UNIVERSITY OF DELHI

SDG ALIGNMENT ANALYSIS OF PhD THESES

2006–2026

Comprehensive Analysis of Research Contributions to the United Nations (UN) Sustainable Development Goals (SDGs) Contents

Prepared by:

Dr. Rajesh Singh
University Librarian

Dhanasri Shivani T G
Assistant Librarian
&
Sanya Agarwal
Assistant Librarian

Delhi University Library System
University of Delhi, Delhi-110007
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PhD Thesis (2006-2026) Metadata Creation Team

O P Gupta, Sanjeev Kumar, Mohammad Shariq, Sunita, Suman, Komal Savitri, Anita, Shazia, Meenu Saini, Shalni, Shushma, and Santosh Kumar

Special Mention

Prof. Rajeev Gupta, HOD, Department of Chemistry

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Executive Summary

This report presents a comprehensive analysis of PhD theses submitted to the University of Delhi from 2006 to 2026, examining their alignment with the 17 United Nations (UN) Sustainable Development Goals (SDGs). A total of 9,303 doctoral theses across 60+ subjects were analysed using advanced machine learning classification techniques.

Key Highlights

9,303 THESIS RECORDS	**33,095** TOTAL SDG ASSIGNMENTS	**3.56** AVERAGE SDGs / THESIS	**8,431 (90.6%)** MULTI-SDG THESES
SDG 4: Quality Education Most Addressed SDG		**SDG 1: No Poverty** Least Addressed SDG	



Figure 1: United Nations (UN) Sustainable Development Goals (SDGs)

1. Introduction

1.1 Background

The United Nations Sustainable Development Goals (SDGs), adopted in 2015, represent a universal call to action to end poverty, protect the planet, and ensure prosperity for all by 2030. Universities play a crucial role in advancing these goals through research, education, and community engagement. The University of Delhi is committed to advancing global sustainability through its research endeavours. This report provides a systematic analysis of how our doctoral research aligns with and contributes to the achievement of the SDGs.

1.2 Objectives

- Map PhD research outputs to the 17 UN Sustainable Development Goals
- Identify trends in SDG-related research over the 2006-2026 period
- Analyse the distribution of research across different SDGs
- Identify interdisciplinary research patterns through multi-label classification
- Provide recommendations for enhancing SDG-aligned research

1.3 Scope

The study draws upon the retrieved PhD thesis records for the period of March, 2006–November, 2026. The study encompasses 60+ departments across 16 Faculties and various centres of study.

The initial dataset comprised 9,416 records. During data screening and curation, 113 records were excluded due to missing essential information, particularly titles and abstracts, unclear or different-language entries, and records that could not be extracted using Python. The remaining records were considered for further analysis, subject to subsequent validation and data cleaning.

Also, a list of remarks included in the raw dataset has been provided separately in **Annexure I** for reference and transparency.

1.4 Limitations

The current report highlights the overall landscape of SDG alignment of the PhD theses submitted to the University of Delhi (2006-2026). However, there could be several limitations to the study, as follows:

• Language Issues: PhD theses in Indian languages may have been treated inconsistently

• Data inconsistencies: We have observed several impurities in the data that are beyond rectification, and hence, there might be several inconsistencies in the analysis.

• Data availability for 2020: PhD thesis records for the year 2020 were not available in the dataset retrieved for this study. This gap coincides with the COVID-19 pandemic period, and consequently, the year 2020 could not be included in the year-wise analysis.

• Technical limitations: The analysis is based on the sdgBERT ML model, as well as keyword matching for SDG 17. It may carry all the biases of the sdgBERT model, and hence only 80-90% accuracy is claimed.

2. Methodology

2.1 Data Collection

PhD thesis data were collected from library records. For each thesis, the following information was extracted:

- Title of the Thesis
- Abstract
- Year of completion
- Keywords (extracted from the title and abstract of the theses using NLP)
- Research area/discipline

2.2 Technologies Used

The SDG Classification Tool is built in Python and leverages modern, industry-standard solutions, machine learning, and data processing technologies.

Category	Technology	Purpose
NLP	BERT (Transformers)	Hugging Face library for BERT model loading and tokenisation
Data Processing	Pandas, NumPy	Data manipulation, CSV/Excel processing
Web Interface	Streamlit	Interactive web application framework
Visualization	Plotly, Matplotlib	Interactive charts, word clouds, heatmaps

2.2 Classification Approach

The classification was carried out using a Python-based SDG classification programme developed using the **SDG Multi-label mBERT model**, available through Hugging Face. The model was used to identify and assign relevant Sustainable Development Goals (SDGs) to the PhD theses based on their textual content.

2.3 Classification Parameters

- **Classification Threshold (SDGs 1–17):** The Top_98th_Percentile parameter represents the minimum confidence score applied by the Transformer-based model when identifying relevant SDGs for each thesis.
- **Multi-label:** Enabled - Each thesis can be assigned multiple SDGs

3. Overall Summary (2006-2026)

This section presents a cumulative analysis of all PhD theses over the 21-year period from 2006 to 2026.

3.1 Distribution Overview



Figure 2: Overall SDG Distribution (2006-2026)

3.2 Summary Statistics

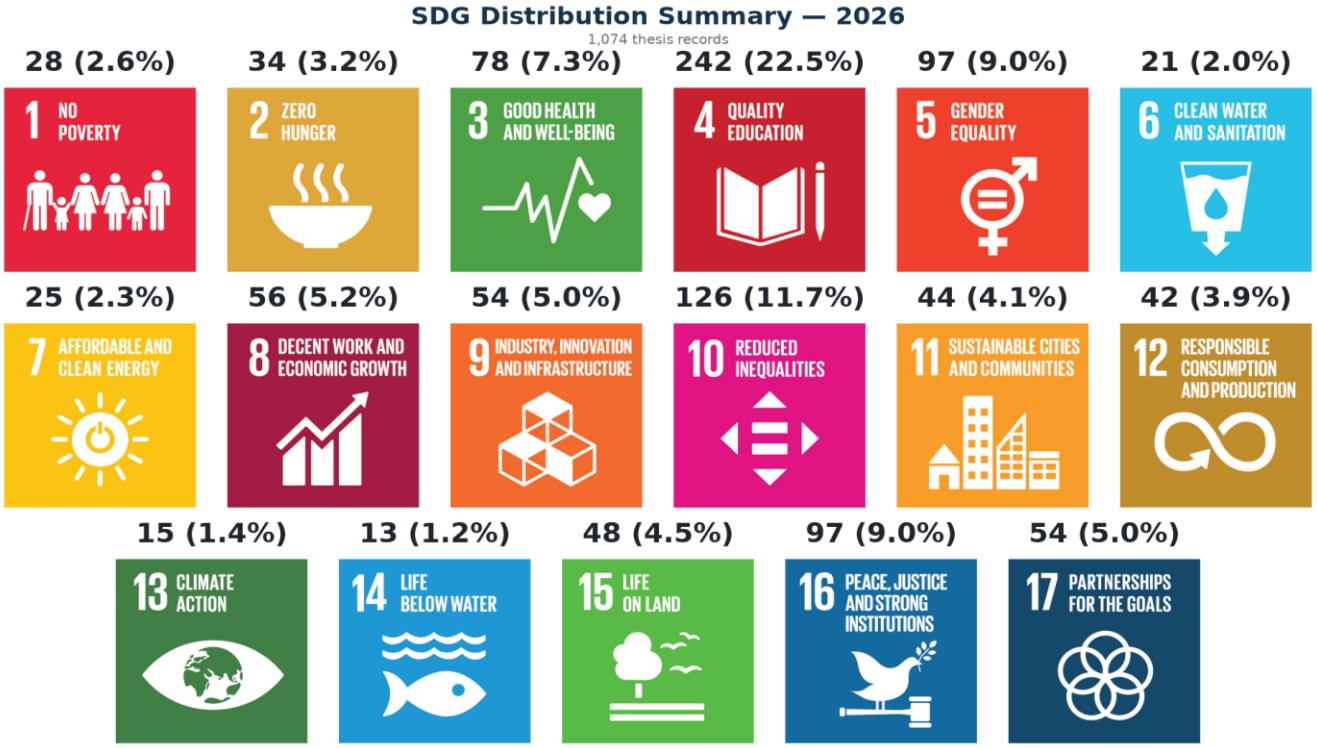
Metric	Value
Total PhD Theses Analysed	9303
Total SDGs Assigned	33095
Average SDGs per Thesis	3.56
Theses with Multiple SDGs	8,431 (90.6%)
Most Addressed SDG	SDG 4 – Quality Education (1,067; 11.5%)
Least Addressed SDG	SDG 1 – No Poverty (146; 1.6%)

4. Year-wise Analysis

This section provides a detailed analysis for each year from 2006 to 2026.

4.1 Analysis of 2026

1,074 THESIS RECORDS	3,773 SDG ASSIGNMENTS	3.51 AVERAGE SDGs / THESIS	972 (90.5%) MULTI-SDG THESES



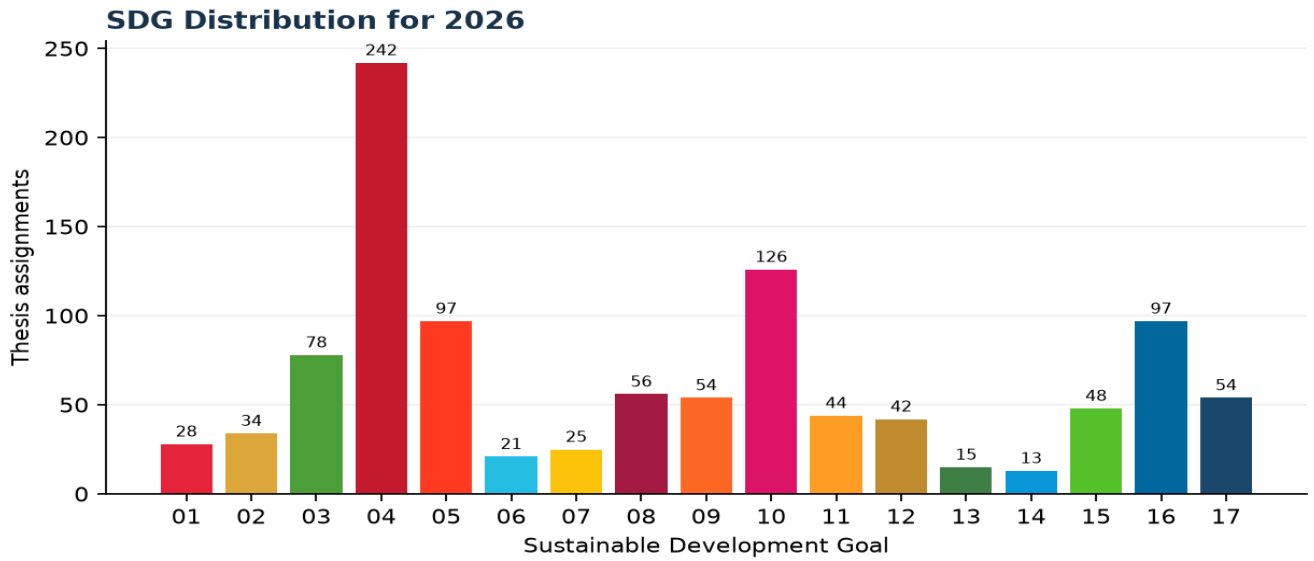


Figure 3: SDG Distribution for 2026

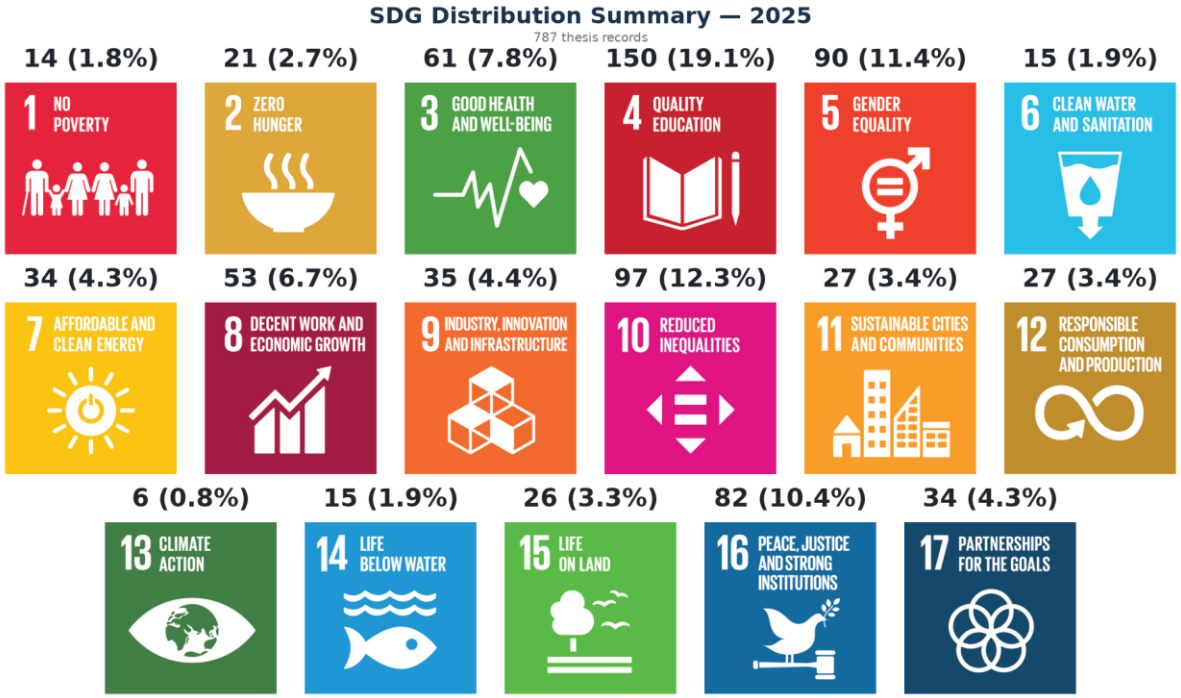
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	28	2.6%
SDG 02	Zero Hunger	34	3.2%
SDG 03	Good Health and Well-being	78	7.3%
SDG 04	Quality Education	242	22.5%
SDG 05	Gender Equality	97	9.0%
SDG 06	Clean Water and Sanitation	21	2.0%
SDG 07	Affordable and Clean Energy	25	2.3%
SDG 08	Decent Work and Economic Growth	56	5.2%
SDG 09	Industry, Innovation and Infrastructure	54	5.0%
SDG 10	Reduced Inequalities	126	11.7%
SDG 11	Sustainable Cities and Communities	44	4.1%
SDG 12	Responsible Consumption and Production	42	3.9%
SDG 13	Climate Action	15	1.4%
SDG 14	Life Below Water	13	1.2%
SDG 15	Life on Land	48	4.5%
SDG 16	Peace, Justice and Strong Institutions	97	9.0%
SDG 17	Partnerships for the Goals	54	5.0%

Key Observations for 2026

- Top SDGs: **SDG 4** (Quality Education: 242), **SDG 10** (Reduced Inequalities: 126), **SDG 5/16** (Gender Equality / Peace, Justice and Strong Institutions: 97 each).
- High concentration: Top 3 SDGs = **43.3%**.
- Average SDGs per record: **3.51**.
- Interdisciplinary: **972 records (90.5%)** address multiple SDGs.

4.2 Year-wise Analysis — 2025 Analysis of

787 THESIS RECORDS	2,733 SDG ASSIGNMENTS	3.47 AVERAGE SDGs / THESIS	716 (91.0%) MULTI-SDG THESES



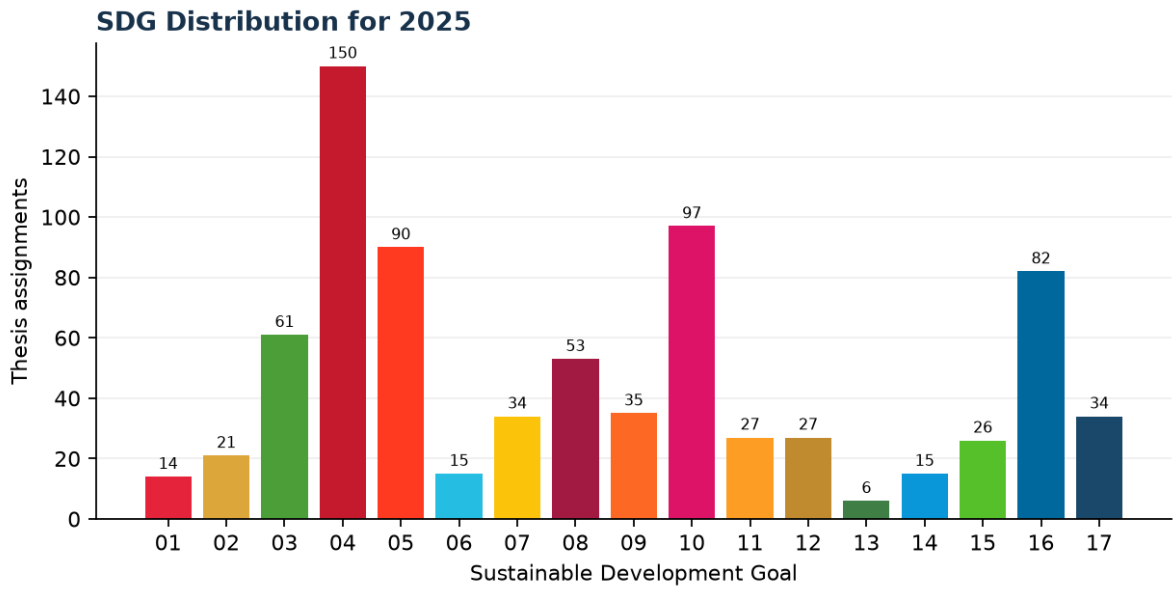


Figure 4: SDG Distribution for 2025

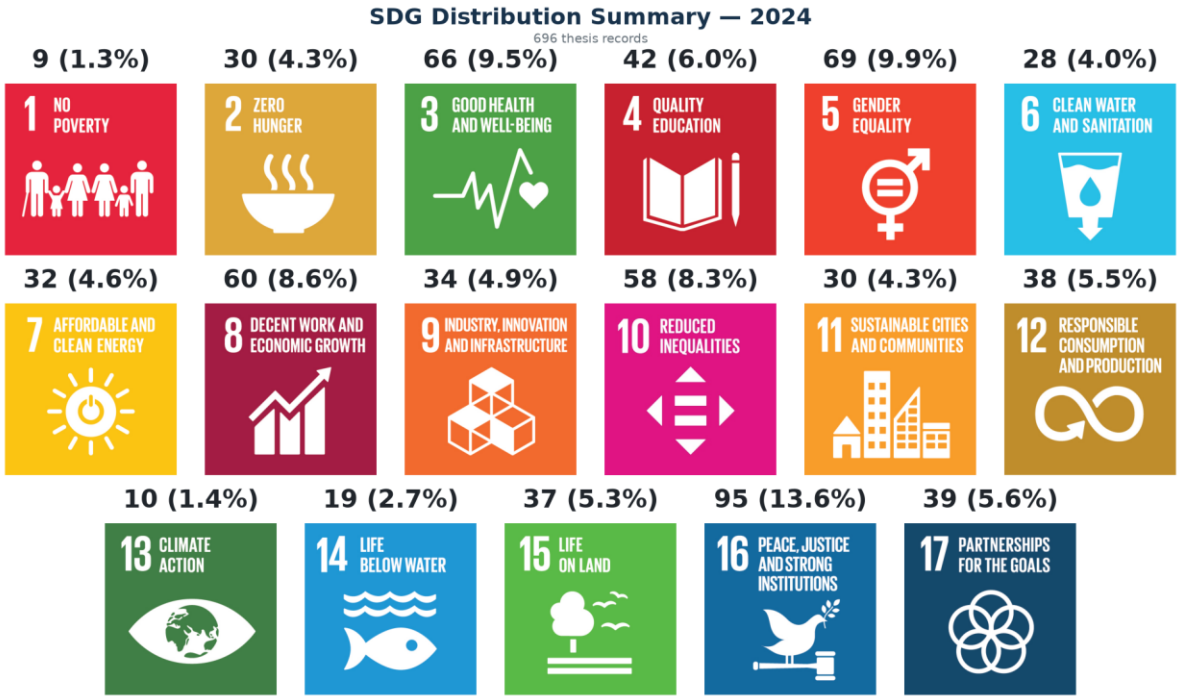
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	14	1.8%
SDG 02	Zero Hunger	21	2.7%
SDG 03	Good Health and Well-being	61	7.8%
SDG 04	Quality Education	150	19.1%
SDG 05	Gender Equality	90	11.4%
SDG 06	Clean Water and Sanitation	15	1.9%
SDG 07	Affordable and Clean Energy	34	4.3%
SDG 08	Decent Work and Economic Growth	53	6.7%
SDG 09	Industry, Innovation and Infrastructure	35	4.4%
SDG 10	Reduced Inequalities	97	12.3%
SDG 11	Sustainable Cities and Communities	27	3.4%
SDG 12	Responsible Consumption and Production	27	3.4%
SDG 13	Climate Action	6	0.8%
SDG 14	Life Below Water	15	1.9%
SDG 15	Life on Land	26	3.3%
SDG 16	Peace, Justice and Strong Institutions	82	10.4%
SDG 17	Partnerships for the Goals	34	4.3%

Key Observations for 2025

- Top SDGs: SDG 4 (Quality Education: 150), SDG 10 (Reduced Inequalities: 97), SDG 5 (Gender Equality: 90).
- High concentration: Top 3 SDGs = 42.8%.
- Average SDGs per record: 3.47.
- Interdisciplinary: 716 records (91.0%) address multiple SDGs.

4.3 Analysis of 2024

696 THESIS RECORDS	2,469 SDG ASSIGNMENTS	3.55 AVERAGE SDGs / THESIS	629 (90.4%) MULTI-SDG THESES



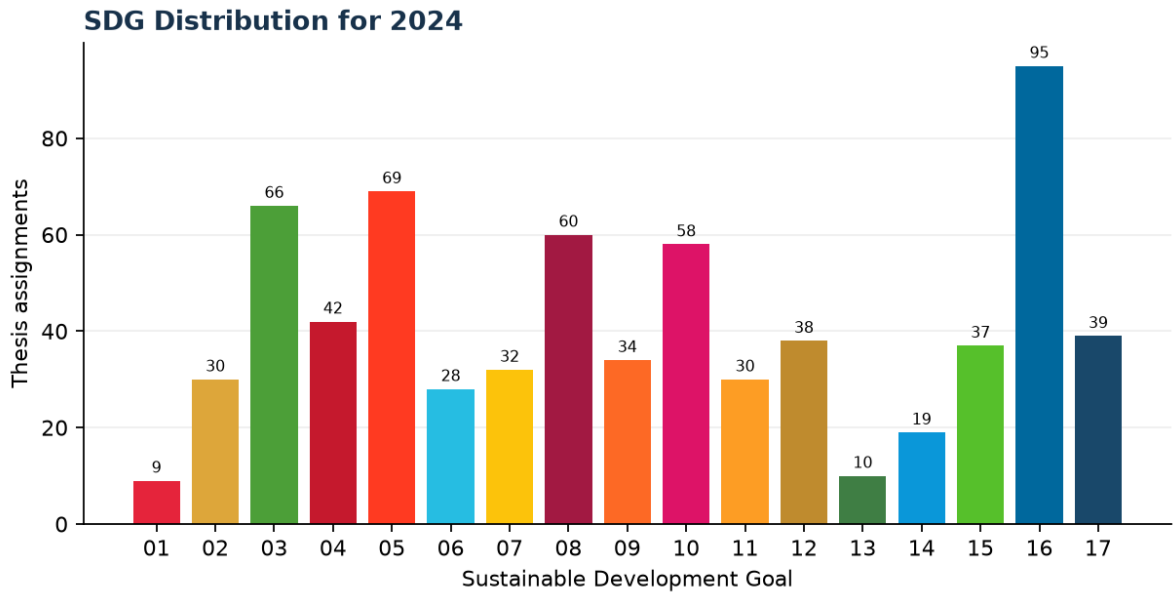


Figure 5: SDG Distribution for 2024

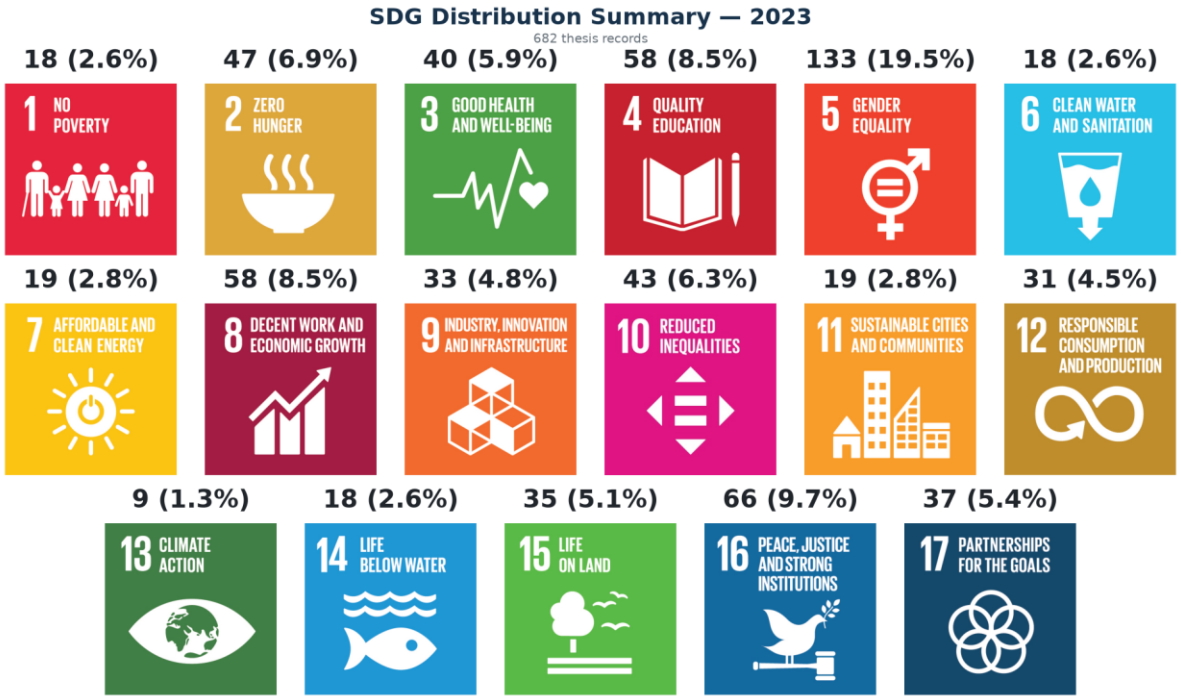
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	9	1.3%
SDG 02	Zero Hunger	30	4.3%
SDG 03	Good Health and Well-being	66	9.5%
SDG 04	Quality Education	42	6.0%
SDG 05	Gender Equality	69	9.9%
SDG 06	Clean Water and Sanitation	28	4.0%
SDG 07	Affordable and Clean Energy	32	4.6%
SDG 08	Decent Work and Economic Growth	60	8.6%
SDG 09	Industry, Innovation and Infrastructure	34	4.9%
SDG 10	Reduced Inequalities	58	8.3%
SDG 11	Sustainable Cities and Communities	30	4.3%
SDG 12	Responsible Consumption and Production	38	5.5%
SDG 13	Climate Action	10	1.4%
SDG 14	Life Below Water	19	2.7%
SDG 15	Life on Land	37	5.3%
SDG 16	Peace, Justice and Strong Institutions	95	13.6%
SDG 17	Partnerships for the Goals	39	5.6%

Key Observations for 2024

- Top SDGs: SDG 16 (Peace, Justice and Strong Institutions: 95), SDG 5 (Gender Equality: 69), SDG 3 (Good Health and Well-being: 66).
- High concentration: Top 3 SDGs = 33.0%.
- Average SDGs per record: 3.55.
- Interdisciplinary: 629 records (90.4%) address multiple SDGs.

4.4 Analysis of 2023

682 THESIS RECORDS	2,490 SDG ASSIGNMENTS	3.65 AVERAGE SDGs / THESIS	611 (89.6%) MULTI-SDG ssTHESES



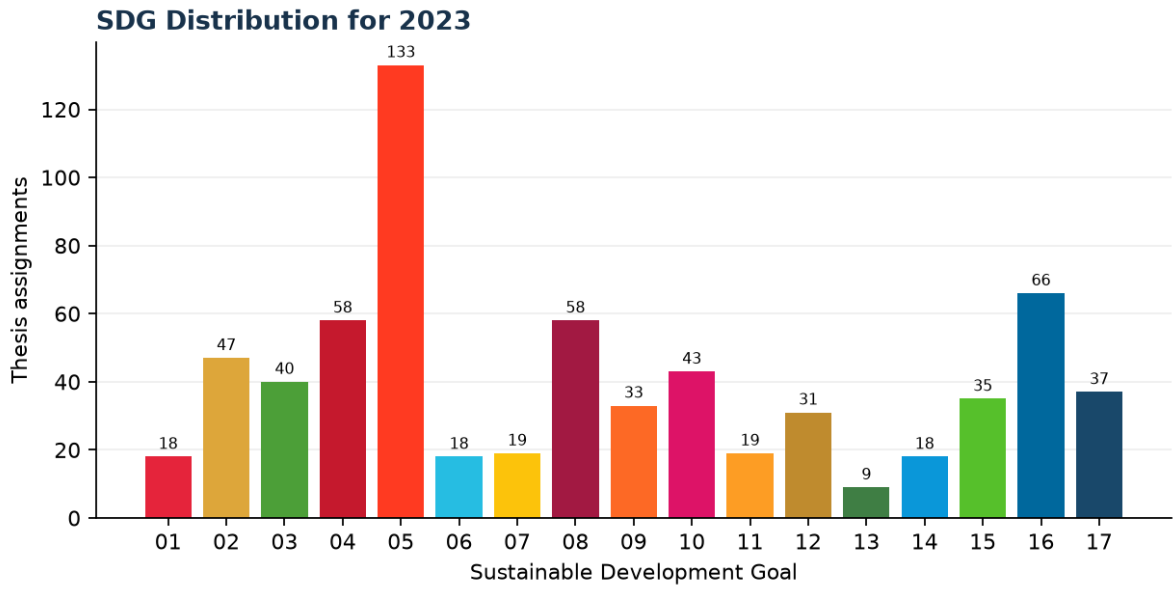


Figure 6: SDG Distribution for 2023

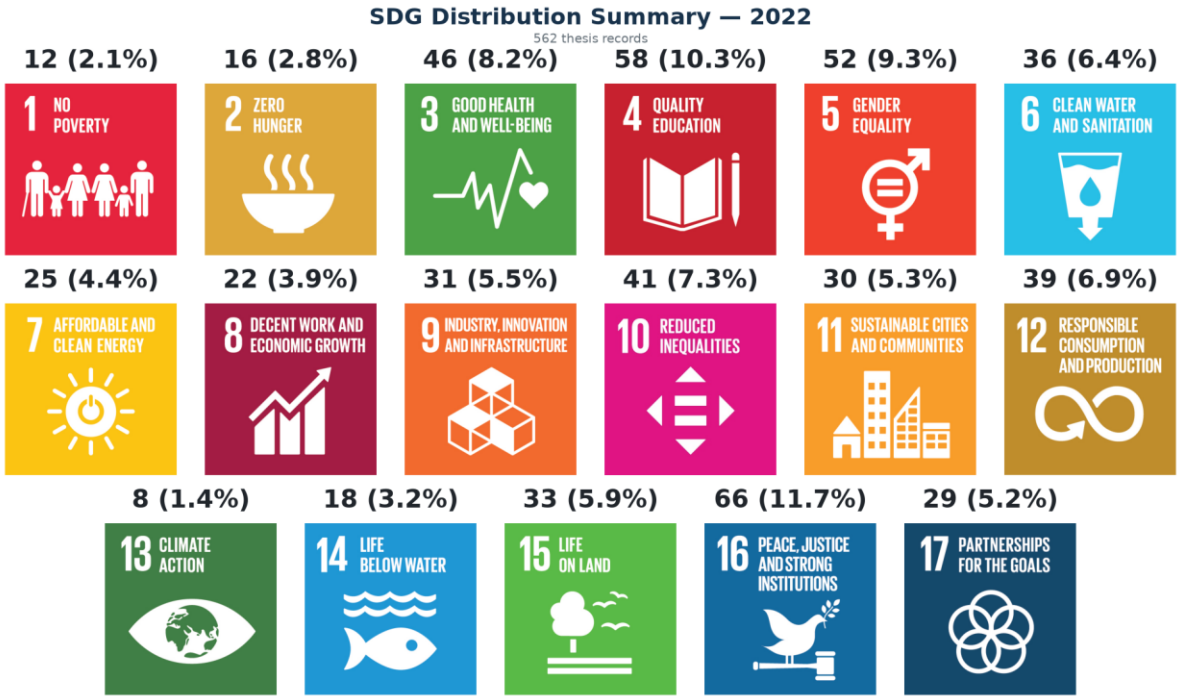
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	18	2.6%
SDG 02	Zero Hunger	47	6.9%
SDG 03	Good Health and Well-being	40	5.9%
SDG 04	Quality Education	58	8.5%
SDG 05	Gender Equality	133	19.5%
SDG 06	Clean Water and Sanitation	18	2.6%
SDG 07	Affordable and Clean Energy	19	2.8%
SDG 08	Decent Work and Economic Growth	58	8.5%
SDG 09	Industry, Innovation and Infrastructure	33	4.8%
SDG 10	Reduced Inequalities	43	6.3%
SDG 11	Sustainable Cities and Communities	19	2.8%
SDG 12	Responsible Consumption and Production	31	4.5%
SDG 13	Climate Action	9	1.3%
SDG 14	Life Below Water	18	2.6%
SDG 15	Life on Land	35	5.1%
SDG 16	Peace, Justice and Strong Institutions	66	9.7%
SDG 17	Partnerships for the Goals	37	5.4%

Key Observations for 2023

- Top SDGs: **SDG 5** (Gender Equality: 133), **SDG 16** (Peace, Justice and Strong Institutions: 66), **SDG 4/8** (Quality Education / Decent Work and Economic Growth: 58 each).
- High concentration: Top 3 SDGs = **37.7%**.
- Average SDGs per record: **3.65**.
- Interdisciplinary: **611 records (89.6%)** address multiple SDGs.

4.5 Analysis of 2022

562 THESIS RECORDS	1,897 SDG ASSIGNMENTS	3.38 AVERAGE SDGs / THESIS	499 (88.8%) MULTI-SDG THESES



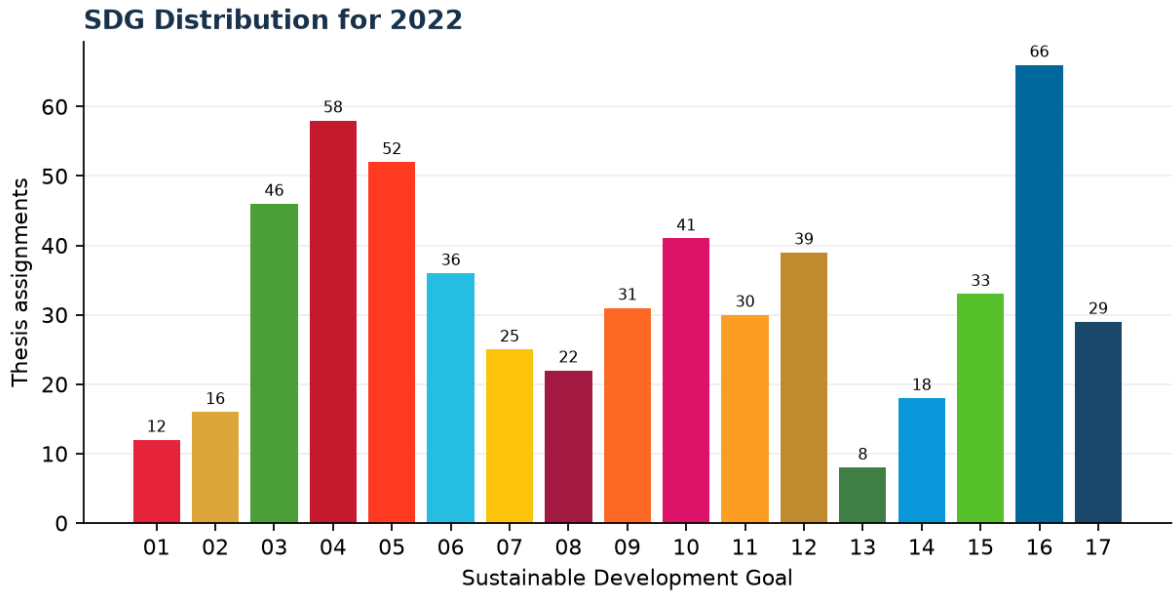


Figure 7: SDG Distribution for 2022

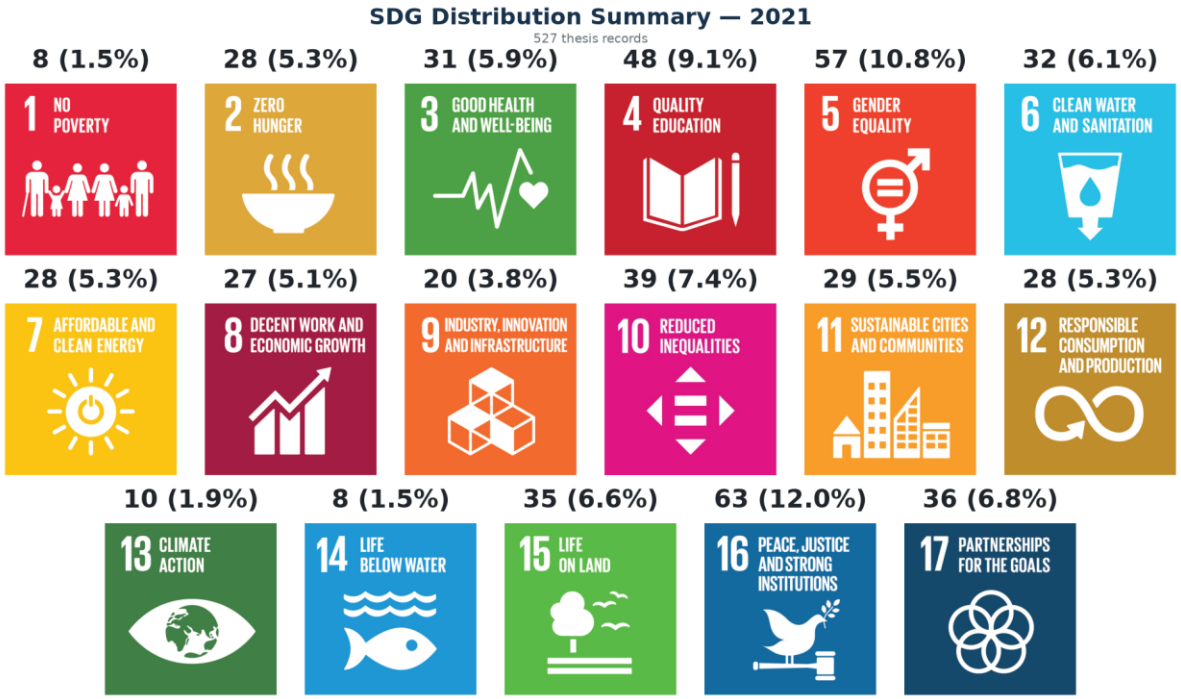
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	12	2.1%
SDG 02	Zero Hunger	16	2.8%
SDG 03	Good Health and Well-being	46	8.2%
SDG 04	Quality Education	58	10.3%
SDG 05	Gender Equality	52	9.3%
SDG 06	Clean Water and Sanitation	36	6.4%
SDG 07	Affordable and Clean Energy	25	4.4%
SDG 08	Decent Work and Economic Growth	22	3.9%
SDG 09	Industry, Innovation and Infrastructure	31	5.5%
SDG 10	Reduced Inequalities	41	7.3%
SDG 11	Sustainable Cities and Communities	30	5.3%
SDG 12	Responsible Consumption and Production	39	6.9%
SDG 13	Climate Action	8	1.4%
SDG 14	Life Below Water	18	3.2%
SDG 15	Life on Land	33	5.9%
SDG 16	Peace, Justice and Strong Institutions	66	11.7%
SDG 17	Partnerships for the Goals	29	5.2%

Key Observations for 2022

- Top SDGs: **SDG 16** (Peace, Justice and Strong Institutions: 66), **SDG 4** (Quality Education: 58), **SDG 5** (Gender Equality: 52).
- High concentration: Top 3 SDGs = **31.3%**.
- Average SDGs per record: **3.38**.
- Interdisciplinary: **499 records (88.8%)** address multiple SDGs.

4.6 Analysis of 2021

527 THESIS RECORDS	1,814 SDG ASSIGNMENTS	3.44 AVERAGE SDGs / THESIS	472 (89.6%) MULTI-SDG THESES



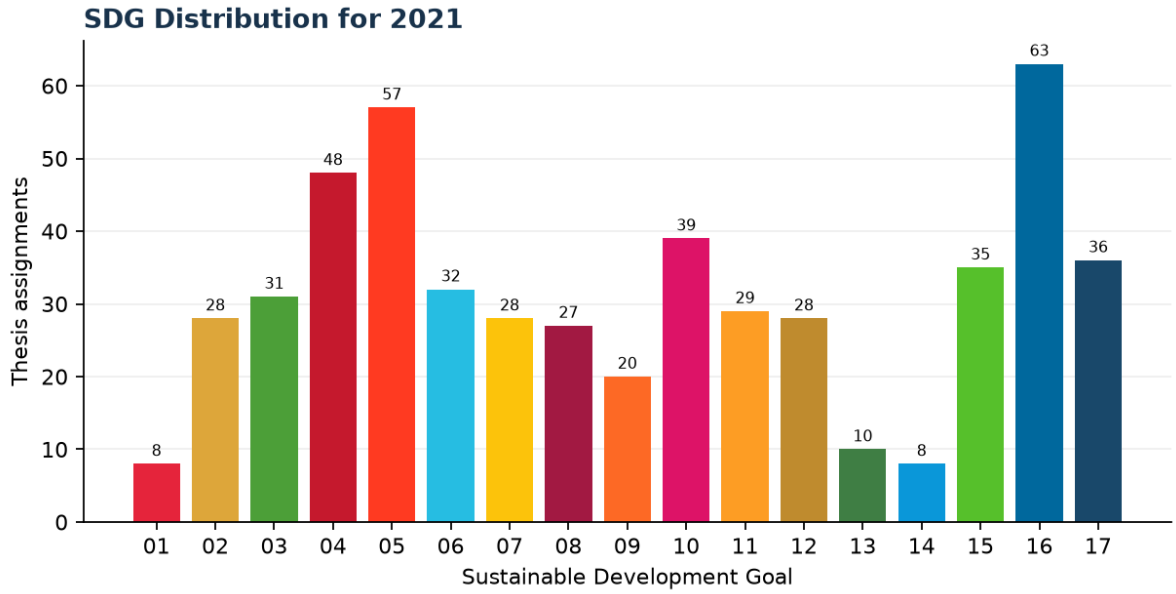


Figure 8: SDG Distribution for 2021

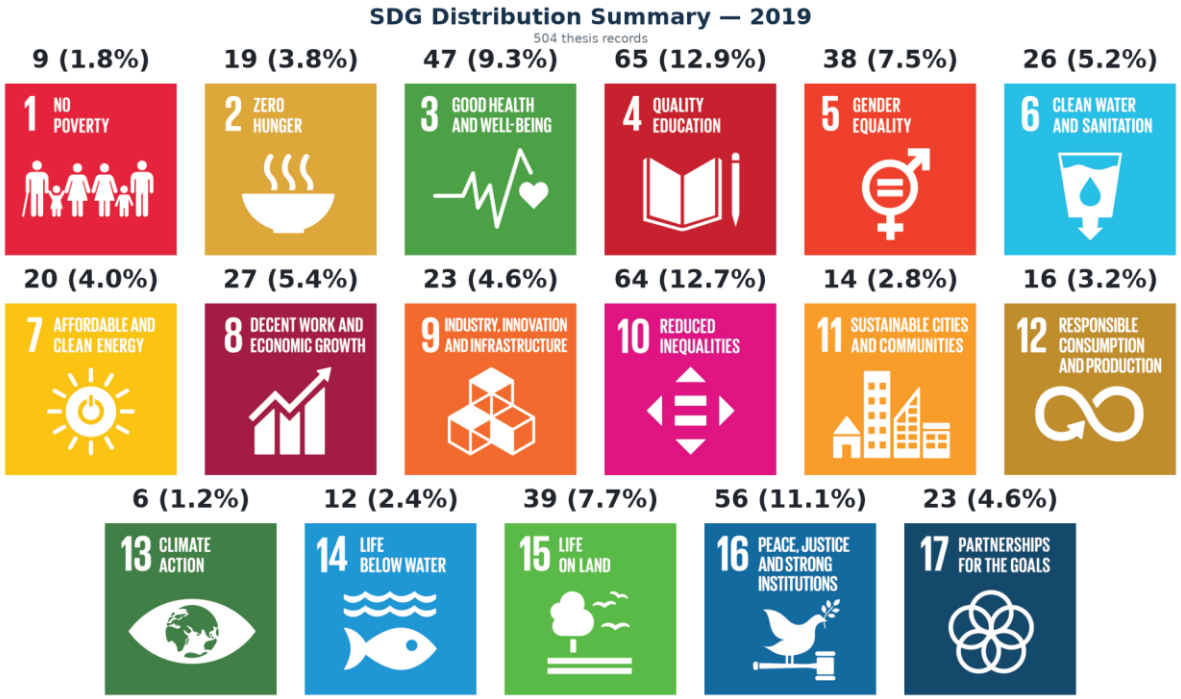
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	8	1.5%
SDG 02	Zero Hunger	28	5.3%
SDG 03	Good Health and Well-being	31	5.9%
SDG 04	Quality Education	48	9.1%
SDG 05	Gender Equality	57	10.8%
SDG 06	Clean Water and Sanitation	32	6.1%
SDG 07	Affordable and Clean Energy	28	5.3%
SDG 08	Decent Work and Economic Growth	27	5.1%
SDG 09	Industry, Innovation and Infrastructure	20	3.8%
SDG 10	Reduced Inequalities	39	7.4%
SDG 11	Sustainable Cities and Communities	29	5.5%
SDG 12	Responsible Consumption and Production	28	5.3%
SDG 13	Climate Action	10	1.9%
SDG 14	Life Below Water	8	1.5%
SDG 15	Life on Land	35	6.6%
SDG 16	Peace, Justice and Strong Institutions	63	12.0%
SDG 17	Partnerships for the Goals	36	6.8%

Key Observations for 2021

- Top SDGs: **SDG 16** (Peace, Justice and Strong Institutions: 63), **SDG 5** (Gender Equality: 57), **SDG 4** (Quality Education: 48).
- High concentration: Top 3 SDGs = **31.9%**.
- Average SDGs per record: **3.44**.
- Interdisciplinary: **472 records (89.6%)** address multiple SDGs.

4.7 Analysis of 2019

504 THESIS RECORDS	1,794 SDG ASSIGNMENTS	3.56 AVERAGE SDGs / THESIS	449 (89.1%) MULTI-SDG THESES



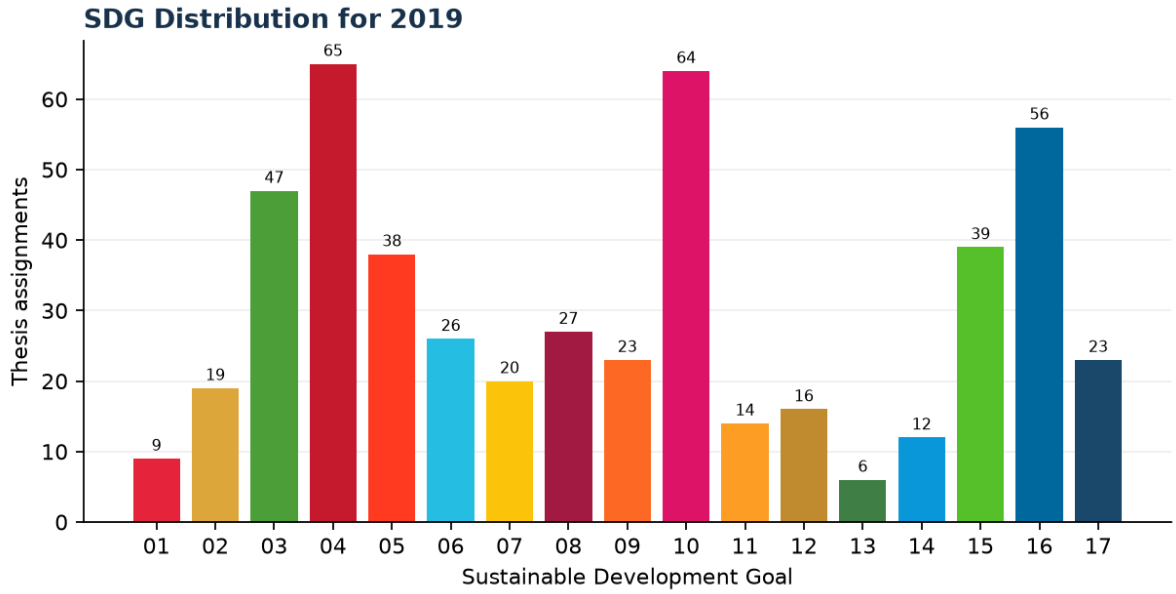


Figure 9: SDG Distribution for 2019

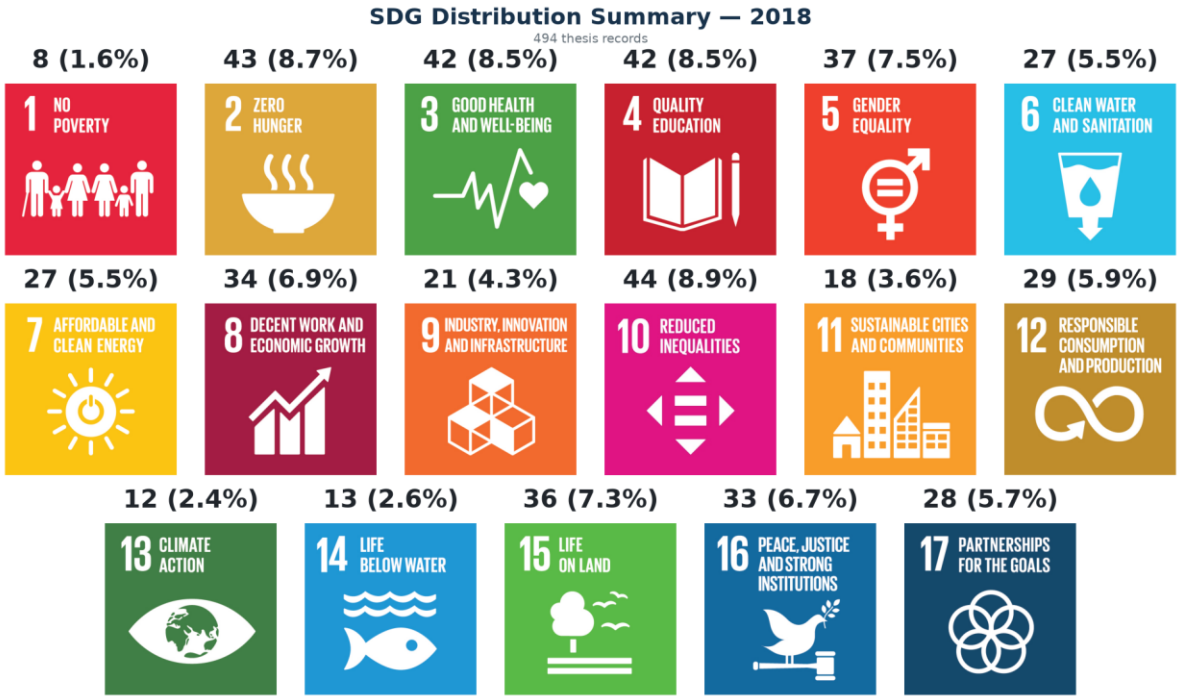
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	9	1.8%
SDG 02	Zero Hunger	19	3.8%
SDG 03	Good Health and Well-being	47	9.3%
SDG 04	Quality Education	65	12.9%
SDG 05	Gender Equality	38	7.5%
SDG 06	Clean Water and Sanitation	26	5.2%
SDG 07	Affordable and Clean Energy	20	4.0%
SDG 08	Decent Work and Economic Growth	27	5.4%
SDG 09	Industry, Innovation and Infrastructure	23	4.6%
SDG 10	Reduced Inequalities	64	12.7%
SDG 11	Sustainable Cities and Communities	14	2.8%
SDG 12	Responsible Consumption and Production	16	3.2%
SDG 13	Climate Action	6	1.2%
SDG 14	Life Below Water	12	2.4%
SDG 15	Life on Land	39	7.7%
SDG 16	Peace, Justice and Strong Institutions	56	11.1%
SDG 17	Partnerships for the Goals	23	4.6%

Key Observations for 2019

- Top SDGs: **SDG 4** (Quality Education: 65), **SDG 10** (Reduced Inequalities: 64), **SDG 16** (Peace, Justice and Strong Institutions: 56).
- High concentration: Top 3 SDGs = **36.7%**.
- Average SDGs per record: **3.56**.
- Interdisciplinary: **449 records (89.1%)** address multiple SDGs.

4.8 Analysis of 2018

494 THESIS RECORDS	1,757 SDG ASSIGNMENTS	3.56 AVERAGE SDGs / THESIS	454 (91.9%) MULTI-SDG THESES



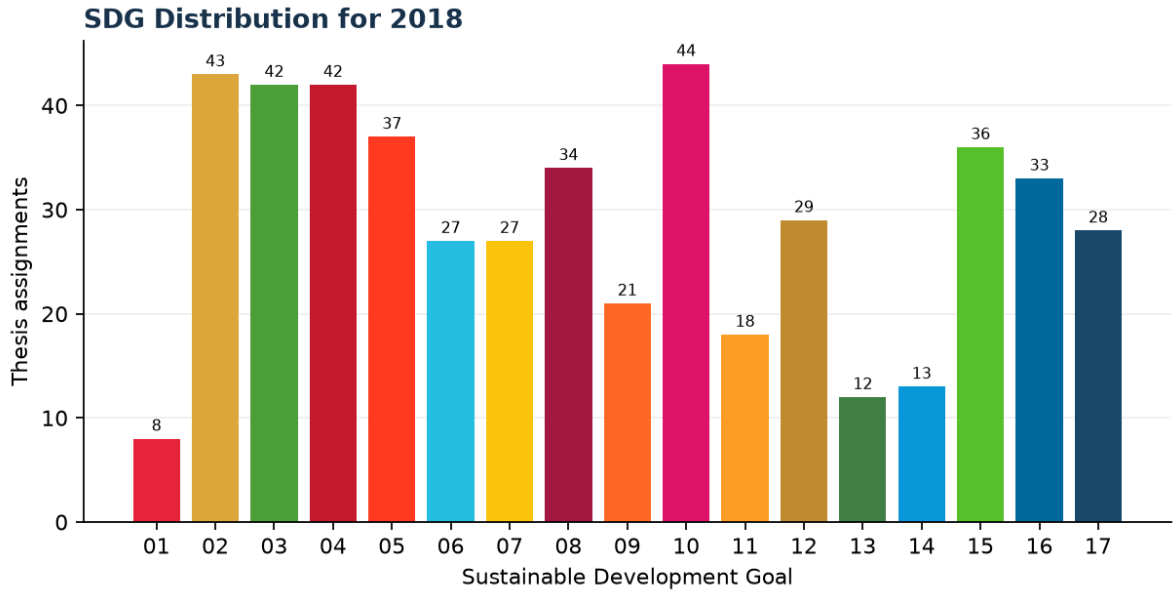


Figure 10: SDG Distribution for 2018

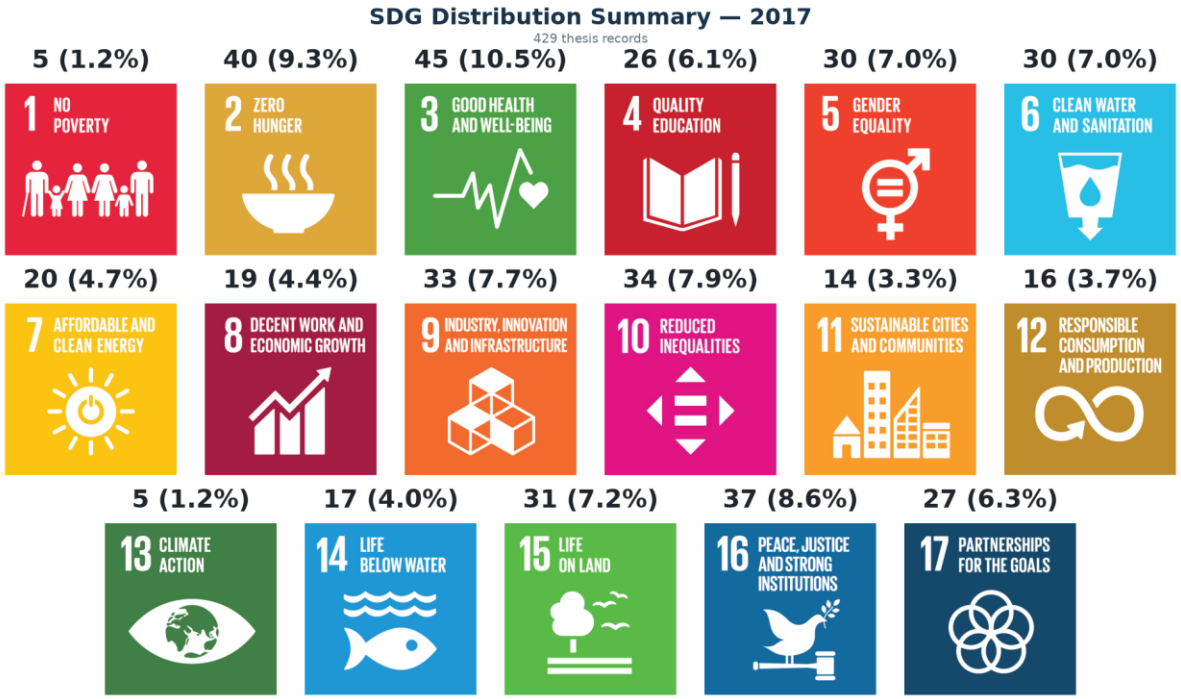
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	8	1.6%
SDG 02	Zero Hunger	43	8.7%
SDG 03	Good Health and Well-being	42	8.5%
SDG 04	Quality Education	42	8.5%
SDG 05	Gender Equality	37	7.5%
SDG 06	Clean Water and Sanitation	27	5.5%
SDG 07	Affordable and Clean Energy	27	5.5%
SDG 08	Decent Work and Economic Growth	34	6.9%
SDG 09	Industry, Innovation and Infrastructure	21	4.3%
SDG 10	Reduced Inequalities	44	8.9%
SDG 11	Sustainable Cities and Communities	18	3.6%
SDG 12	Responsible Consumption and Production	29	5.9%
SDG 13	Climate Action	12	2.4%
SDG 14	Life Below Water	13	2.6%
SDG 15	Life on Land	36	7.3%
SDG 16	Peace, Justice and Strong Institutions	33	6.7%
SDG 17	Partnerships for the Goals	28	5.7%

Key Observations for 2018

- Top SDGs: **SDG 10** (Reduced Inequalities: 44), **SDG 2** (Zero Hunger: 43), **SDG 3/4** (Good Health and Well-being / Quality Education: 42 each).
- High concentration: Top 3 SDGs = **26.1%**.
- Average SDGs per record: **3.56**.
- Interdisciplinary: **454 records (91.9%)** address multiple SDGs.

4.9 Analysis of 2017

429 THESIS RECORDS	1,510 SDG ASSIGNMENTS	3.52 AVERAGE SDGs / THESIS	387 (90.2%) MULTI-SDG THESES



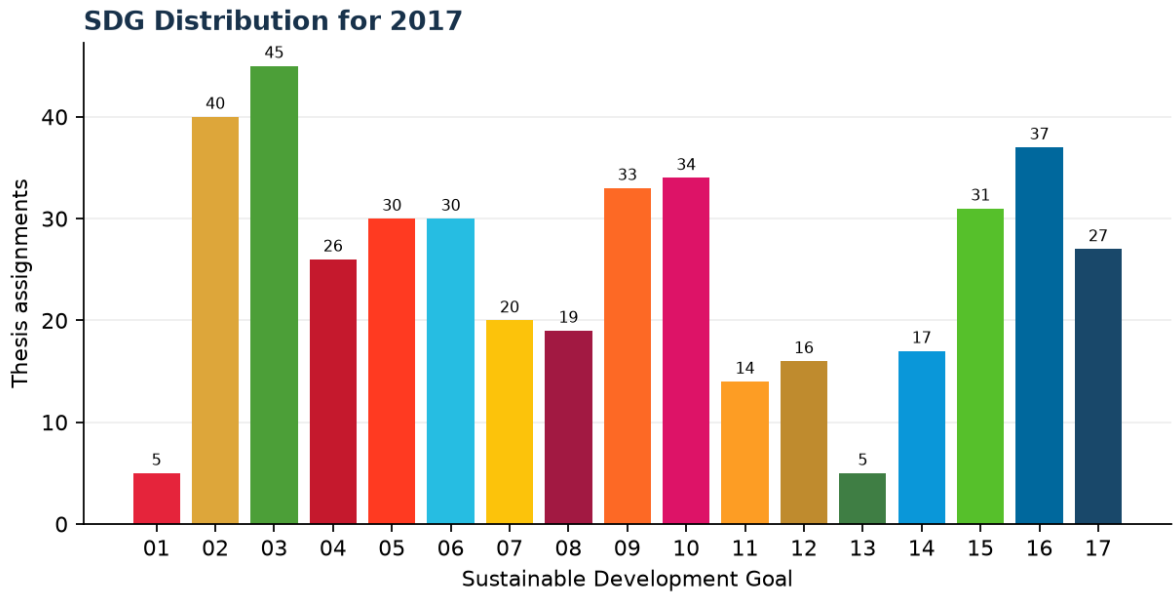


Figure 11: SDG Distribution for 2017

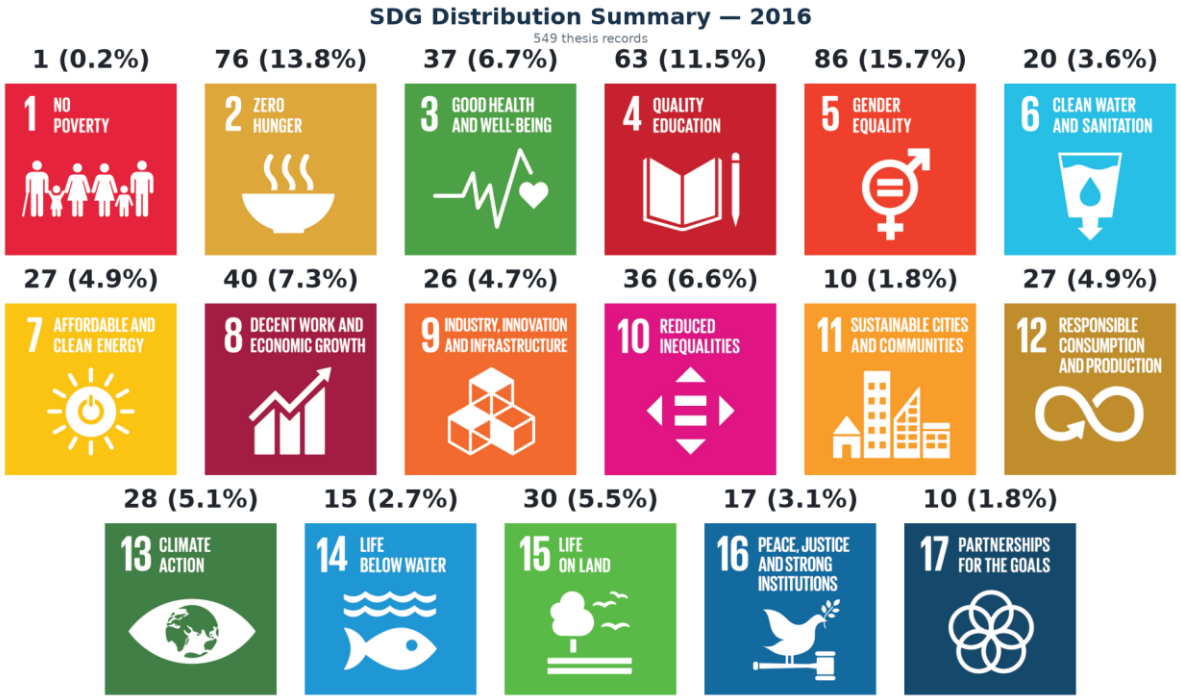
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	5	1.2%
SDG 02	Zero Hunger	40	9.3%
SDG 03	Good Health and Well-being	45	10.5%
SDG 04	Quality Education	26	6.1%
SDG 05	Gender Equality	30	7.0%
SDG 06	Clean Water and Sanitation	30	7.0%
SDG 07	Affordable and Clean Energy	20	4.7%
SDG 08	Decent Work and Economic Growth	19	4.4%
SDG 09	Industry, Innovation and Infrastructure	33	7.7%
SDG 10	Reduced Inequalities	34	7.9%
SDG 11	Sustainable Cities and Communities	14	3.3%
SDG 12	Responsible Consumption and Production	16	3.7%
SDG 13	Climate Action	5	1.2%
SDG 14	Life Below Water	17	4.0%
SDG 15	Life on Land	31	7.2%
SDG 16	Peace, Justice and Strong Institutions	37	8.6%
SDG 17	Partnerships for the Goals	27	6.3%

Key Observations for 2017

- Top SDGs: **SDG 3** (Good Health and Well-being: 45), **SDG 2** (Zero Hunger: 40), **SDG 16** (Peace, Justice and Strong Institutions: 37).
- High concentration: Top 3 SDGs = **28.4%**.
- Average SDGs per record: **3.52**.
- Interdisciplinary: **387 records (90.2%)** address multiple SDGs.

4.10 Analysis of 2016

549 THESIS RECORDS	1,969 SDG ASSIGNMENTS	3.59 AVERAGE SDGs / THESIS	498 (90.7%) MULTI-SDG THESES



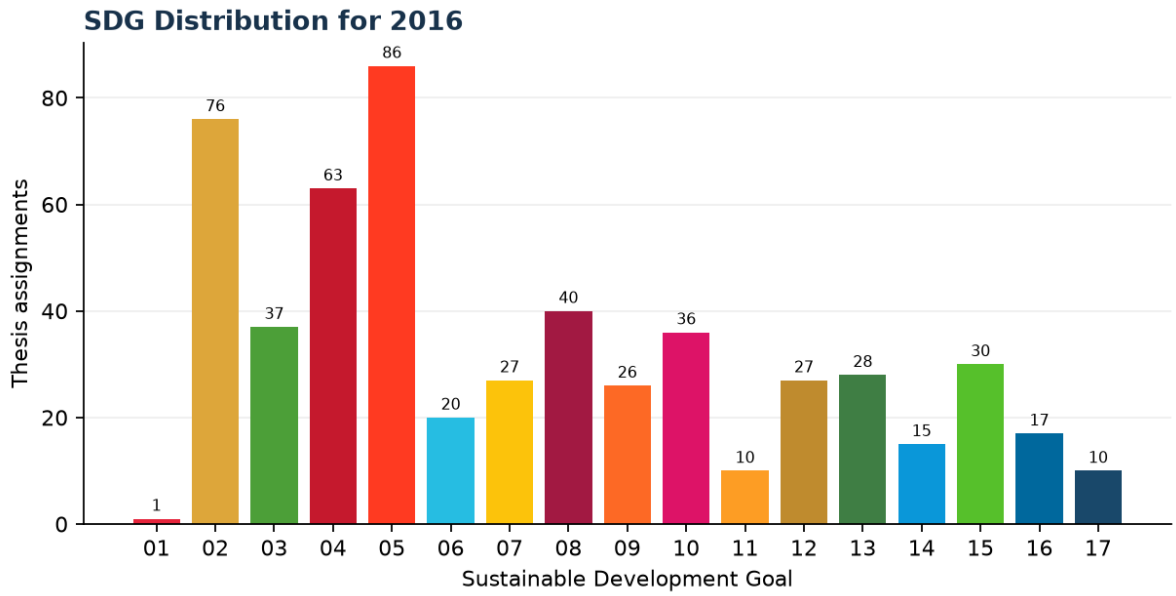


Figure 12: SDG Distribution for 2016

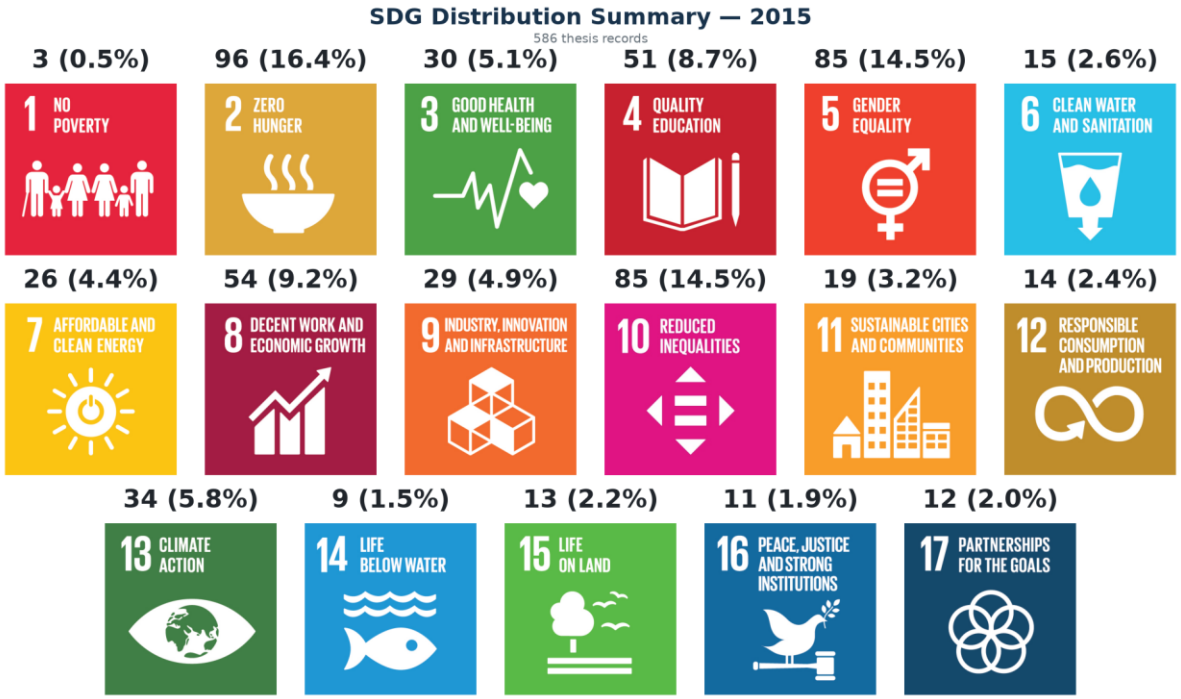
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	1	0.2%
SDG 02	Zero Hunger	76	13.8%
SDG 03	Good Health and Well-being	37	6.7%
SDG 04	Quality Education	63	11.5%
SDG 05	Gender Equality	86	15.7%
SDG 06	Clean Water and Sanitation	20	3.6%
SDG 07	Affordable and Clean Energy	27	4.9%
SDG 08	Decent Work and Economic Growth	40	7.3%
SDG 09	Industry, Innovation and Infrastructure	26	4.7%
SDG 10	Reduced Inequalities	36	6.6%
SDG 11	Sustainable Cities and Communities	10	1.8%
SDG 12	Responsible Consumption and Production	27	4.9%
SDG 13	Climate Action	28	5.1%
SDG 14	Life Below Water	15	2.7%
SDG 15	Life on Land	30	5.5%
SDG 16	Peace, Justice and Strong Institutions	17	3.1%
SDG 17	Partnerships for the Goals	10	1.8%

Key Observations for 2016

- Top SDGs: **SDG 5** (Gender Equality: 86), **SDG 2** (Zero Hunger: 76), **SDG 4** (Quality Education: 63).
- High concentration: Top 3 SDGs = **41.0%**.
- Average SDGs per record: **3.59**.
- Interdisciplinary: **498 records (90.7%)** address multiple SDGs.

4.11 Analysis of 2015

586 THESIS RECORDS	2,357 SDG ASSIGNMENTS	4.02 AVERAGE SDGs / THESIS	563 (96.1%) MULTI-SDG THESES



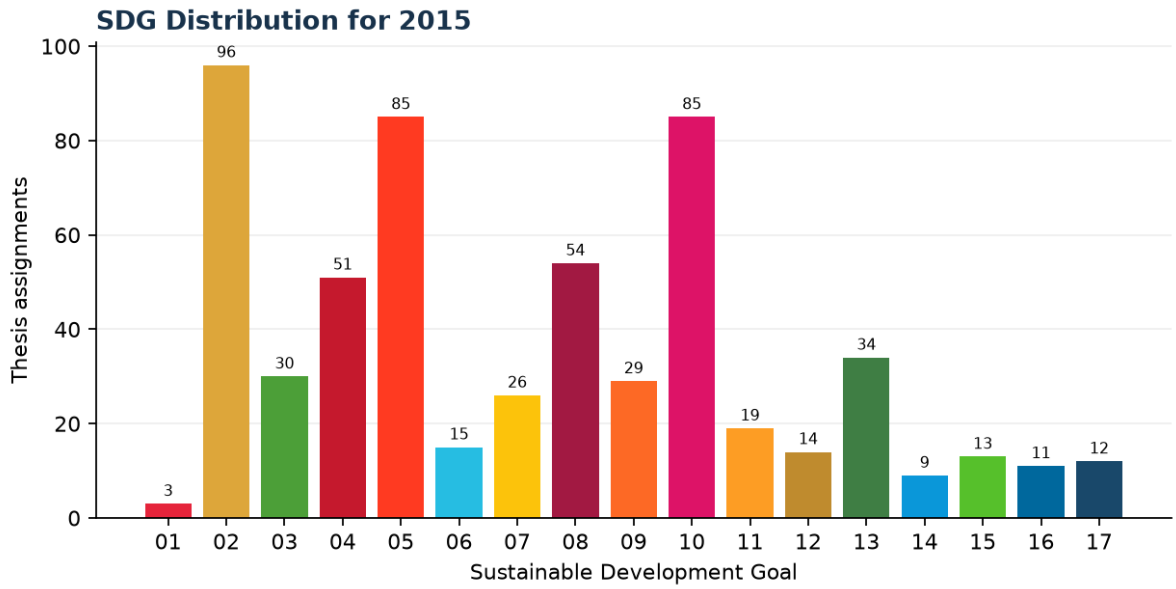


Figure 13: SDG Distribution for 2015

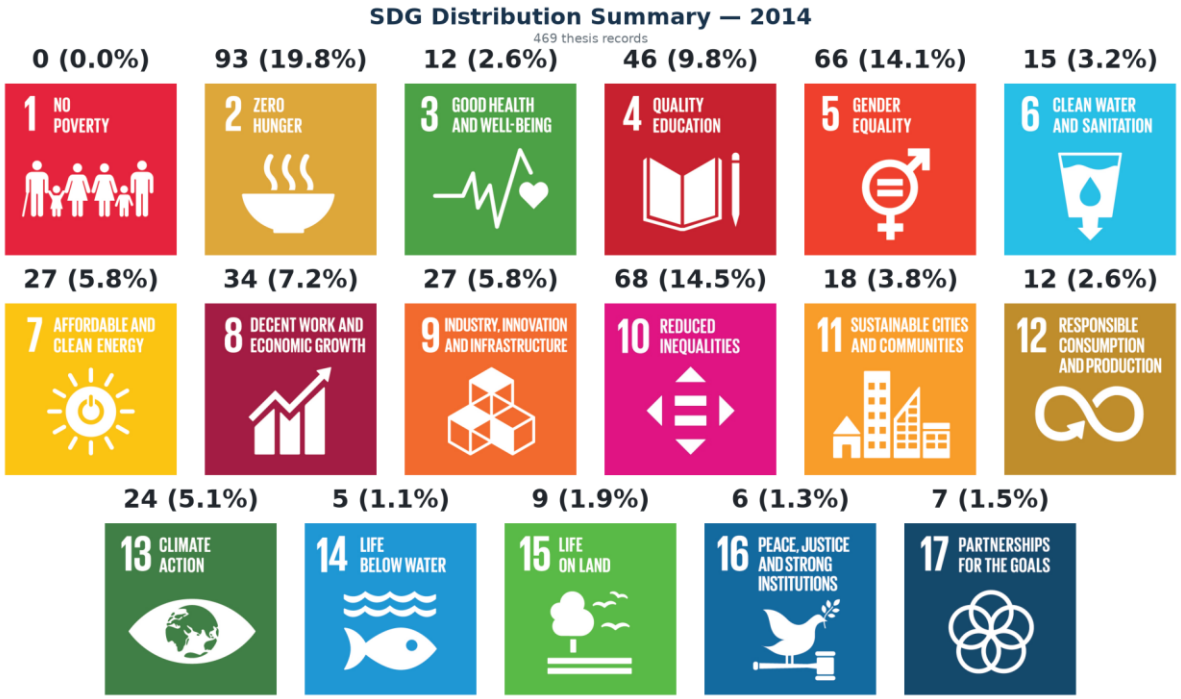
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	3	0.5%
SDG 02	Zero Hunger	96	16.4%
SDG 03	Good Health and Well-being	30	5.1%
SDG 04	Quality Education	51	8.7%
SDG 05	Gender Equality	85	14.5%
SDG 06	Clean Water and Sanitation	15	2.6%
SDG 07	Affordable and Clean Energy	26	4.4%
SDG 08	Decent Work and Economic Growth	54	9.2%
SDG 09	Industry, Innovation and Infrastructure	29	4.9%
SDG 10	Reduced Inequalities	85	14.5%
SDG 11	Sustainable Cities and Communities	19	3.2%
SDG 12	Responsible Consumption and Production	14	2.4%
SDG 13	Climate Action	34	5.8%
SDG 14	Life Below Water	9	1.5%
SDG 15	Life on Land	13	2.2%
SDG 16	Peace, Justice and Strong Institutions	11	1.9%
SDG 17	Partnerships for the Goals	12	2.0%

Key Observations for 2015

- Top SDGs: **SDG 2** (Zero Hunger: 96), **SDG 5** (Gender Equality: 85), **SDG 10** (Reduced Inequalities: 85).
- High concentration: Top 3 SDGs = **45.4%**.
- Average SDGs per record: **4.02**.
- Interdisciplinary: **563 records (96.1%)** address multiple SDGs.

4.12 Analysis of 2014

469 THESIS RECORDS	1,878 SDG ASSIGNMENTS	4.00 AVERAGE SDGs / THESIS	450 (95.9%) MULTI-SDG THESES



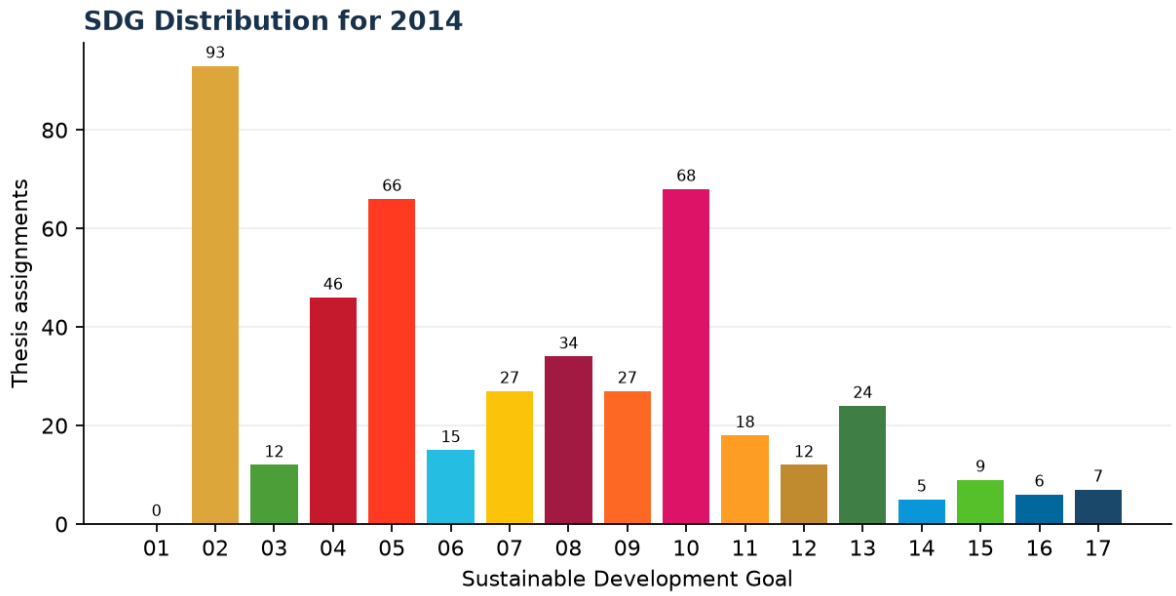


Figure 14: SDG Distribution for 2014

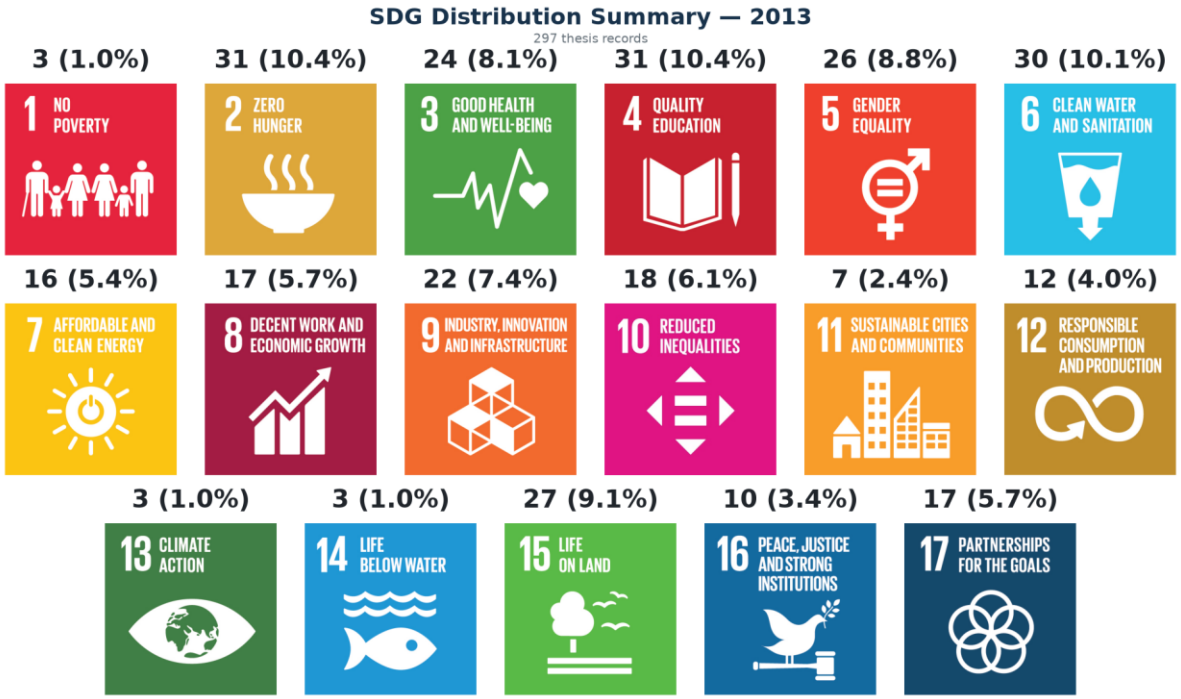
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	0	0.0%
SDG 02	Zero Hunger	93	19.8%
SDG 03	Good Health and Well-being	12	2.6%
SDG 04	Quality Education	46	9.8%
SDG 05	Gender Equality	66	14.1%
SDG 06	Clean Water and Sanitation	15	3.2%
SDG 07	Affordable and Clean Energy	27	5.8%
SDG 08	Decent Work and Economic Growth	34	7.2%
SDG 09	Industry, Innovation and Infrastructure	27	5.8%
SDG 10	Reduced Inequalities	68	14.5%
SDG 11	Sustainable Cities and Communities	18	3.8%
SDG 12	Responsible Consumption and Production	12	2.6%
SDG 13	Climate Action	24	5.1%
SDG 14	Life Below Water	5	1.1%
SDG 15	Life on Land	9	1.9%
SDG 16	Peace, Justice and Strong Institutions	6	1.3%
SDG 17	Partnerships for the Goals	7	1.5%

Key Observations for 2014

- Top SDGs: **SDG 2** (Zero Hunger: 93), **SDG 10** (Reduced Inequalities: 68), **SDG 5** (Gender Equality: 66).
- High concentration: Top 3 SDGs = **48.4%**.
- Average SDGs per record: **4.00**.
- Interdisciplinary: **450 records (95.9%)** address multiple SDGs.

4.13 Analysis of 2013

297 THESIS RECORDS	1,079 SDG ASSIGNMENTS	3.63 AVERAGE SDGs / THESIS	268 (90.2%) MULTI-SDG THESES



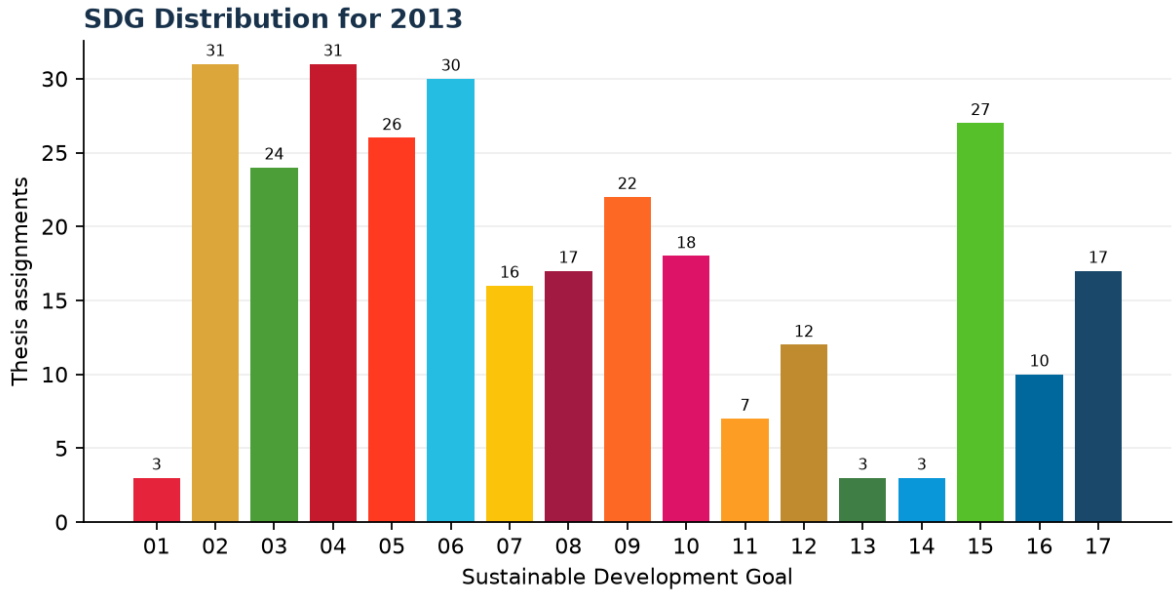


Figure 15: SDG Distribution for 2013

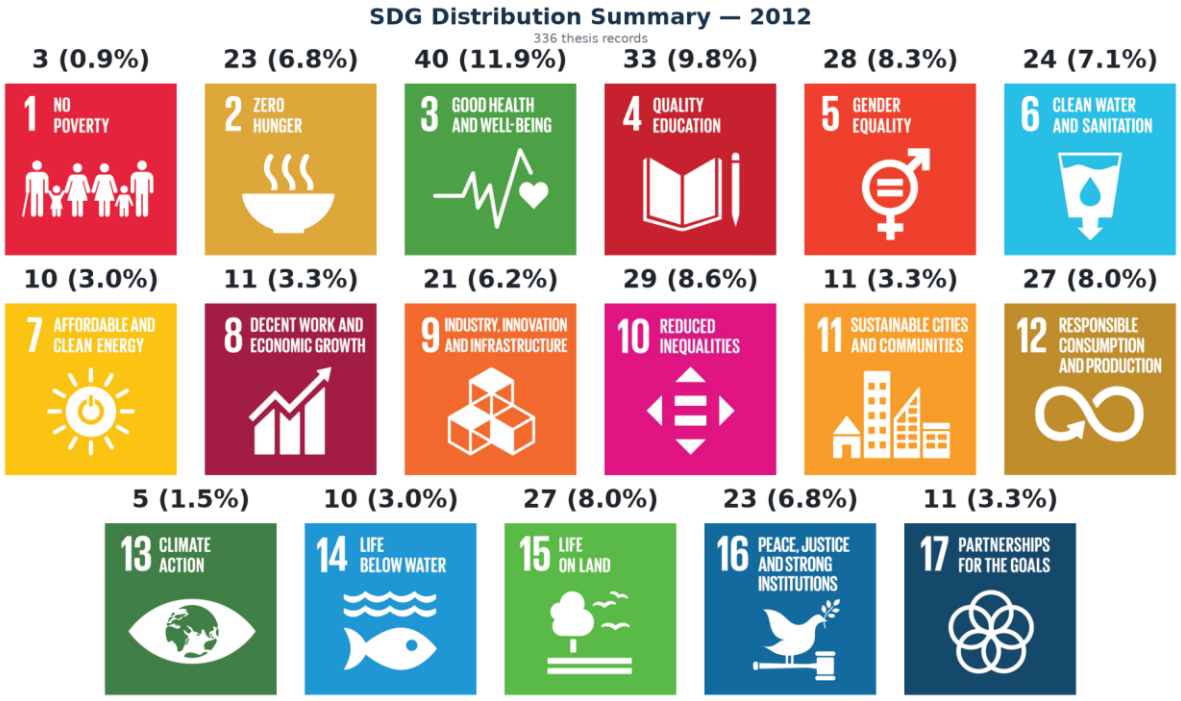
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	3	1.0%
SDG 02	Zero Hunger	31	10.4%
SDG 03	Good Health and Well-being	24	8.1%
SDG 04	Quality Education	31	10.4%
SDG 05	Gender Equality	26	8.8%
SDG 06	Clean Water and Sanitation	30	10.1%
SDG 07	Affordable and Clean Energy	16	5.4%
SDG 08	Decent Work and Economic Growth	17	5.7%
SDG 09	Industry, Innovation and Infrastructure	22	7.4%
SDG 10	Reduced Inequalities	18	6.1%
SDG 11	Sustainable Cities and Communities	7	2.4%
SDG 12	Responsible Consumption and Production	12	4.0%
SDG 13	Climate Action	3	1.0%
SDG 14	Life Below Water	3	1.0%
SDG 15	Life on Land	27	9.1%
SDG 16	Peace, Justice and Strong Institutions	10	3.4%
SDG 17	Partnerships for the Goals	17	5.7%

Key Observations for 2013

- Top SDGs: **SDG 2/4** (Zero Hunger / Quality Education: 31 each), **SDG 6** (Clean Water and Sanitation: 30).
- High concentration: Top 3 SDGs = **31.0%**.
- Average SDGs per record: **3.63**.
- Interdisciplinary: **268 records (90.2%)** address multiple SDGs.

4.14 Analysis of 2012

336	1,186	3.53	302 (89.9%)
THESIS RECORDS	SDG ASSIGNMENTS	AVERAGE SDGs / THESIS	MULTI-SDG THESES



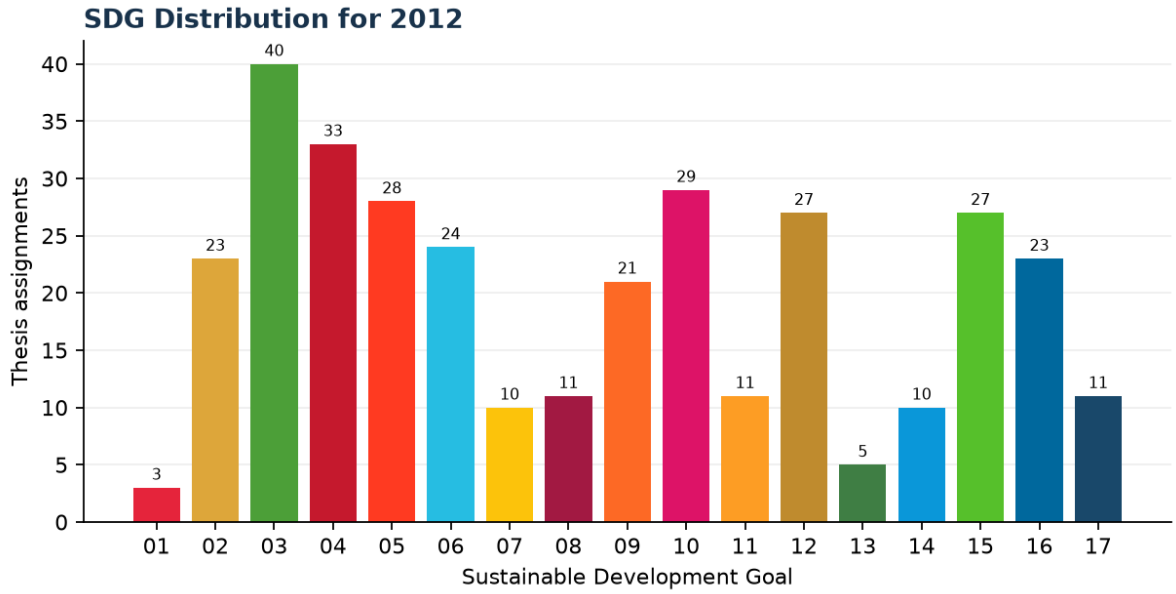


Figure 16: SDG Distribution for 2012

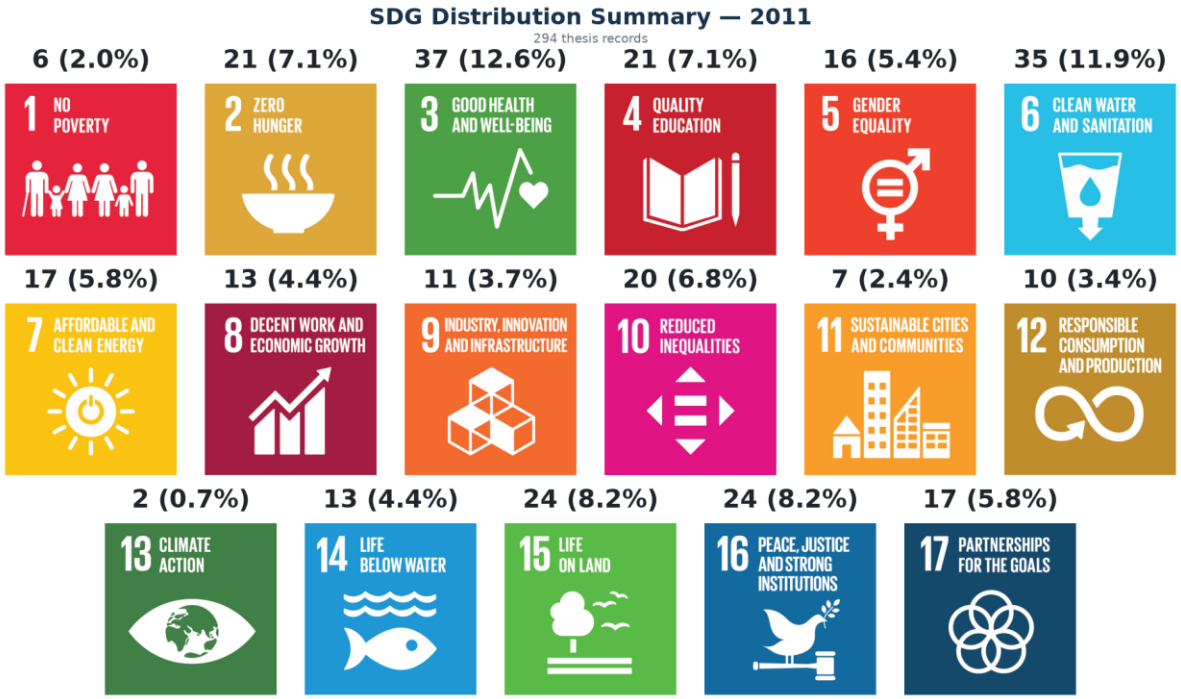
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	3	0.9%
SDG 02	Zero Hunger	23	6.8%
SDG 03	Good Health and Well-being	40	11.9%
SDG 04	Quality Education	33	9.8%
SDG 05	Gender Equality	28	8.3%
SDG 06	Clean Water and Sanitation	24	7.1%
SDG 07	Affordable and Clean Energy	10	3.0%
SDG 08	Decent Work and Economic Growth	11	3.3%
SDG 09	Industry, Innovation and Infrastructure	21	6.2%
SDG 10	Reduced Inequalities	29	8.6%
SDG 11	Sustainable Cities and Communities	11	3.3%
SDG 12	Responsible Consumption and Production	27	8.0%
SDG 13	Climate Action	5	1.5%
SDG 14	Life Below Water	10	3.0%
SDG 15	Life on Land	27	8.0%
SDG 16	Peace, Justice and Strong Institutions	23	6.8%
SDG 17	Partnerships for the Goals	11	3.3%

Key Observations for 2012

- Top SDGs: **SDG 3** (Good Health and Well-being: 40), **SDG 4** (Quality Education: 33), **SDG 10** (Reduced Inequalities: 29).
- High concentration: Top 3 SDGs = **30.4%**.
- Average SDGs per record: **3.53**.
- Interdisciplinary: **302 records (89.9%)** address multiple SDGs.

4.15 Analysis of 2011

294 THESIS RECORDS	990 SDG ASSIGNMENTS	3.37 AVERAGE SDGs / THESIS	267 (90.8%) MULTI-SDG THESES



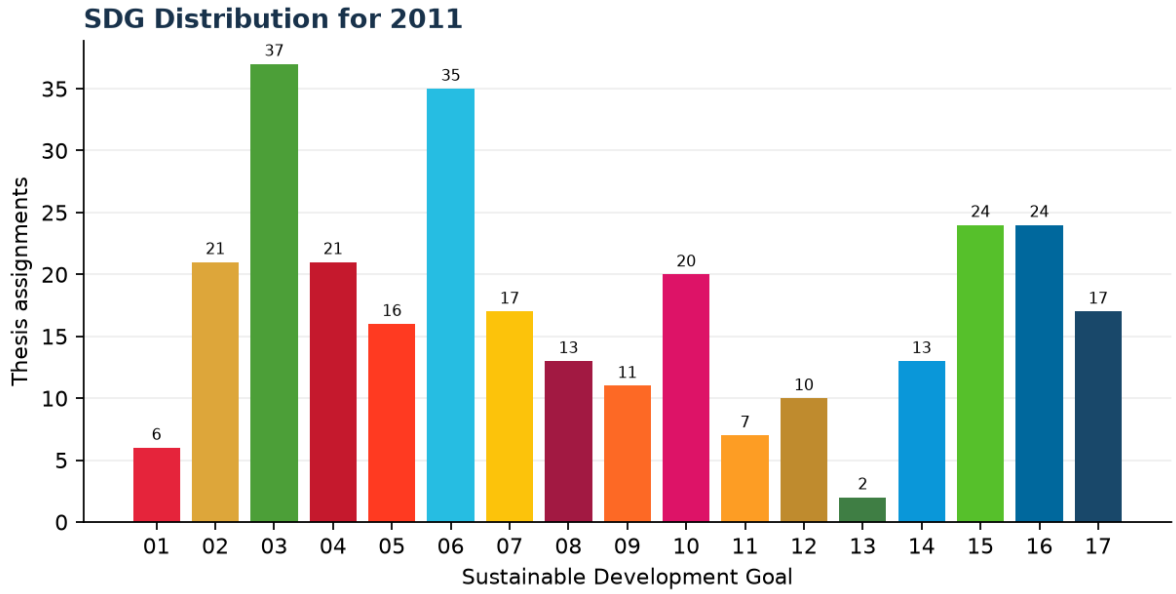


Figure 16: SDG Distribution for 2011

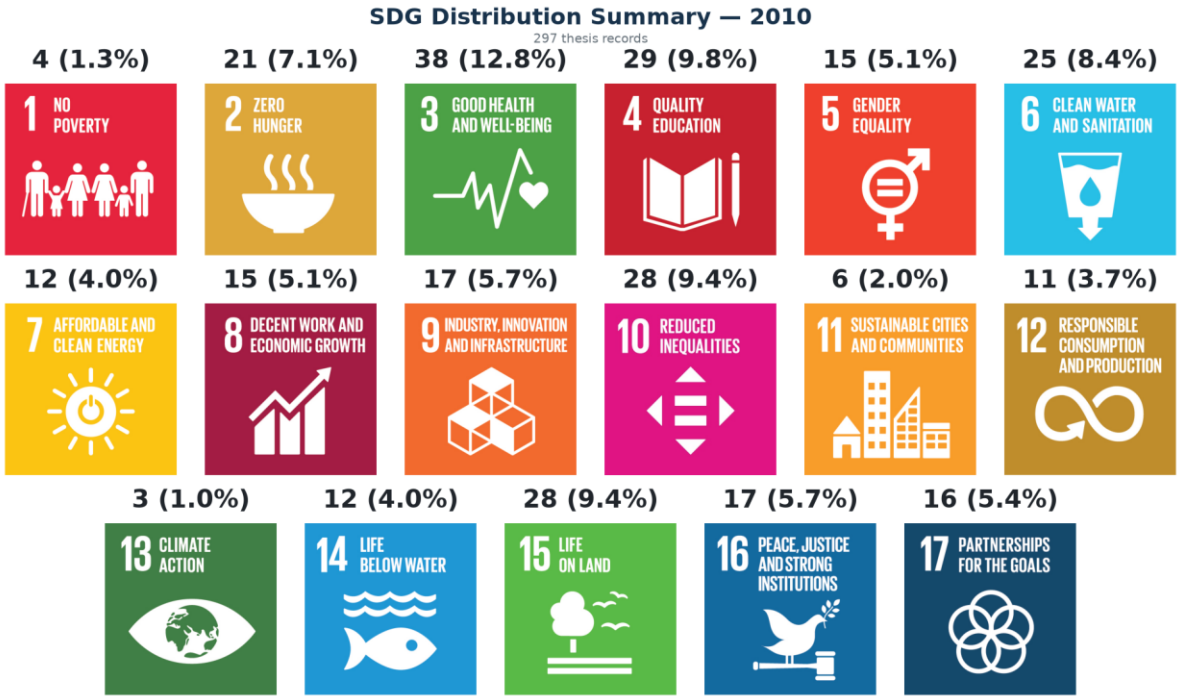
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	6	2.0%
SDG 02	Zero Hunger	21	7.1%
SDG 03	Good Health and Well-being	37	12.6%
SDG 04	Quality Education	21	7.1%
SDG 05	Gender Equality	16	5.4%
SDG 06	Clean Water and Sanitation	35	11.9%
SDG 07	Affordable and Clean Energy	17	5.8%
SDG 08	Decent Work and Economic Growth	13	4.4%
SDG 09	Industry, Innovation and Infrastructure	11	3.7%
SDG 10	Reduced Inequalities	20	6.8%
SDG 11	Sustainable Cities and Communities	7	2.4%
SDG 12	Responsible Consumption and Production	10	3.4%
SDG 13	Climate Action	2	0.7%
SDG 14	Life Below Water	13	4.4%
SDG 15	Life on Land	24	8.2%
SDG 16	Peace, Justice and Strong Institutions	24	8.2%
SDG 17	Partnerships for the Goals	17	5.8%

Key Observations for 2011

- Top SDGs: **SDG 3** (Good Health and Well-being: 37), **SDG 6** (Clean Water and Sanitation: 35), **SDG 15/16** (Life on Land / Peace, Justice and Strong Institutions: 24 each).
- High concentration: Top 3 SDGs = **32.7%**.
- Average SDGs per record: **3.37**.
- Interdisciplinary: **267 records (90.8%)** address multiple SDGs.

4.16 Analysis of 2010

297 THESIS RECORDS	1,004 SDG ASSIGNMENTS	3.38 AVERAGE SDGs / THESIS	269 (90.6%) MULTI-SDG THESES



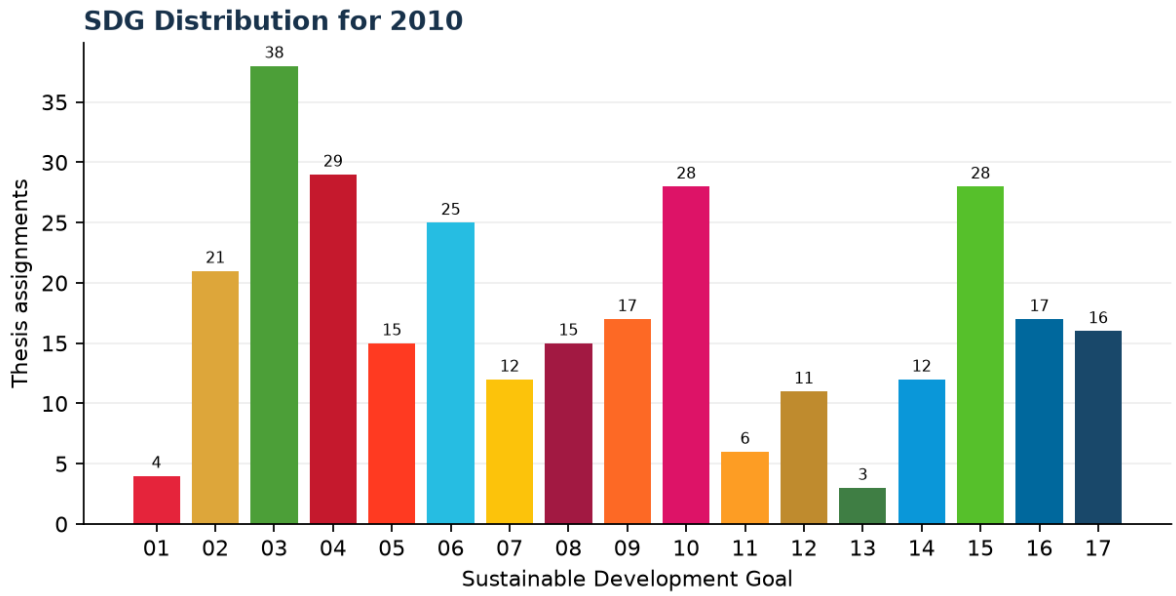


Figure 17: SDG Distribution for 2010

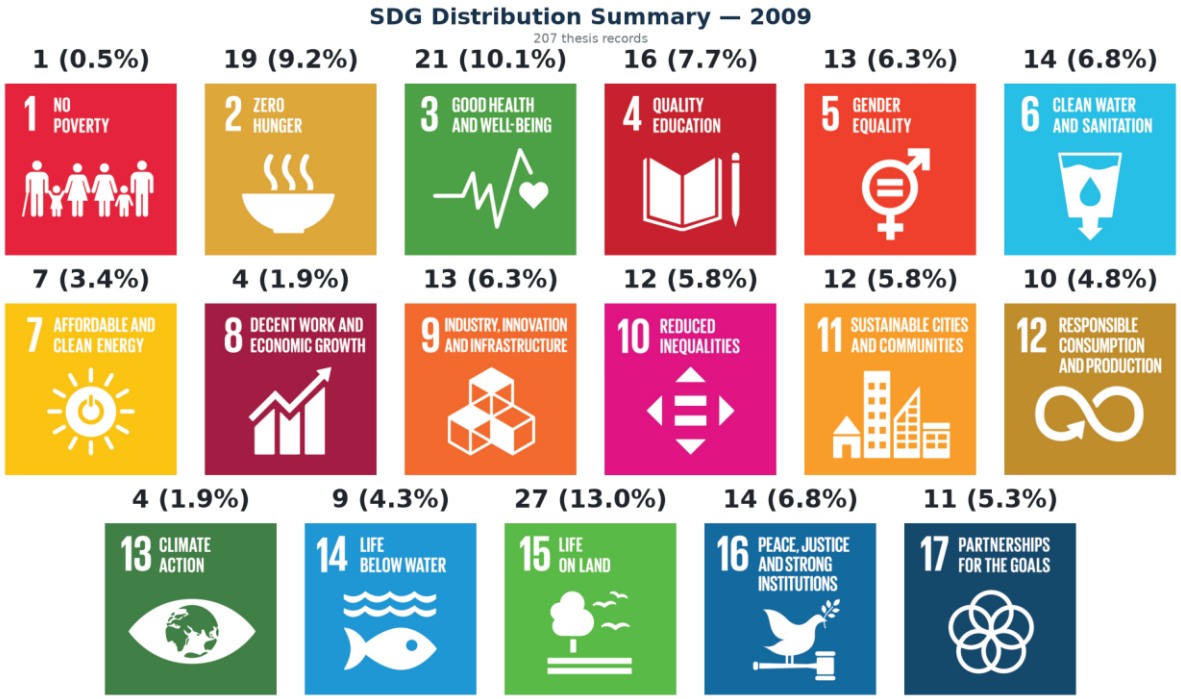
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	4	1.3%
SDG 02	Zero Hunger	21	7.1%
SDG 03	Good Health and Well-being	38	12.8%
SDG 04	Quality Education	29	9.8%
SDG 05	Gender Equality	15	5.1%
SDG 06	Clean Water and Sanitation	25	8.4%
SDG 07	Affordable and Clean Energy	12	4.0%
SDG 08	Decent Work and Economic Growth	15	5.1%
SDG 09	Industry, Innovation and Infrastructure	17	5.7%
SDG 10	Reduced Inequalities	28	9.4%
SDG 11	Sustainable Cities and Communities	6	2.0%
SDG 12	Responsible Consumption and Production	11	3.7%
SDG 13	Climate Action	3	1.0%
SDG 14	Life Below Water	12	4.0%
SDG 15	Life on Land	28	9.4%
SDG 16	Peace, Justice and Strong Institutions	17	5.7%
SDG 17	Partnerships for the Goals	16	5.4%

Key Observations for 2010

- Top SDGs: **SDG 3** (Good Health and Well-being: 38), **SDG 4** (Quality Education: 29), **SDG 10** (Reduced Inequalities: 28).
- High concentration: Top 3 SDGs = **32.0%**.
- Average SDGs per record: **3.38**.
- Interdisciplinary: **269 records (90.6%)** address multiple SDGs.

4.17 Analysis of 2009

207 THESIS RECORDS	693 SDG ASSIGNMENTS	3.35 AVERAGE SDGs / THESIS	181 (87.4%) MULTI-SDG THESES



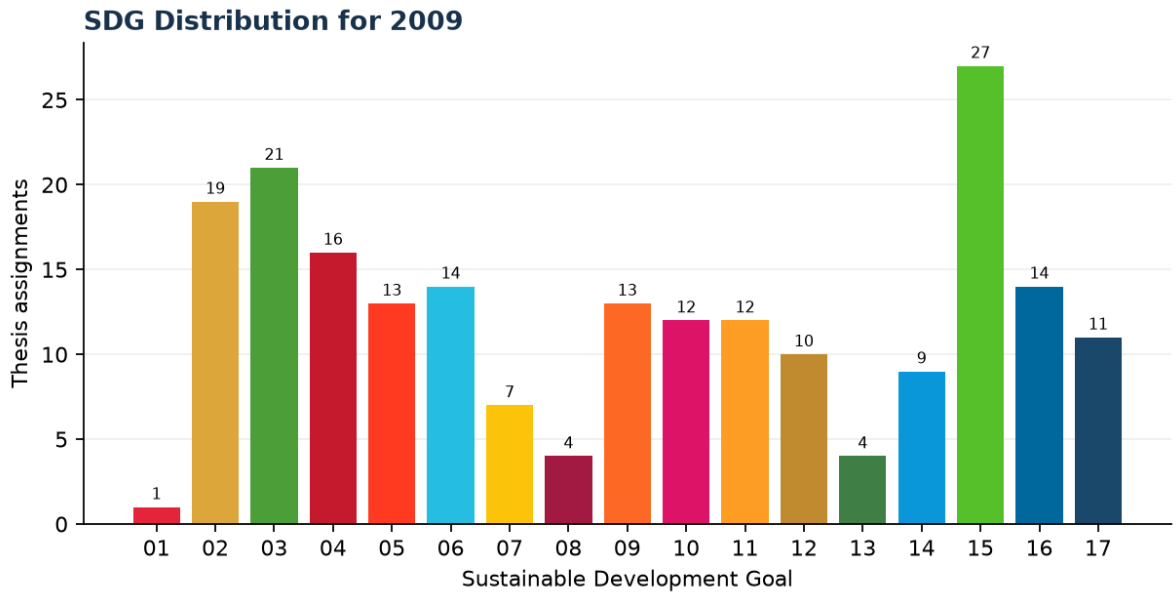


Figure 18: SDG Distribution for 2009

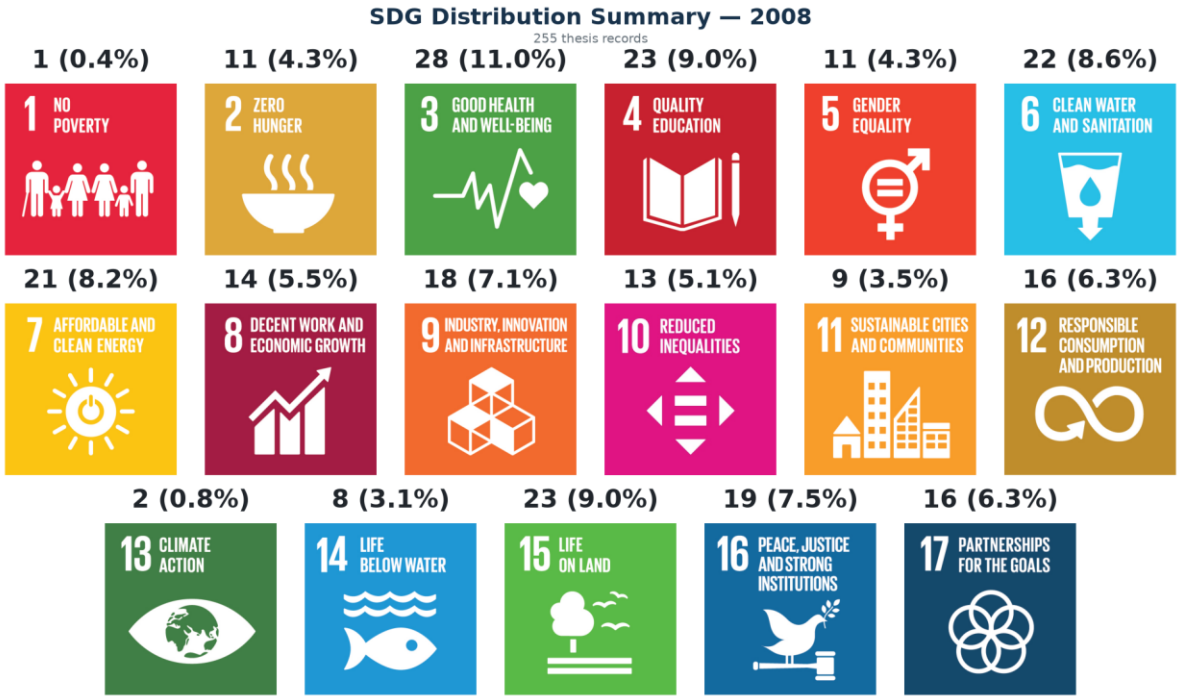
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	1	0.5%
SDG 02	Zero Hunger	19	9.2%
SDG 03	Good Health and Well-being	21	10.1%
SDG 04	Quality Education	16	7.7%
SDG 05	Gender Equality	13	6.3%
SDG 06	Clean Water and Sanitation	14	6.8%
SDG 07	Affordable and Clean Energy	7	3.4%
SDG 08	Decent Work and Economic Growth	4	1.9%
SDG 09	Industry, Innovation and Infrastructure	13	6.3%
SDG 10	Reduced Inequalities	12	5.8%
SDG 11	Sustainable Cities and Communities	12	5.8%
SDG 12	Responsible Consumption and Production	10	4.8%
SDG 13	Climate Action	4	1.9%
SDG 14	Life Below Water	9	4.3%
SDG 15	Life on Land	27	13.0%
SDG 16	Peace, Justice and Strong Institutions	14	6.8%
SDG 17	Partnerships for the Goals	11	5.3%

Key Observations for 2009

- Top SDGs: **SDG 15** (Life on Land: 27), **SDG 3** (Good Health and Well-being: 21), **SDG 2** (Zero Hunger: 19).
- High concentration: Top 3 SDGs = **32.4%**.
- Average SDGs per record: **3.35**.
- Interdisciplinary: **181 records (87.4%)** address multiple SDGs.

4.18 Analysis of 2008

255 THESIS RECORDS	836 SDG ASSIGNMENTS	3.28 AVERAGE SDGs / THESIS	216 (84.7%) MULTI-SDG THESES



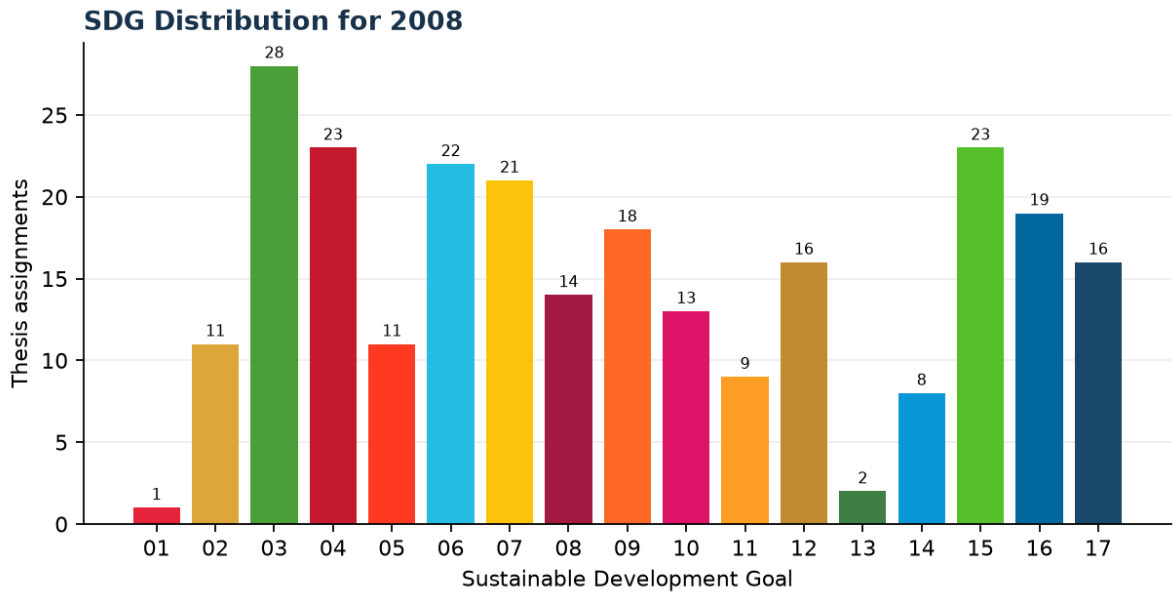


Figure 19: SDG Distribution for 2008

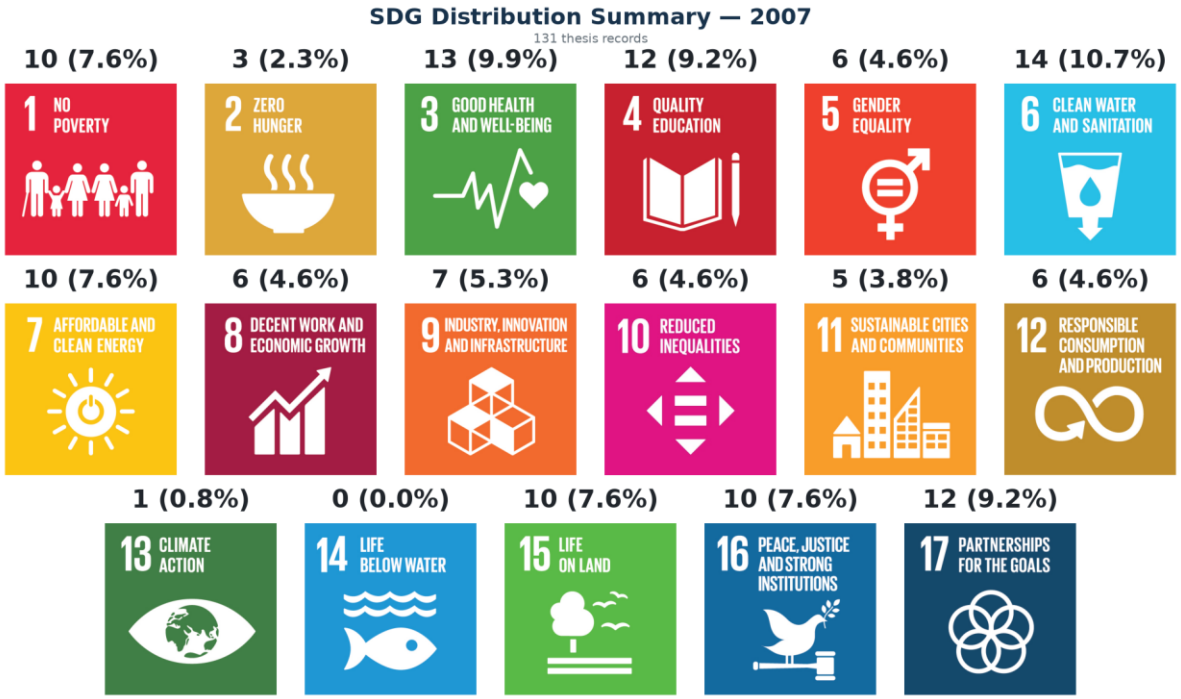
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	1	0.4%
SDG 02	Zero Hunger	11	4.3%
SDG 03	Good Health and Well-being	28	11.0%
SDG 04	Quality Education	23	9.0%
SDG 05	Gender Equality	11	4.3%
SDG 06	Clean Water and Sanitation	22	8.6%
SDG 07	Affordable and Clean Energy	21	8.2%
SDG 08	Decent Work and Economic Growth	14	5.5%
SDG 09	Industry, Innovation and Infrastructure	18	7.1%
SDG 10	Reduced Inequalities	13	5.1%
SDG 11	Sustainable Cities and Communities	9	3.5%
SDG 12	Responsible Consumption and Production	16	6.3%
SDG 13	Climate Action	2	0.8%
SDG 14	Life Below Water	8	3.1%
SDG 15	Life on Land	23	9.0%
SDG 16	Peace, Justice and Strong Institutions	19	7.5%
SDG 17	Partnerships for the Goals	16	6.3%

Key Observations for 2008

- Top SDGs: **SDG 3** (Good Health and Well-being: 28), **SDG 4/15** (Quality Education / Life on Land: 23 each).
- High concentration: Top 3 SDGs = **29.0%**.
- Average SDGs per record: **3.28**.
- Interdisciplinary: **216 records (84.7%)** address multiple SDGs.

4.19 Analysis of 2007

131 THESIS RECORDS	437 SDG ASSIGNMENTS	3.34 AVERAGE SDGs / THESIS	113 (86.3%) MULTI-SDG THESES



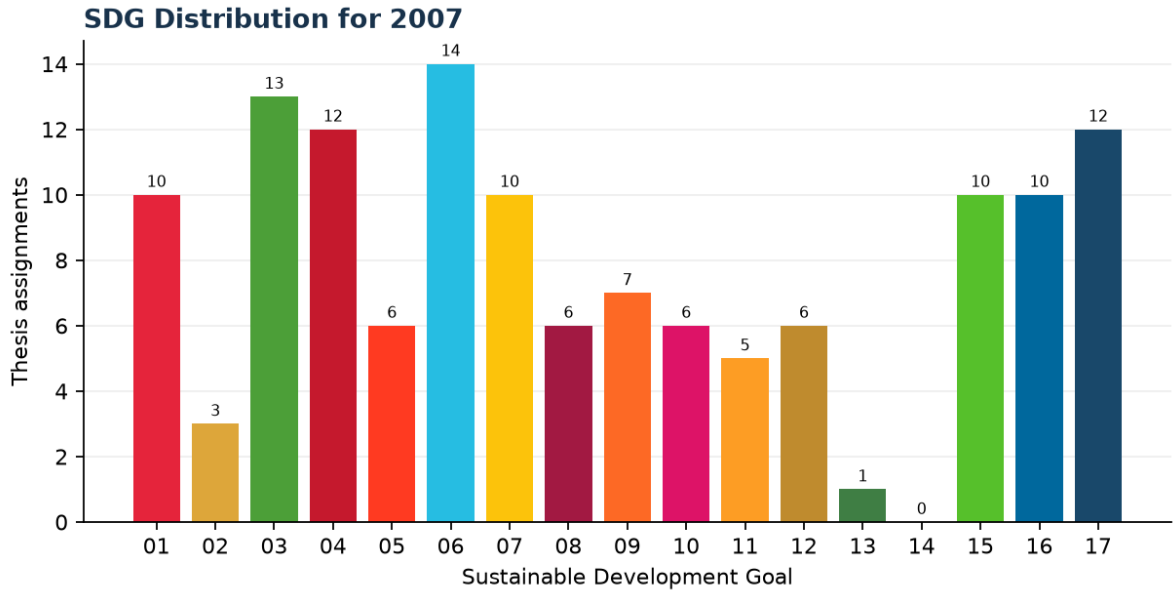


Figure 20: SDG Distribution for 2007

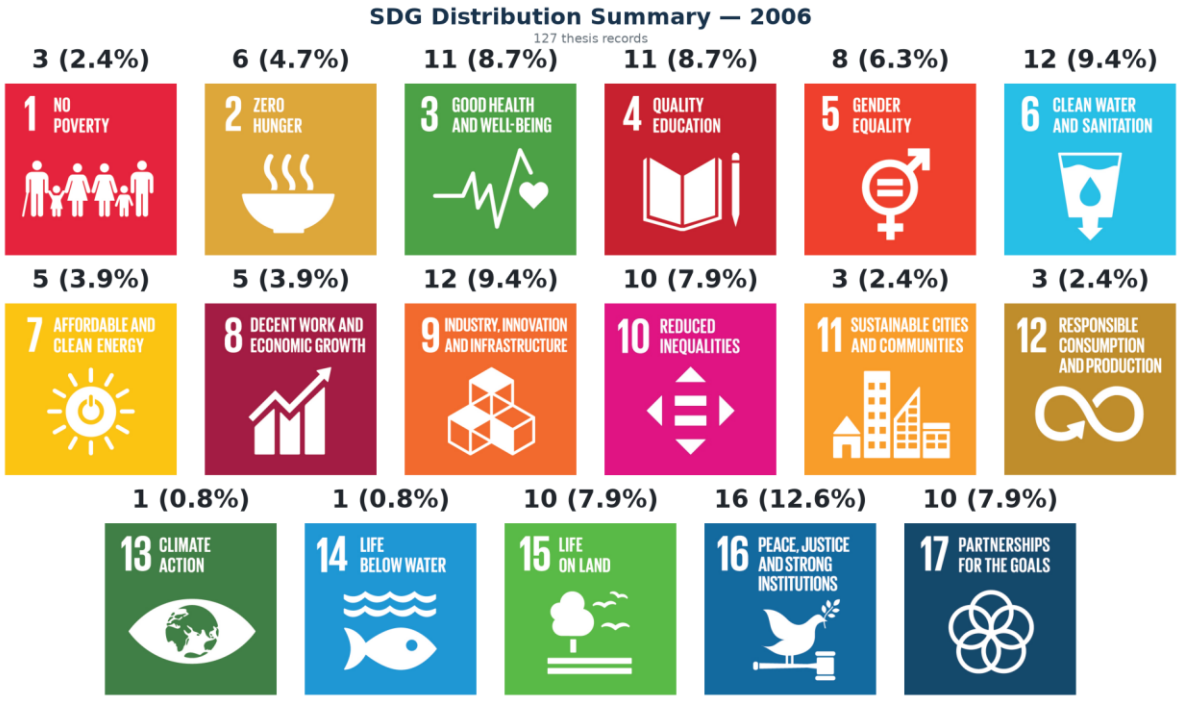
SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	10	7.6%
SDG 02	Zero Hunger	3	2.3%
SDG 03	Good Health and Well-being	13	9.9%
SDG 04	Quality Education	12	9.2%
SDG 05	Gender Equality	6	4.6%
SDG 06	Clean Water and Sanitation	14	10.7%
SDG 07	Affordable and Clean Energy	10	7.6%
SDG 08	Decent Work and Economic Growth	6	4.6%
SDG 09	Industry, Innovation and Infrastructure	7	5.3%
SDG 10	Reduced Inequalities	6	4.6%
SDG 11	Sustainable Cities and Communities	5	3.8%
SDG 12	Responsible Consumption and Production	6	4.6%
SDG 13	Climate Action	1	0.8%
SDG 14	Life Below Water	0	0.0%
SDG 15	Life on Land	10	7.6%
SDG 16	Peace, Justice and Strong Institutions	10	7.6%
SDG 17	Partnerships for the Goals	12	9.2%

Key Observations for 2007

- Top SDGs: **SDG 6** (Clean Water and Sanitation: 14), **SDG 3** (Good Health and Well-being: 13), **SDG 4/17** (Quality Education / Partnerships for the Goals: 12 each).
- High concentration: Top 3 SDGs = **29.8%**.
- Average SDGs per record: **3.34**.
- Interdisciplinary: **113 records (86.3%)** address multiple SDGs.

4.20 Analysis of 2006

127 THESIS RECORDS	429 SDG ASSIGNMENTS	3.38 AVERAGE SDGs / THESIS	115 (90.6%) MULTI-SDG THESES



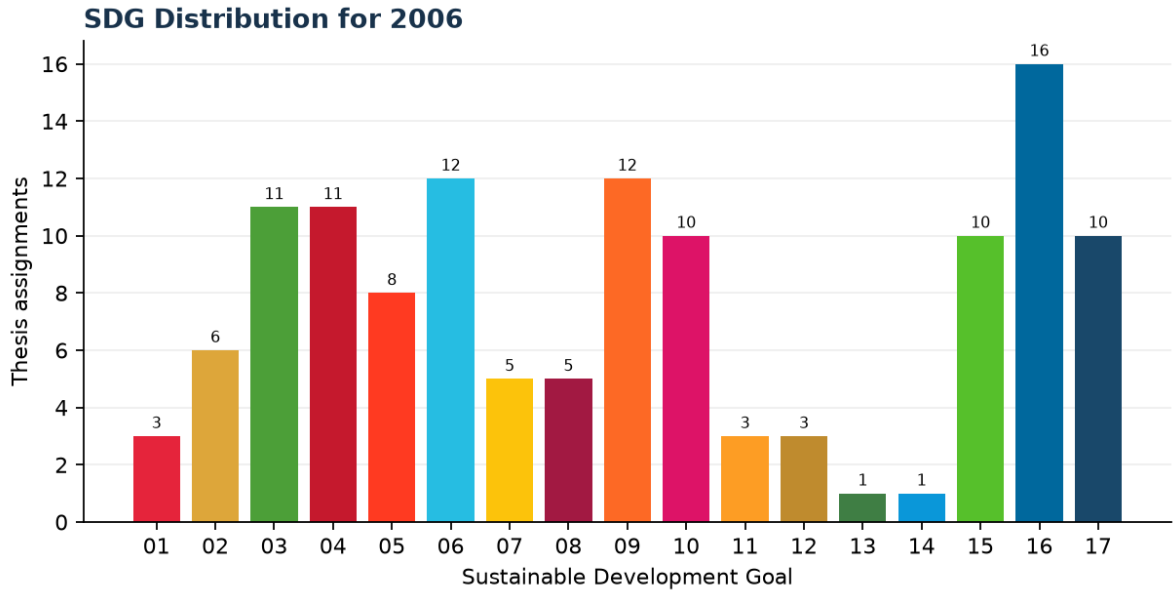


Figure 21: SDG Distribution for 2006

SDG	Goal	Thesis assignments	Share of theses
SDG 01	No Poverty	3	2.4%
SDG 02	Zero Hunger	6	4.7%
SDG 03	Good Health and Well-being	11	8.7%
SDG 04	Quality Education	11	8.7%
SDG 05	Gender Equality	8	6.3%
SDG 06	Clean Water and Sanitation	12	9.4%
SDG 07	Affordable and Clean Energy	5	3.9%
SDG 08	Decent Work and Economic Growth	5	3.9%
SDG 09	Industry, Innovation and Infrastructure	12	9.4%
SDG 10	Reduced Inequalities	10	7.9%
SDG 11	Sustainable Cities and Communities	3	2.4%
SDG 12	Responsible Consumption and Production	3	2.4%
SDG 13	Climate Action	1	0.8%
SDG 14	Life Below Water	1	0.8%
SDG 15	Life on Land	10	7.9%
SDG 16	Peace, Justice and Strong Institutions	16	12.6%
SDG 17	Partnerships for the Goals	10	7.9%

Key Observations for 2006

- Top SDGs: **SDG 16** (Peace, Justice and Strong Institutions: 16), **SDG 9/6** (Industry, Innovation and Infrastructure / Clean Water and Sanitation: 12 each).
- High concentration: Top 3 SDGs = **31.5%**.
- Average SDGs per record: **3.38**.
- Interdisciplinary: **115 records (90.6%)** address multiple SDGs.

5. Cumulative Analysis: Key Findings

5.1 SDG Distribution Across All Years (2006-2026):

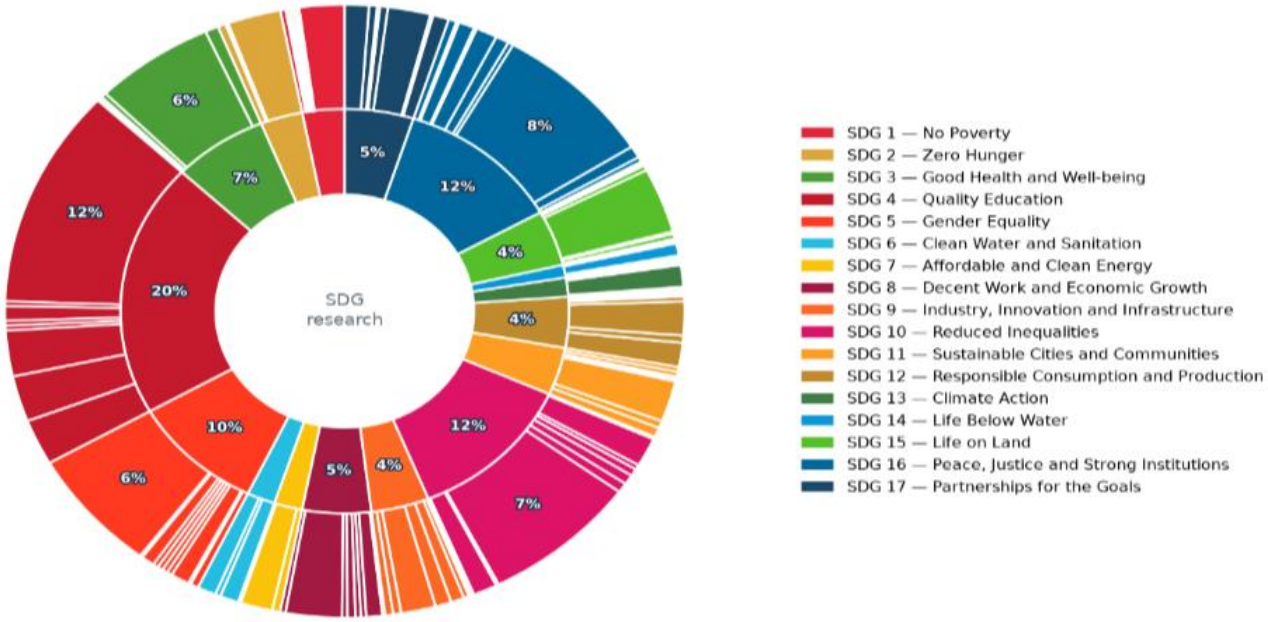


Figure 23: Cumulative SDG Distribution (2006-2026)

5.2 SDG Co-occurrence Matrix

The co-occurrence heatmap below shows which SDGs frequently appear together, indicating interdisciplinary research areas.

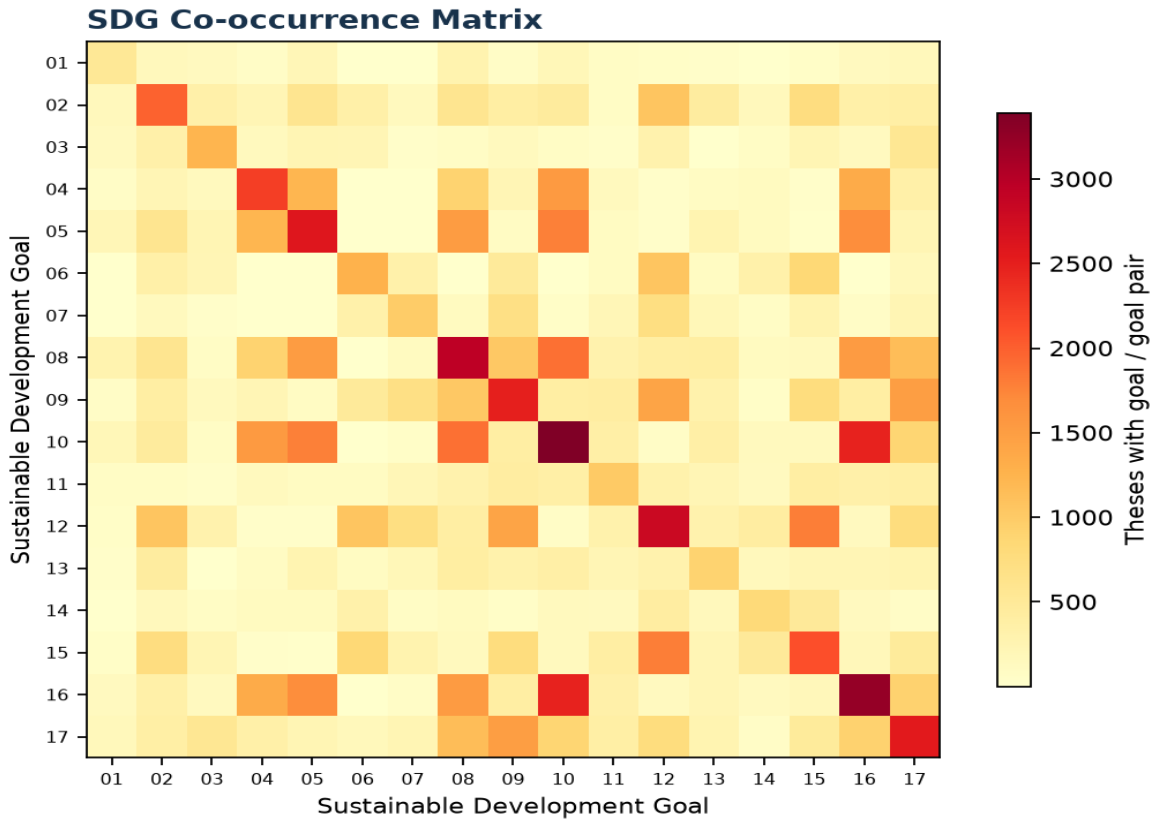


Figure 24: SDG Co-occurrence Matrix

This matrix uses unique goals parsed from SDG_Top_AVG when available; otherwise it uses the selected label field. Diagonal cells count theses mentioning each goal; off-diagonal cells count theses mentioning both goals.

- **SDG 4 + SDG 5:** Quality Education and Gender Equality show a notable association, indicating the intersection of educational research with gender-related concerns.
- **SDG 4 + SDG 8:** Quality Education and Decent Work and Economic Growth appear together, reflecting the relationship between education, skills, and employment-related research.
- **SDG 4 + SDG 10:** Quality Education and Reduced Inequalities demonstrate an association, highlighting the connection between education and social inclusion.
- **SDG 5 + SDG 10:** Gender Equality and Reduced Inequalities show a notable overlap, reflecting research addressing gender-related and broader social inequalities.
- **SDG 8 + SDG 10:** Decent Work and Economic Growth and Reduced Inequalities appear together, indicating an intersection between employment-related and inequality-related research.
- **SDG 9 + SDG 10:** Industry, Innovation and Infrastructure and Reduced Inequalities also demonstrate a visible association.
- **SDG 10 + SDG 16:** Reduced Inequalities and Peace, Justice and Strong Institutions show a prominent relationship in the matrix.

5.3 Major Research Themes Analysis

The sunburst chart below highlights the major research areas classified under each major SDG.

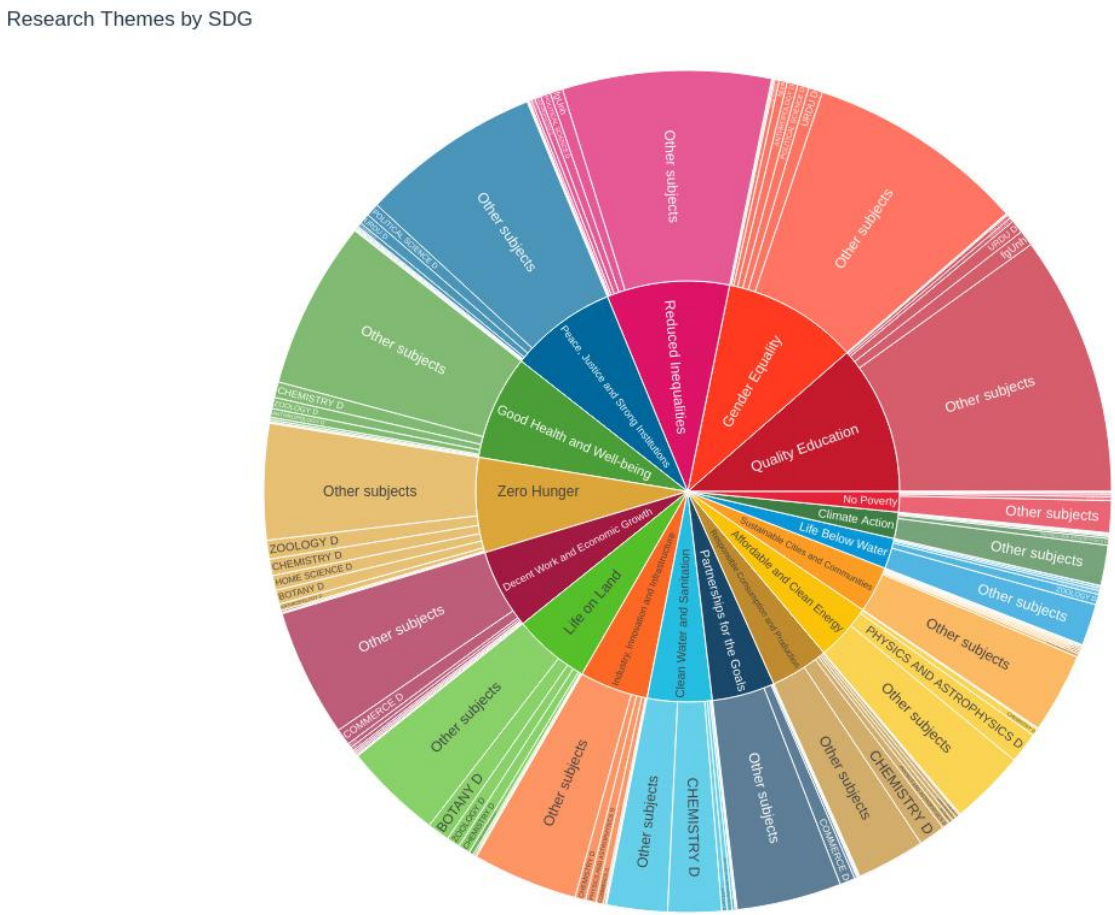


Figure 25: Sunburst Chart by Major Research Themes

5.4 Radar Chart – Delhi University SDG Research Profile

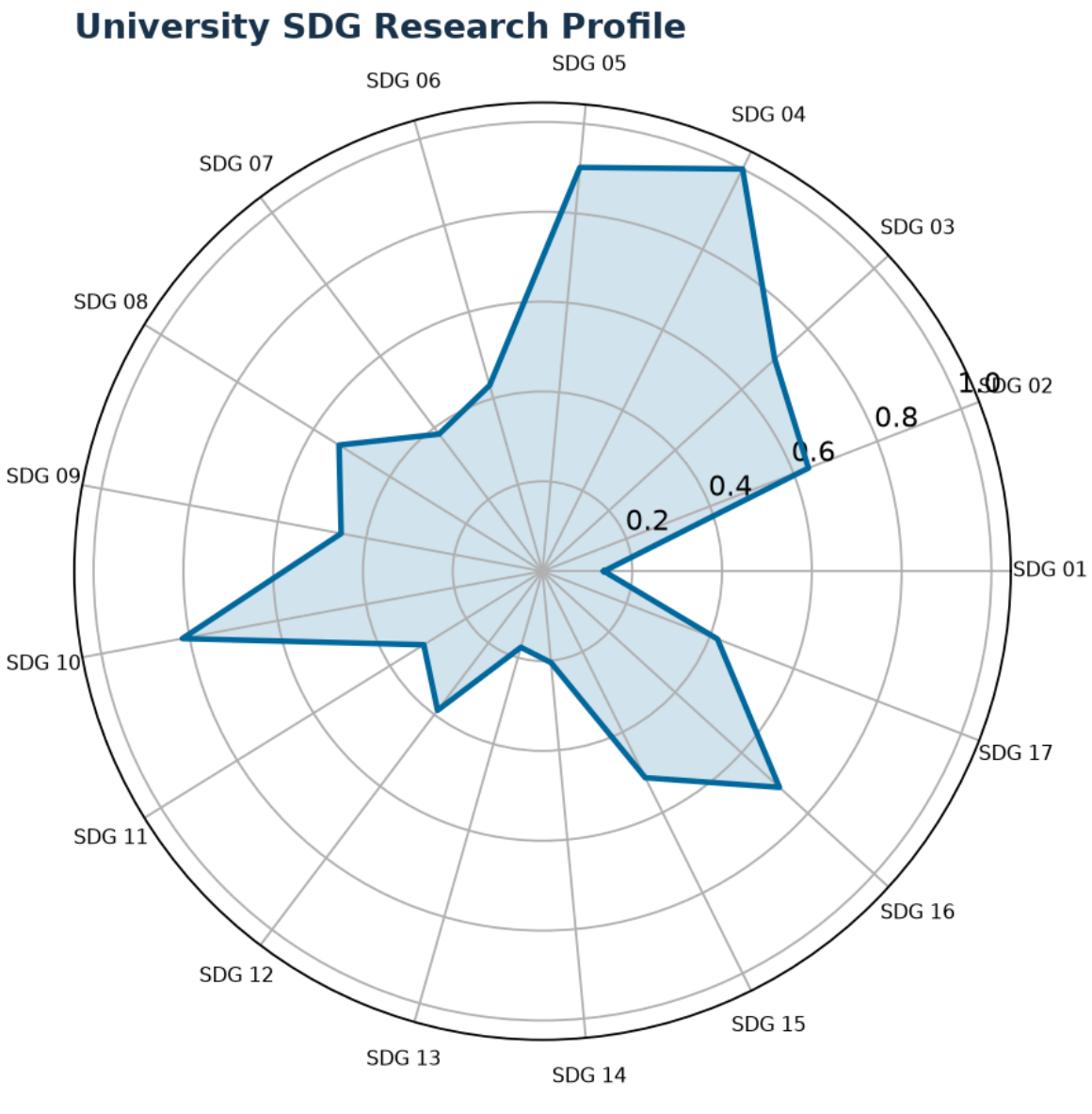


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Figure 26: University SDG Research Profile

6 Trends and Patterns

6.1 Year-over-Year Trends

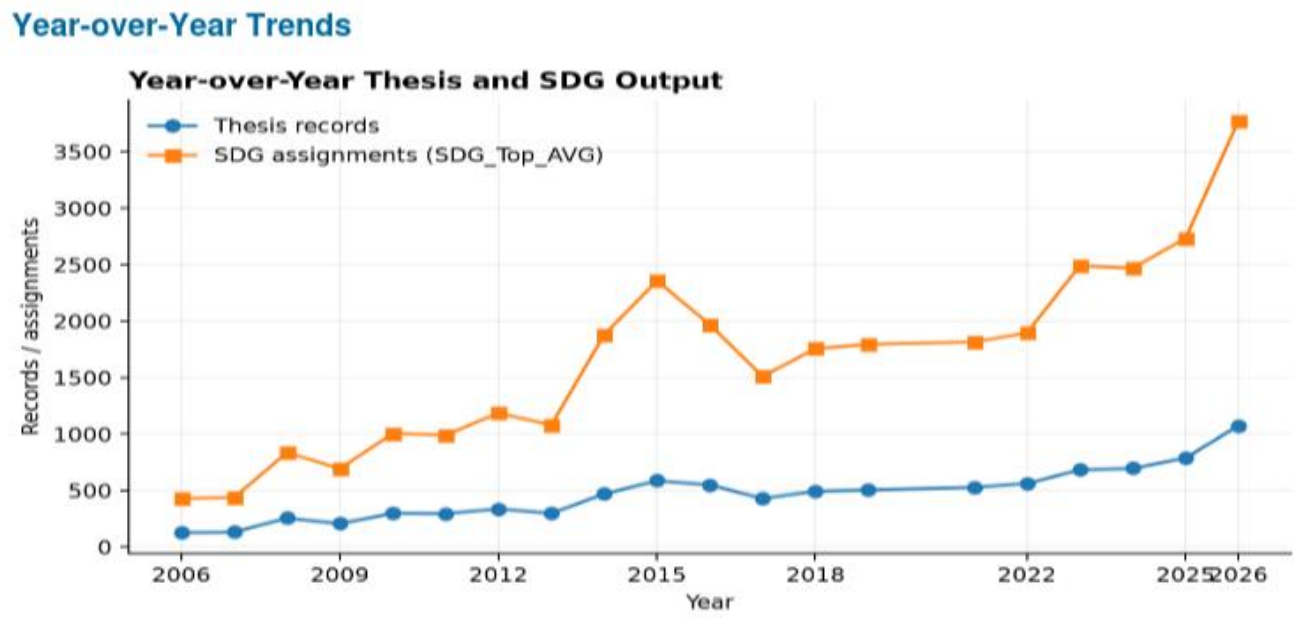

Figure 27: SDG Research Trends (2006-2026)

Trend Observations:

- **Increasing SDG-aligned research over time**
- **Rapid increase in SDG-aligned research after 2015 (since the UN announced the SDGs)**

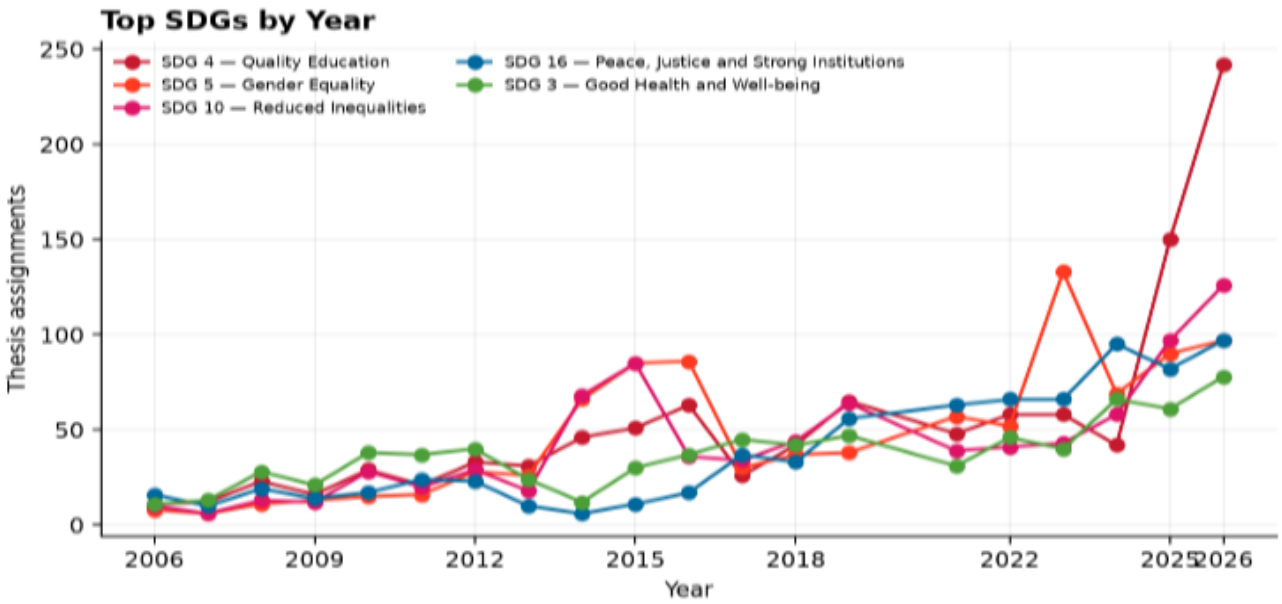

Figure 28: Top SDGs Trends (2006-2026)

Key Trend Observations:

- Overall increase in SDG-aligned research output, with a noticeable rise after 2015 and a substantial expansion during 2023–2026.
- SDG 4 (Quality Education) demonstrates the most pronounced upward trend, particularly during 2025–2026.
- SDGs 5 (Gender Equality), 10 (Reduced Inequalities) and 16 (Peace, Justice and Strong Institutions) also show notable growth in the later years, although their annual counts fluctuate.
- SDG 3 (Good Health and Well-being) shows a comparatively moderate upward trend over the period.
- The long-term growth analysis also indicates notable expansion in SDG 13 (Climate Action), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production) and SDG 14 (Life Below Water).

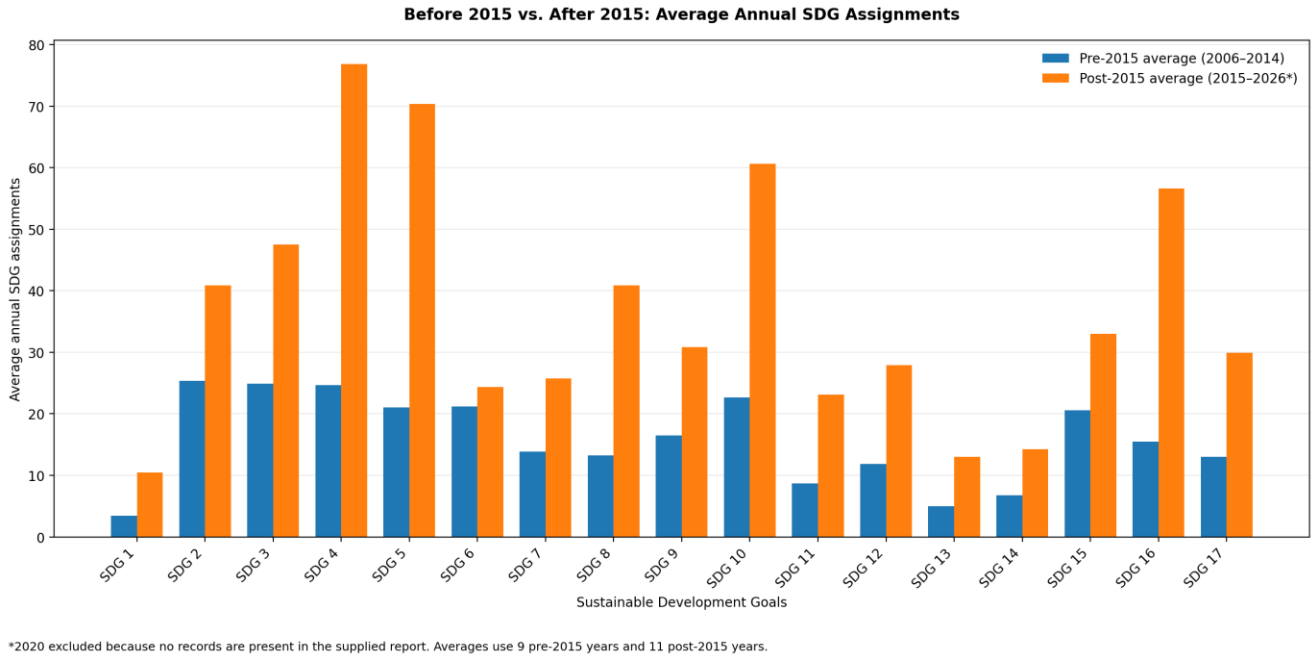

Figure 30: SDGs Research Trends Before 2015 vs After 2015

- All 17 SDGs show higher average annual assignments in the post-2015 period.

6.2 Growth Rates by SDG

S. No.	SDG	Start count	End count	CAGR
1	SDG 4 - Quality Education	11	242	16.7%
2	SDG 13 - Climate Action	1	15	14.5%
3	SDG 11 - Sustainable Cities and Communities	3	44	14.4%
4	SDG 12 - Responsible Consumption and Production	3	42	14.1%
5	SDG 14 - Life Below Water	1	13	13.7%
6	SDG 10 - Reduced Inequalities	10	126	13.5%
7	SDG 5 - Gender Equality	8	97	13.3%
8	SDG 8 - Decent Work and Economic Growth	5	56	12.8%
9	SDG 1 - No Poverty	3	28	11.8%

10	SDG 3 - Good Health and Well-being	11	78	10.3%
11	SDG 16 - Peace, Justice and Strong Institutions	16	97	9.4%
12	SDG 2 - Zero Hunger	6	34	9.1%
13	SDG 17 - Partnerships for the Goals	10	54	8.8%
14	SDG 7 - Affordable and Clean Energy	5	25	8.4%
15	SDG 15 - Life on Land	10	48	8.2%
16	SDG 9 - Industry, Innovation and Infrastructure	12	54	7.8%
17	SDG 6 - Clean Water and Sanitation	12	21	2.8%

Compound annual growth rate (CAGR), from 2006 to 2026. Only goals with positive counts at both endpoints are included.

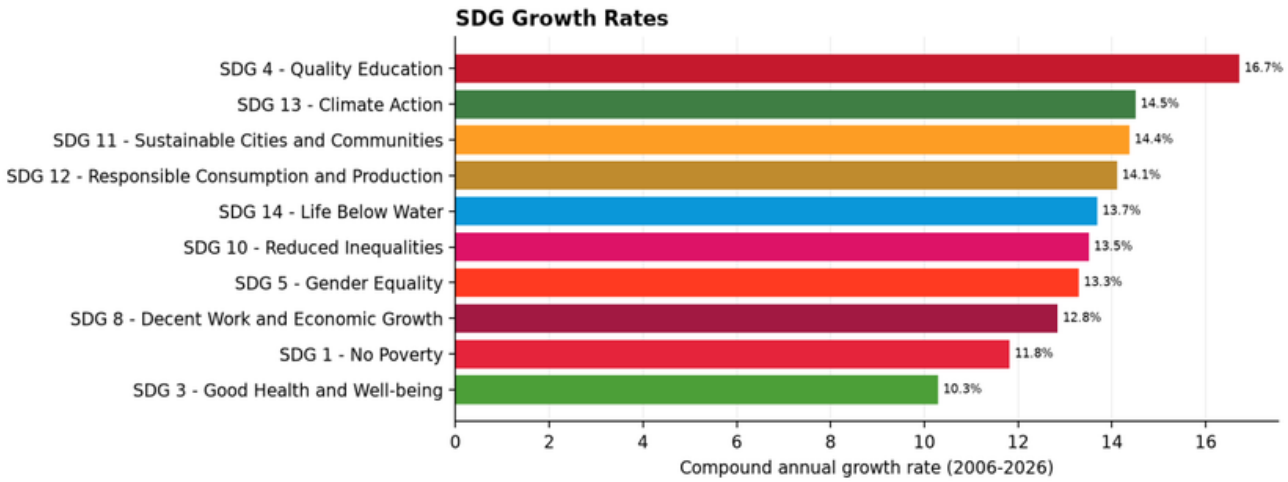

Figure 31: SDG Research Trends (2006-2026)

7. Recommendations

Based on the analysis findings, the following recommendations are proposed:

7.1 Strategic Research Directions

1. **Strengthen underrepresented SDG areas:** Encourage greater research engagement in comparatively less represented areas, particularly SDG 1 (No Poverty), SDG 13 (Climate Action), and SDG 14 (Life Below Water), through targeted research initiatives, funding opportunities, and doctoral research support.
2. **Promote interdisciplinary research:** Build on the substantial proportion of theses addressing multiple SDGs (90.6%) by encouraging interdisciplinary research and collaboration across departments and faculties. Particular attention may be given to interconnected themes such as Gender Equality, Reduced Inequalities, Climate Action, Sustainable Cities and Communities, and Responsible Consumption and Production.
3. **Build on established research strengths:** Further strengthen research in SDG 4 (Quality Education), which emerged as the most addressed goal in the analysis. Encourage the expansion of related research themes and explore opportunities to connect established areas of research with other SDGs.
4. **Encourage emerging research priorities:** Promote research in areas showing notable growth during the study period, particularly SDG 13 (Climate Action), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), SDG 14 (Life Below Water), SDG 10 (Reduced Inequalities), and SDG 5 (Gender Equality).

7.2 Operational Recommendations

9. **SDG tagging at submission:** Implement SDG classification as part of the thesis submission process.

10. **Annual monitoring:** Conduct annual SDG alignment analysis to track progress and identify emerging trends.

11. **Faculty engagement:** Share findings with faculty to raise awareness of SDG-relevant research opportunities.

7.3 Reporting and Communication

12. **External reporting:** Include SDG alignment metrics in sustainability reports and university rankings submissions.

13. **Stakeholder communication:** Highlight SDG contributions in communications with funding bodies, government, and industry partners.

8. Conclusion

This comprehensive analysis of 9,303 PhD thesis records submitted to the University of Delhi during the period 2006–2026 provides an overview of the alignment of doctoral research with the 17 United Nations Sustainable Development Goals (SDGs). The analysis highlights the distribution of SDG assignments, interdisciplinary research patterns, and the evolution of SDG-related research across the period.

Key conclusions from this analysis include:

- **Extensive SDG coverage:** The dataset comprises 33,095 SDG assignments across 9,303 thesis records, with an average of 3.56 SDGs per thesis, indicating the representation of multiple sustainability dimensions across doctoral research.
- **Dominance of Quality Education:** SDG 4 (Quality Education) emerges as the most addressed goal, with 1,067 thesis assignments (11.5%), followed by other goals reflecting the diverse research interests and contributions of the University.
- **Strong interdisciplinary orientation:** A substantial proportion of doctoral research, comprising 8,431 theses (90.6%), addresses multiple SDGs, highlighting the interconnected nature of research themes and their relevance to different dimensions of sustainable development.
- **Emerging research priorities:** The growth analysis indicates notable increases in research associated with Quality Education, Climate Action, Sustainable Cities and Communities, Responsible Consumption and Production, Life Below Water, Reduced Inequalities, and Gender Equality, suggesting expanding research engagement with diverse sustainability concerns.
- **Increasing research activity:** The year-wise analysis indicates an overall increase in SDG-aligned research activity over the study period, with a noticeable rise in thesis records and SDG assignments in the later years.

Moving forward, the University of Delhi is well-positioned to enhance its contribution to the 2030 Agenda by implementing the recommendations outlined in this report and continuing to monitor and strengthen SDG-aligned research.

— End of Report —

Annexure I

Details of Records Not Extracted or Processed from the Original Dataset

The following remarks were included in the original dataset, these are the records that could not be extracted or processed by the Python-based extraction programme due to the reasons indicated.

S. No. / Record Range	Reason for Non-extraction
136	Content unclear / different language / not extracted by Python
139–140	Content unclear / different language / not extracted by Python
143	Content unclear / different language / not extracted by Python
212–263	Hindi theses and dissertations – not extracted by Python extractor
429–431	Hindi language – not extracted by Python extractor
433–438	Hindi language – not extracted by Python extractor
441–445	Hindi language – not extracted by Python extractor
454	Hindi language – not extracted by Python extractor
507–526	Hindi language – not extracted by Python
646	Hindi language – not extracted by Python extractor
1–47 (Sanskrit theses)	Not extracted by Python due to language-related issues
50–68 (Buddhist Studies)	File links inaccessible / PDF files unavailable