# **Problem Initialization and Planning Phase**

Date	10-10-2025
Project Name	Global Malnutrition Trends: A Power BI Analysis (1983-2019)

#### 2.1. Define Problem Statement:

A problem statement is a concise description that identifies a gap between a current and desired future state, outlining the specific issue a project aims to address. It provides crucial context for a team or organization, guiding the problem-solving process by defining the problem, who is affected, why it's important, and the ideal outcome.

## **Key Components of a Problem Statement**

- **Current State:** What is the current situation or the existing problem?
- **Desired State:** What is the ideal or desired future situation?
- **The Gap:** The difference between the current and desired states, which the project will aim to bridge.
- **Context:** Information about the specific problem, including who is affected, where and when it occurs, and why it's important.

## **Existing Problem**

Malnutrition remains one of the most persistent and complex global health challenges. Despite significant progress in some regions, millions of people, especially children and women, continue to suffer from undernutrition, micronutrient deficiencies, and, increasingly, over-nutrition. The coexistence of these forms of malnutrition across different populations highlights the growing "double burden" of malnutrition worldwide.

- **Undernutrition** (stunting, wasting, under-weight) remains prevalent in low- and middle-income countries, particularly in sub-Saharan Africa and South Asia.
- **Micronutrient deficiencies**, such as lack of iron, vitamin A, and iodine, affect billions and lead to impaired immunity, cognitive delays, and increased mortality.
- **Over-nutrition** and **obesity** are rising rapidly due to urbanization, changing diets, and sedentary lifestyles, creating a paradox where undernutrition and obesity coexist within the same populations or even households.

#### **Proposed Solution**

# Global Malnutrition Trends: A Power BI Analysis (1983-2019)

To address the persistent and complex issue of global malnutrition, this project proposes a **data-driven analytical framework** that integrates global nutrition, socioeconomic, and environmental datasets to identify patterns, predict future trends, and support targeted interventions. The proposed solution aims to combine technology, research, and policy analysis to create actionable insights that can drive meaningful progress toward ending malnutrition worldwide.

- **Data Collection:** Gather reliable, standardized nutrition indicators (stunting, wasting, underweight, obesity) from global databases.
- **Data Cleaning and Integration:** Merge datasets from multiple sources to ensure consistency and comparability.
- **Exploratory Data Analysis (EDA):** Identify relationships between nutrition outcomes and factors such as income, education, gender, and climate.