# Empowering India: Analysing the Evolution of Union Budget Allocations for Sustainable Growth in this topic data flow diagram
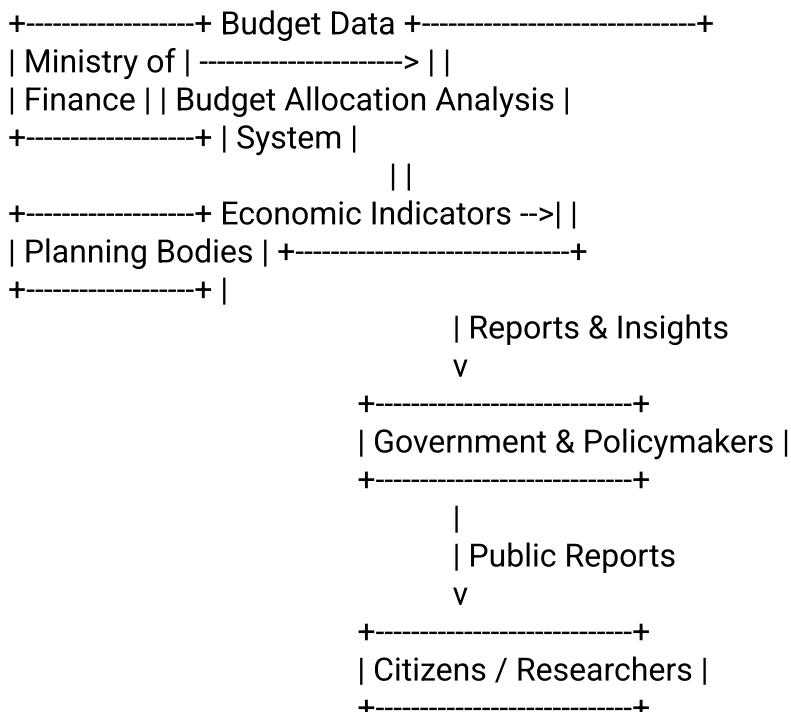

Below is a clear, structured Data Flow Diagram (DFD) design for the topic:

"Empowering India: Analysing the Evolution of Union Budget Allocations for Sustainable Growth"
You can use this directly for documentation, project reports, or system design.

◆ Level 0 DFD (Context Diagram)

Shows the system as a single process and its interaction with external entities.

Copy code

```
+------------------+ Budget Data +---------------------------+
| Ministry of | --------------------> | |
| Finance | | Budget Allocation Analysis |
+------------------+ | System |
                             | |
+------------------+ Economic Indicators -->| |
| Planning Bodies | +---------------------------+
+------------------+ |
                                    | Reports & Insights
                                    v
                        +---------------------------+
                        | Government & Policymakers |
                        +---------------------------+
                                    |
                                    | Public Reports
                                    v
                        +---------------------------+
                        | Citizens / Researchers |
                        +---------------------------+
```

Explanation
Inputs: Budget data, economic indicators
Process: Budget Allocation Analysis System
Outputs: Insights, sustainability reports, visualizations
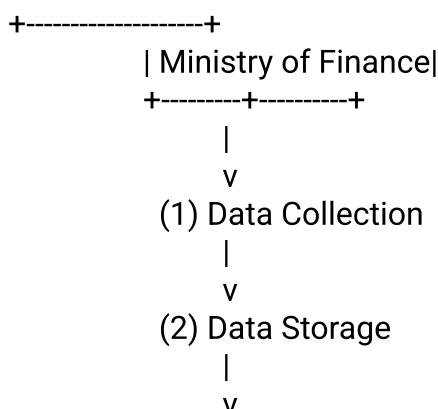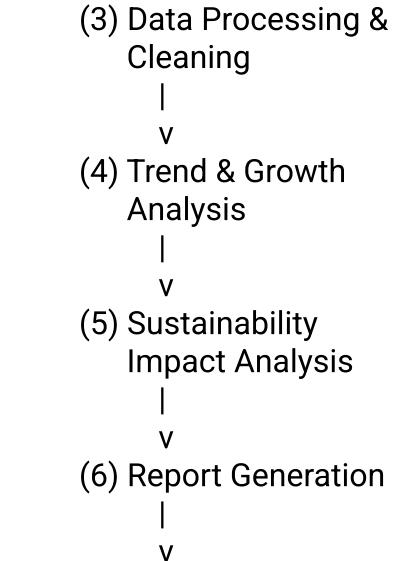
◆ Level 1 DFD (Major Subsystems)

Breaks the system into main functional processes.

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```
+------------------+
            | Ministry of Finance|
            +---------+----------+
                 |
                 v
            (1) Data Collection
                 |
                 v
            (2) Data Storage
                 |
                 v
```

```
                (3) Data Processing &
                    Cleaning
                       |
                       v
                (4) Trend & Growth
                    Analysis
                       |
                       v
                (5) Sustainability
                    Impact Analysis
                       |
                       v
                (6) Report Generation
                       |
                       v
          +-----------------+-----------------+
              | |
```
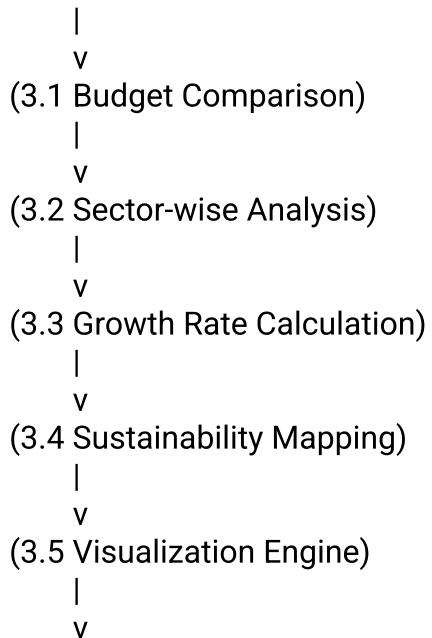
Government & Policymakers Citizens/Researchers

Key Processes

Data Collection – gathers budget & economic data

Data Storage – stores historical and current budgets

Data Processing – cleans & normalizes data

Trend Analysis – studies allocation changes over time

Impact Analysis – maps spending to sustainability goals

Report Generation – dashboards, charts, summaries

- ◆ Level 2 DFD (Detailed View of Analysis Module)

Focuses on how trend & sustainability analysis works.

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```
From Data Storage
            |
            v
     (3.1 Budget Comparison)
            |
            v
     (3.2 Sector-wise Analysis)
            |
            v
     (3.3 Growth Rate Calculation)
            |
            v
     (3.4 Sustainability Mapping)
            |
            v
     (3.5 Visualization Engine)
            |
            v
       Reports & Dashboards
```

Subprocess Explanation

Budget Comparison: Year-wise allocation changes

Sector-wise Analysis: Health, Education, Energy, Infrastructure

Growth Rate Calculation: CAGR, YoY growth

Sustainability Mapping: SDGs alignment

Visualization Engine: Graphs & charts

- ◆ Data Stores Used

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D1: Historical Budget Database

D2: Economic Indicators Database

D3: Sustainability Metrics Database
D4: Report Repository
 🔹 Symbols Used (DFD Notation)
Process: Circle / Rounded rectangle
Data Store: Open-ended rectangle
External Entity: Square
Data Flow: Arrow
✅ How You Can Use This
Convert into draw.io, Lucidchart, or Visio diagrams
Add screenshots in project report
Use Level 0 → Level 2 for clear academic presentation
If you want, I can also:
✔ Convert these into diagram-ready Mermaid code
✔ Create DFD images
✔ Add use-case diagram or ER diagram
Just tell me 👍