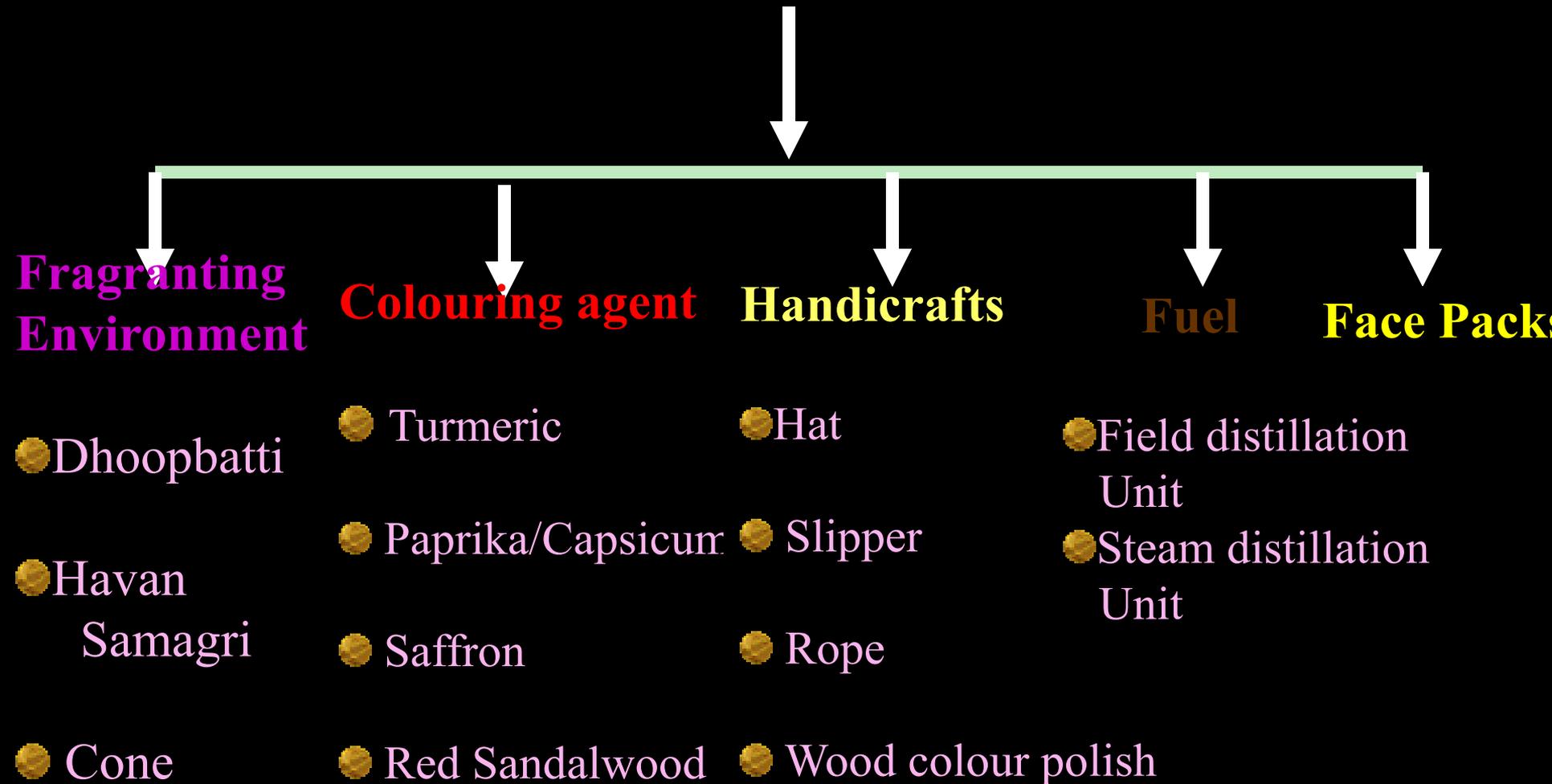
Garland

Bouquet

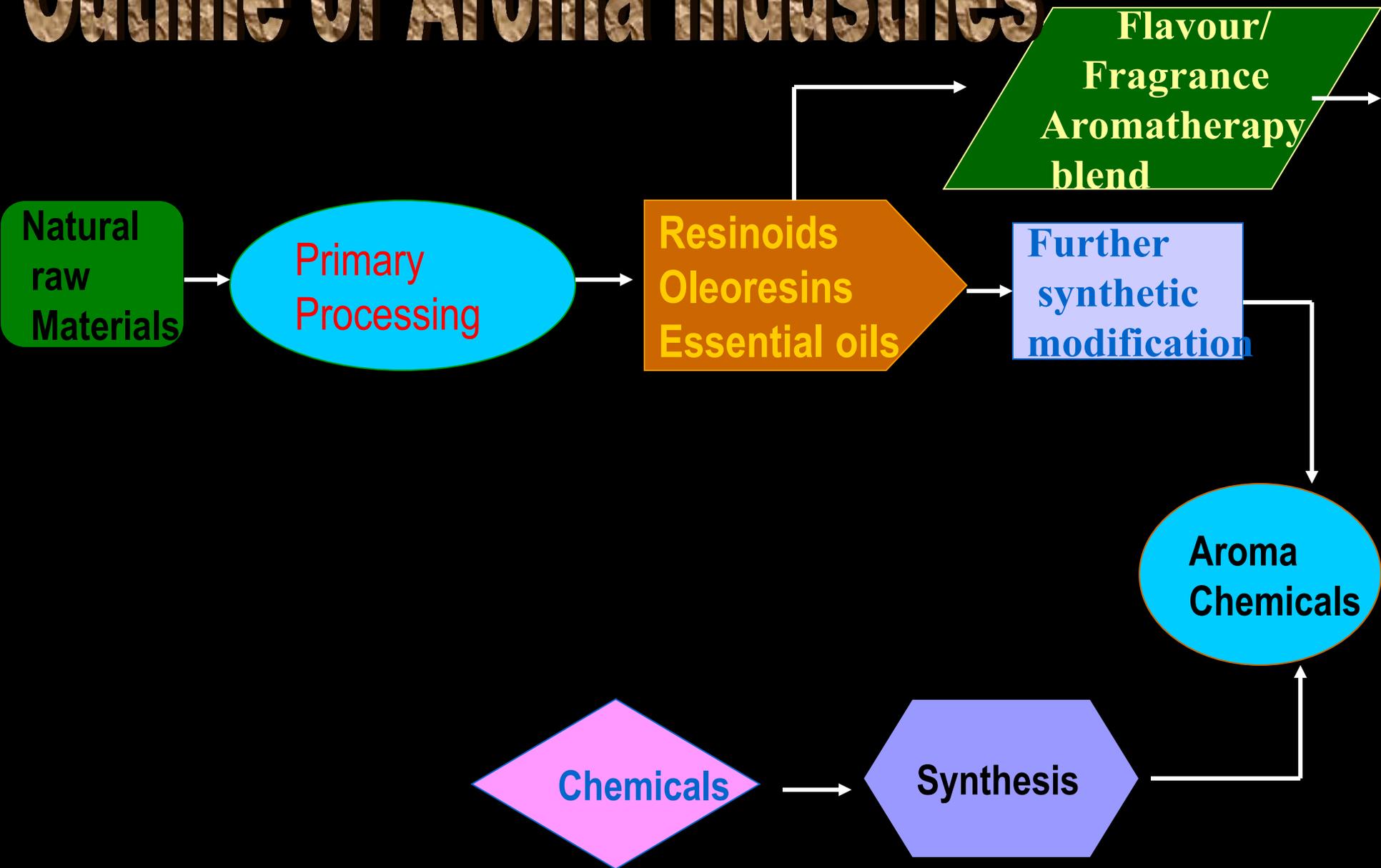
Decoration



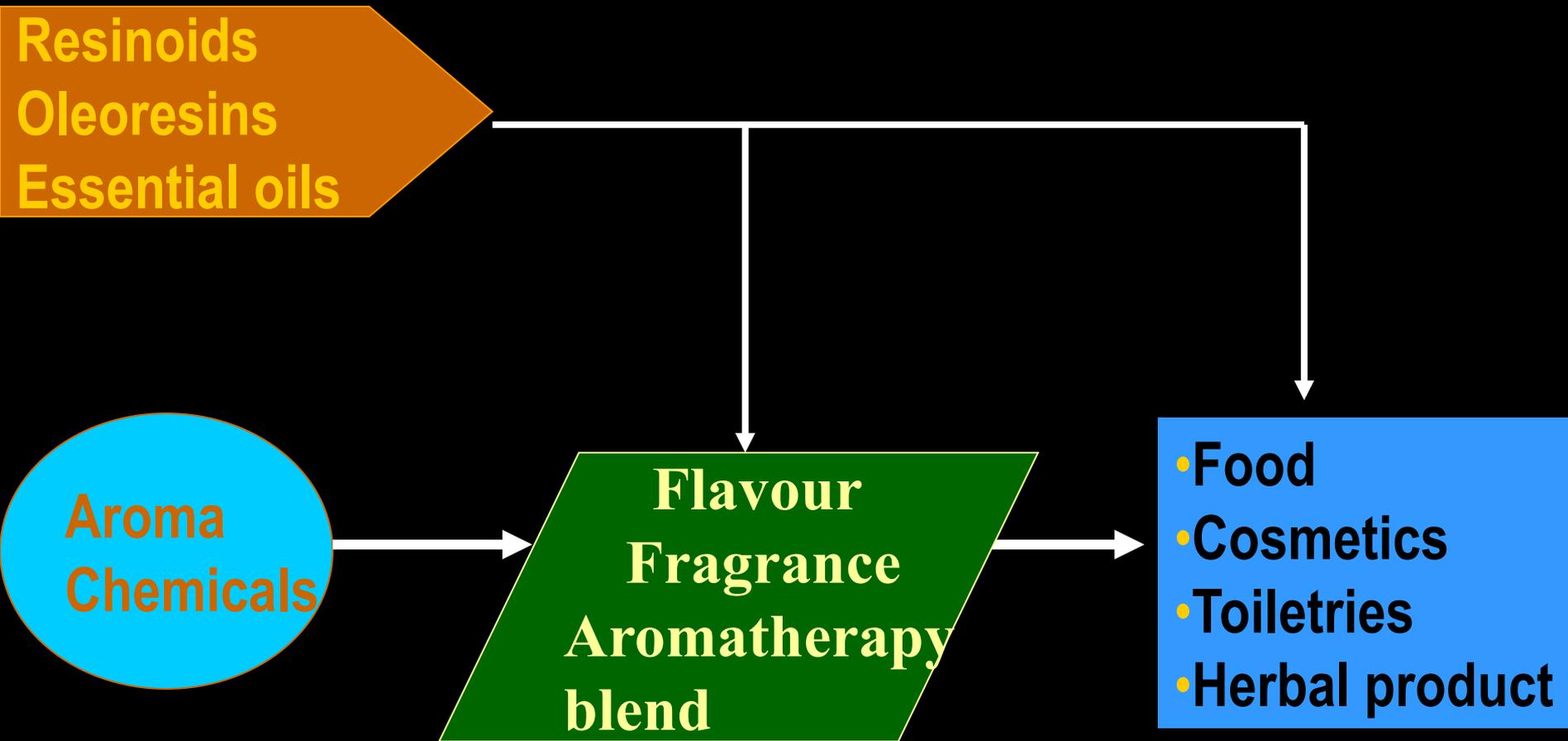
Utilization of Aromatic Plant after extraction



Outline of Aroma Industries



Outline of Aroma Industries



Reasons for Increasing Demand of Essential Oils, Fragrance & Flavour

- *Fashion*
- *Lust to remain youthful*
- *Back to nature movement*
- *Increasing popularity of Aromatherapy*
- *Increase in number of social institution*
- *Awareness about cleanliness*
- *Increased consumption of Beverages*
- *Demand for spicy food*



World Trade in Essential Oils, aroma Chemicals, Fragrance & Flavour

<i>Item</i>	<i>% of Value Chain</i>	<i>US \$ Billion</i>
Aroma Chemicals	12	1.8
Essential Oils & Natural Extracts	12	1.8
Flavour	41	6.2
Fragrance	35	5.3
<i>Total</i>	<i>100</i>	<i>15.5</i>

Essential Oils

Demand Sectors

Isolates & Aroma Chemicals

Flavours

Fragrances

Flavours

- Toothpaste
- Soft Drink
- Biscuit
- Ice-cream
- Medicine

Fragrances

- Soap
- Cream
- Perfume
- Hair Oil
- Agarbatti
- Talcum Powder
- Room Freshener

Pharmaceuticals (Aromatherapy)

- Cough
- Cold
- Headache
- Skin care
- Hair care
- Burn

Global Fragrance & Flavour Market

21 billion US \$

40% is with following

1. International flavour & fragrance
2. Symrise
3. Firmenich
4. Quest International
5. Givaudan

Indian Fragrance & Flavour Market

225 Million US \$

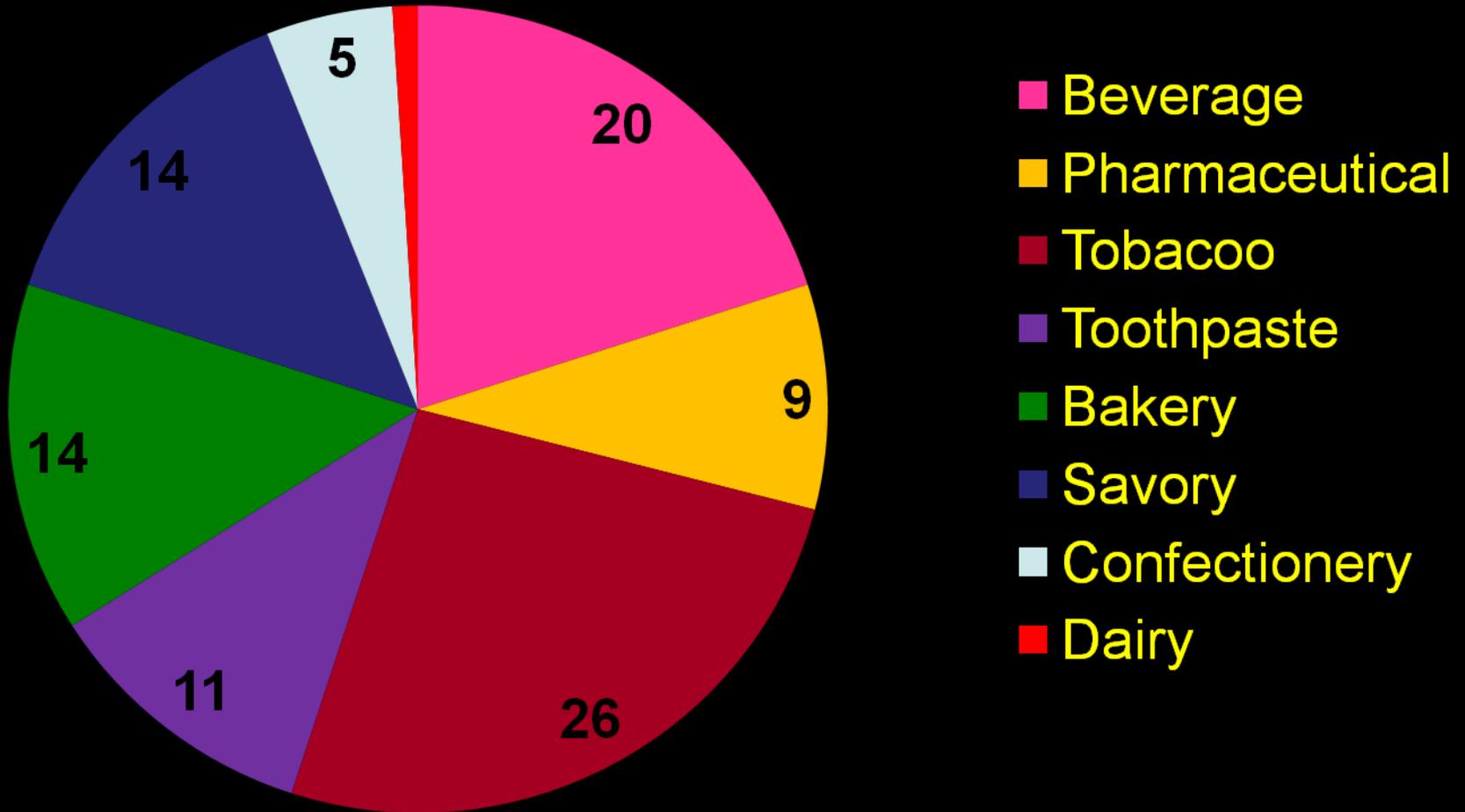
75% market is with

1. International flavour & fragrance
2. Symrise
3. Firemenich
4. Quest International
5. Givaudan

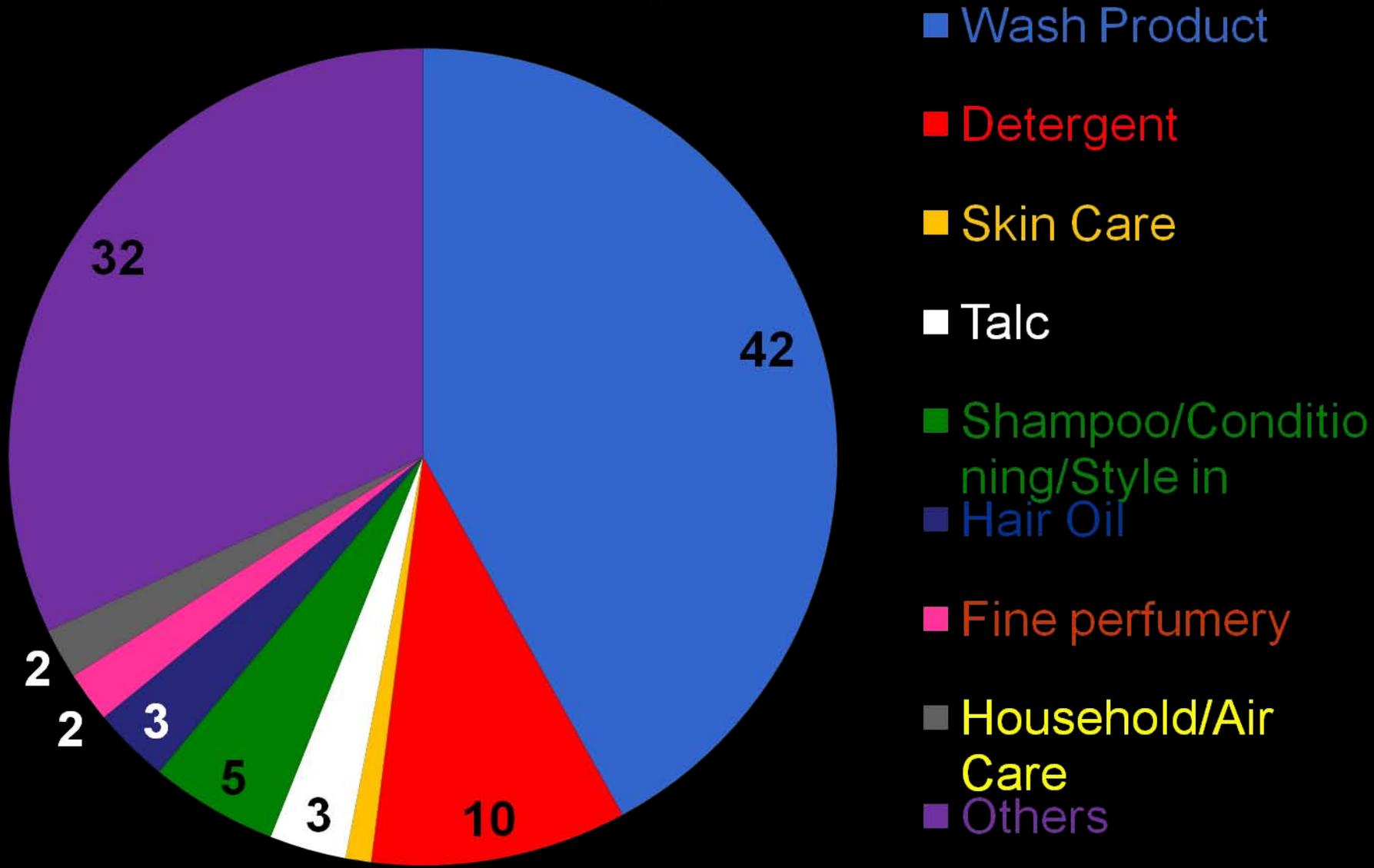
45 %
Flavour

55 %
Fragrance

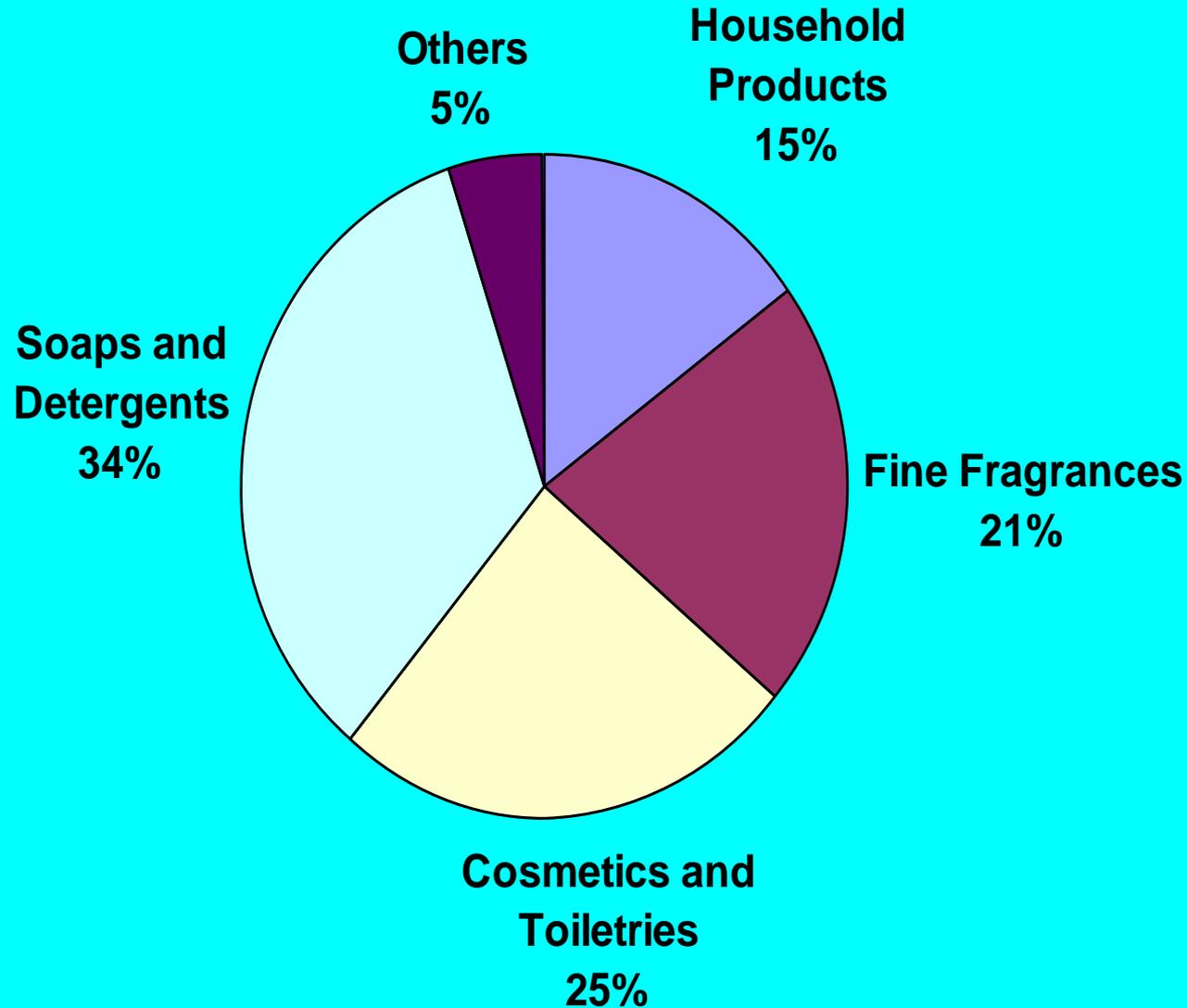
Indian Flavour Market Break Up Sales Wise



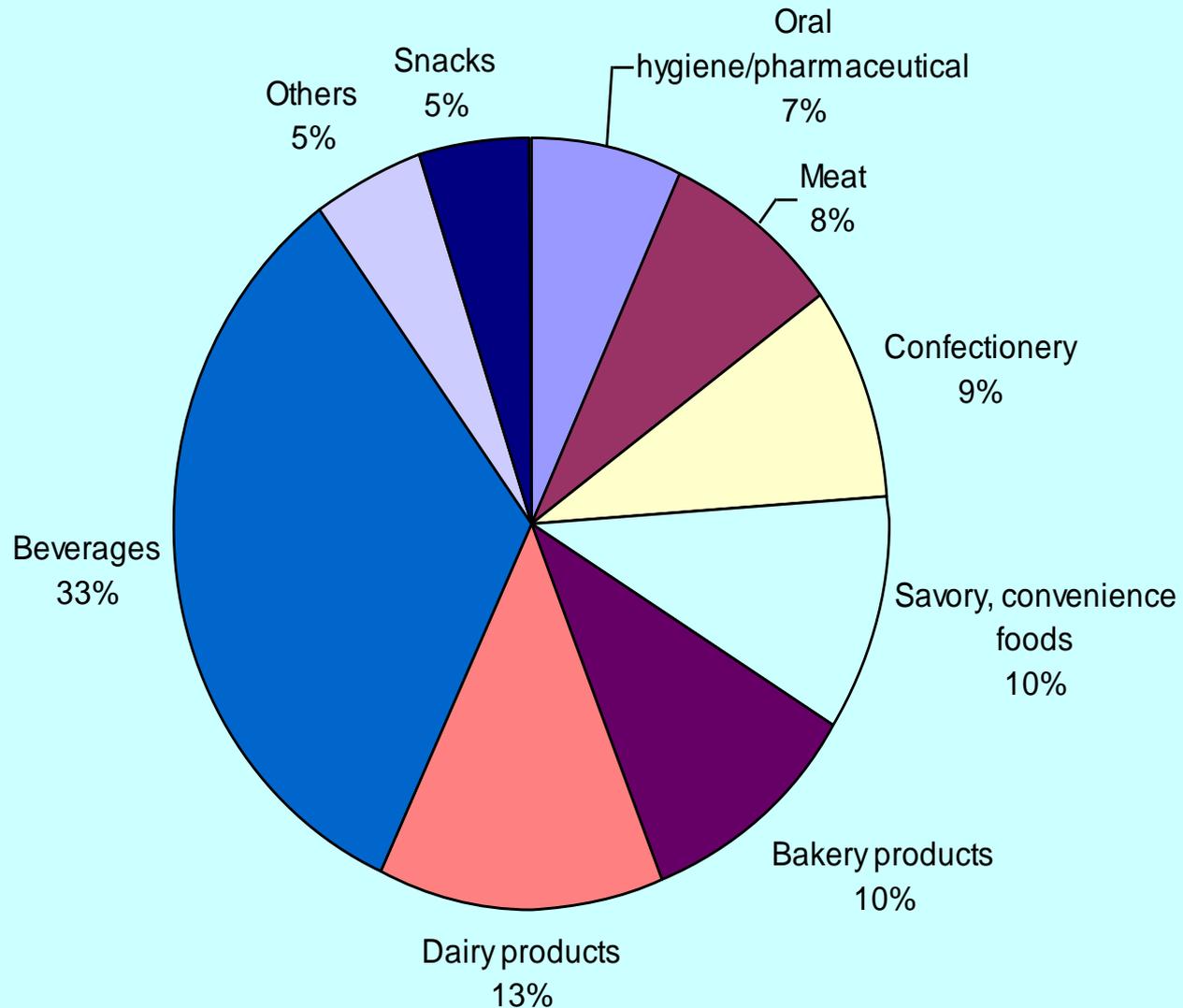
Indian Fragrance Market Break Up Sales Wise



FRAGRANCES END-USE MARKET



FLAVOURS END-USE MARKET





Thanks for patient hearing.

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