

SIMPLIFIED VALUE CHAIN OF RMRDC SUCCESSFUL PROJECTS

Development of Sweet Sorghum Value Chain in Nigeria (NG|P|2020|64)

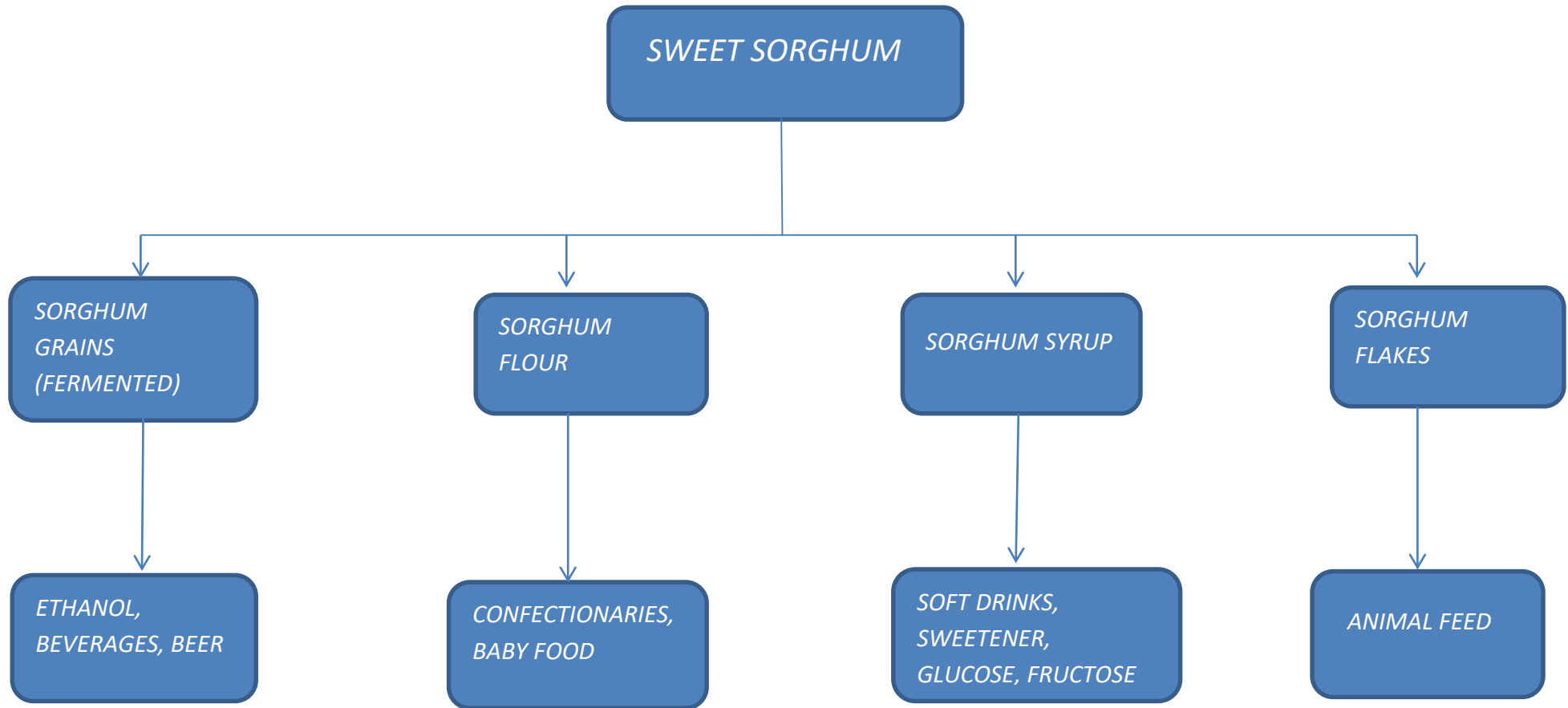
INDUSTRIAL APPLICATION/USES

- Ethanol,
- Animal feed,
- Beverages,
- Beer,
- local drinks

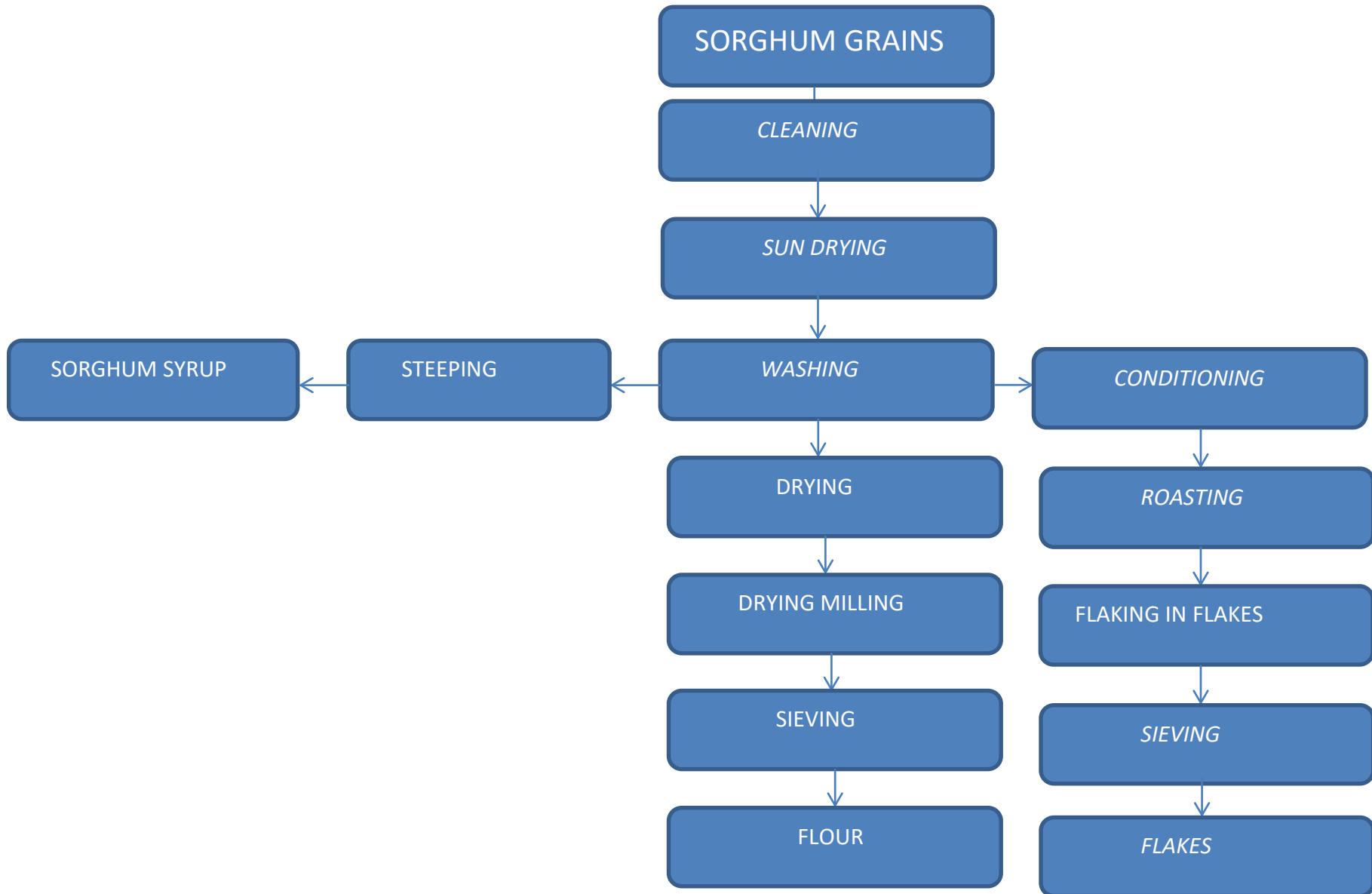
MAJOR PRODUCING STATES

- Kaduna,
- Borno,
- Niger,
- Taraba,
- Ogun,
- Ondo,
- Oyo states

Sweet Sorghum Value Chain



Sweet Sorghum Processing Chart



Development of Essential Oil Plant

LEMON GRASS INDUSTRIAL APPLICATION/PRODUCTS

Applications:

- Pharmaceutical,
- Cosmetic industries.

Products:

- Lotion,
- Body cream,
- Facial cream,
- Conditioner,
- Vitamin supplement drugs,
- Stress relieving drugs,
- Immune system boosters

LEMON GRASS MAJOR PRODUCING STATES

- Ekiti,
- Lagos
- Oyo states.

EUCALYPTUS INDUSTRIAL APPLICATION/PRODUCTS

Applications:

- Pharmaceutical
- Cosmetics and General industrial

Products:

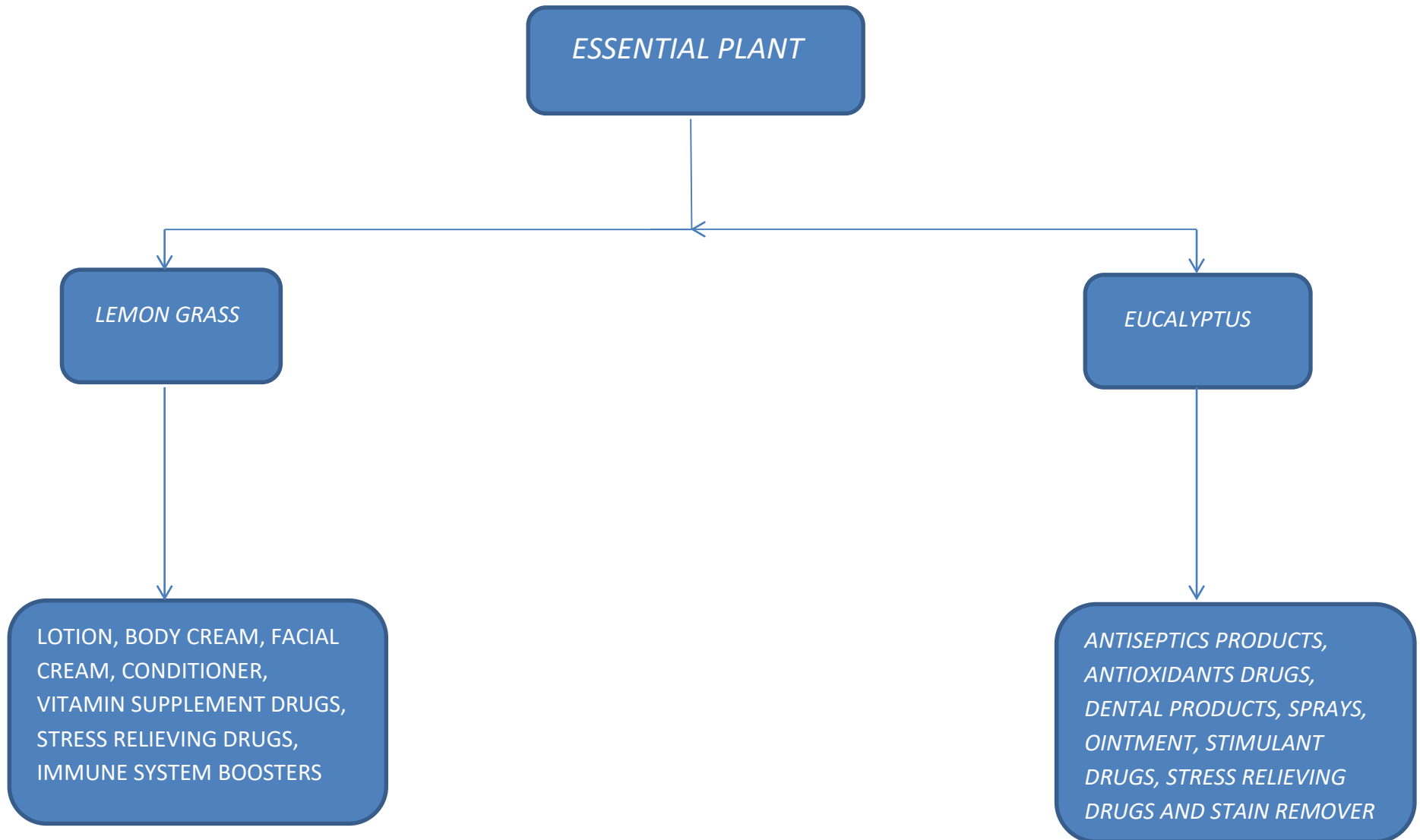
- Antiseptics,
- Antioxidants,
- Dental products,
- Sprays,
- ointment,
- Stimulant and Stress relieving drugs,
- Spot and stain remover.

EUCALYPTUS MAJOR PRODUCING STATES

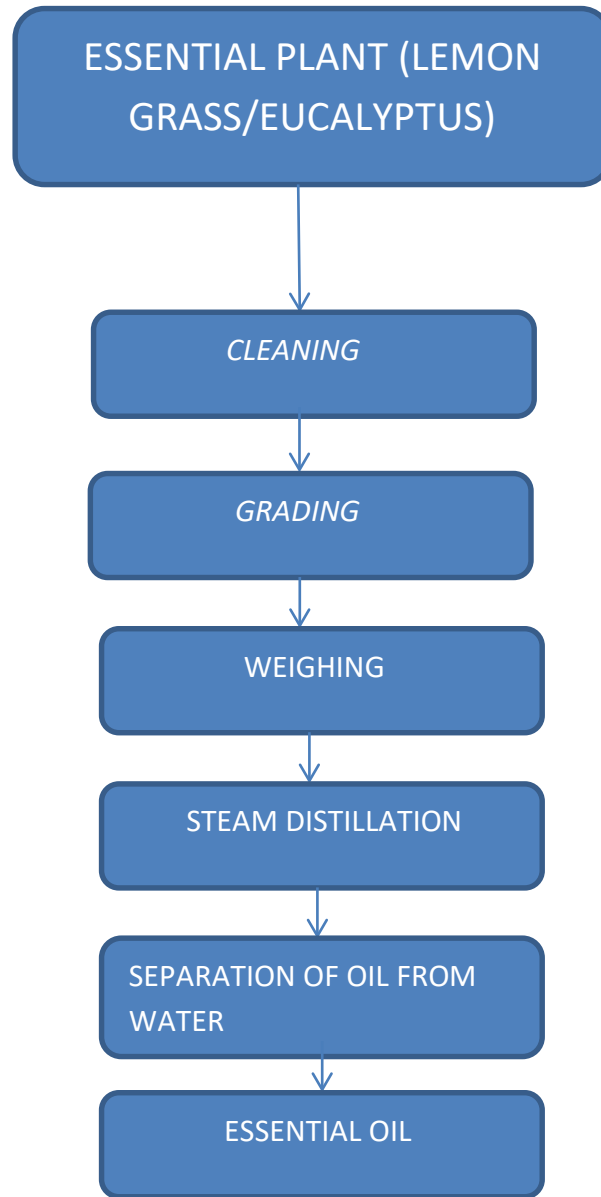
Locations:

- Benue,
- Zamfara,
- Kaduna,
- Kano,
- Abuja,
- Kwara

Essential Plant Value Chain



Essential Oil Processing Chart



Optimization of Kilishi Processing Technology (NG|P|2017|277)

CATTLE INDUSTRIAL APPLICATION/PRODUCTS

Applications:

- Food,
- Leather,
- Sports,
- Fashion,
- Cosmetic,
- Medicinal industries.

Products:

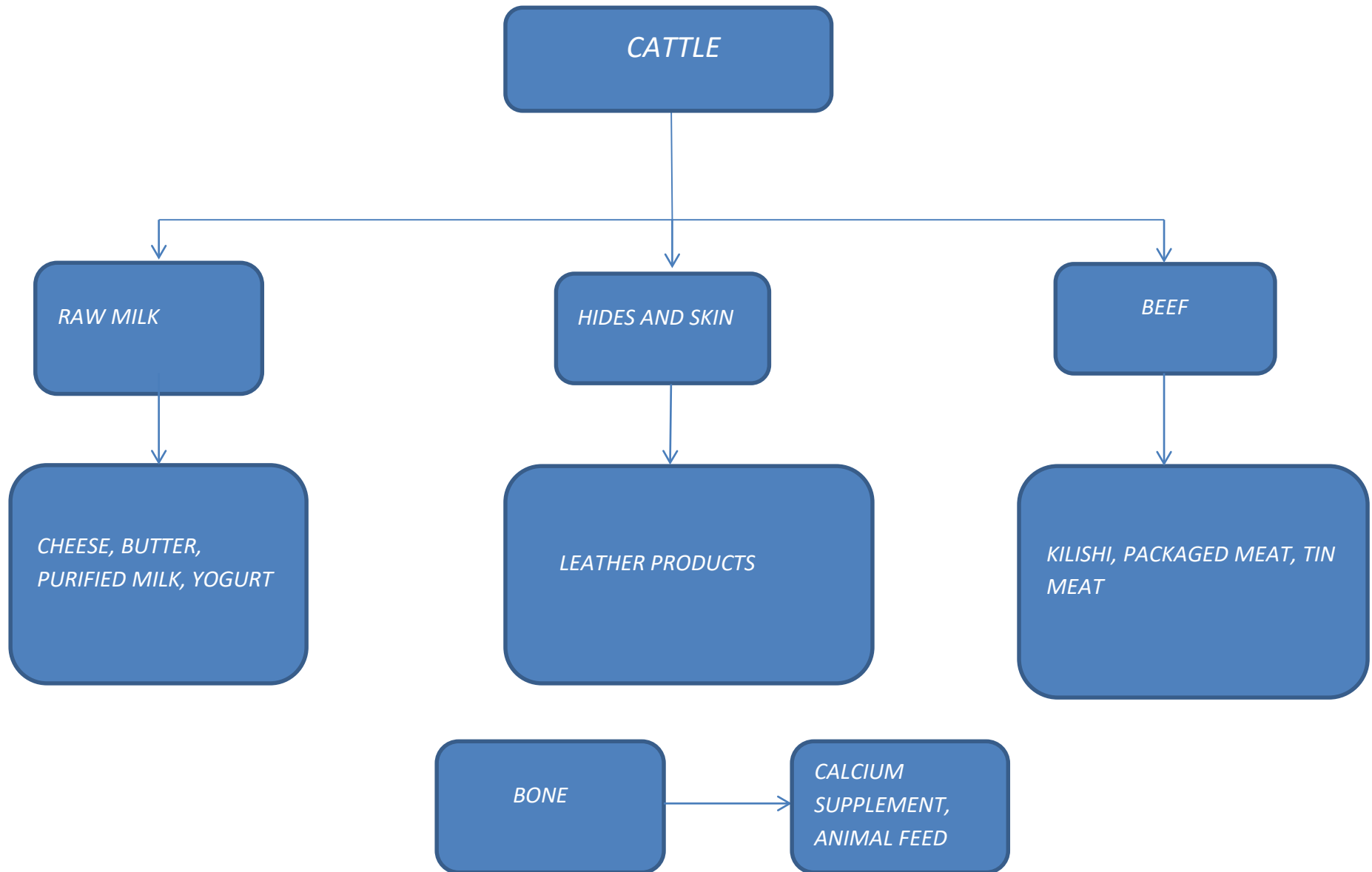
- Meat,
- Fabric
- Kilishi
- Calcium Supplement
- Animal Feed
- Tin Meat
- Packaged Meat

CATTLE MAJOR PRODUCING STATES

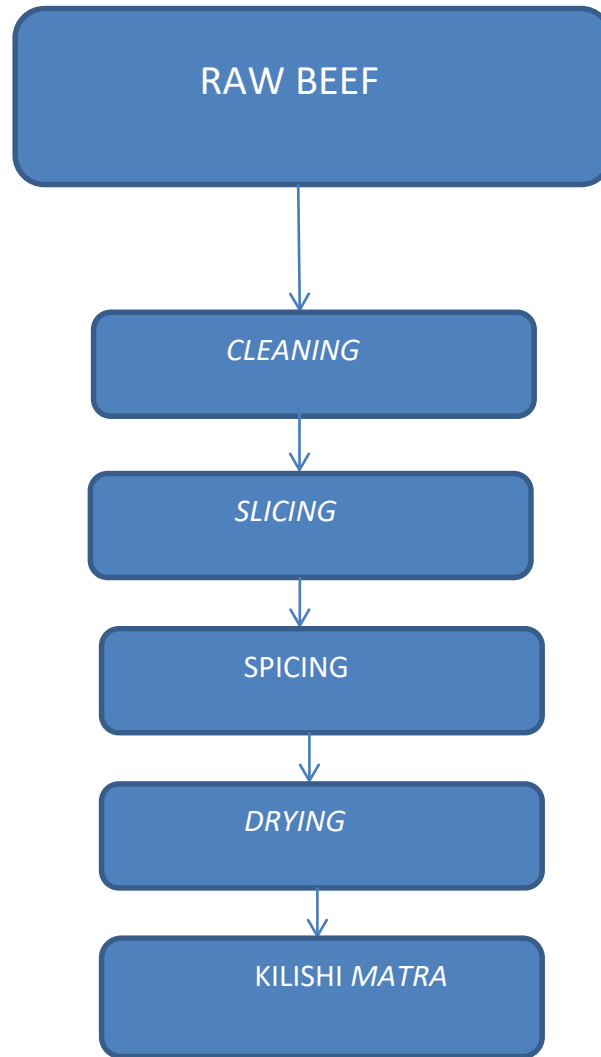
Locations:

- Ogun,
- Lagos,
- Oyo,
- Imo,
- Benue,
- Edo,
- Kaduna,
- Gombe,
- Katsina,
- Kano,
- Jigawa states, etc.

Cattle Value Chain



Kilishi Processing Chart





Automotive Brake-Pad and Lining using Palm-Kernel Shell as friction Material (NG|P2016|134)

PALM FRUIT INDUSTRIAL APPLICATION/PRODUCTS

Applications:

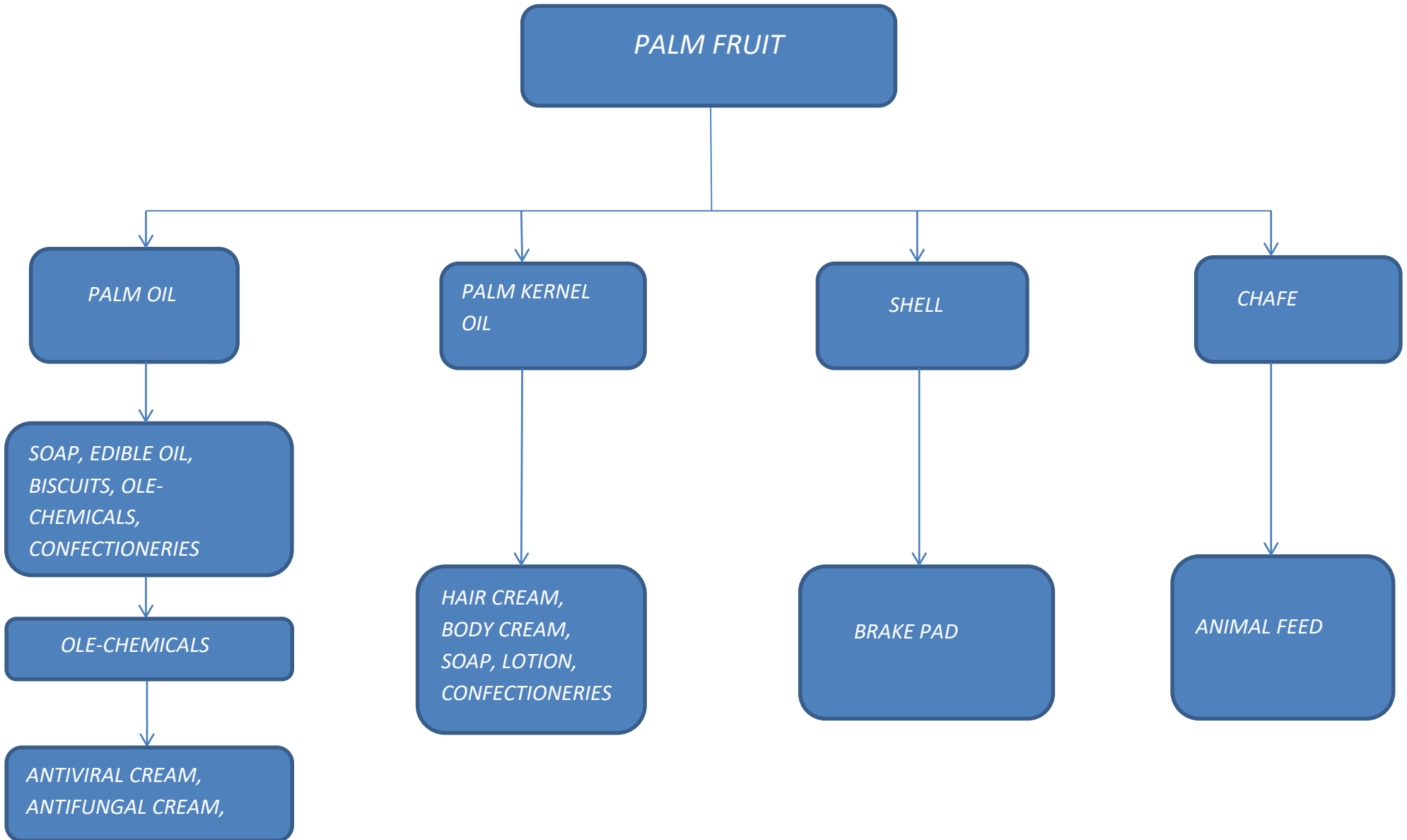
- Bio-fuel,
- Building,
- Pharmaceutical,
- Confectionery,
- Food,
- Cosmetic,
- Animal feed,
- Chemical industries.
- Products:
- Oil,
- Spies,
- Roofs,
- wooding floors,
- walls,
- Wax,
- Biscuits,
- Pastries,
- Soaps,
- Fertility drugs,
- Cold drugs,
- Inhalers,
- Asthma drugs
- Glue,
- Bio-plastics.

PALM FRUIT MAJOR PRODUCING STATES

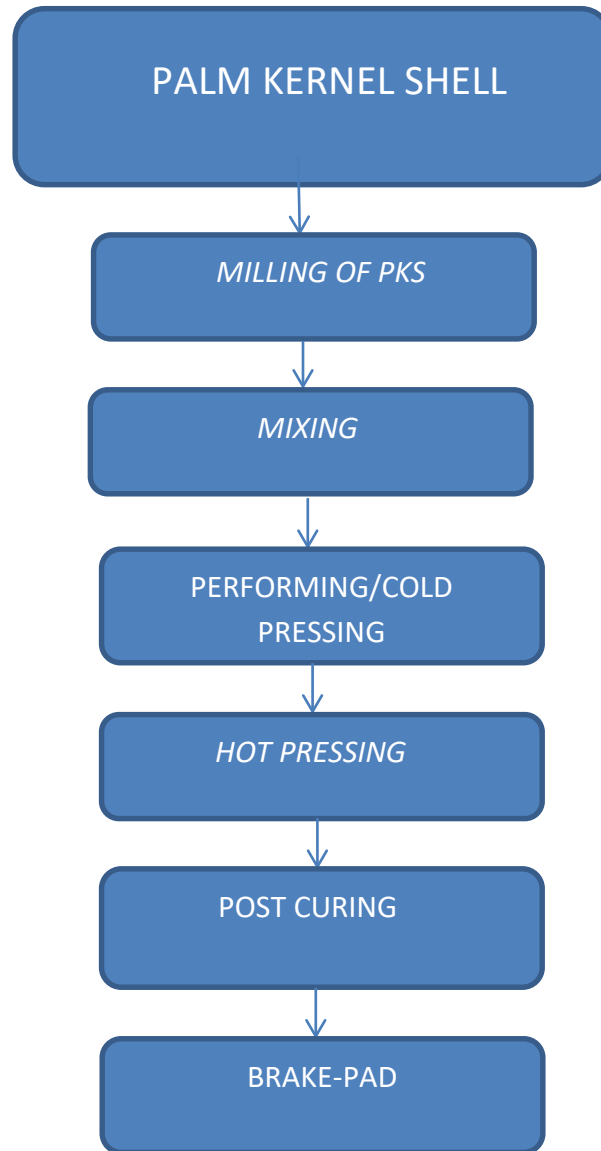
Location:

- Akwa-Ibom,
- Cross River,
- Anambra,
- Oyo,
- Rivers,
- Abia,
- Osun,
- Ondo,
- Benue,
- Delta,
- Edo,
- Kogi,
- Imo
- Ebonyi States.

Palm Fruit Value Chain



Automotive Brake-Pad and Lining using Palm-Kernel Shell as friction Material Processing Chart



Production of Starch and its Derivative from Tacca and Cassava

NG|P|2015|000086

CASSAVA INDUSTRIAL APPLICATION/PRODUCTS

Applications:

- Food,
- Chemical,
- Glucose,
- Gum,
- Cardboard/boxes,
- Paper,
- textile,
- Wood and furniture industries.

Products:

- Starch,
- Corrugated card board,
- Remoistening gum,
- Wallpaper,
- Paper,
- ethanol,
- Plastics,
- Detergent.

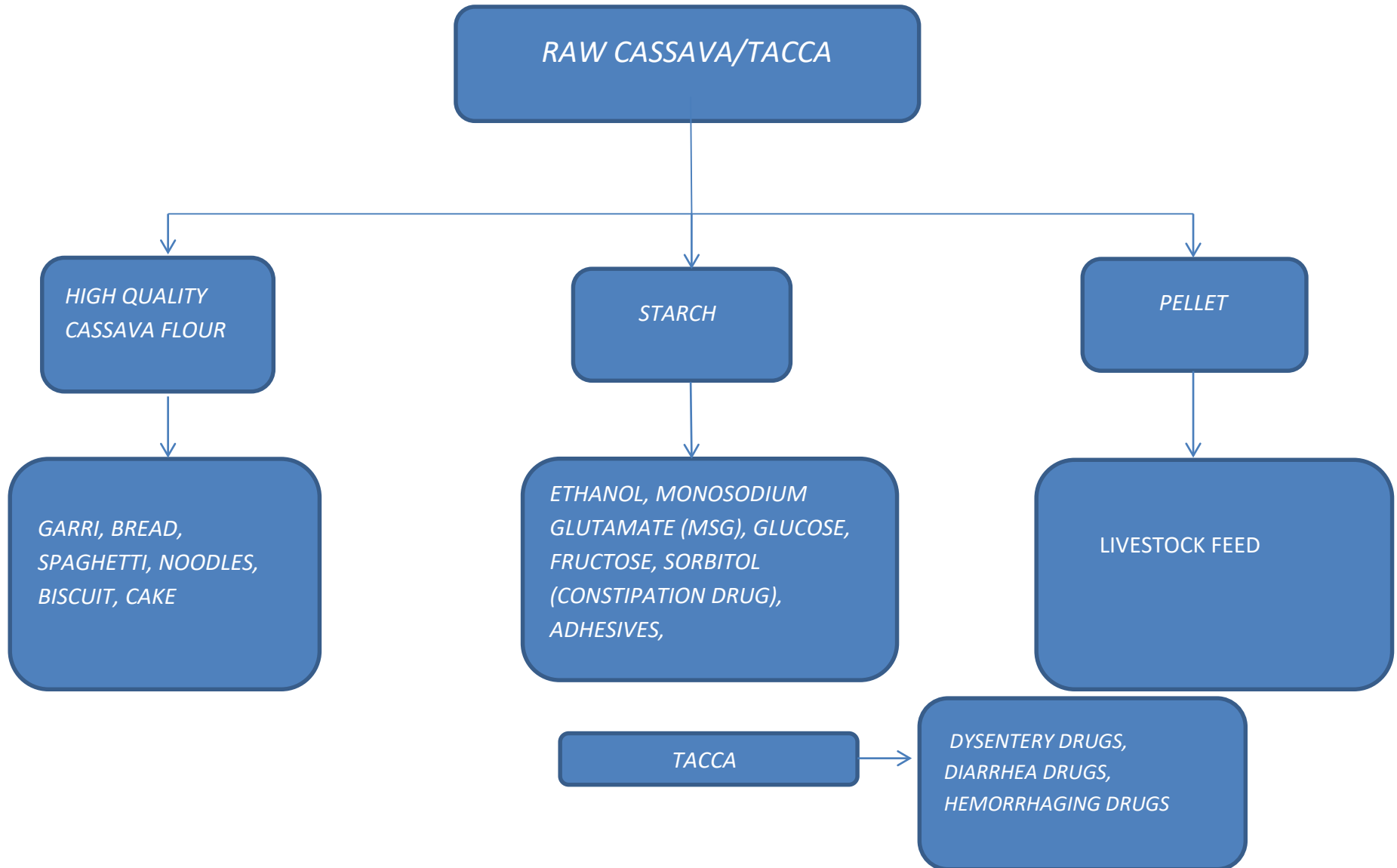
CASSAVA/TACCA MAJOR PRODUCING STATES

Locations:

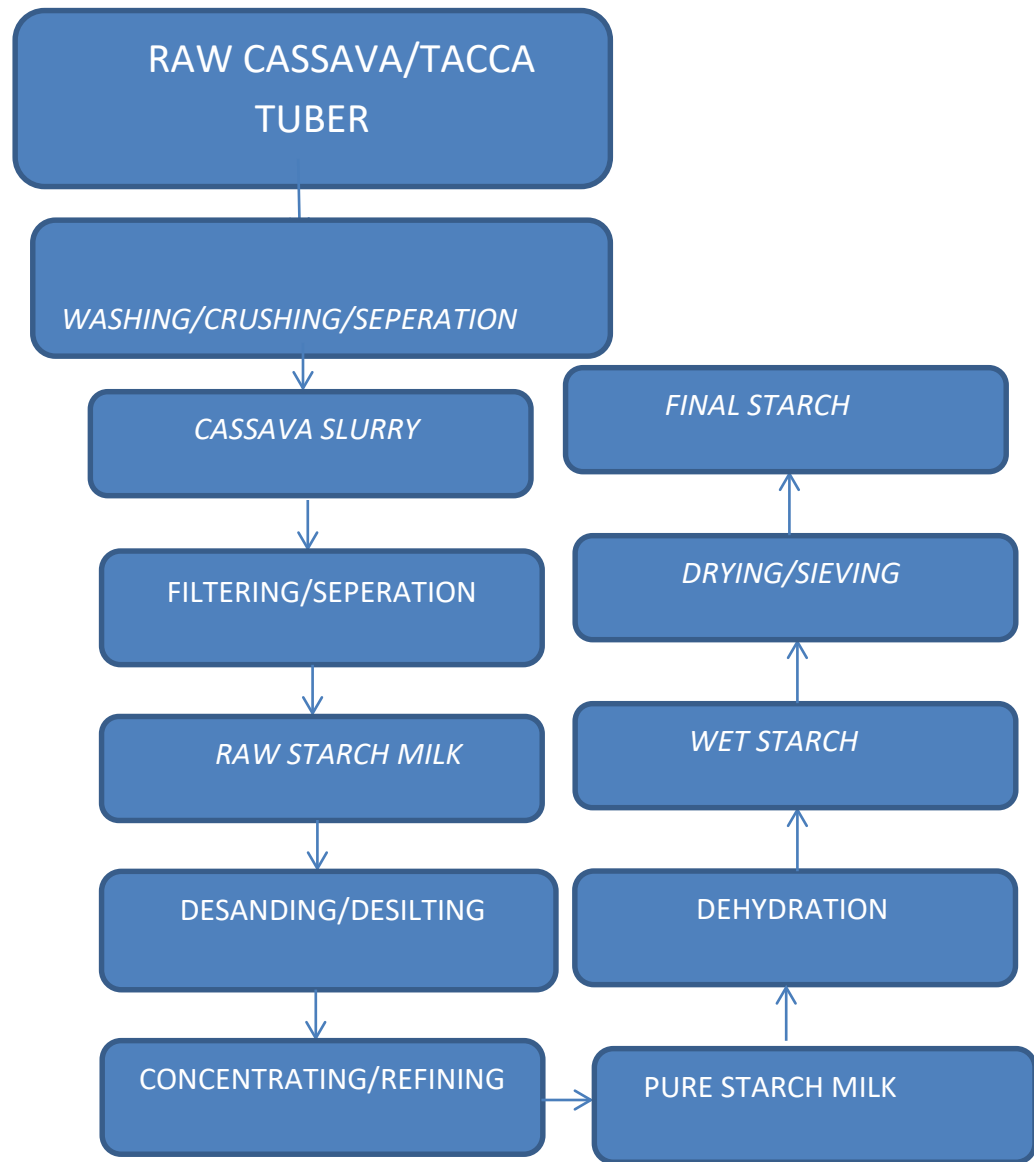
- Anambra,
- Delta,
- Edo,

- Benue,
- Cross River,
- Imo,
- Oyo,
- Kwara,
- Ondo states, etc

Raw Cassava/Tacca Value Chain



Starch Processing Chart



Development of Cashew Value Chain in Nigeria

CASHEW INDUSTRIAL APPLICATION/PRODUCTS

Applications:

- Medicinal,
- Building,
- Plastic,
- Chemical,
- Bio-fuel,
- Pharmaceutical,
- Juice industries.

Products:

- Paint,
- Plastics,
- Cashew juice,
- Jam,
- Bio-crude,
- Ethanol.

CASHEW MAJOR PRODUCING STATES

Locations:

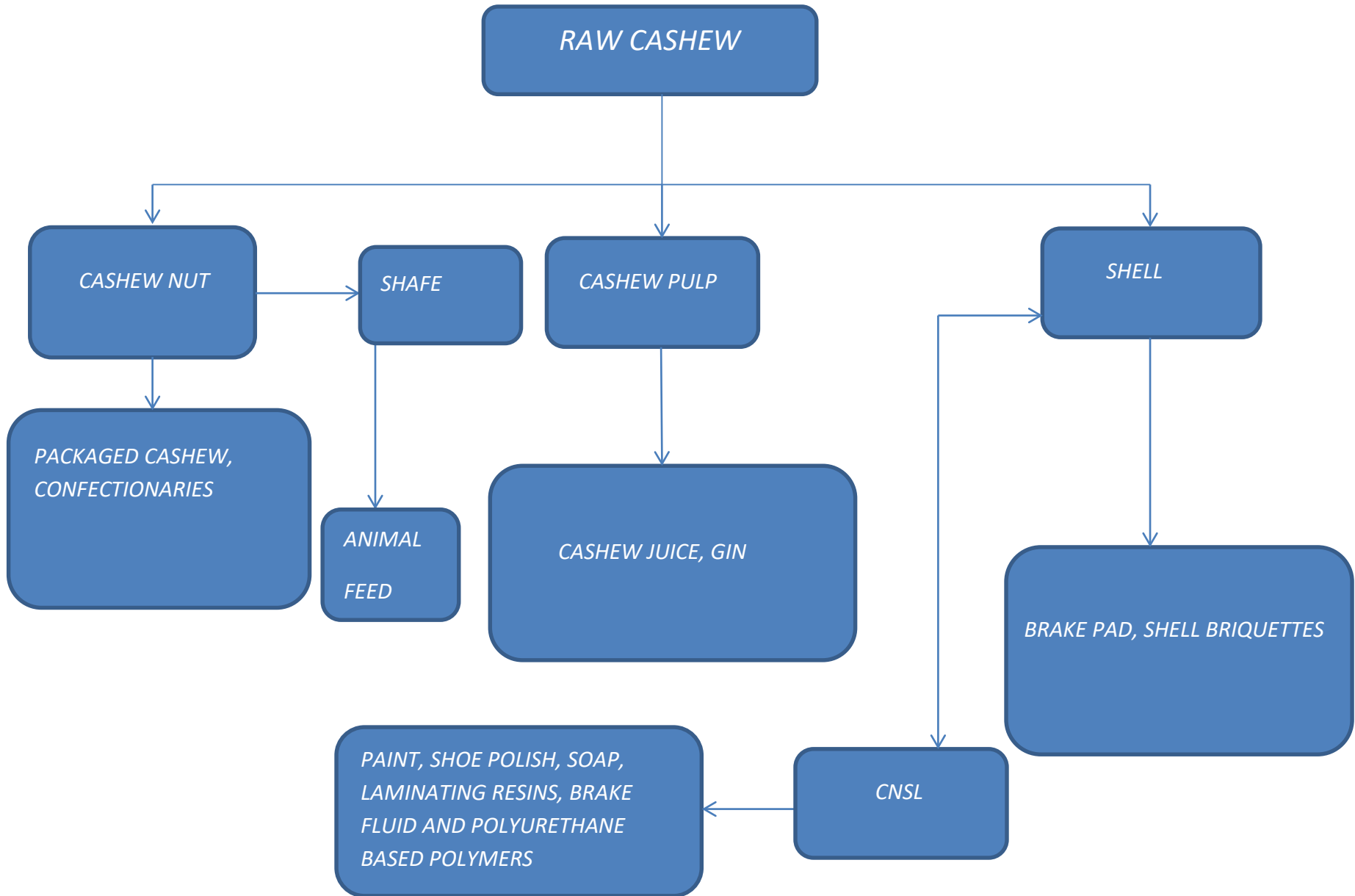
- Kogi,
- Abia,
- Benue,
- Enugu,
- Imo,
- Ebonyi,
- Kaduna,
- Oyo,

- Ogun,
- Ondo,
- Anambra,
- Kano,
- Bauchi,
- Taraba,
- Jigawa,
- Edo,
- Plateau states.

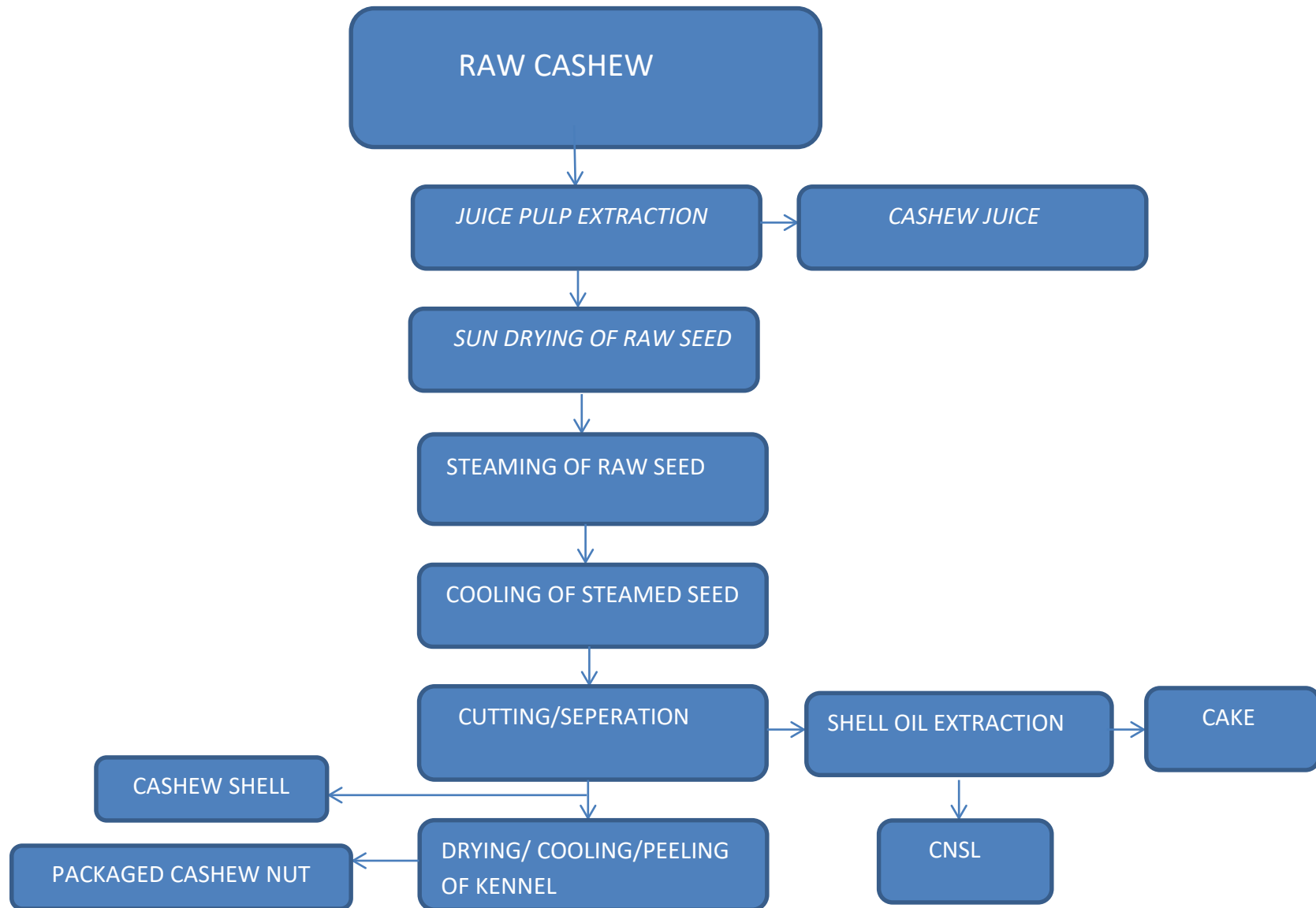
The new commercial type plantations are found in:

- cross river,
- Abia,
- Kogi,
- Oyo,
- Kaduna,
- Kwara,
- Imo States.

Raw Cashew Value Chain



Cashew Processing Chart





Development and Utilization of Cotton in Nigeria (NG|PT|NC|2018|2|729)

COTTON INDUSTRIAL APPLICATION/PRODUCTS

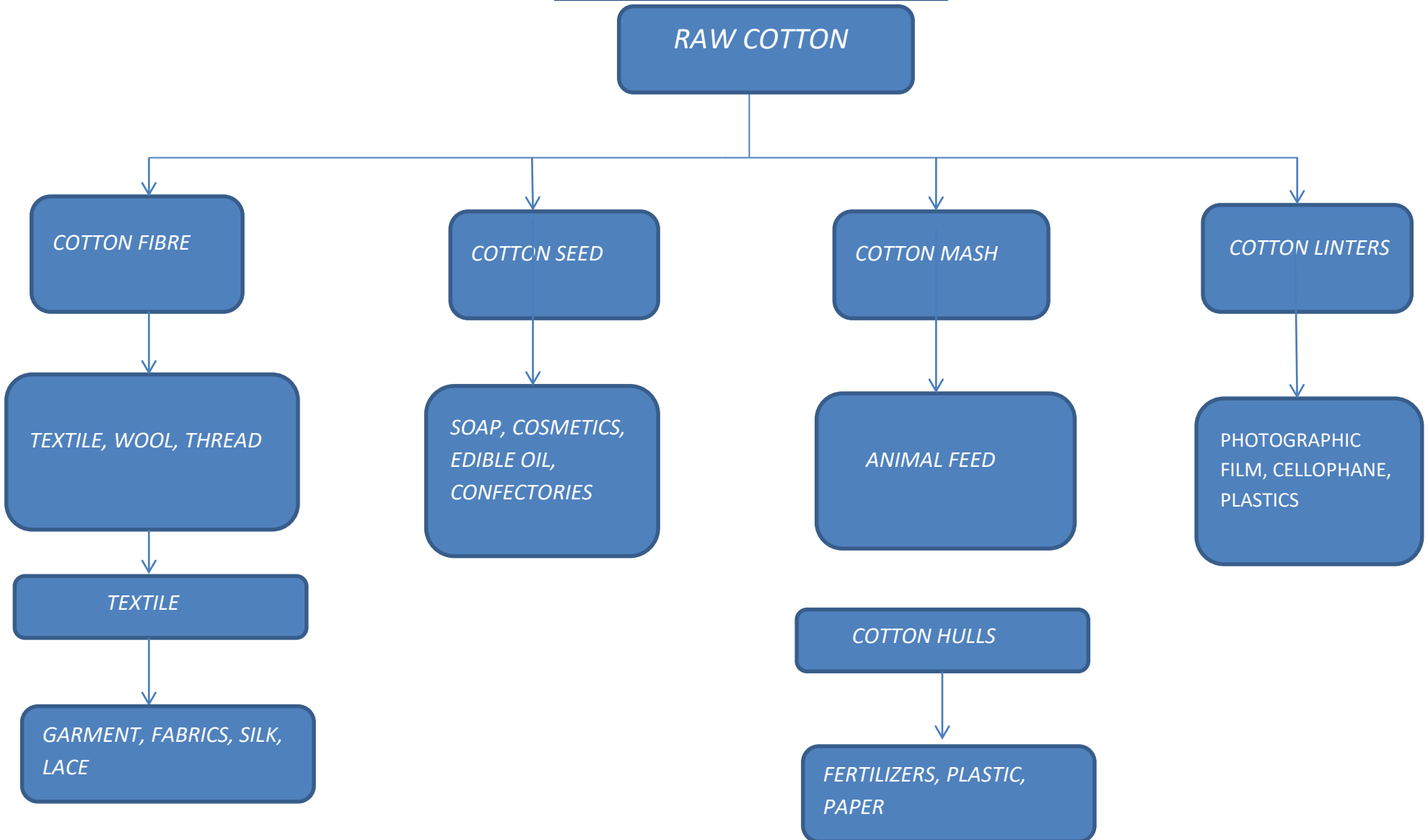
- Cotton Yarn
 - Fabric
- Cotton wool
 - Textile
 - The production of mattress fillers
- Cotton oil
 - Feed filler
 - Production of edible fat
 - Cake for animal feed
 - Soap and soap stock

COTTON MAJOR PRODUCING STATES

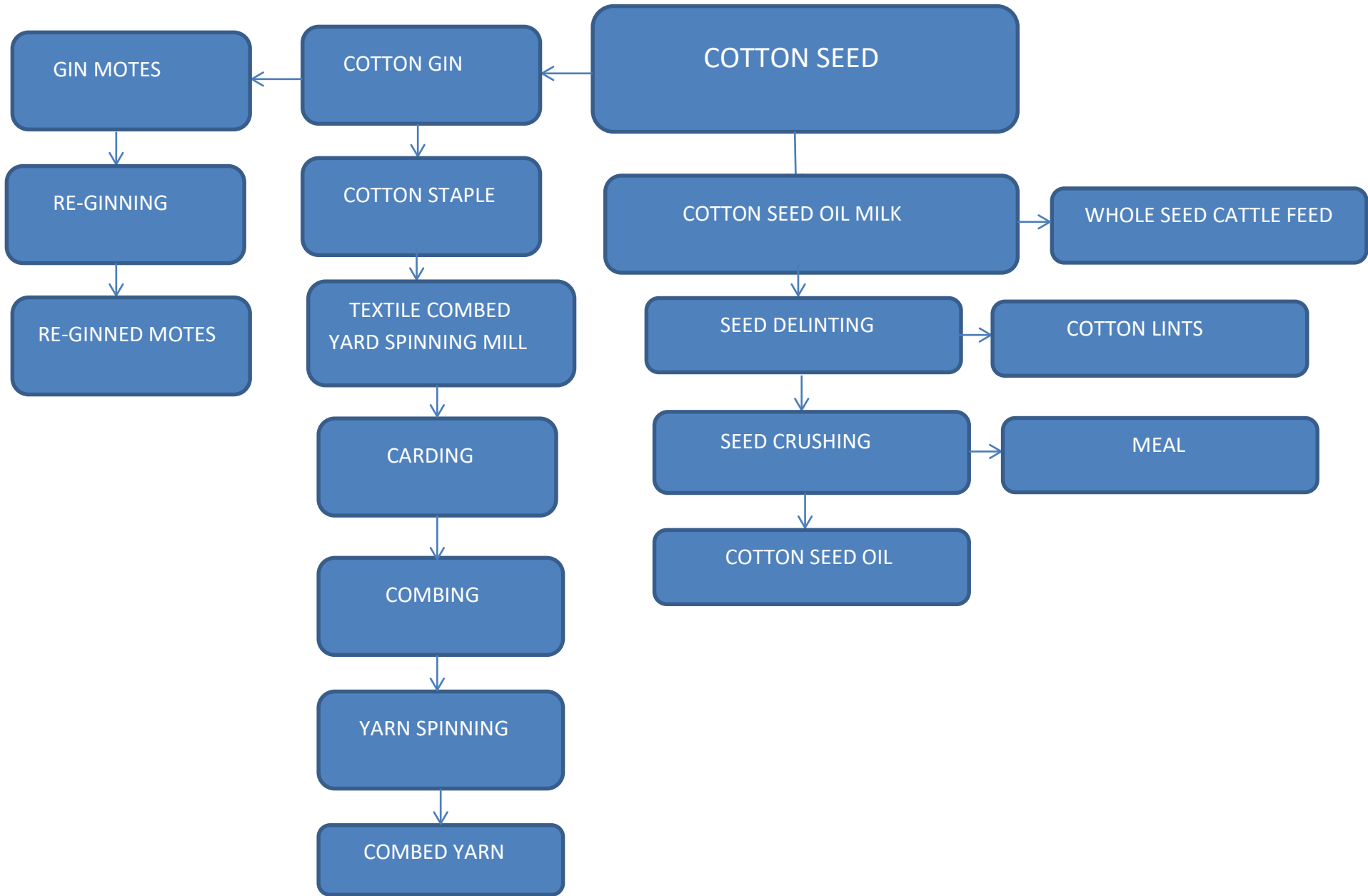
Location:

- Kano,
- Kaduna,
- Oyo,
- Ondo,
- Kwara,
- Katsina,
- Jigawa,
- Ogun,
- Kebbi,
- Sokoto
- Zamfara state

Raw Cotton Value Chain



Raw Cotton Processing Chart





Development of Calcine-Kaolin from Kaolin for Paint Industry (NG|P|2019|6)

KAOLIN INDUSTRIAL APPLICATION/PRODUCTS

Application:

- Cosmetic,
- Pharmaceuticals,
- Building Materials,
- Stationaries,
- Paint,
- Electronic Industries

Products:

- Plastic.
- Paper,
- paint,
- adhesive,
- fertilizer,
- shoe polish,
- tiles,
- electric component,
- skin moisturizer,
- skin cleanser,
- ulcer drugs,
- sore drugs,
- diarrhea drugs

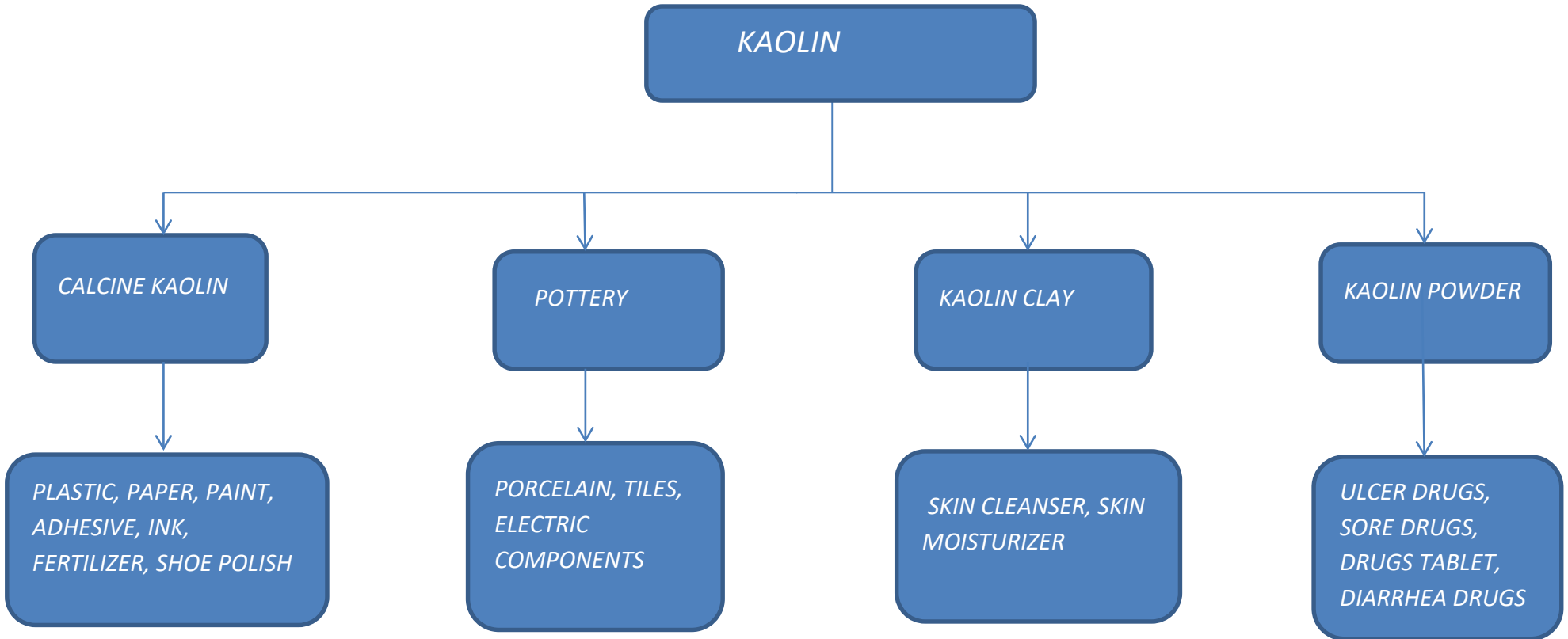
KAOLIN MAJOR PRODUCING STATES

Location

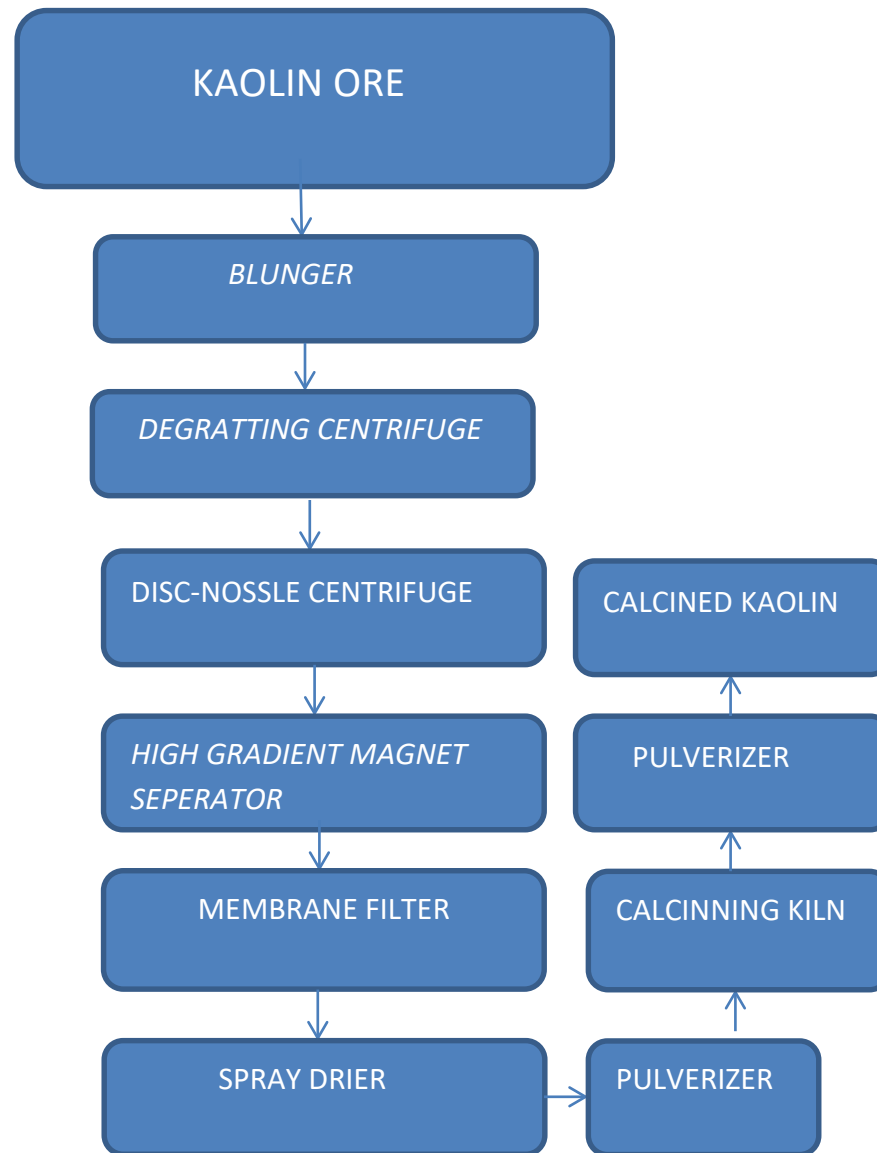
- Adamawa,

- Borno,
- Abia,
- Delta,
- Ekiti,
- Kaduna,
- Katsina,
- Kogi,
- Ogun,
- Ondo,
- Oyo,
- Plateau State

Kaolin Value Chain



Calcine-Kaolin Processing Chart



Pilot Plant for Caustic Soda and Precipitated Calcium Carbonate Production (NG|P|2019|5)

PRECIPITATED CALCIUM CARBONATE INDUSTRIAL APPLICATION/PRODUCTS

Application:

- Food
- Pharmaceuticals,
- Building Materials,
- Stationaries,
- Paint,
- fertilizer

Products:

- Glass,
- Chalk,
- Paint,
- Paper,
- Plastics,
- Drug Tablet,
- Food Additives,
- Calcium Supplements
- Asphalt,
- Soil Conditioner,
- Steel
- Fertilizer,
- Cement,
- Tiles,
- Purification Fillers
- Paint,
- Adhesive,

- Plastic,
- Ink,
- Paper,
- Calcium Supplement,
- Tablet
- Pulp And Paper,
- Alumina,
- Soap And Detergents

CAUSTIC SODA INDUSTRIAL APPLICATION/PRODUCTS

Application:

- Stationaries,
- Cosmetic Industries

Products:

- Pulp And Paper
- Alumina
- Soap And Detergents

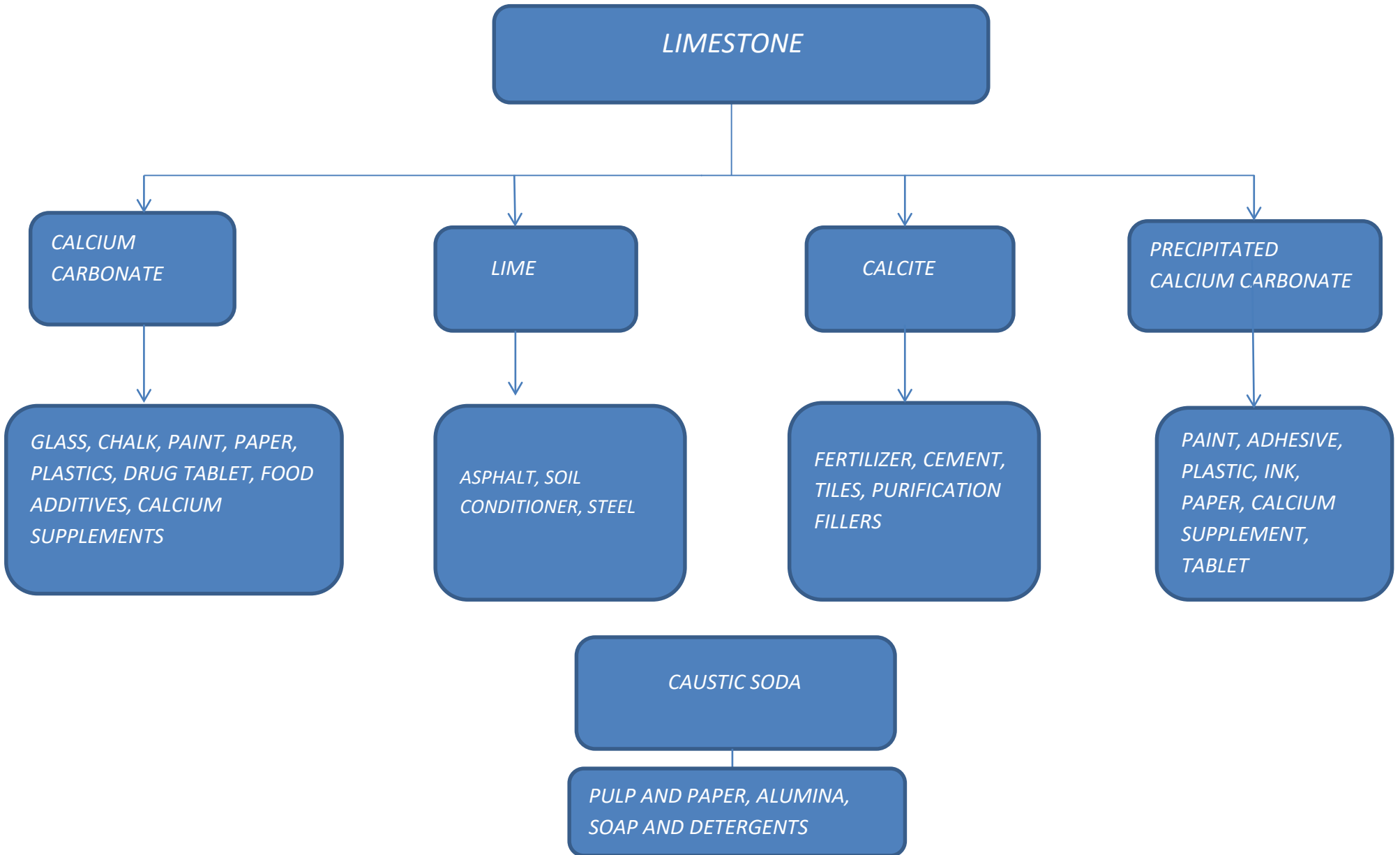
LIMESTONE MAJOR PRODUCING STATES

Location

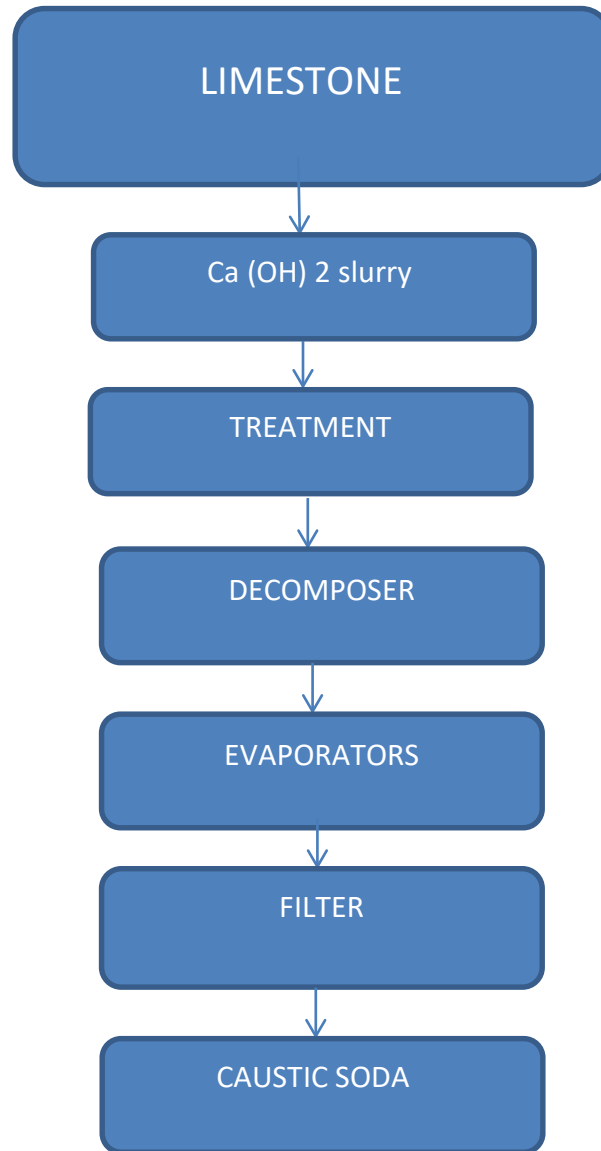
- Cross River,
- Ebonyi,
- Abia,
- Akwa-Ibom,
- Anambra,
- Bauchi,

- Bayelsa,
- Benue,
- Borno,
- Edo,
- Enugu,
- Imo,
- Ogun,
- Ondo
- Sokoto States,

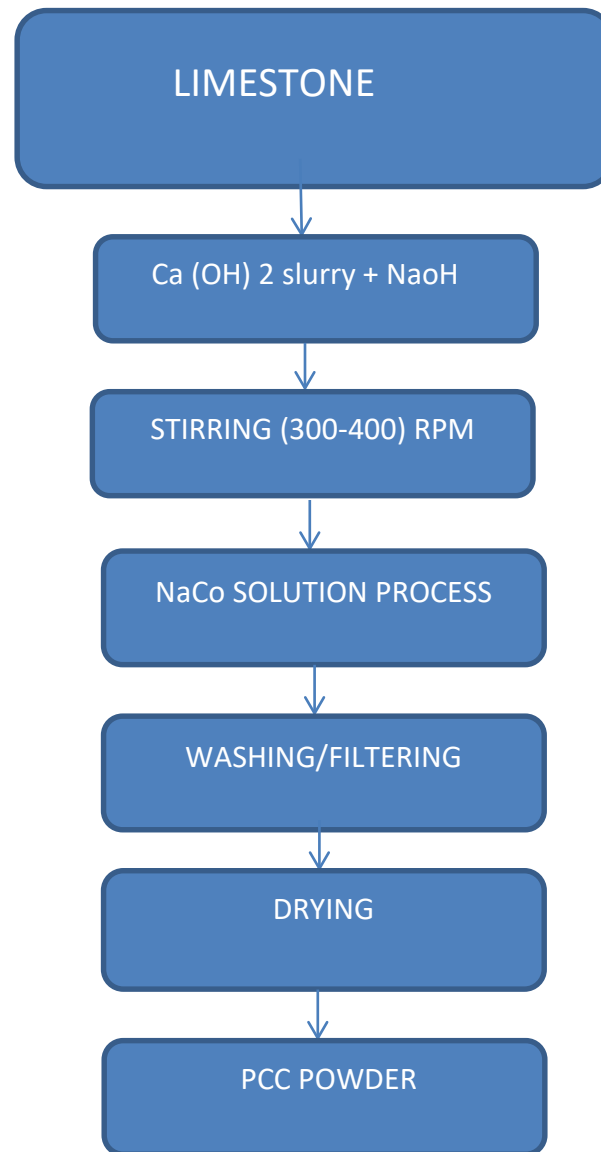
Limestone Value Chain



Caustic Soda Processing Chart



Precipitated Calcium Carbonate Processing Chart



Pilot Plant for Gypsum Washer (NG|P|2020|62)

GYPSUM INDUSTRIAL APPLICATION/PRODUCTS

Application:

- Stationaries,
- Building Materials
- fertilizer

Products:

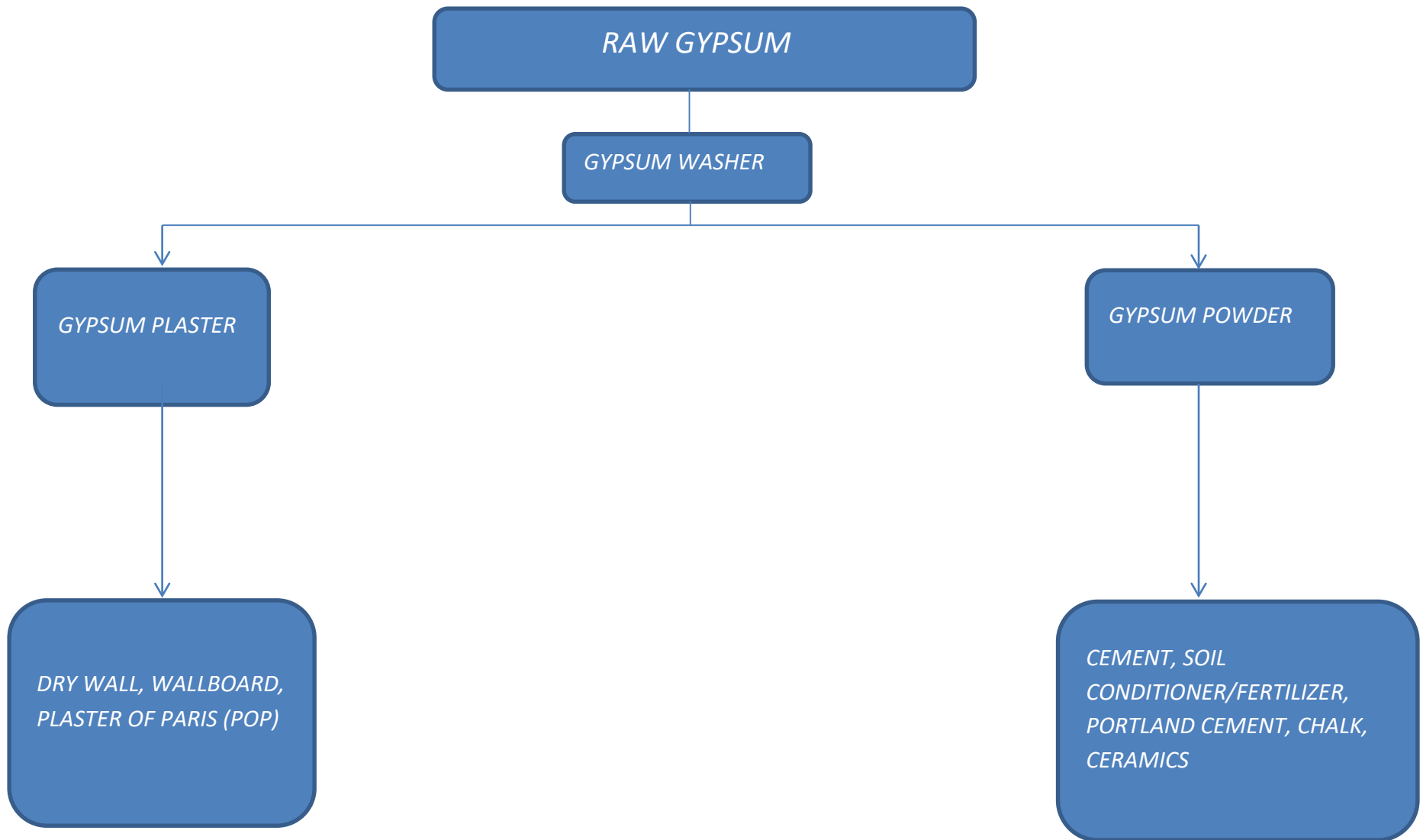
- Dry Wall,
- Wallboard,
- Plaster Of Paris (Pop)
- Cement,
- Soil Conditioner/Fertilizer,
- Portland Cement,
- Chalk

GYPSUM MAJOR PRODUCING STATES

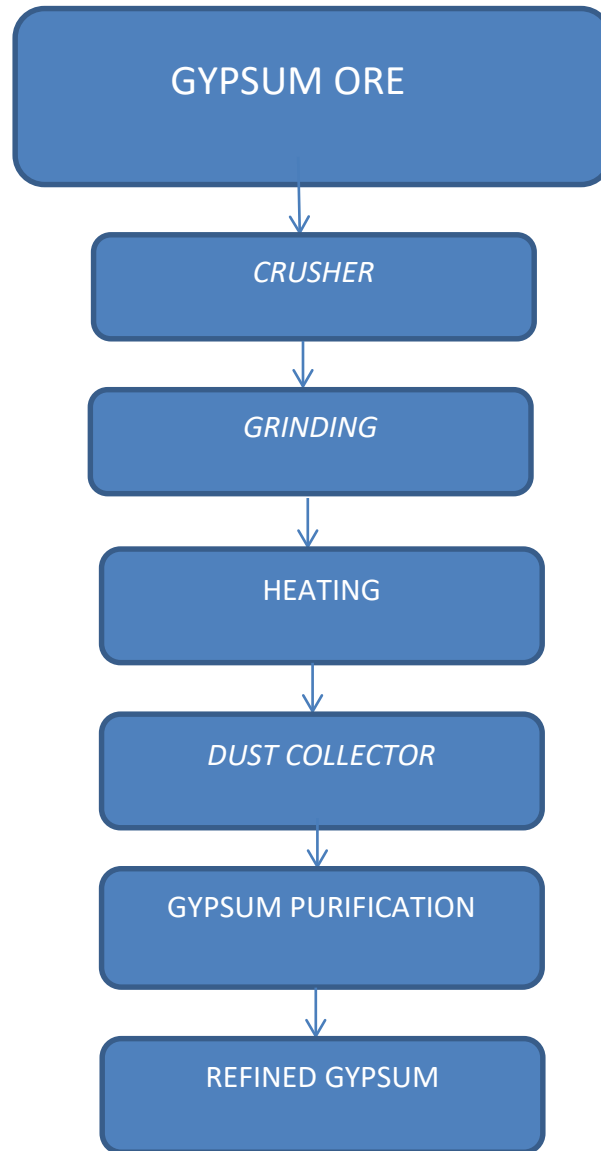
Location

- Adamawa,
 - Anambra,
 - Bauchi,
 - Bayelsa,
 - Benue,
 - Borno,
 - Delta,
 - Edo,
 - Gombe,
 - Imo,
 - Kogi,
 - Ondo,
 - Ogun
 - Sokoto
- States

Gypsum Value Chain



Gypsum Processing Chart



Design and Fabrication of Thin Layer Evaporator and Solar Dryer for Salt (Nacl) Production

SALT (Nacl) INDUSTRIAL APPLICATION/PRODUCTS

Application:

- Pharmaceuticals
- Food
- Insecticides
- Fashion
- Plastic

Products:

- Electrolytes Drugs,
- Flavour,
- Preservative,
- Sodium Chloride Solution,
- Plastic,
- Rubber,
- Glass
- Dyes,
- Textiles,
- Antiseptics,
- Insecticides,
- Solvents,
- Paints,
- Disinfectant

SALT (Nacl) MAJOR PRODUCING STATES

Location

- Benue
- Cross river states
- Ebonyi
- Nassarawa

Salt (Nacl) Value Chain

SALT (Nacl)

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graph TD; A[SALT (Nacl)] --> B[SODIUM CHLORIDE]; A --> C[CHLORINE]; B --> D["ELECTROLYTES DRUGS, FLAVOUR, PRESERVATIVE, SODIUM CHLORIDE SOLUTION, PLASTIC, RUBBER, GLASS"]; C --> E["DYES, TEXTILES, ANTISEPTICS, INSECTICIDES, SOLVENTS, PAINTS, DISINFECTANT"];
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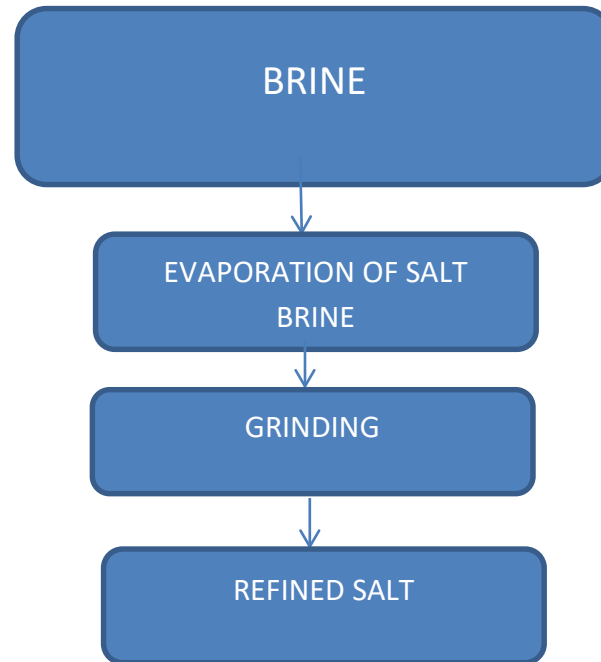
*SODIUM
CHLORIDE*

*ELECTROLYTES DRUGS,
FLAVOUR, PRESERVATIVE,
SODIUM CHLORIDE
SOLUTION, PLASTIC,
RUBBER, GLASS*

CHLORINE

*DYES, TEXTILES, ANTISEPTICS,
INSECTICIDES, SOLVENTS, PAINTS, DISINFECTANT*

Salt Processing Chart



Pilot Plant for Production of Copper Sulphate (NG|P|2020|12)

COPPER SULPHATE INDUSTRIAL APPLICATION/PRODUCTS

Application:

- Pharmaceuticals
- Food
- Insecticides
- Fashion
- Plastic

Products:

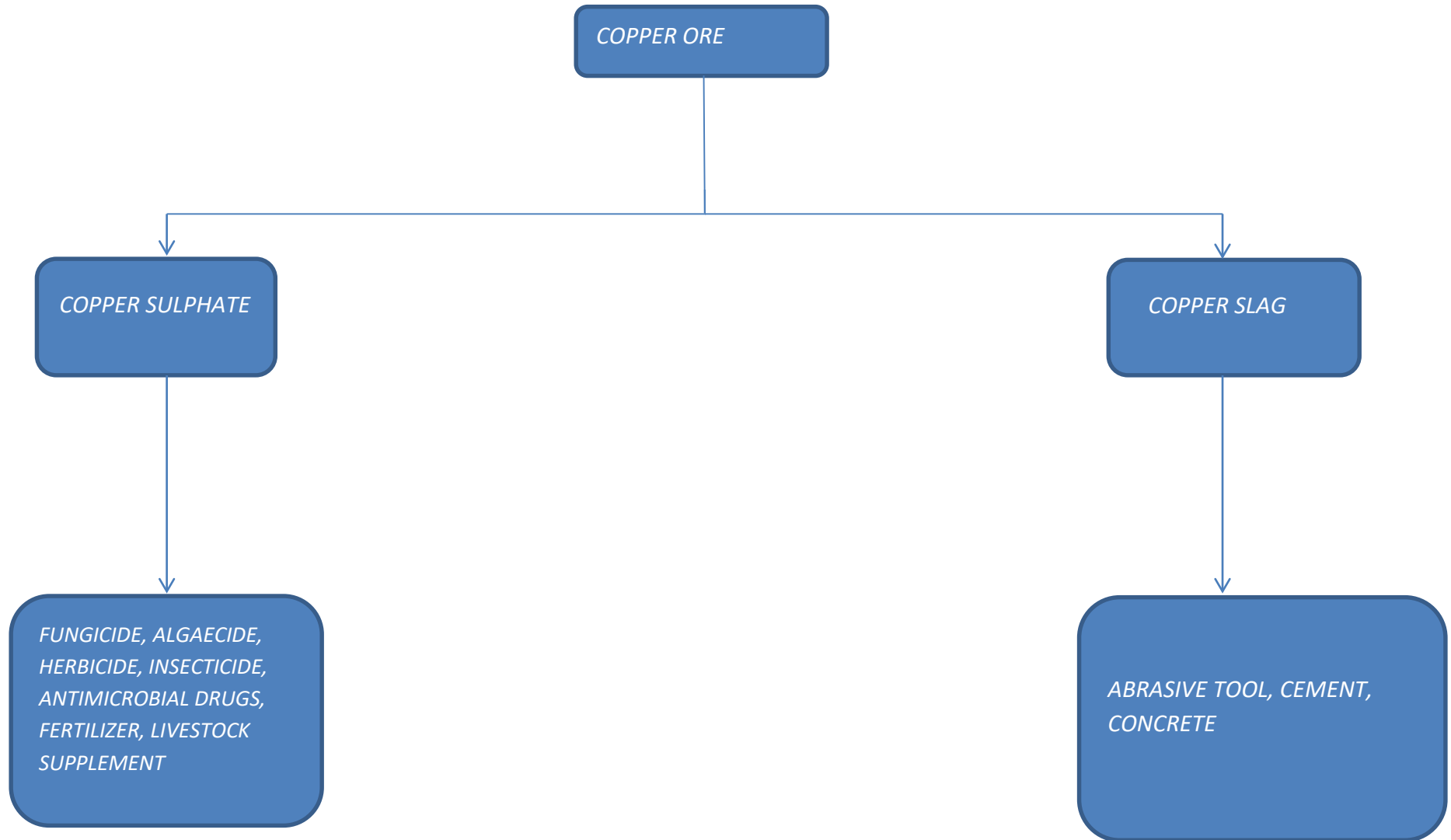
- Electrolytes Drugs,
- Flavour,
- Preservative,
- Sodium Chloride Solution,
- Plastic,
- Rubber,
- Glass
- Dyes,
- Textiles,
- Antiseptics,
- Insecticides,
- Solvents,
- Paints,
- Disinfectant

COPPER MAJOR PRODUCING STATES

Location

- Benue
- Cross river states
- Zamfara

Copper Ore Value Chain



Copper Sulphate Processing Chart

