



Lecture 1.

Introduction, Circular flow,
Classification, Data review



Resources of the country

Human (people)

Financial (currency, bank deposit, bonds, corporate equity, etc.)

Natural (land, forest, water, biota, air, space, etc.)

Produced (building, machinery, goods, technology, etc.)

Integrated framework



Human

- provides labor as means of production
- reproduce itself
- manage resources



Natural

- use as means and input to production
- reproduce itself
- absorb waste



Produced

- means of production
- input to production



Financial

- means of exchange
- produced with transactions



Types of variable

- **Stock** - measures at a certain *point in time*
- **Flow** - measure of variables during a *period of time*



Stocks

- Value of assets at a **POINT IN TIME**
 - Non Financial and Financial Assets
 - Financial liabilities
 - Net worth
- Recorded at the beginning and end of reference period

Economic flows

Flows that results in change of:

- **Value**
- **Volume**
- **Compositions**
- **Ownership of economic assets**

Types of economic flows

- **Goods & services**
- **Distributive (*income*)**
- **Financial (*financial instruments*)**
- **Other accumulation entries**

Types of economic flows

Economic flows

- Goods & services
- Distributive
- Financial
- Other accumulation entries



NATIONAL



**NATIONAL,
INSTITUTIONL**

Economic flows & account

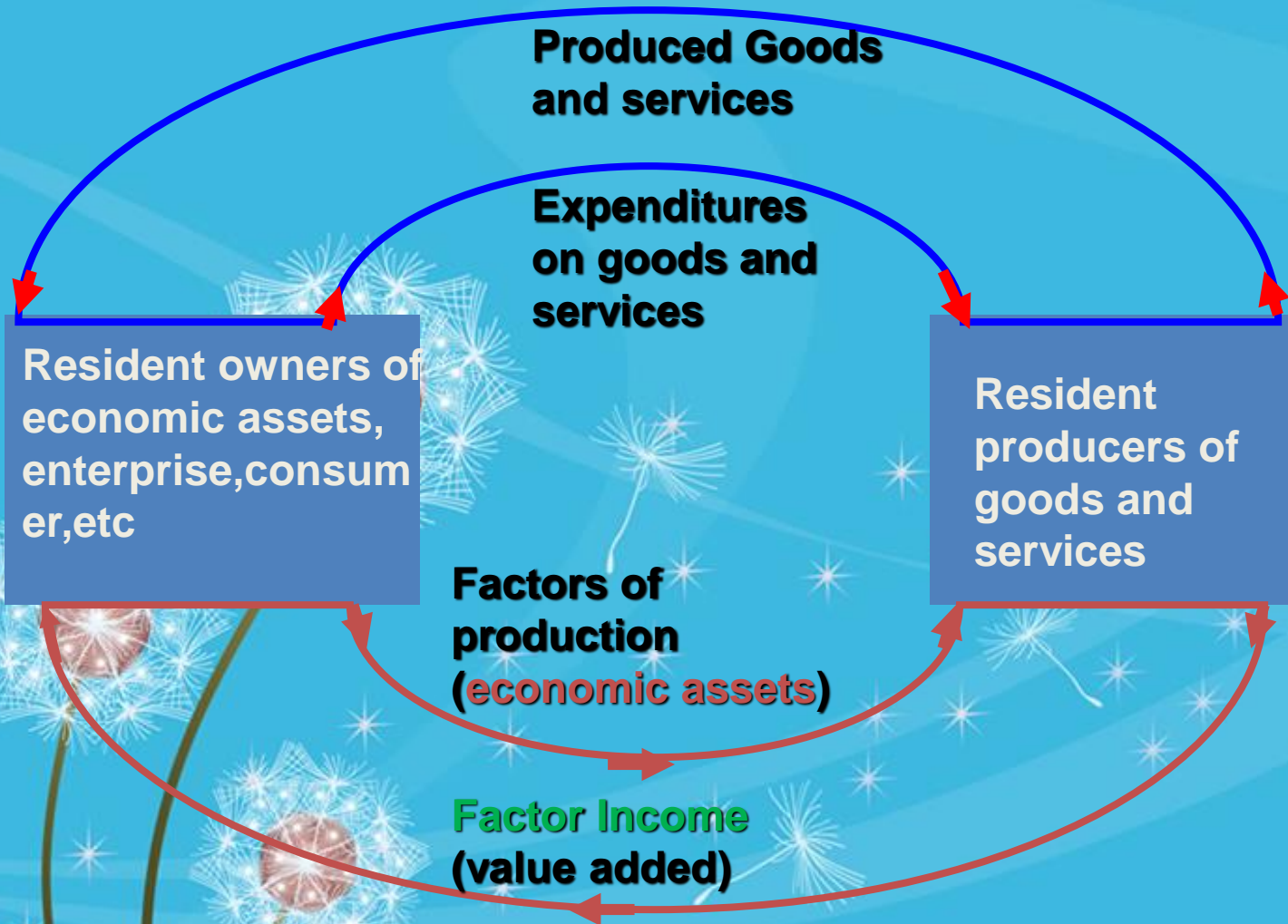
Economic flows

- *Goods & services*
- *Distributive (income)*
- *Financial*
- *Other accumulation entries*



Accounts

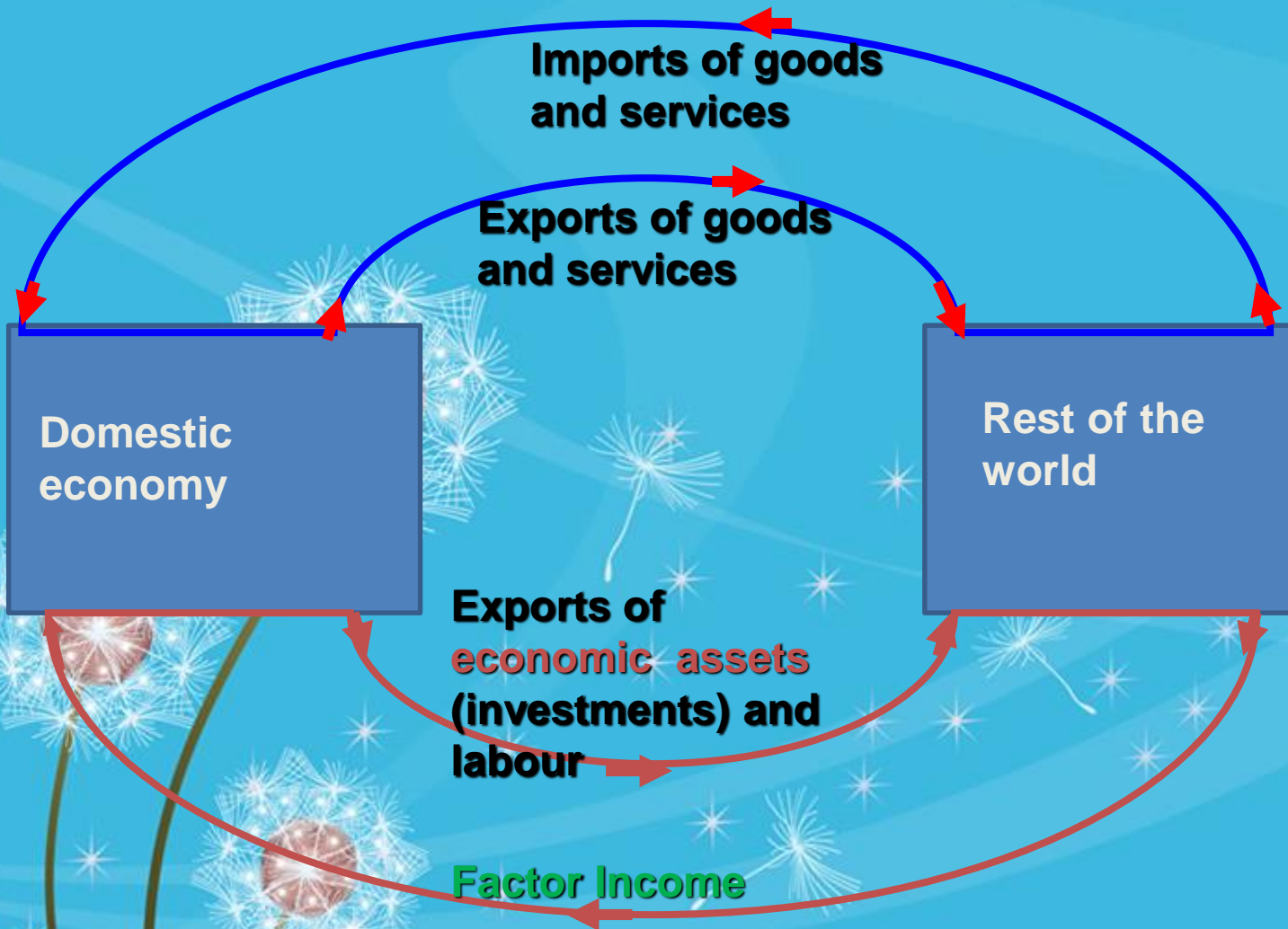
- *Supply & use tables*
- *Income & use of income account*
- *Financial account*
- *Other value change*



Circular Flow of:

- 1. goods and services,**
- 2. economic assets**
- 3. income**

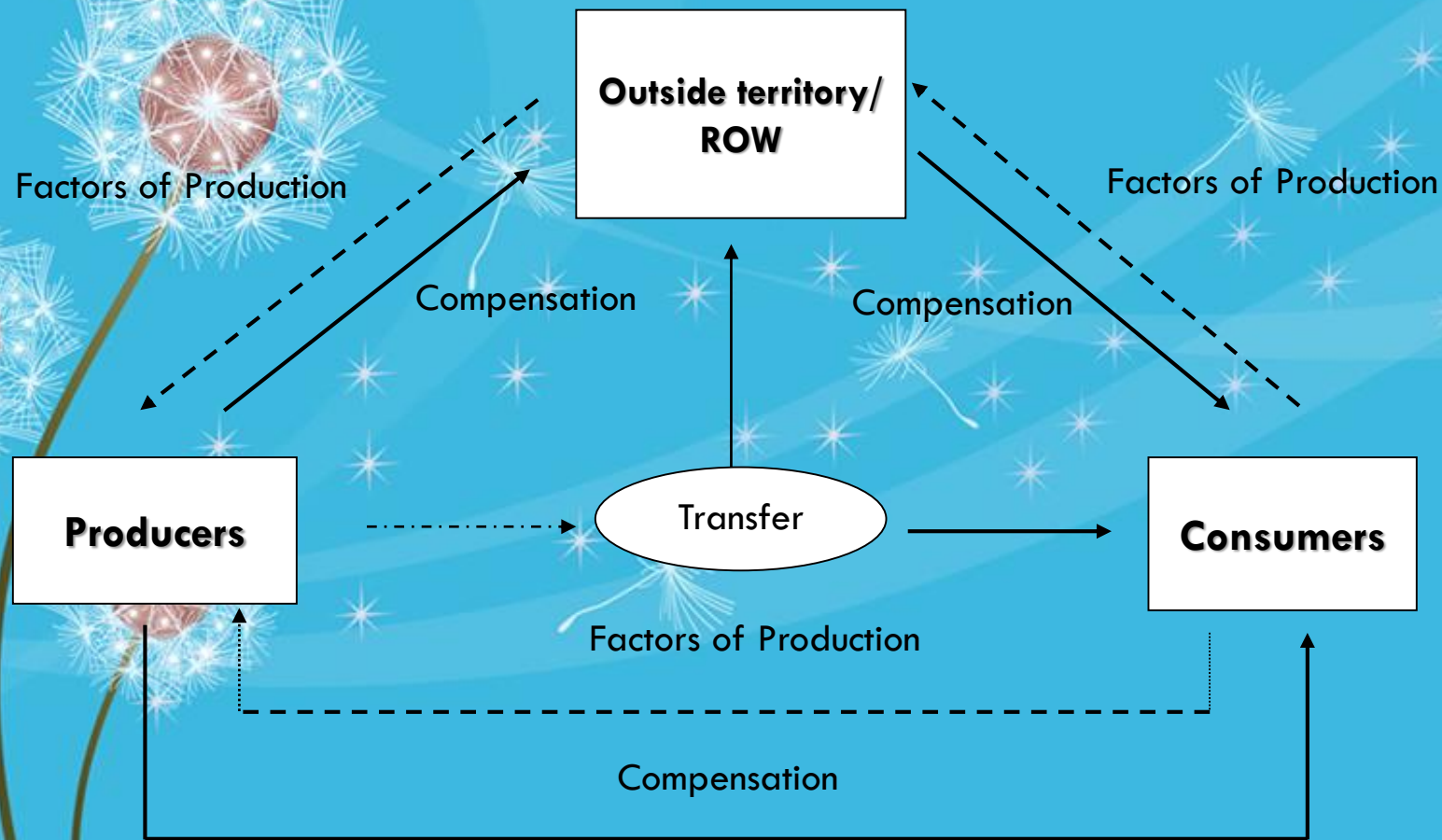
within the economy



Flow of:
1.goods and services,
2.economic assets,
3.income

between economy and rest of the world (ROW)

Flows of regional factors income





**→ What is
GDP/GRDP ?**

Three approaches of GDP/GRDP:

- **Production approach**
- **Income approach**
- **Expenditure approach**

Gross Domestic Product

- Measured from the production of goods and services
- Measured from the expenditure on these goods and services
- Measured from the income generated from production of goods and services

Gross Domestic Product

GDP by
production

Measured
from
producers

GDP by
expenditure

Measured
from users

GDP by
income
generation

Measured
from
producers

How the GDP is measured?

- **GDP by production** is measured by type of industry or type of economic activity
- **GDP by expenditure** is measured by what the goods are used for in final demand, that is whether for consumption, capital formation or export
- **GDP by income** is measured by the payment of producers to the different resources used in production including payment to government.

Production approach

**Value of products produced in a domestic territory within a certain period of time, or value of production/output less intermediate cost/input, or commonly known as :
“Gross Value Added (GVA)”**

Production approach ... (2)

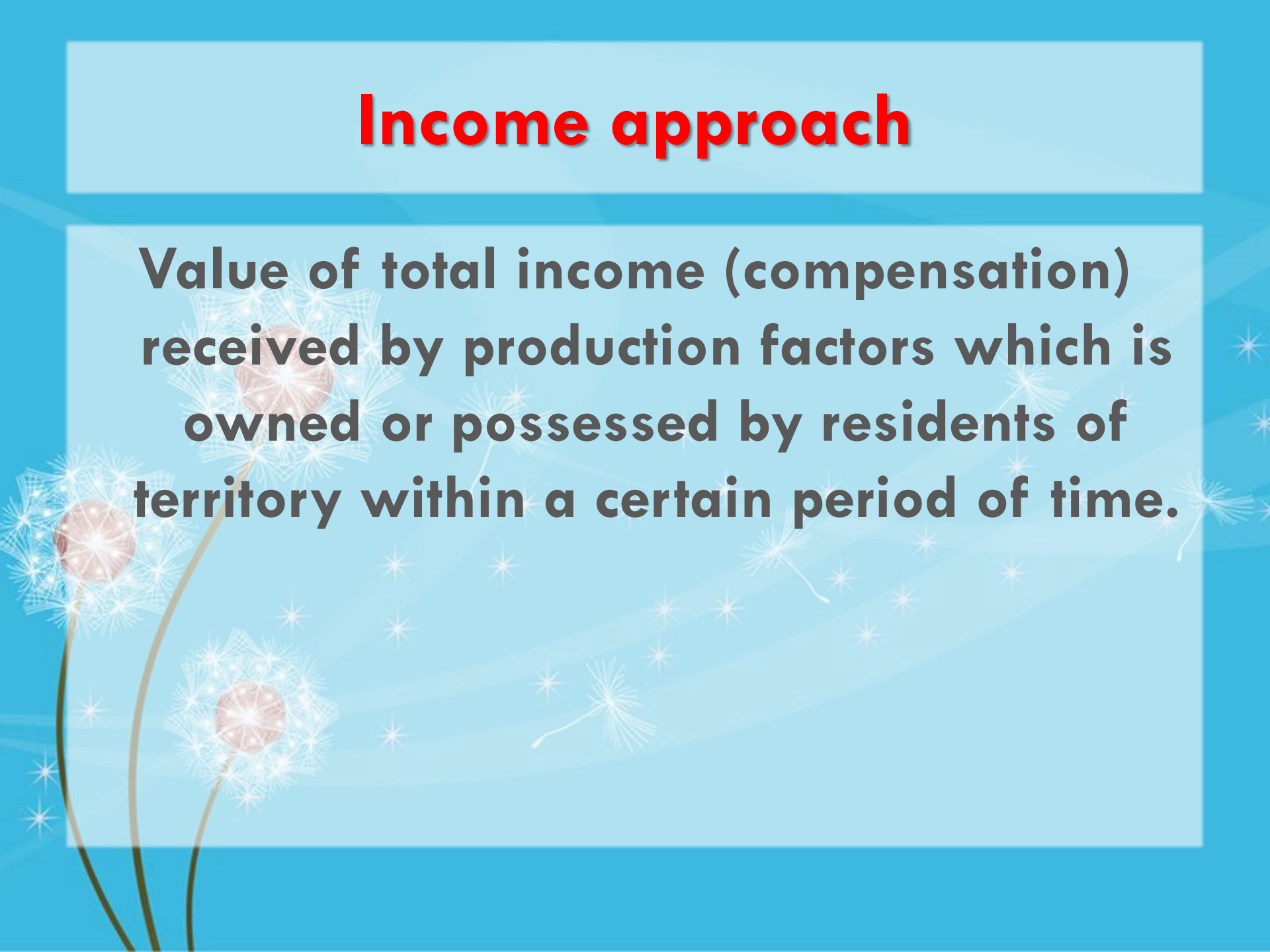
$$\text{GDP (GRDP)} = \sum \text{GVA}_i$$

i = Industries



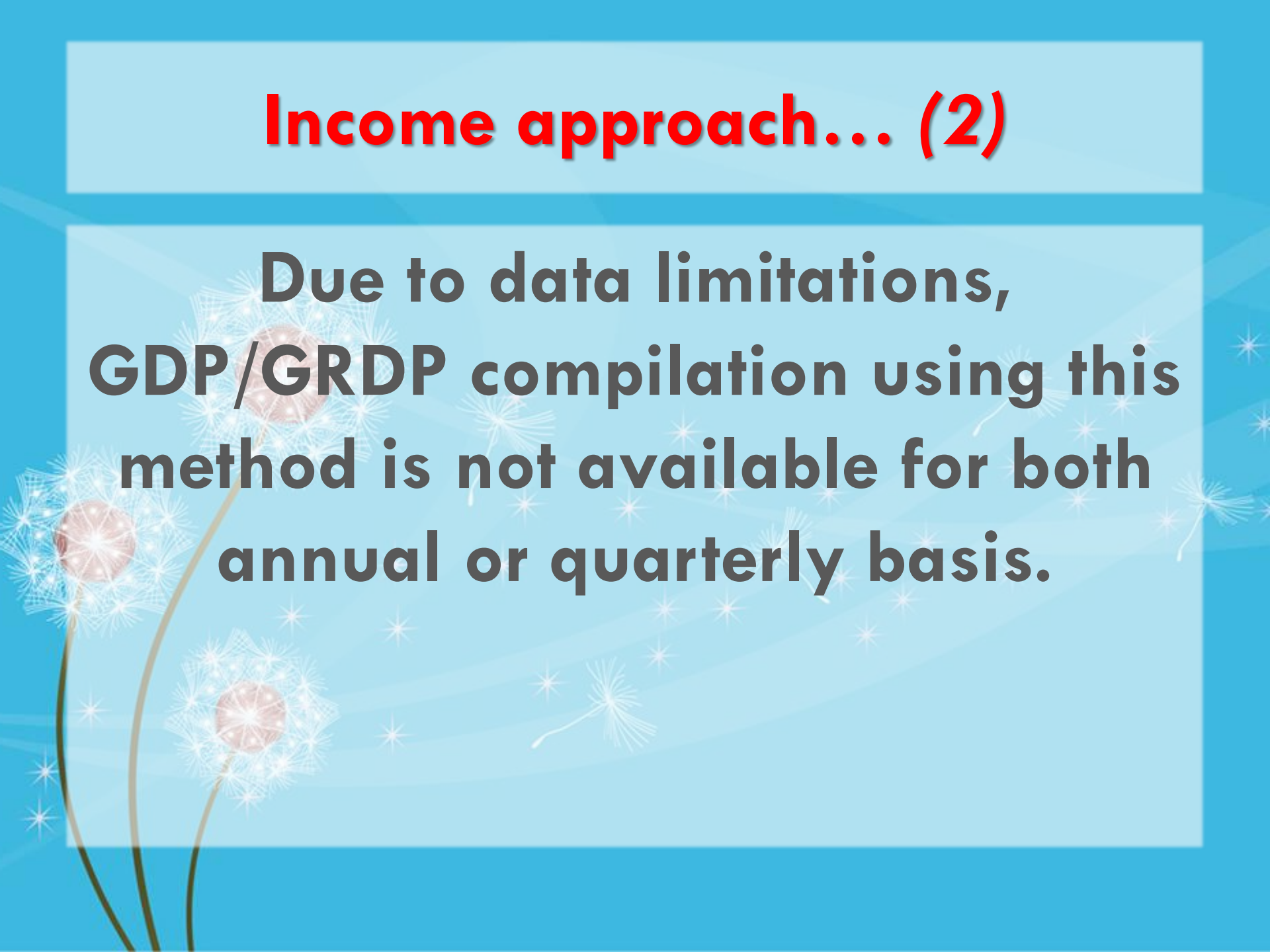
Income approach

Value of total income (compensation) received by production factors which is owned or possessed by residents of territory within a certain period of time.

The background of the slide is a vibrant blue gradient. In the lower-left corner, there are three dandelion stems with brown heads and white, feathery seed heads. Scattered across the blue background are numerous small, white, starburst-like sparkles, some of which appear to be floating or falling, adding a decorative and dynamic feel to the presentation.

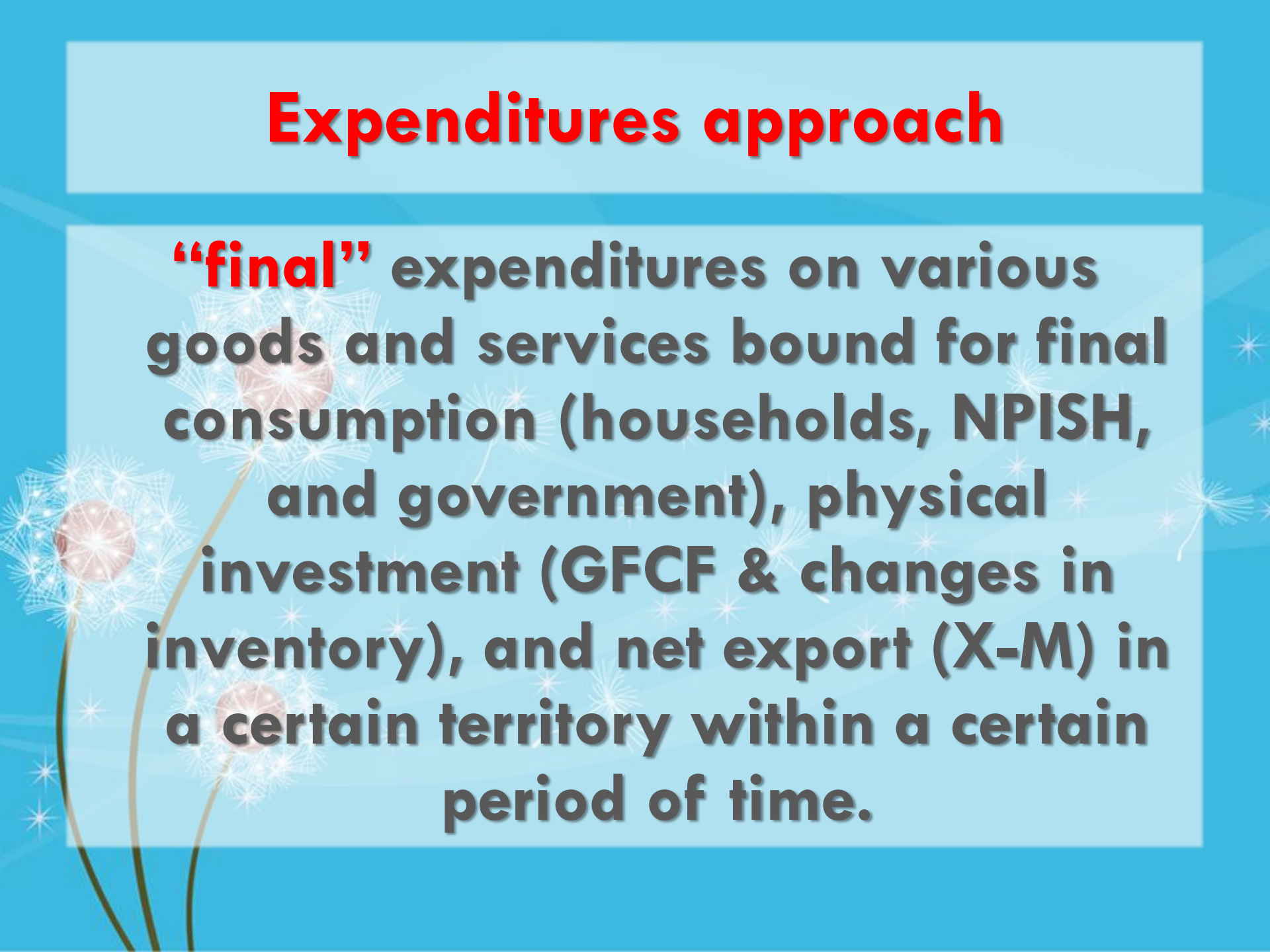
Income approach... (2)

**Due to data limitations,
GDP/GRDP compilation using this
method is not available for both
annual or quarterly basis.**

The background of the slide is a vibrant blue gradient. On the left side, there are three dandelion-like plants with brown stems and heads, and their white, feathery seeds are blowing away. Scattered throughout the blue background are numerous small, white, star-shaped sparkles, giving the impression of a bright, airy atmosphere.

Expenditures approach

“final” expenditures on various goods and services bound for final consumption (households, NPISH, and government), physical investment (GFCF & changes in inventory), and net export (X-M) in a certain territory within a certain period of time.

The background of the slide is a vibrant blue gradient. On the left side, there are several dandelion-like plants with brown stems and white, glowing seed heads. Scattered throughout the blue background are numerous small, white, starburst or sparkle effects, giving the slide a bright and dynamic appearance.

Expenditures approach ... (2)

- GDP by expenditure is widely utilise in analysis of macro economic, which is symbolize in *keynessian identity*:

$$Y = C + G + I + (X - M)$$

Y = GDP

C = households consumption

G = government consumption

I = Investation

X = Exports of goods and services

M = Imports of goods and services

Classification

By Type	Standard classification
Product	Central Products Classification (CPC)
Industry	International Standard Industrial Classification of all Economic Activities (ISIC)
Government consumption	Classification of the functions of government (COFOG)
Household consumption	Classification of individual consumption according to purpose (COICOP)
Nonprofit institution serving household (NPISH)	Classification of the purposes of nonprofit institutions serving households (COPNI)
Gross fixed capital formation (GFCF)	Classification of the outlays of producers according to purpose (COPP)
Exports and Imports	Standard Industrial Trade Classification (SITC), Harmonized Commodity Description and Coding System (HS)



Thank you

