OPERATIONAL ASSETS OF ENTERPRISE

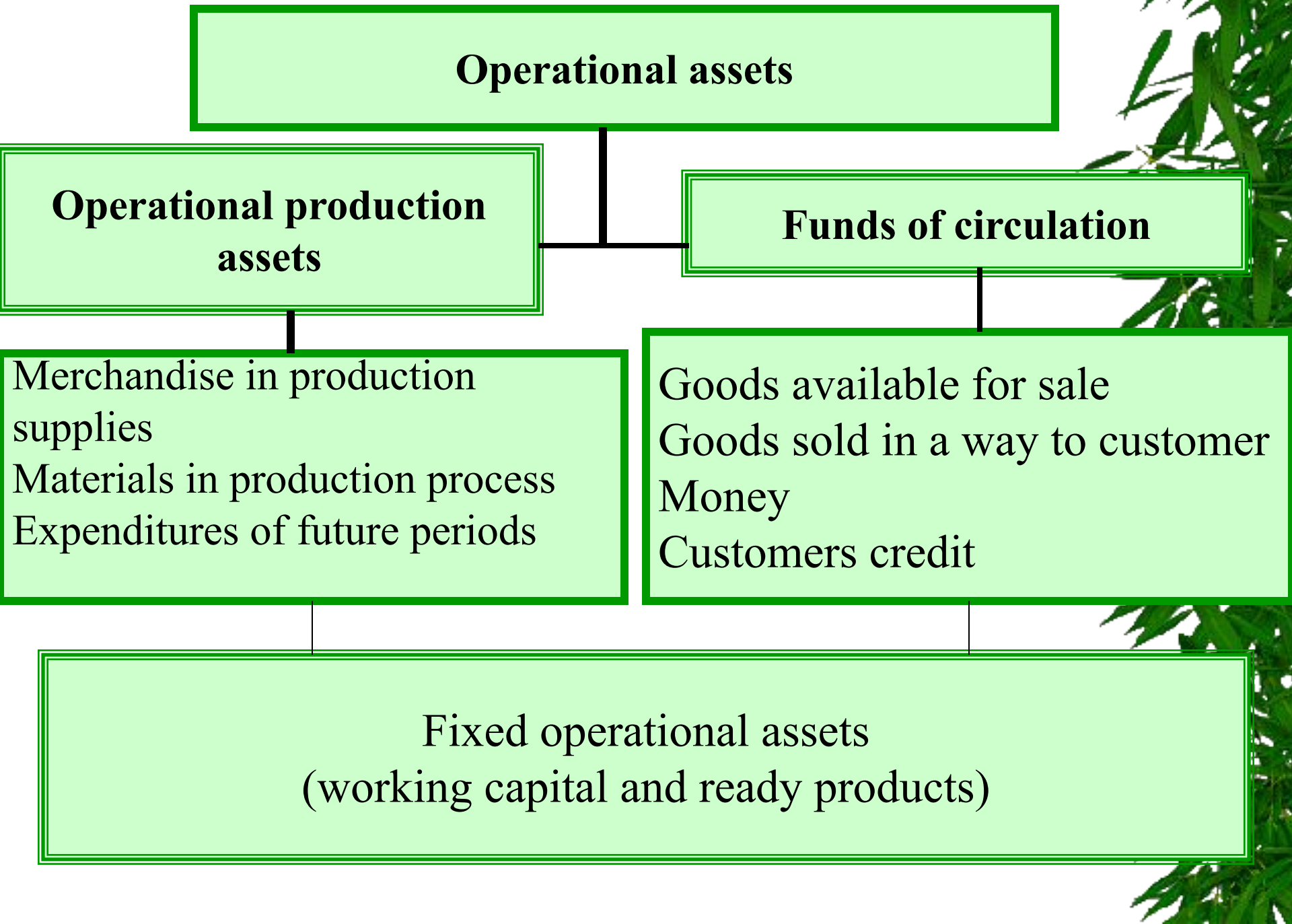
1. COMPOSITION, STRUCTURE AND CLASSIFICATION OF OA
2. DETERMINATION OF NECESSITY IN OPERATIONAL ASSETS
3. ESTIMATION OF THE EFFICIENCY OF USAGE OF OPERATIONAL ASSETS

operational assets -
it is the sum of money,
that was advanced for creation
operational production assets
and funds of circulation, which provide
continuous rotation of
money.

it is the total value of elements of operational product

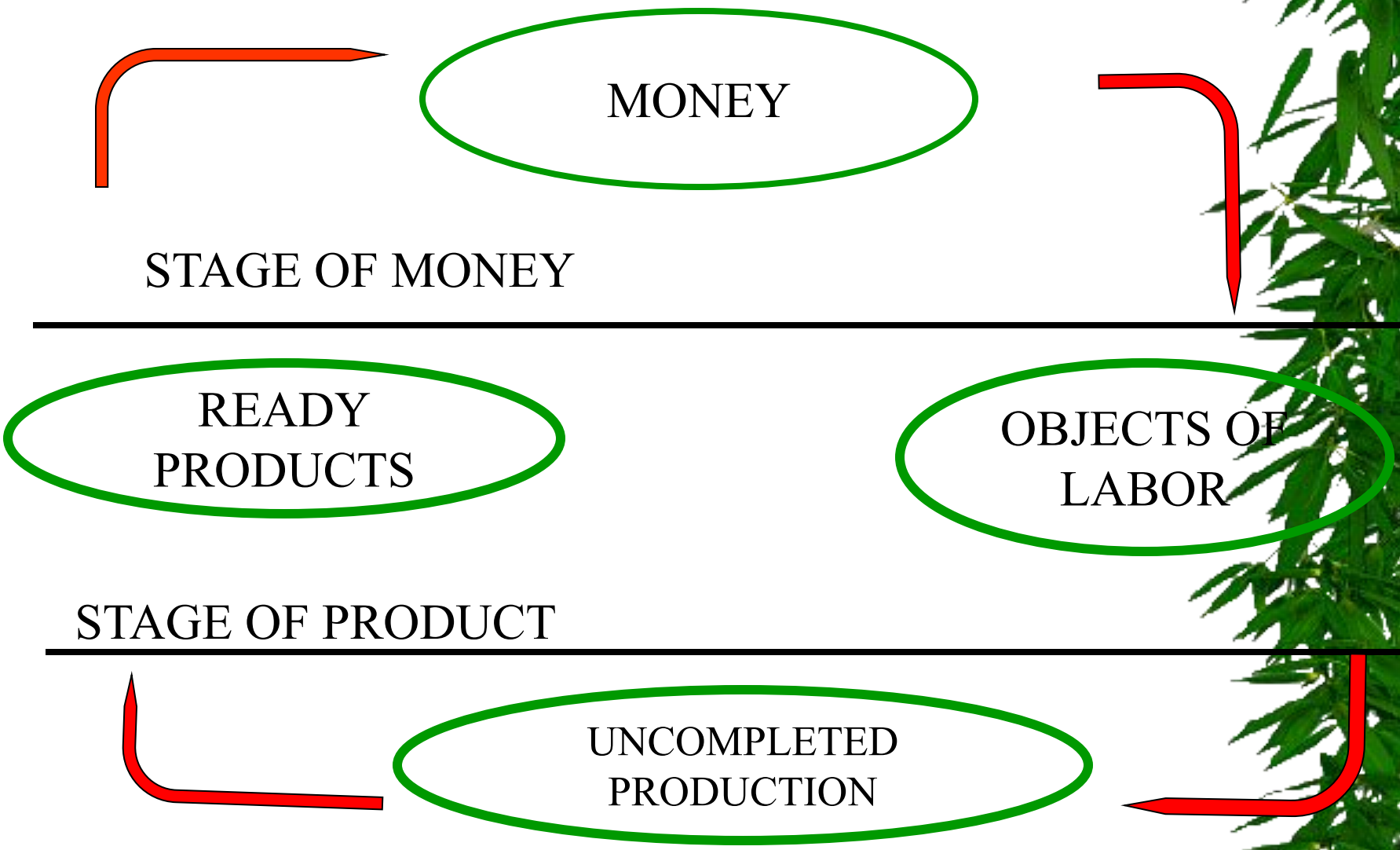
Structure of operational assets – it is the specific proportion of operational production assets and funds of circulation in total value of operational assets

(in economics of Ukraine structure of operational assets usually divide into: commodity material values - 21,6%, credits for customers – 69,5%, money – 3,9, current financial investments – 1,7.)


Operational assets
Operational production assets
Funds of circulation
Merchandise in production supplies
Materials in production process
Expenditures of future periods
Goods available for sale
Goods sold in a way to customer
Money
Customers credit
Fixed operational assets
(working capital and ready products)

Operational production assets (working capital)- it is the **objects of labor** (raw material, basic materials and half-finished products, auxiliary materials, fuel, package materials, spare parts, etc.);
means of labor with the term of service less than one year (low value and quickly used objects and instruments); uncompleted production and charges of future periods.

enterprise invested in the supplies of ready products, commoditi es what are shipped but unpaid, and also money in transfer, in


MONEY
STAGE OF MONEY
READY PRODUCTS
OBJECTS OF LABOR
STAGE OF PRODUCT
UNCOMPLETED PRODUCTION
STAGE OF PRODUCTION

CLASSIFICATION OF OPERATIONAL ASSETS

1. BY THE ECONOMIC MEANING:

operational production assets

and funds of circulation

2. BY THE METHOD OF FORMING:

OWN

BORROWED

3. BY THE METHOD OF PLANNING:

FIXED

UNRATIONED

Methods of value estimation of supplies

by every item cost price;
by average cost price;
Method FIFO (first in – first out);
Method LIFO (last in – first out)

The process of setting the norms of operational assets of enterprise *is* a calculation of optimum size of operational assets, necessary for organization and running normal economic activity of enterprise.

Normative of operational assets — it is the minimum value of operational assets which is enough for continuous run of the production process.

$$Wn = Hoc * \frac{M}{T}$$

Hoc –norm of operational assets, days
M- value of material resources for the period, hrv
T - period

Target of the process of setting the norms

Determination of rational size of operational assets which are distracted on a certain term in the sphere of production and sphere of circulation

PRINCIPLES OF PLANNING

1. PRINCIPLE OF DETERMINATION
2. PRINCIPLE OF SYSTEM WORK
3. PRINCIPLE OF SCIENTIFIC CHARACTER
4. PRINCIPLE OF VALIDATION
5. PRINCIPLE OF PROGRESS CHARACTER

Terms of establishment of norms on operational assets

1. Terms of delivery and sale
2. Distance between the supplier and the consumer
3. Transport terms
4. Time for the preparation of materials for the use in the production process
5. Periods of putting raw materials in production
6. Duration of production cycle
7. Forms of accounting, duration of document circulation

Methods of determination of necessity in operational assets

DIRECT CALCULATION OF THE

Based on the calculation of norms on each of the rationed element of the operational assets.
Enables more precisely rationing of the operational assets usage, taking into account the specific of enterprise development

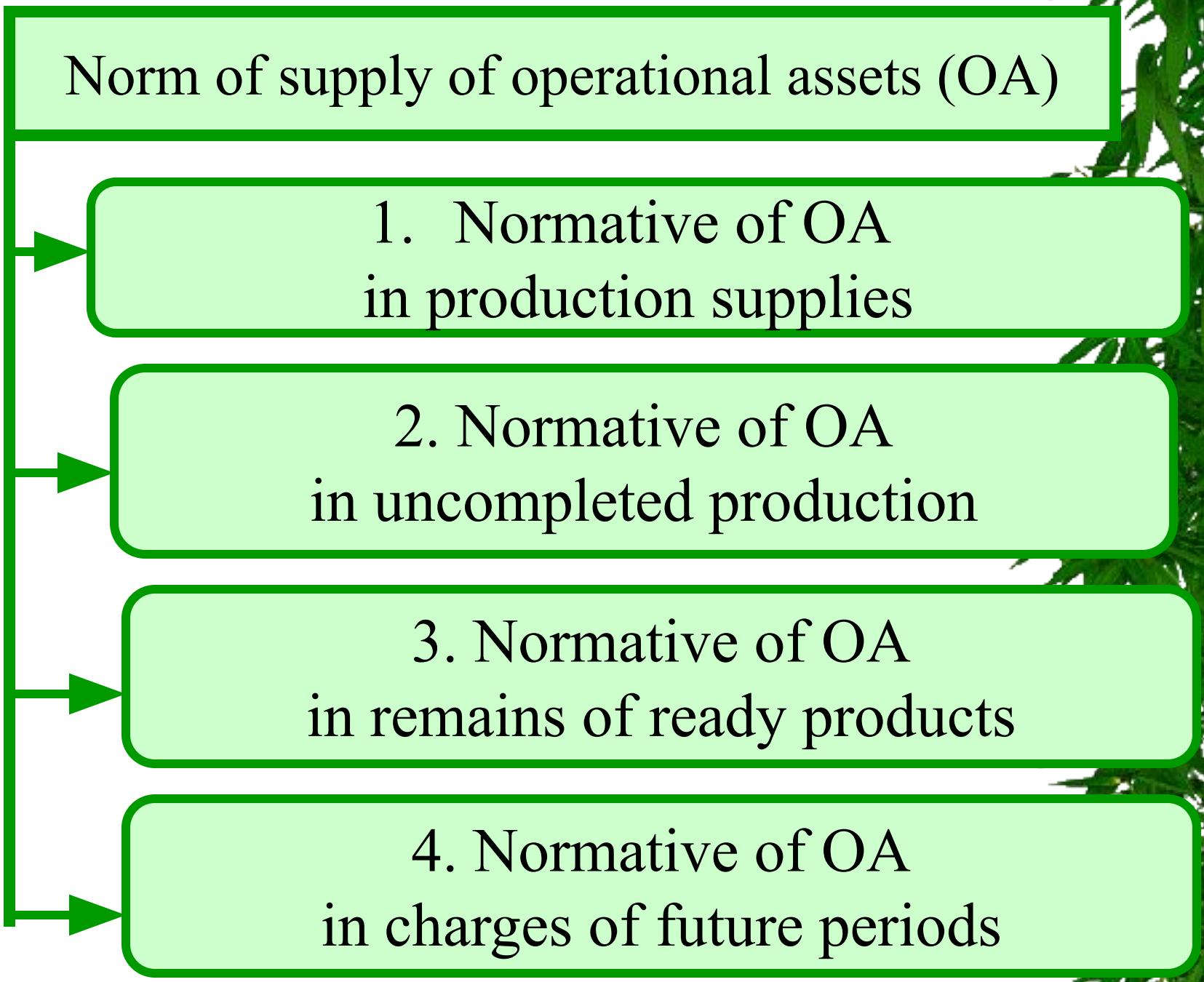
ANALYTICAL METHOD

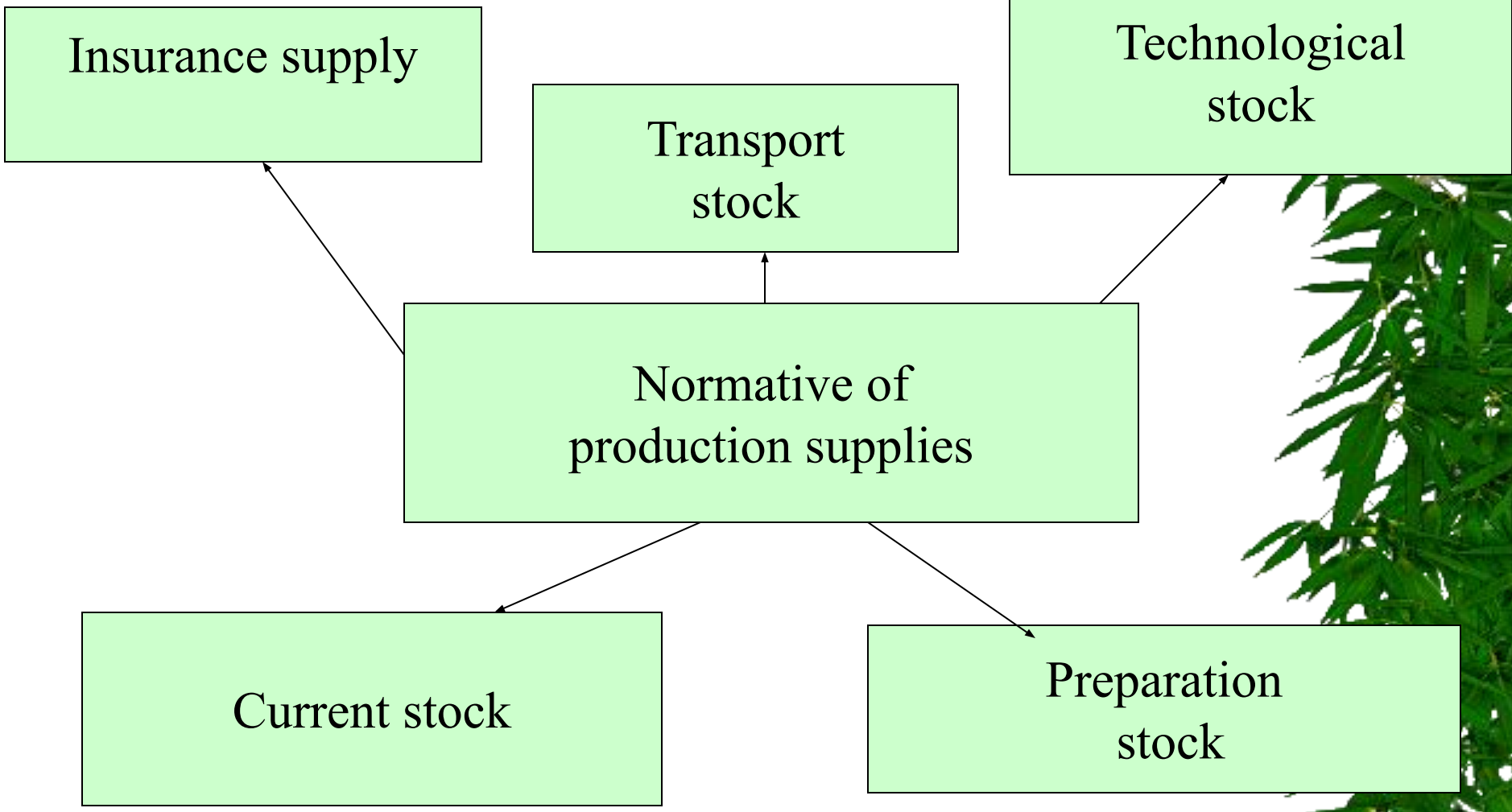
Used in those cases
when in planned
period it is not foreseen
substantial changes
in the activity of enterprise.
A normative is determined
by comparison between
the rates of growth
productions and
the size of rationed
operational assets

d o f c o e f f i c i e

The normative is determined on the base of previous period norms by making in them changes, taking into account terms of production, deliveries, realization of products, calculations

Norm of supply of operational assets - it is the minimum necessary amount of days, for which specific amount of supplies is needed to provide the normal functioning of enterprise.


Norm of supply of operational assets (OA)
1. Normative of OA in production supplies
2. Normative of OA in uncompleted production
3. Normative of OA in remains of ready products
4. Normative of OA in charges of future periods


Insurance supply
Transport stock
Technological stock
Normative of production supplies
Current stock
Preparation stock

y f o r p r o v i d i n g

c o n t i n

Зтек = Д * Тпост

Д – daily necessity for supplies;

Тпост – period of delivery of the material resource in days

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Determined as
a requirement in the
resources
on the period of
derangement
deliveries (Тср пост)
Зстрах = Д* Тср пост

A transport stock is created in case of the exceeding of terms of transport cycle as compared to terms of circulation of documents on the enterprise, sent from suppliers on considerable distances

Technological stock
created in cases, when the type of particular raw material needs previous treatment

Preparation stock created because of the necessity of reception, unloading, sorting and warehousing production supplies.
The norms of time are set by a time-study

Maximum stock size (Зmax):

$$Зmax = З min + З nom$$

Average stock

$$Зср = Зmin + 0.5 * Зnom$$

Normative of production supplies (Нпр.з)

Нпр.з. = Д*Здн

Daily necessity, items.

Д =Мо/360

Мо – overall necessity in particular type of resources, items

Мо = $\sum_{i=1}^{m} Ni * q_i$

$q_i = \frac{Mi}{Квм}$

Ni- number of products

q – weight of one base item

Mi – net weight of one item

Квм – coefficient of the use of metal

Normative of op

$$Ннезав. = \frac{Ср * Тц * Кнз}{360}$$

Ср – cost price of annual volume of production
Тц – duration of production cycle
Кнз – coeficient of increasing of cost, which shows the degree of completing of the product

$$Кнз = \frac{M + 0{,}5C_1}{C_1} = \frac{C_0 + 0{,}5C_n}{C_0 + C_n}$$

M – sum of material expenditures on production of one item
C_1 - cost price of one item without material expenditures
C_0 - one-time expenditures at the moment of the starting of production
Сп – current expenditures on production

Normative of

Нгп = Пс*Здн

Пс – value of daily production volume by production cost

Здн – norm of stock in days

The norm of supply consists of amount of days which are needed for preparation of products to realization (acquisition, packing, shipping users et cetera)

Normative

Calculates with taking into account the remains of money on beginning of period and sum of charges which must be carried out in the planned period after deduction of the sum for future redemption of charges due to an unit cost

Нмп = **Сн + Зпл – Зпог**

Сн – remains of money on beginning of period

Зпл – charges which must be carried out in the planned period

Зпог - sum for future redemption of charges due to an unit cost

3

effective use

it is their functioning during which is provided the stable state of financial resources and the most high results of activity at the minimum charges of enterprise

Circulation of operational assets is the duration of complete circulation of facilities from the moment of acquisition of operational assets (purchase of raw material, materials etc) to the output and realization of the ready products.

Indicators of circulation of operational assets

Indicator of circulation

shows

How many turns can do operating assets for certain period of time

Calculated as

$$Коб = \frac{РП}{Ос}$$

РП - annual sold products

Ос – average remains of operating assets per year

Coefficient of load

shows

How many operational assets of enterprise are on the 1 grivna of the sold products

Calculated as

$$Кз = \frac{Ос}{РП}$$

Duration of one turn

shows

Duration of one turn of operational assets in days

Calculated as

$$Тоб = \frac{360}{Коб}$$

Average remains of operating assets per year (Oc)

$$\overline{O} = \frac{\frac{O_1}{2} + O_2 + \ldots + \frac{O_n}{2}}{n-1}$$

O_1, O_2, O_{12} – average remains of operating assets per month

Acceleration of circulation of operational assets

An increase of volume of produced products on every hryvna of current expenditures of enterprise

Enables to free part of assets and use them to create additional reserves for expansion of production

Freed volume

$$\Delta\overline{O} = \frac{РП_0}{360} * (Тб - Тз)$$

РПо - volume of produced and sold products in the actual period

Тб, Тз – average duration of one turn of operational assets in basic and actual period

Comparative

$$\Delta O = \frac{\overline{O_б}}{РП_б} * РП_з - \overline{O}_з$$

Оз, Об– average remains of operational assets in actual and basic period

РПз, РПб – volume of sold products in actual and basic year

Sum of increas

$$\Delta П = П_б * \frac{РП_з}{РП_б} * \frac{Об}{Оз} - П_з$$

Пз, Пб – an income from sold products in actual and basic period respectively

Оз, Об– average remains of operational assets in actual and basic period

РПз, РПб – volume of sold products in actual and basic year

Influence of the

$$\Delta R = \frac{\Pi_1}{\overline{O\Phi} + \overline{O} - \overline{\Delta O}} \times 100 - R_1, \%$$

ΔR - a change of level of general profitability due to the change of remains of the fixed operational assets

Π_1 – balance income in actual year

ОФ – average annual cost of capital production assets

R_1 – general profitability of production in actual year, %

Increase of efficiency of operational assets use could be achieved due to such measures:

- diminishing of terms of products making as the result of mechanizations of works, improvement of technological processes;
- diminishing the normative of production supplies by the improvement of organization of material and technical deliveries by diminishing of their transporting distance

▸ economy of financial resources, better storage and account, severe observance of norms of expenditures of materials per one unit

▸ improvement of calculations with customers and introduction other methods on an improvement financial and payment discipline

▸arrangement of pricing, application of functioning system of economic stimulation.

Exercise

- In a actual year the amount of the fixed operational assets on the enterprise made 460 thousand of hrv. Duration of one turn of operational assets – 56 days. Next (planned) year the volume of the sold products will be increased on 27 %. Define, on how many days time of one turn will be less at the unchangeable size of the fixed operational assets.

- У звітному році сума нормованих оборотних засобів на підприємстві склала 460 тис. грн. Тривалість одного обороту оборотних засобів - 56 днів. В наступному році обсяг реалізованої продукції збільшиться на 27 %. Визначити, на скільки днів скоротиться час одного обороту при тій же величині нормованих оборотних коштів.

Розв'язання

Тривалість одного обороту визначається за формулою: Тоб = Д/Коб=Оср*360(365)/РП

- РП0 = Оср0*365 / Тоб0 = 460*365/56 = 2998,2 тис.грн.
- РП1 = 2998,2*1,27 = 3807,7 тис.грн.
- Тоб1 = 460*365/3807,7=44,09 днів

Час скорочення одного обороту = 44,09–56= 11,91 дні