

THE KENAF







← Seeds



The Kenaf:Seed Population Density

- Under final destination requirements
- population 60– 160 / m²
- Max / Mini.density = fiber / core

The Kenaf Characteristics



The Kenaf Stalk

- External bark, *tiglio*, = fibers 30%
- Internal wood, *Kenapulo*, shives 60%
- Central pith from 6 to 10%

The Kenaf: Chemical composition

- Cellulose : 45%
- Emi-cellulose : 25%
- Pectines : 5%
- Lignin : 18%
- Other : 7%



C - Pith

B – wood

A - fibers



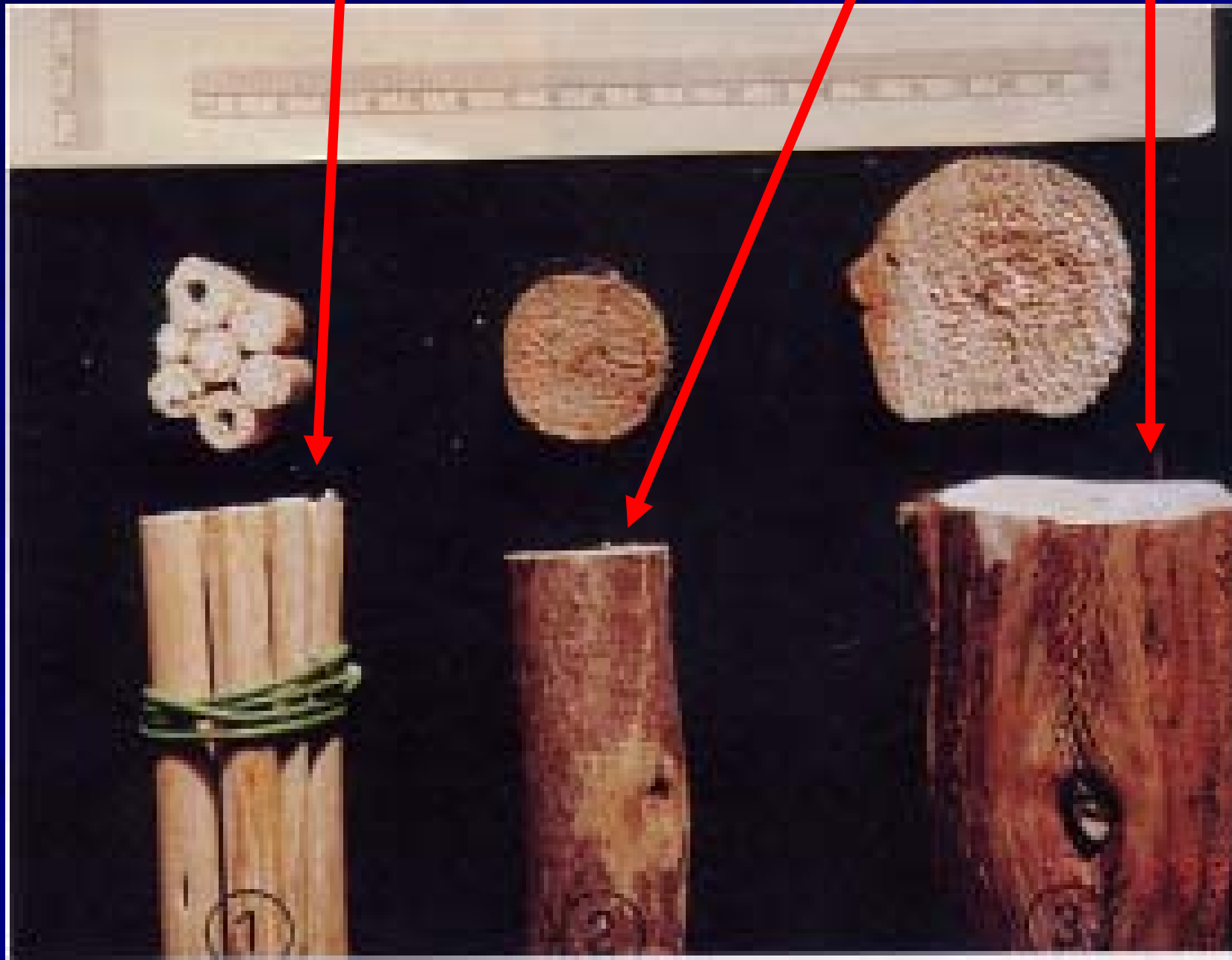
Baste fibers



Decorticated Stalk

High density seeding

Low density seeding





Bottom part cut

Upper part cut

Bast fiber

Pith

Wooden core

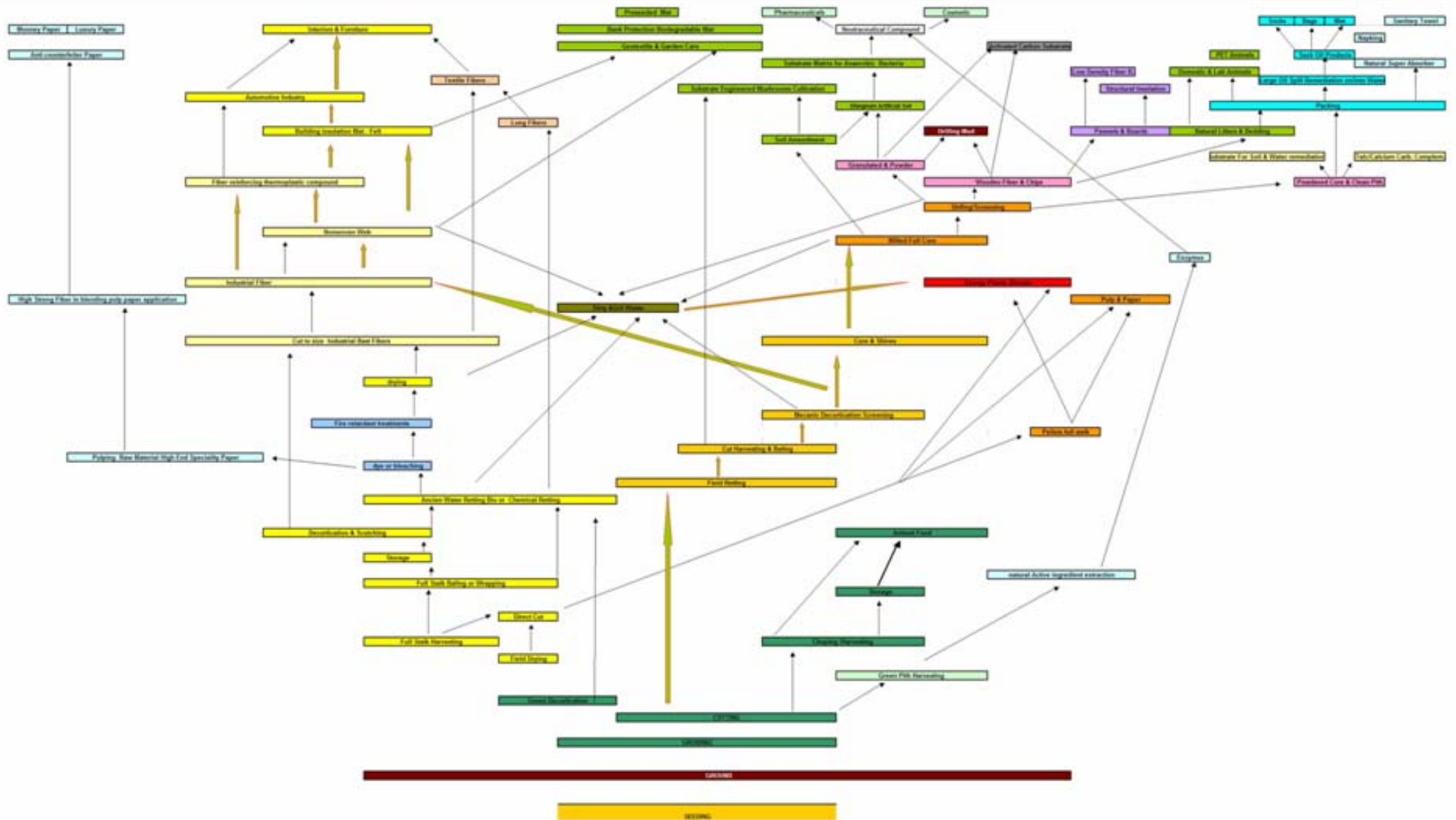
Stalk portions

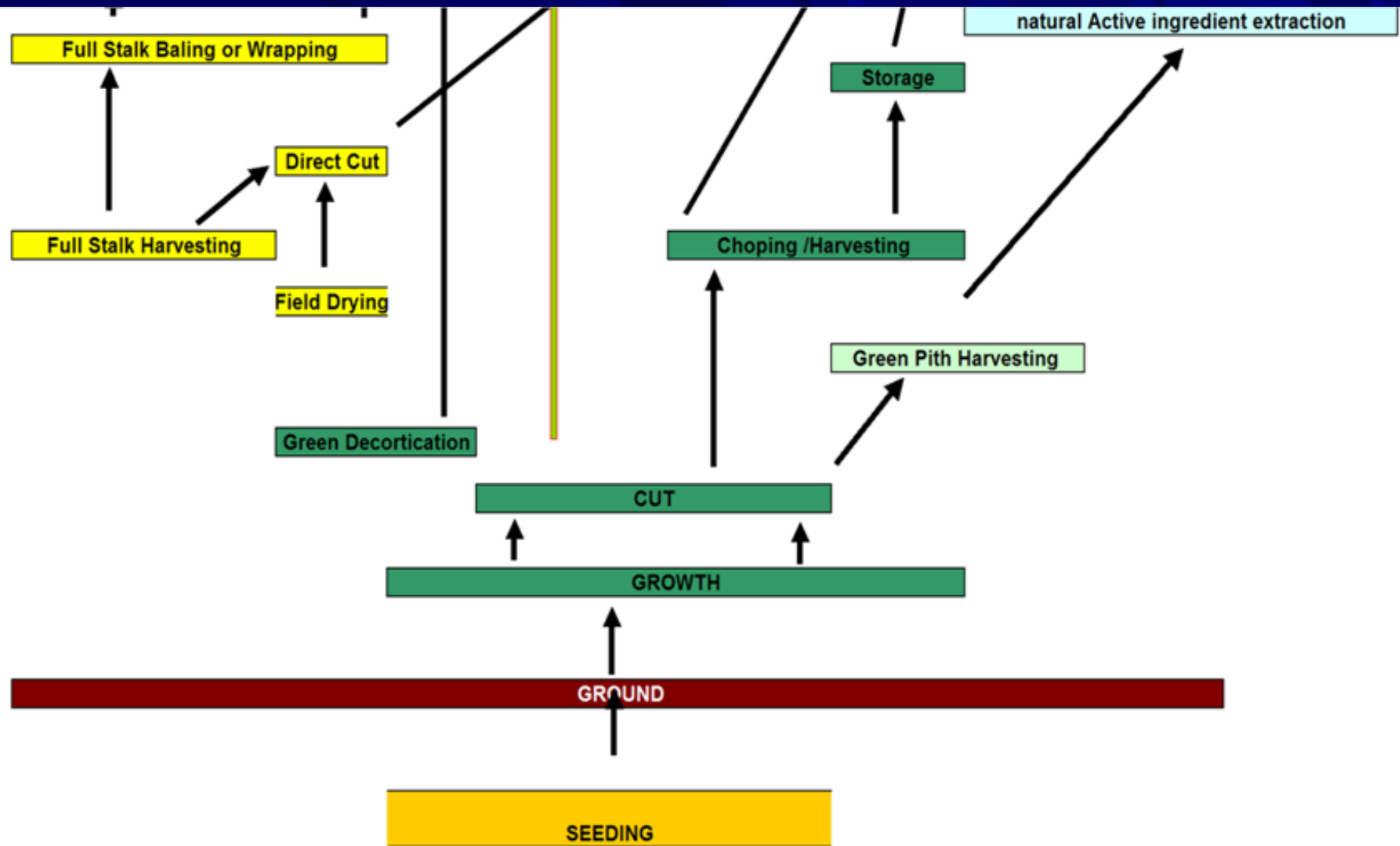


The Kenaf Harvesting

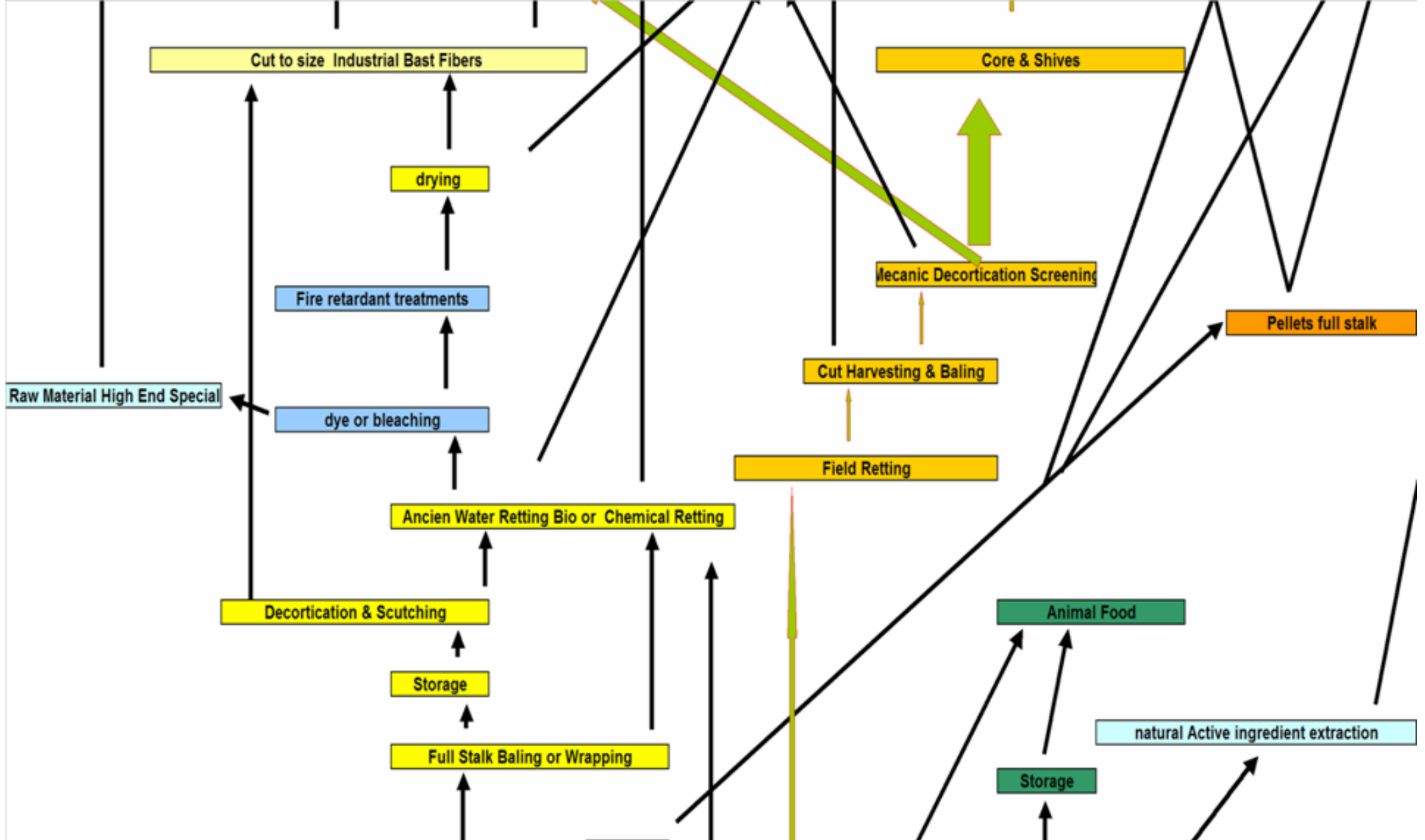
- Expressly made under the needs of final product requirements
- early : good fiber quality
- late : more wooden core

THE KENAF' s UTILIZZATIONS FLOW CHARD





From seeding to harvest



From Harvest to the Kenaf Raw Products fibres wood and pith

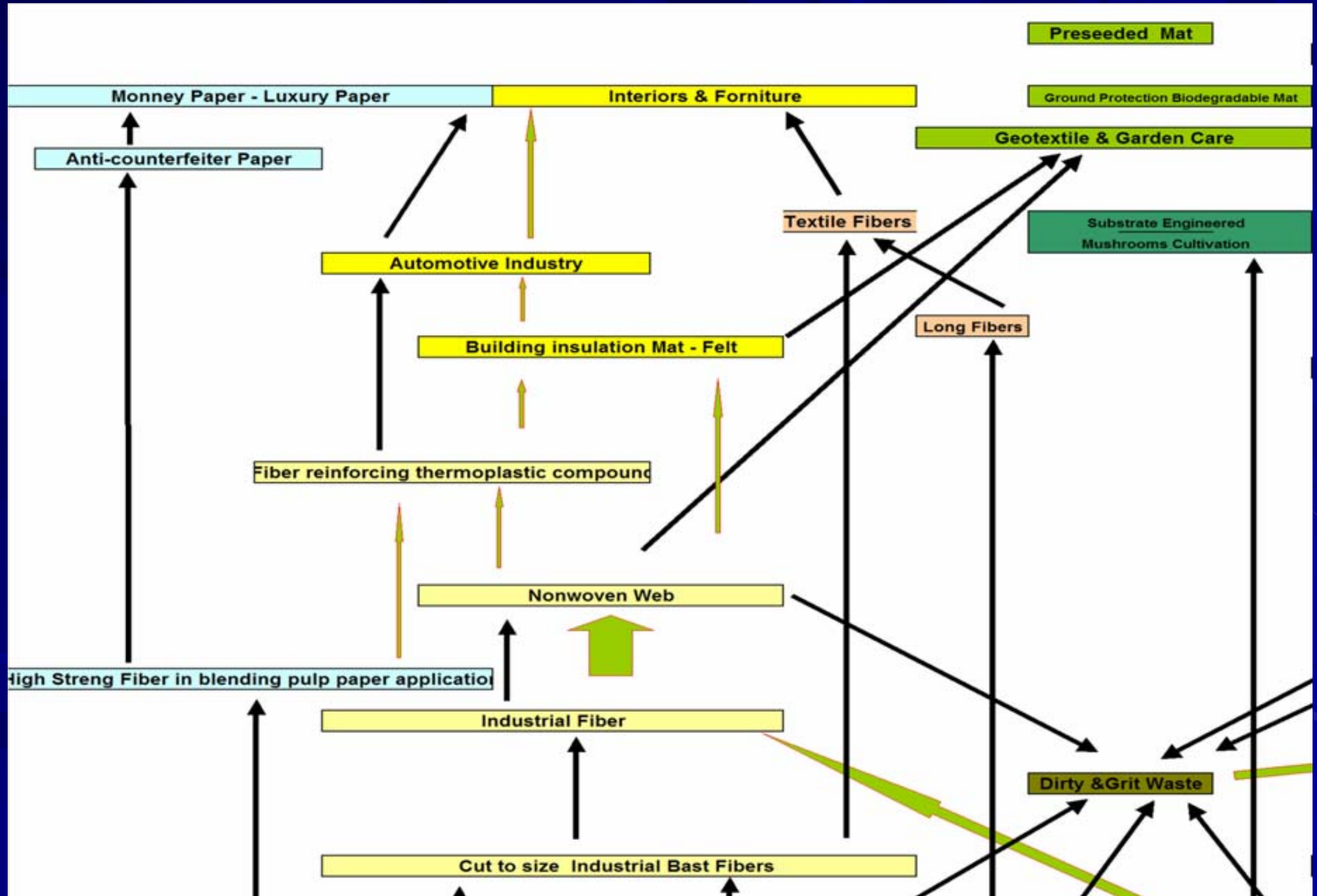
The KENAF: Fibers

- Length : 1 – 4 mm
- Thickness : 5 μ
- Wall thickness : 10 μ

Fibers



Way of the fiber



Papers



Muching Paper/Mat



Fine paper applications



Hygienic Paper & Napkin





Textile Fiber Applications



Fiber insulation board



Automotive door trims

The KENAF: Core applications

- **Cellulose & Papers**
- **Natural litters & bedding**
- **Particle & Fibers panels**
- **Mulching & Garden protections**
- **Engineered Substrate mushroom cultivation.**
- **Super absorber or soil remediation**

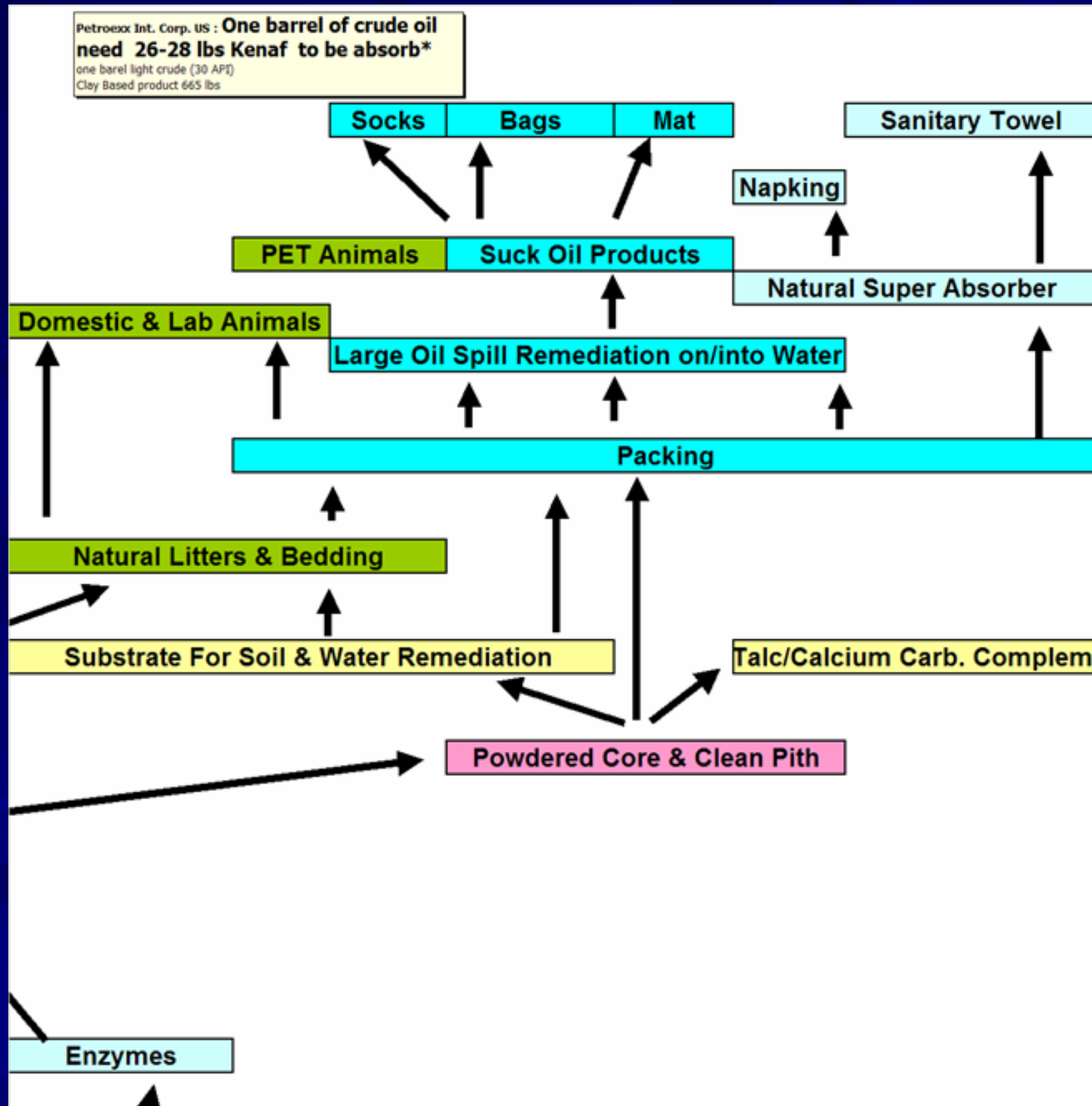
Kenaf Core



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graph TD
    CoreShives[Core & Shives] --> MilledFullCore[Milled Full Core]
    CoreShives --> ShiftingScreening[Shifting/Screening]
    MilledFullCore --> ShiftingScreening
    ShiftingScreening --> WoodenFiberChips[Wooden Fiber & Chips]
    WoodenFiberChips --> DrillingMud[Drilling Mud]
    WoodenFiberChips --> GranulatedPowder[Granulated & Powder]
    WoodenFiberChips --> ActivatedCarbonSubstrate[Activated Carbon Substrate]
    WoodenFiberChips --> LowDensityFiberB[Low Density Fiber B.]
    WoodenFiberChips --> StructuralInsulation[Structural Insulation]
    WoodenFiberChips --> PannelsBoards[Pannels & Boards]
    WoodenFiberChips --> SfangnumArtificialSoil[Sfangnum Artificial Soil]
    WoodenFiberChips --> SubstrateMatrix[Substrate Matrix for Anaerobic Bacteria]
    WoodenFiberChips --> NeutraceuticalCompound[Neutraceutical Compound]
    SfangnumArtificialSoil --> SubstrateMatrix
    SubstrateMatrix --> NeutraceuticalCompound
    NeutraceuticalCompound --> Pharmaceuticals[Pharmaceuticals]
    NeutraceuticalCompound --> Cosmetic[Cosmetic]
    GranulatedPowder --> SoilAmendment[Soil Amendment]
    SoilAmendment --> Pharmaceuticals
    SoilAmendment --> Cosmetic
    EnergyPlantsBimass[Energy Plants -Bimass] --> PulpPaper[Pulp & Paper]
    PulpPaper --> PannelsBoards
    PulpPaper --> StructuralInsulation
  
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THE CORE WAY 2





Super Absorber for water pollutants

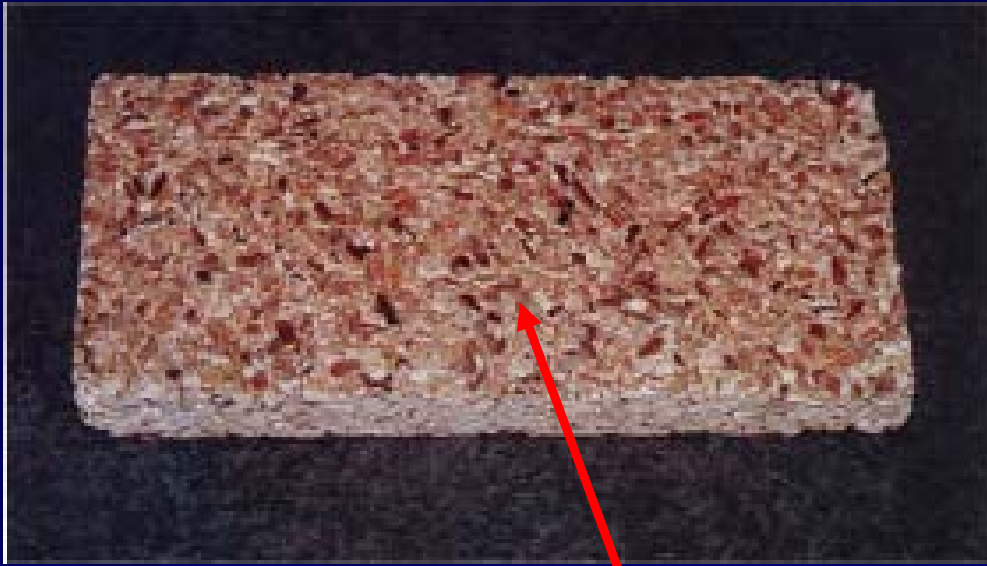


Mushroom Cultivation

Mulching for Gardens or cultivations soil



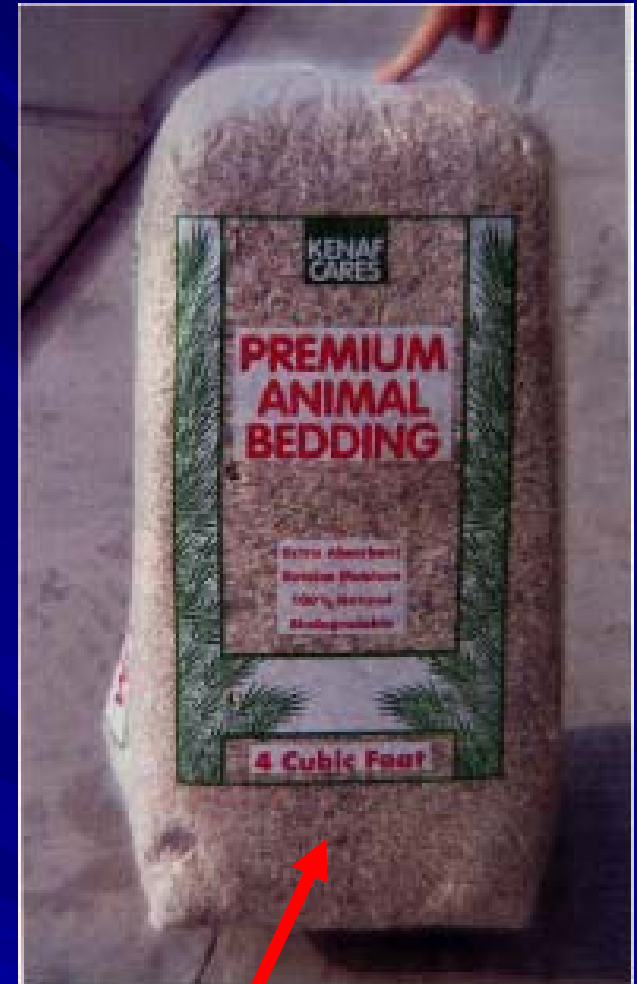
Kenaf core Applications



Insulation board



Low Density Fibers Board



PET beds

Kenaf core Applications

now the K.E.F.I's method cultivation production plants

