

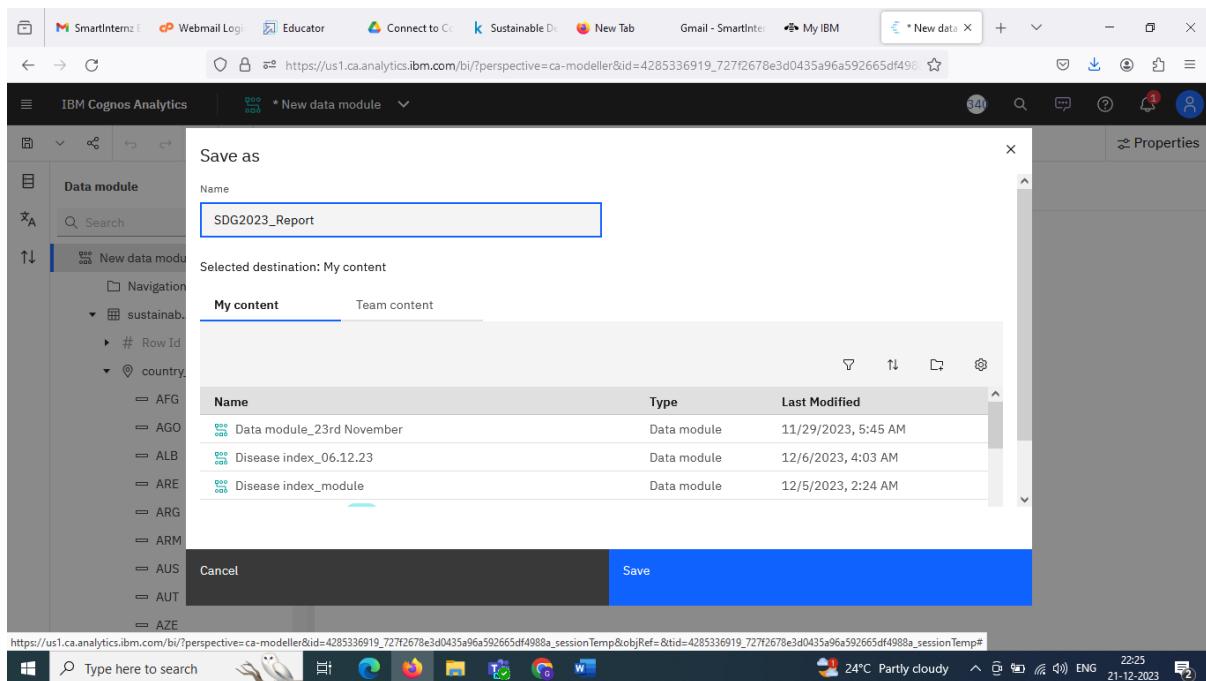
## Data download from Kaggle.com

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "Sustainable Development Data up to 2023" from Kaggle. The left sidebar has a "Datasets" section selected. The main content area displays the title "Sustainable Development Data up to 2023" and a circular graphic representing the 17 Sustainable Development Goals. Below the title, it says "Global Trends in Sustainable Development Goals: 2000 to 2023". There are three tabs: "Data Card" (selected), "Code (3)", and "Discussion (0)". To the right, there are sections for "Usability" (10.00), "License" (CC BY-NC-SA 4.0), and "Expected update frequency" (Annually). At the bottom, a message about cookie usage is shown, along with a "Learn more." link and a "Ok, Got it." button. The system tray at the bottom indicates it's 21:59 on 21-12-2023.

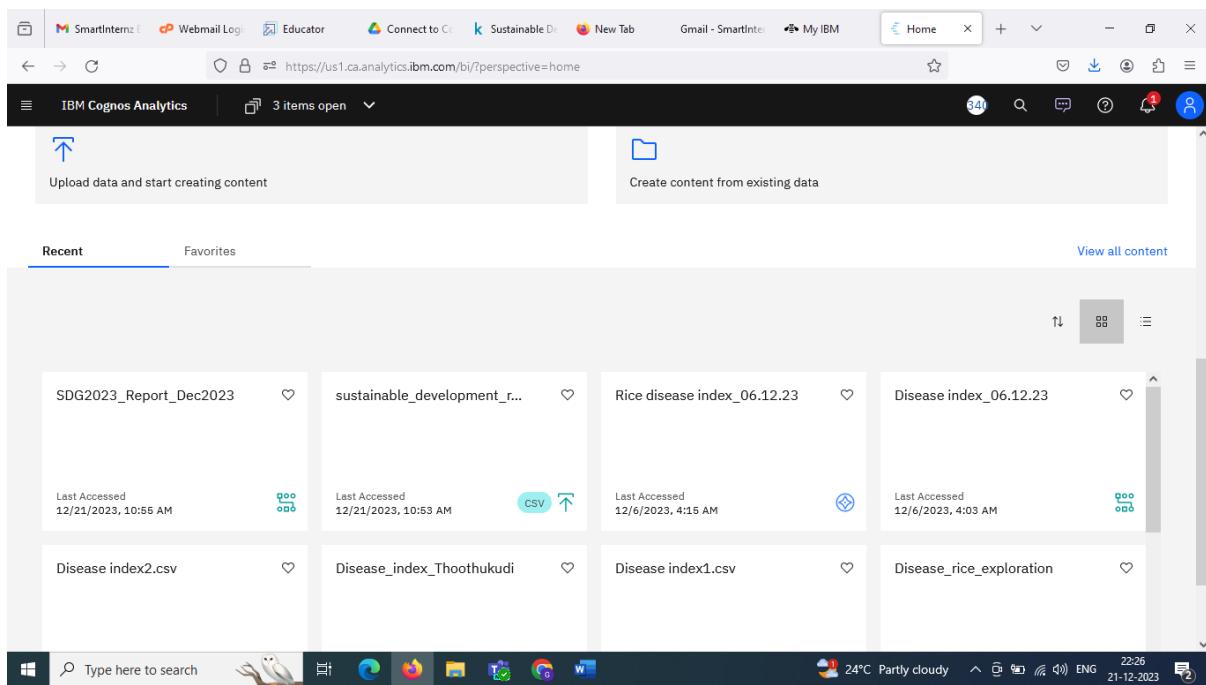
## Data upload in cognos IBM

The screenshot shows a web browser window for IBM Cognos Analytics. A modal dialog box is open, prompting the user to "Upload data and start". The progress bar shows "Analyzing sustainable\_development\_report\_2023.csv" is 100% complete. The background shows the IBM Cognos Analytics interface with various navigation links and a search bar. The system tray at the bottom indicates it's 22:19 on 21-12-2023.

## Save the data



File is uploaded in my content under the name SDG2023\_Report



The null data in the SDG score is replaced by zero by data cleaning - screenshot for data cleaning for SDG 1

This screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' sidebar lists a navigation path for 'SDG2023\_Report\_Dec2023' and a CSV file named 'sustainab...\_2023.csv'. The main area displays a grid of data with columns: country\_code, country, region, overall\_score, and goal\_1\_score. The 'goal\_1\_score' column is highlighted with a blue border. The data includes rows for various countries like NLD, JPN, HUN, SVK, ITA, MDA, CAN, NZL, GRC, ISL, and CHL, with their respective scores. The bottom status bar shows the date as 26-12-2023 and the time as 09:10.

SDG 2 data cleaning (null values are replaced by zero)

This screenshot shows the same IBM Cognos Analytics interface as the previous one, but the 'goal\_2\_score' column is now highlighted with a blue border. A context menu is open over the first row of the grid, with the 'Clean...' option selected. Other options visible in the menu include 'Filter...', 'Create calculation...', 'Create data group...', 'Hide from users', 'Remove', 'Refresh properties...', 'Format data...', 'Rename', 'Cut', 'Copy', 'Export language', and 'Properties'. The data grid shows the same set of countries and their scores as the previous screenshot. The bottom status bar shows the date as 26-12-2023 and the time as 09:12.

## SDG 10 data cleaning (null values are replaced by zero)

The screenshot shows a data module in IBM Cognos Analytics. On the left, there's a navigation pane with a tree view of data paths, including 'sustainab...\_2023.cs' and various score columns like 'goal\_2\_score' through 'goal\_16\_score'. The main area is a grid with six columns: 'score', 'goal\_6\_score', 'goal\_7\_score', 'goal\_8\_score', 'goal\_9\_score', and 'goal\_10\_score'. The 'goal\_10\_score' column is currently selected, as indicated by a blue border around its header. The data in the grid consists of 16 rows of numerical values.

score	goal_6_score	goal_7_score	goal_8_score	goal_9_score	goal_10_score
	79.384	77.57275	71.18414286	49.03428571	12.3945
	55.218	72.866	64.64357143	61.041	77.049
5	76.2612	68.28525	77.98614286	81.04571429	47.4385
	57.963	69.24575	63.70966667	88.26857143	100
5	70.961	68.57725	68.43971429	57.85514286	38.226
	65.0694	69.85575	64.92057143	57.92414286	83.9285
	70.0882	64.1845	76.86471429	52.73171429	25.617
	50.195	61.78775	79.71285714	53.862	54.5995
5	52.424	70.69575	69.4395	59.994	0
5	59.5098	86.64125	76.05283333	16.25628571	76.4385
5	60.2454	64.33125	62.45328571	67.23042857	48.4705

## Two decimal point approximation for overall score and all SDGs

The screenshot shows the 'Data format' dialog box in IBM Cognos Analytics. The 'Column' dropdown is set to 'overall\_score'. The 'Format type' dropdown is set to 'Number', which is highlighted with a blue border. Below it, the 'Number of decimal places' input field is set to '2'. Other options like 'Negative sign symbol', 'Use thousands separator', and 'Missing value characters' have their default settings. At the bottom right of the dialog is a 'Reset properties' button. The background shows a grid of data with the 'overall\_score' column visible.

overall_score
65.32833333
64.090875
64.8735
73.7825
44.97566667
57.936
58.57742857
63.37642857
71.52333333
56.854625
56.64314286

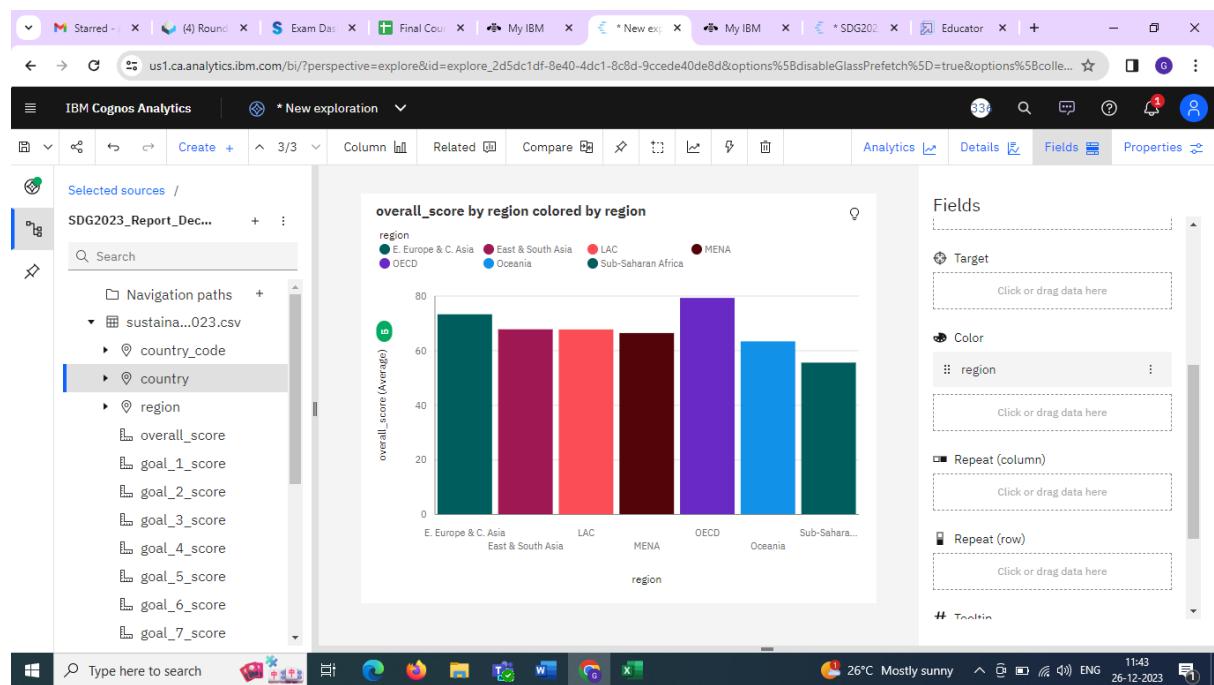
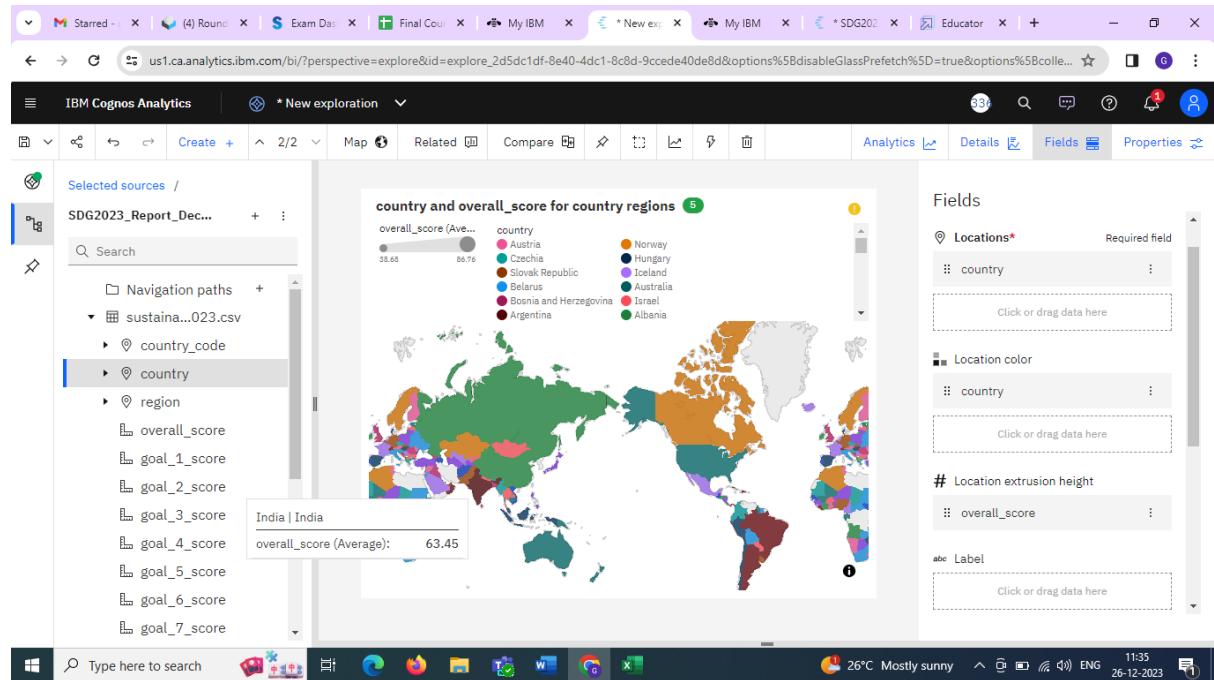
Screenshot of IBM Cognos Analytics interface showing a grid view of data from a CSV file named "sustainab....2023.csv". The grid displays columns: country, region, overall\_score, goal\_1\_score, goal\_2\_score, goal\_3\_score, goal\_4\_score, goal\_5\_score, goal\_6\_score, goal\_7\_score, goal\_8\_score, goal\_9\_score, and goal\_10\_score. The "overall\_score" column is highlighted.

country	region	overall_score	goal_1_score	goal_2_score	goal_3_score	goal_4_score	goal_5_score	goal_6_score	goal_7_score	goal_8_score	goal_9_score	goal_10_score
Tajikistan	E. Europe & C. Asia	69.19	62.961	65.32833333	67.00	64.97566667	66.00	64.8735	64.090875	60.00	63.37642857	69.00
Iran, Islamic Rep.	MENA	69.09	93.9585	64.090875	80.00	73.7825	71.00	66.00	64.8735	60.00	63.37642857	69.00
Bolivia	LAC	68.85	91.735	64.8735	66.00	73.7825	71.00	66.00	64.8735	60.00	63.37642857	69.00
Paraguay	LAC	68.84	95.0725	73.7825	71.00	71.00	70.00	66.00	64.8735	60.00	63.37642857	69.00
Cabo Verde	Sub-Saharan Africa	68.84	84.865	44.97566667	75.00	75.00	74.00	66.00	64.8735	60.00	63.37642857	69.00
Oman	MENA	68.59	0	57.936	83.00	83.00	82.00	66.00	64.8735	60.00	63.37642857	69.00
Turkmenistan	E. Europe & C. Asia	68.47	98.922	58.57742857	69.00	69.00	68.00	66.00	64.8735	60.00	63.37642857	69.00
Suriname	LAC	68.25	0	63.37642857	70.00	70.00	69.00	66.00	64.8735	60.00	63.37642857	69.00
Mauritius	Sub-Saharan Africa	67.98	98.0325	71.52333333	75.00	75.00	74.00	66.00	64.8735	60.00	63.37642857	69.00
Saudi Arabia	MENA	67.69	100	56.854625	80.00	80.00	79.00	66.00	64.8735	60.00	63.37642857	69.00
Lebanon	MENA	67.52	98.731	56.64314286	74.00	74.00	73.00	66.00	64.8735	60.00	63.37642857	69.00

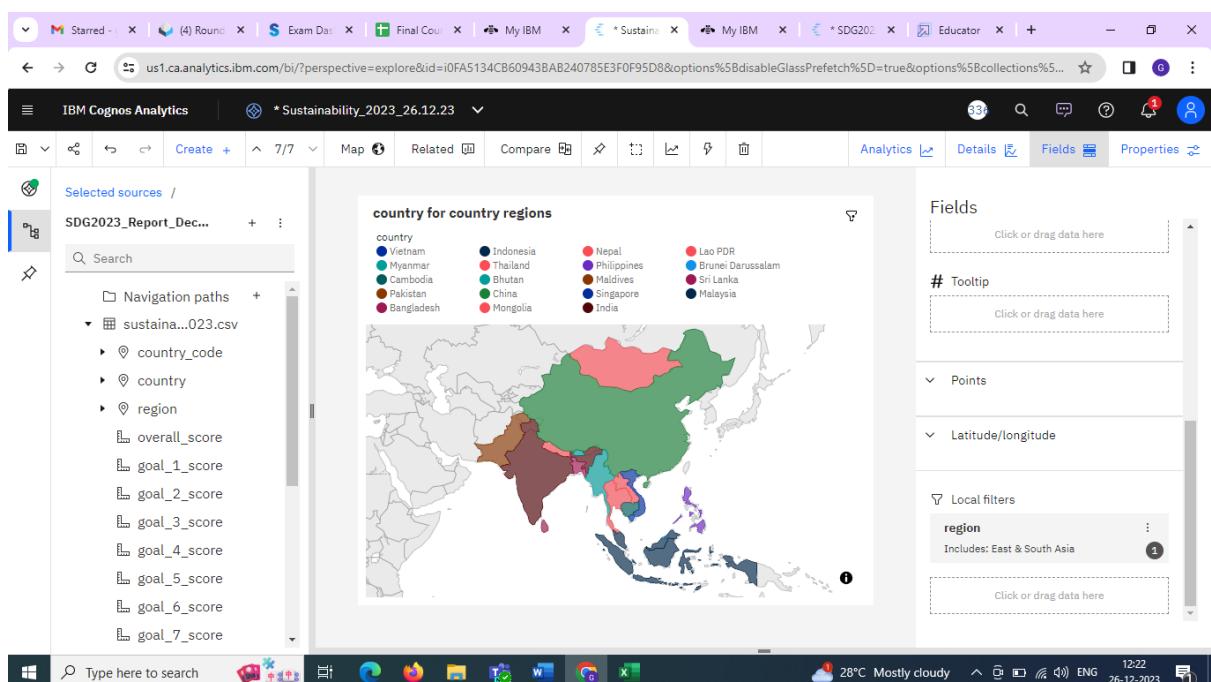
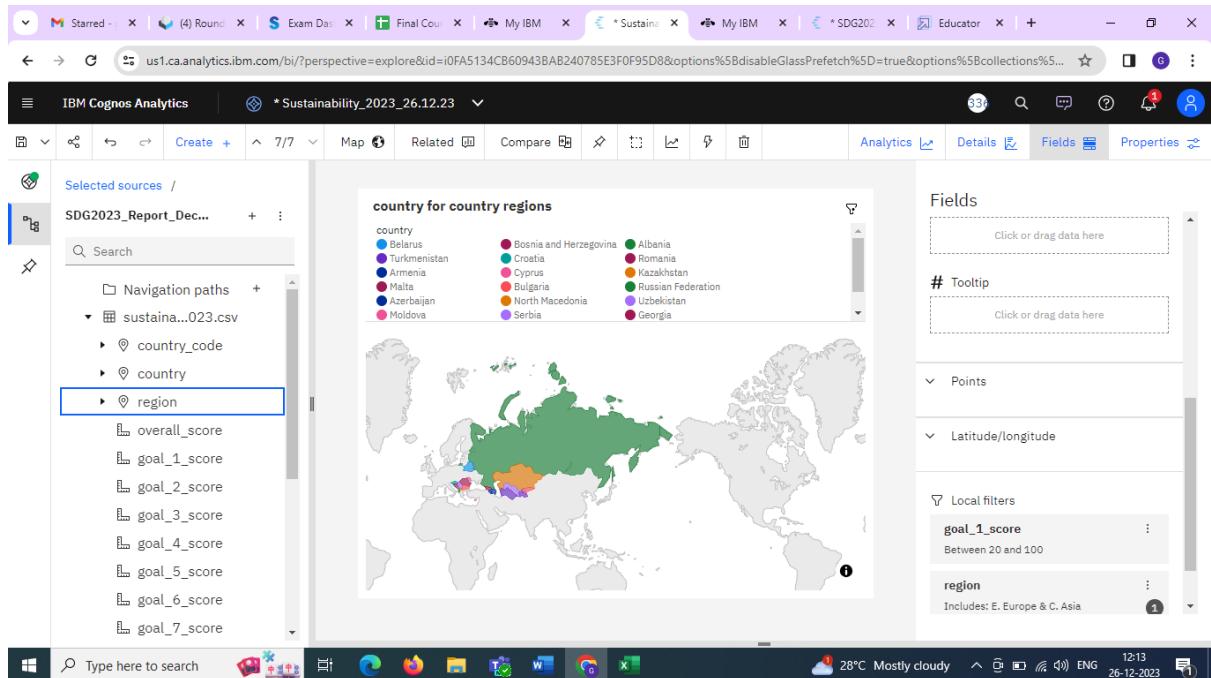
Screenshot of IBM Cognos Analytics interface showing a grid view of data from a CSV file named "sustainab....2023.csv". The grid displays columns: score, goal\_6\_score, goal\_7\_score, goal\_8\_score, goal\_9\_score, and goal\_10\_score. The "goal\_10\_score" column is highlighted.

score	goal_6_score	goal_7_score	goal_8_score	goal_9_score	goal_10_score
	79.384	77.57275	71.18414286	49.03428571	12.3945
	55.218	72.866	64.64357143	61.041	77.049
5	76.2612	68.28525	77.98614286	81.04571429	47.4385
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	50.195	61.78775	79.71285714	53.862	54.5995
5	52.424	70.69575	69.4395	59.994	0
5	59.5098	86.64125	76.05283333	16.25628571	76.4385
5	60.2454	64.33125	62.45328571	67.23042857	48.4705

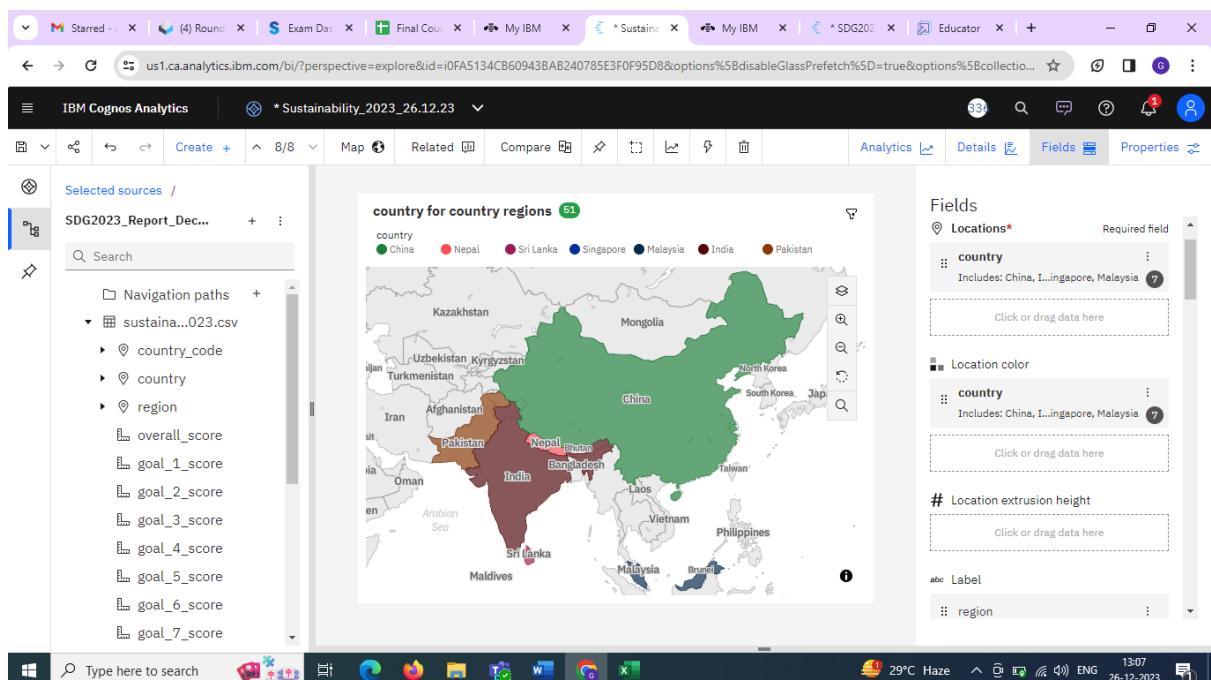
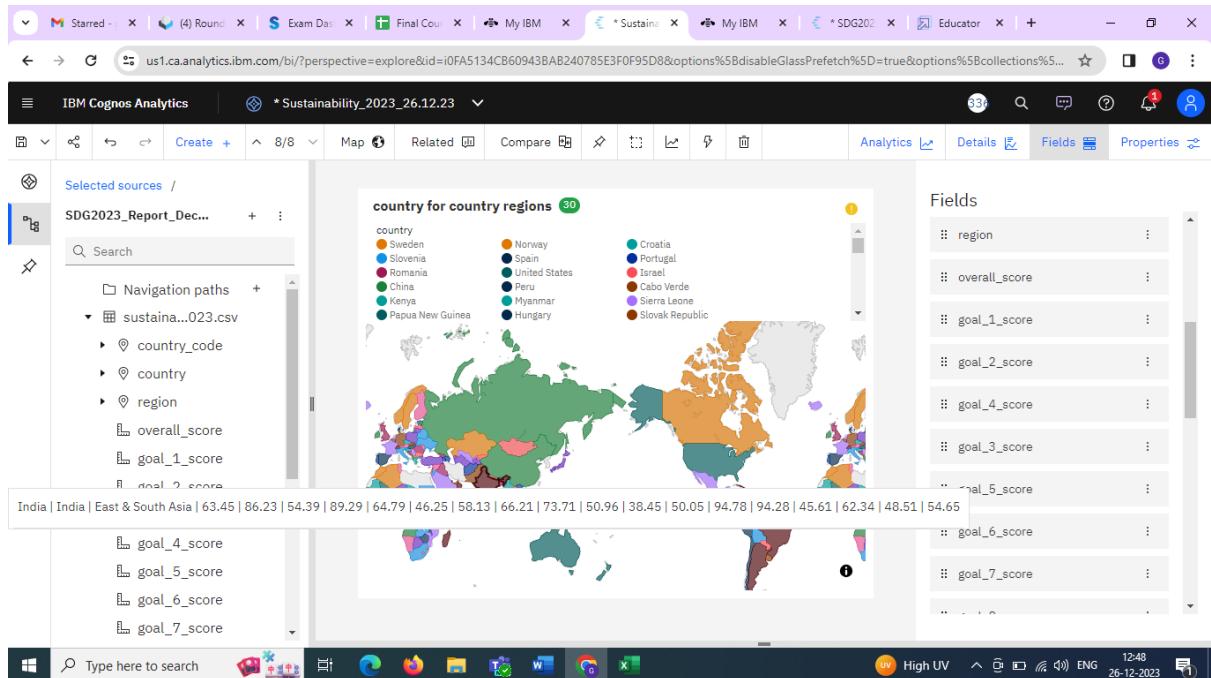
## Visualization – data exploration



## Filter by region – SDG score 1



## Country-wise each data (score, region)



## SDG index data

IBM Cognos Analytics | \* SDG index\_e ... ation\_26.12.23

Selected sources / SDG index\_26.12.23

goal\_3\_score by country colored by year

year: 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022

goal\_3\_score (Average)

Year	goal_3_score (Average)
2000	39.5
2001	40.2
2002	40.9
2003	42.1
2004	43.3
2005	44.4
2006	45.5
2007	47.3
2008	47.8
2009	52.1
2010	52.6
2011	53.5
2012	54.5
2013	55.1
2014	56.0
2015	56.9
2016	57.8
2017	58.7
2018	62.3
2019	63.4
2020	64.3
2021	64.8

Fields

Bars: country (Includes: India)

# Length\*: Required field: goal\_3\_score

# y-start: Click or drag data here

Target: Click or drag data here

Click or drag data here

Type here to search

29°C Haze 13:34 26-12-2023

IBM Cognos Analytics | \* SDG index\_e ... ation\_26.12.23

Selected sources / SDG index\_26.12.23

goal\_1\_score and goal\_2\_score by country colored by year

year - Measures: 2000|goal\_1\_score, 2000|goal\_2\_score, 2001|goal\_1\_score, 2001|goal\_2\_score, 2002|goal\_1\_score, 2002|goal\_2\_score, 2003|goal\_1\_score, 2003|goal\_2\_score, 2004|goal\_1\_score, 2004|goal\_2\_score, 2005|goal\_1\_score, 2005|goal\_2\_score, 2006|goal\_1\_score, 2006|goal\_2\_score, 2007|goal\_1\_score, 2007|goal\_2\_score, 2008|goal\_1\_score, 2008|goal\_2\_score, 2009|goal\_1\_score, 2009|goal\_2\_score, 2010|goal\_1\_score, 2010|goal\_2\_score, 2011|goal\_1\_score, 2011|goal\_2\_score

Values 10

Year	goal_1_score	goal_2_score
2000	34.6	35.6
2001	32.8	33.2
2002	32.3	32.4
2003	36.7	37.4
2004	36.9	37.7
2005	40.9	41.7
2006	47.1	47.6
2007	47.4	49.7
2008	52.8	54.0
2009	52.9	53.5
2010	52.7	52.2
2011	54.3	55.7

Fields

# Length\*: Required field: goal\_1\_score

# goal\_2\_score: Click or drag data here

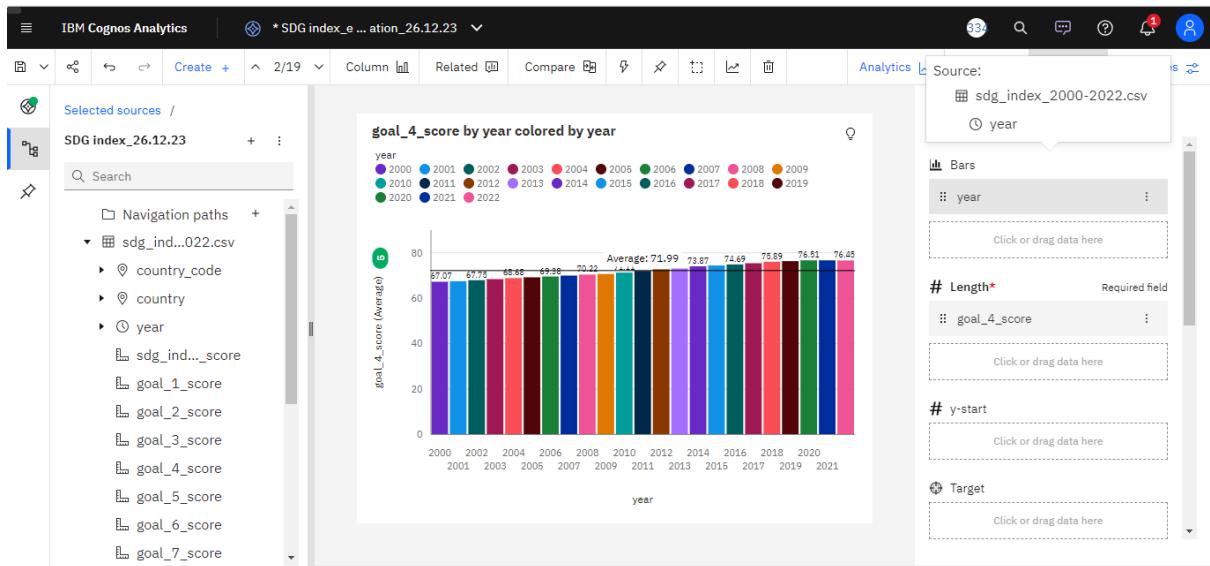
# y-start: Click or drag data here

Target: Click or drag data here

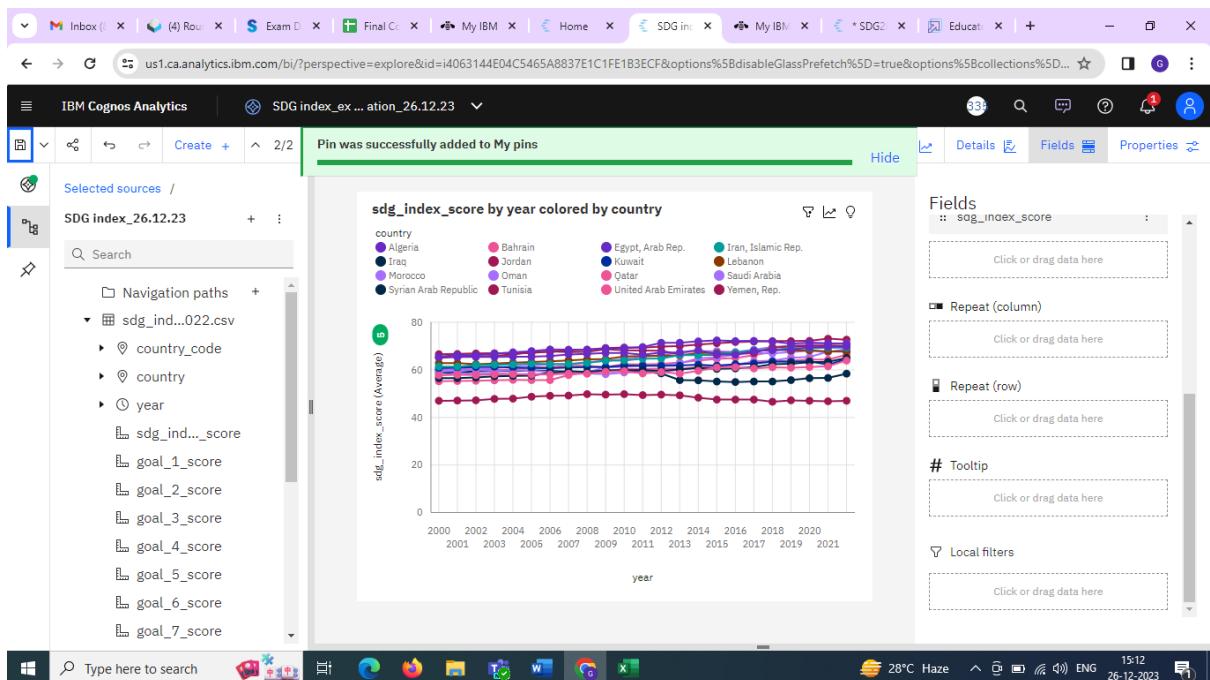
Color: year

Type here to search

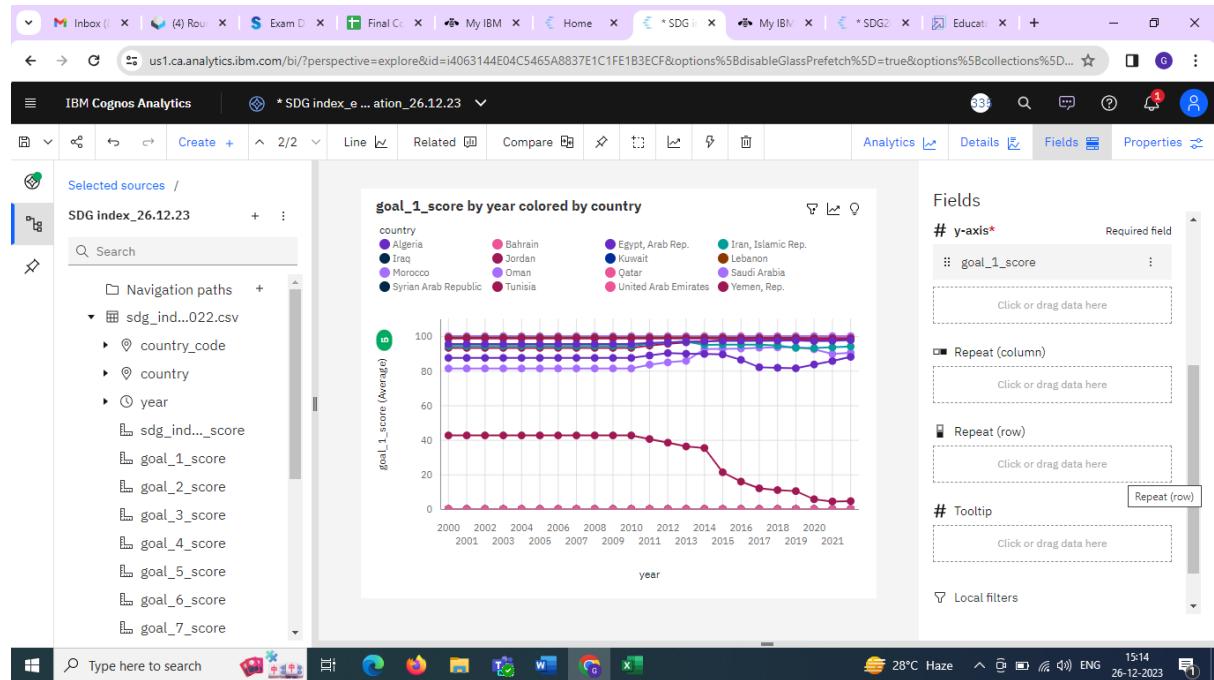
29°C Haze 14:59 26-12-2023



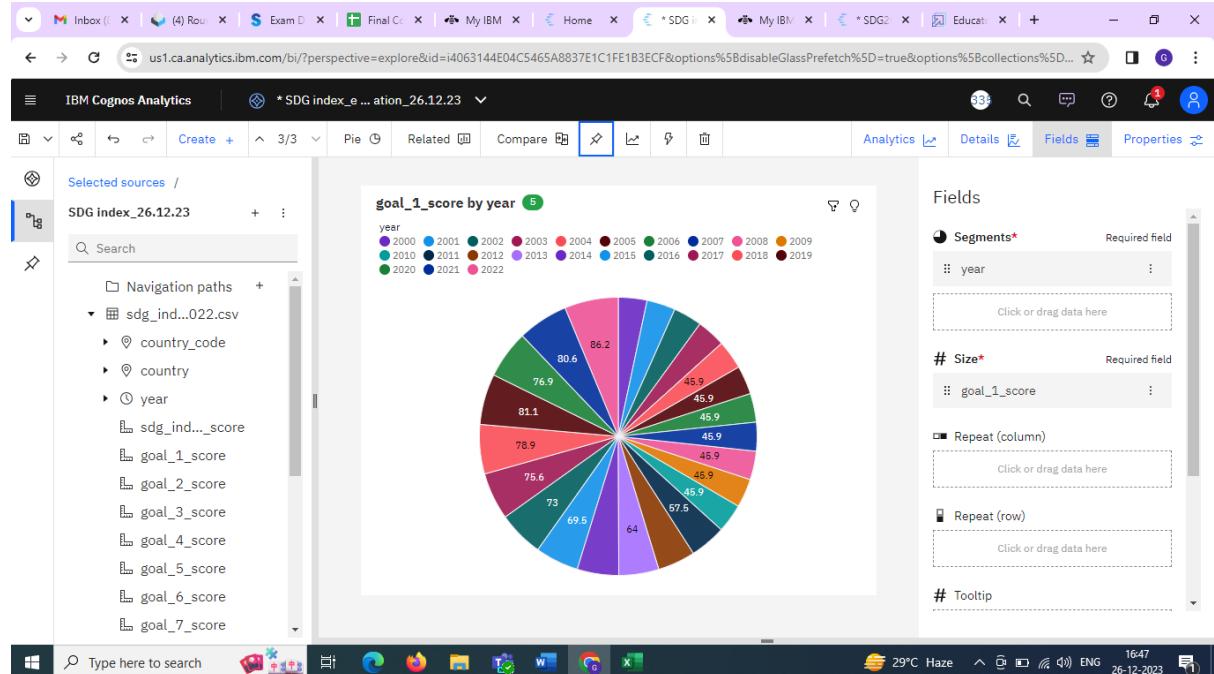
## SDG scores by countries in MENA region

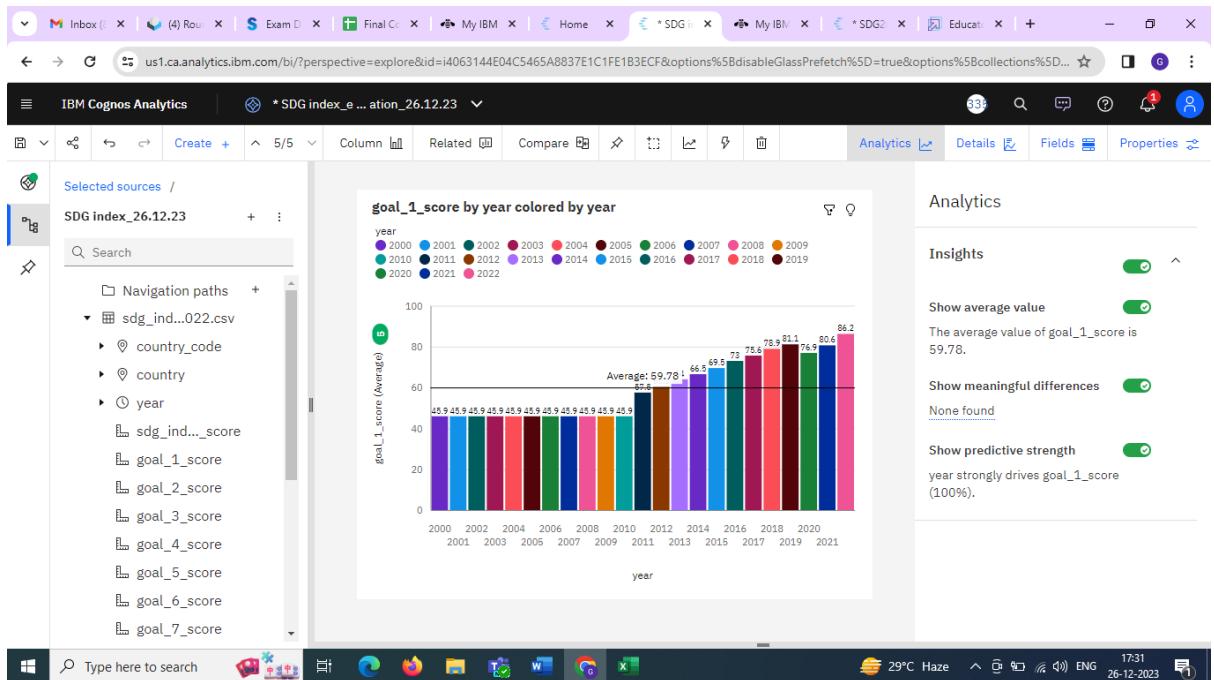


## SDG 1 score

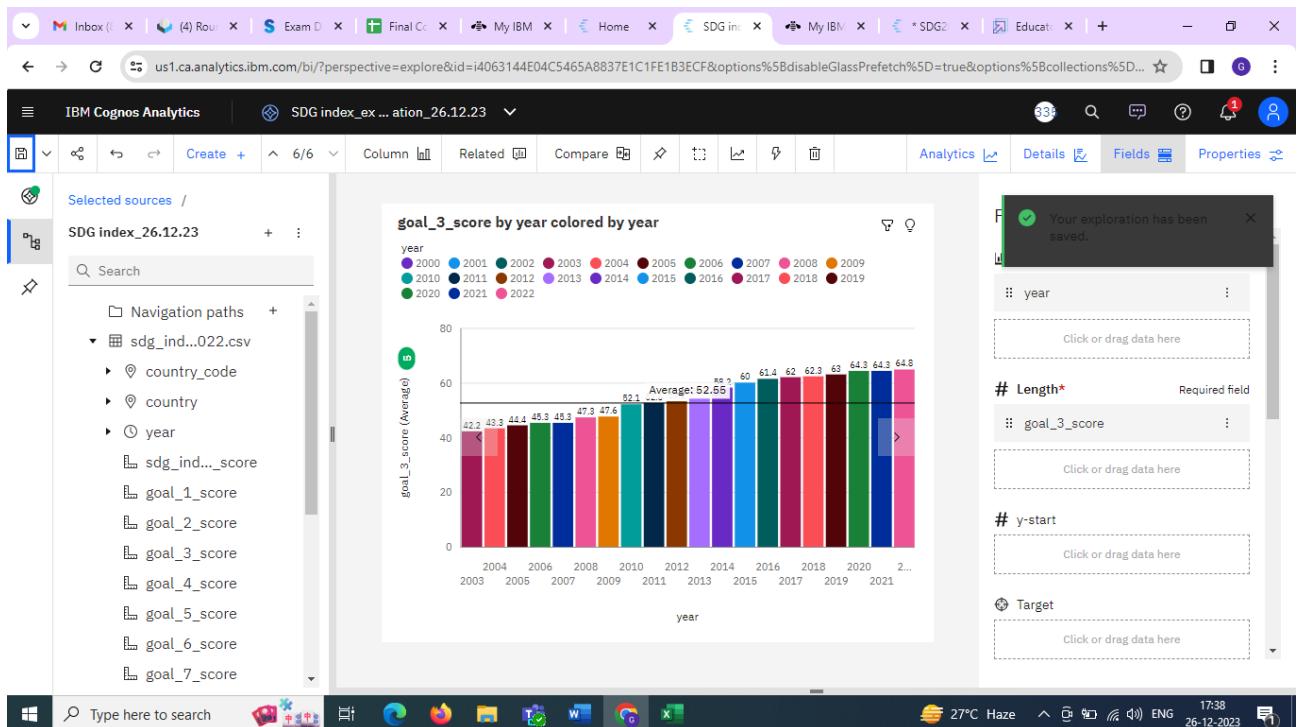


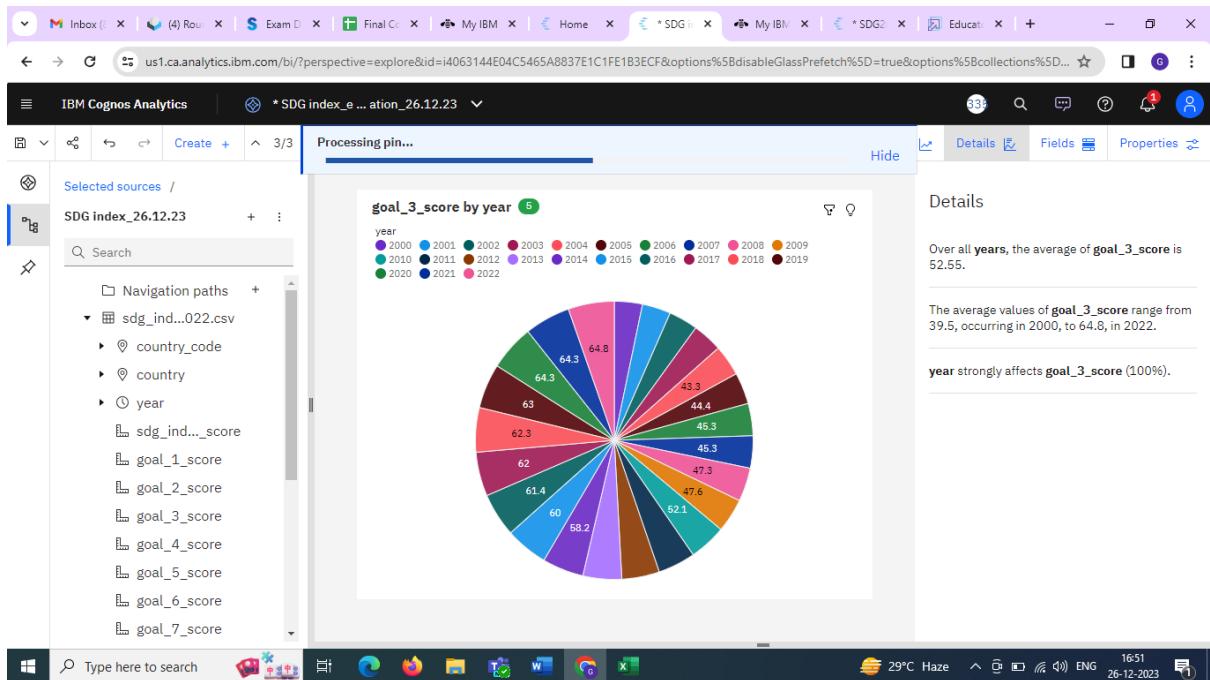
## SDG 1 -Poverty – India



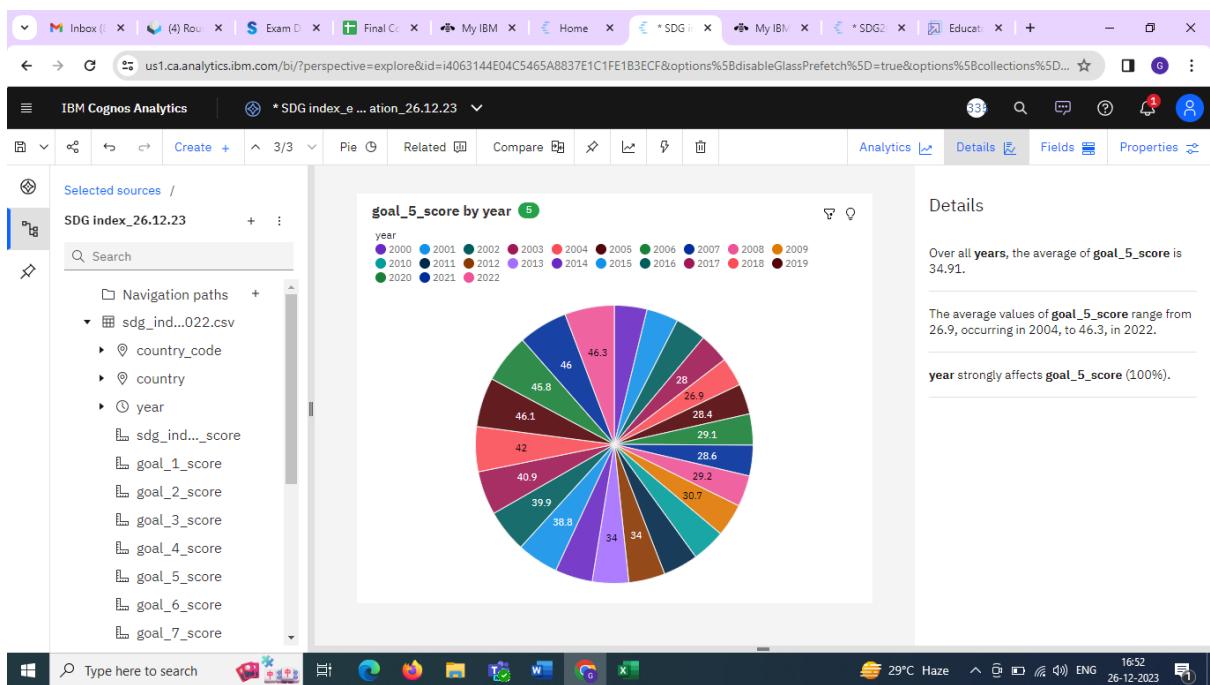


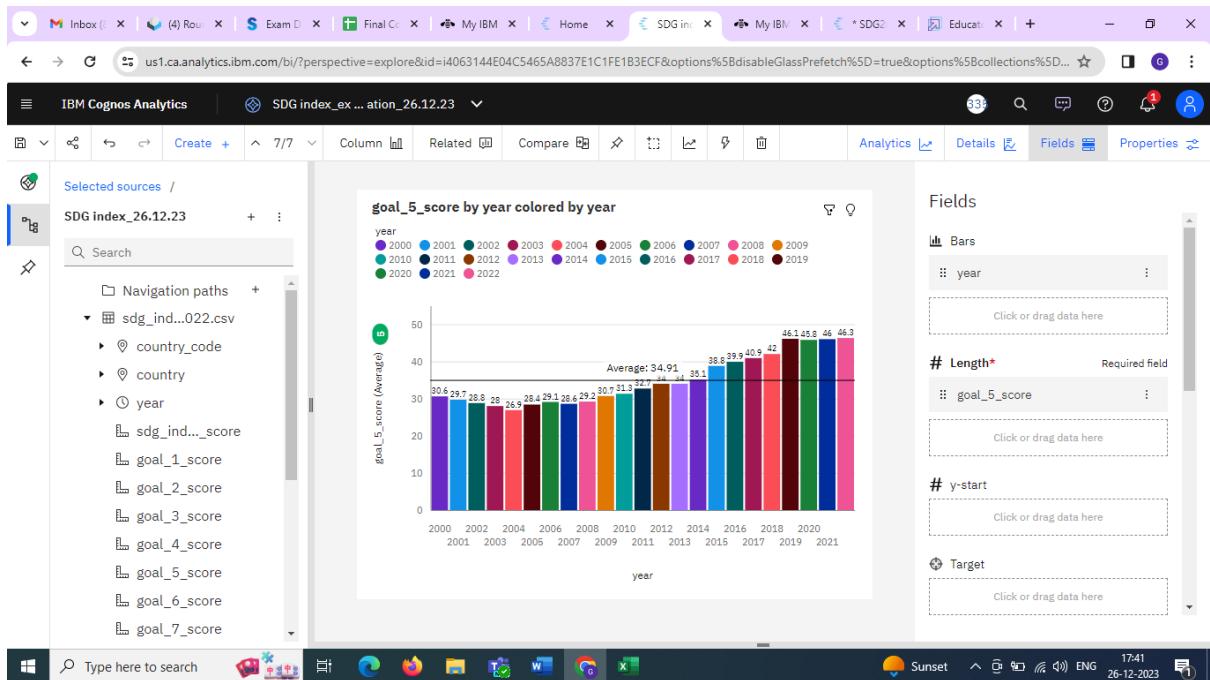
## SDG 3



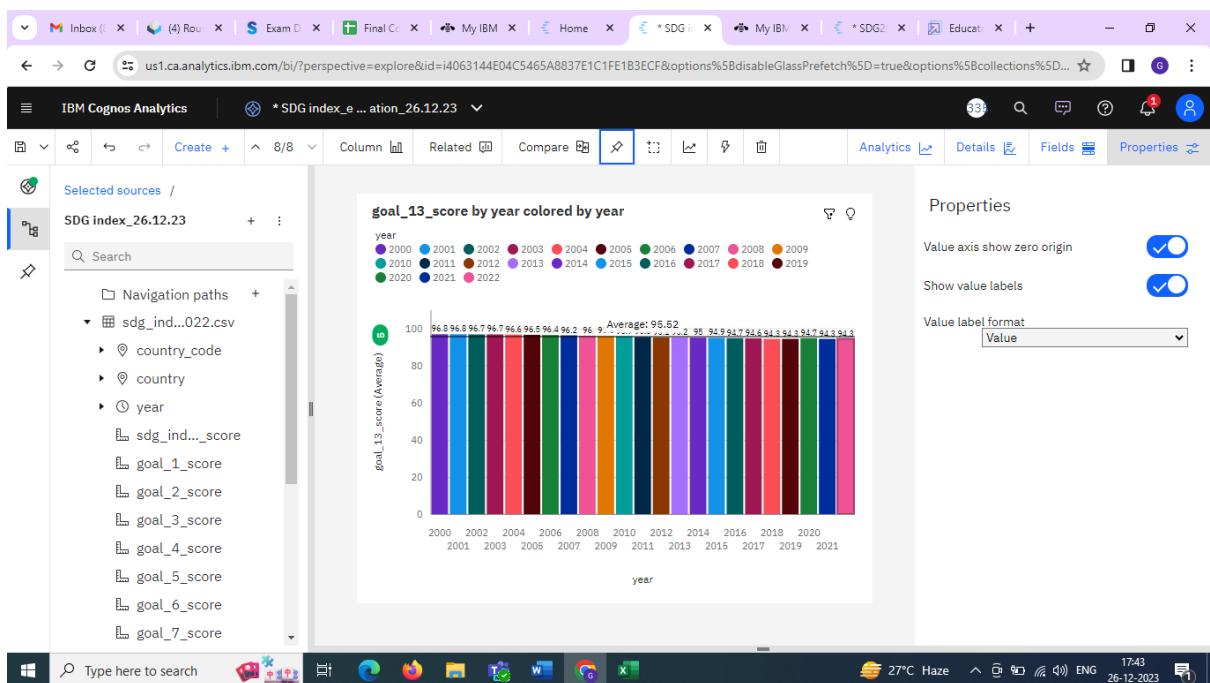


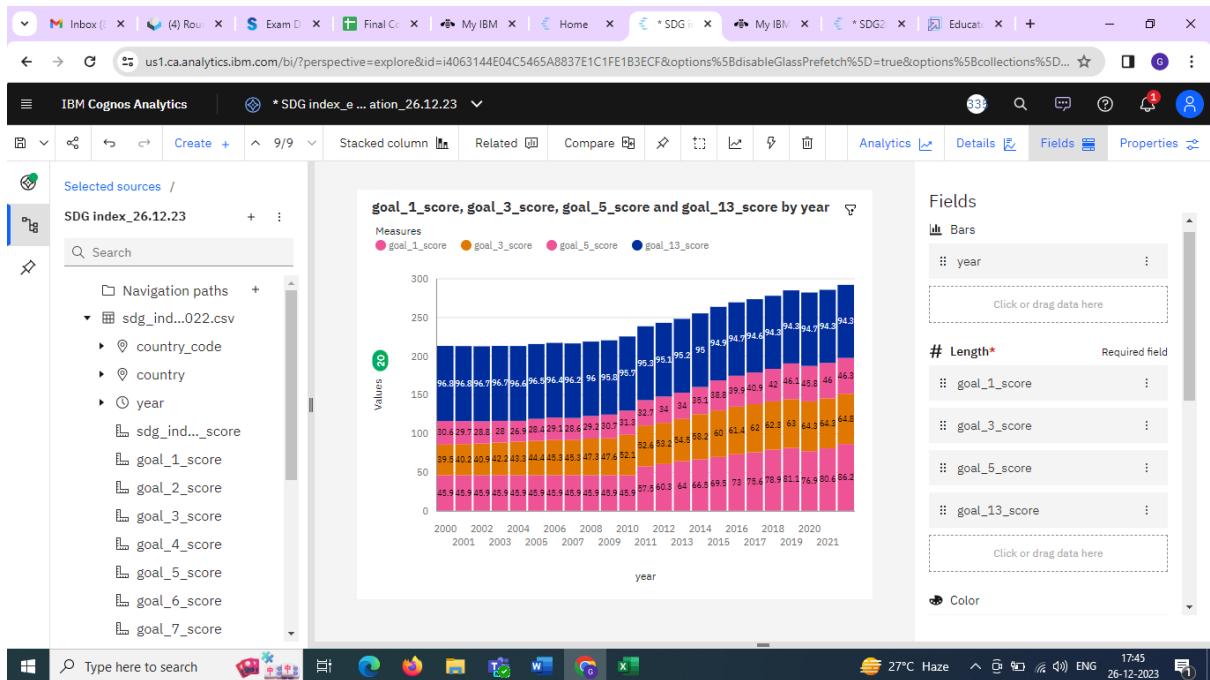
## SDG 5



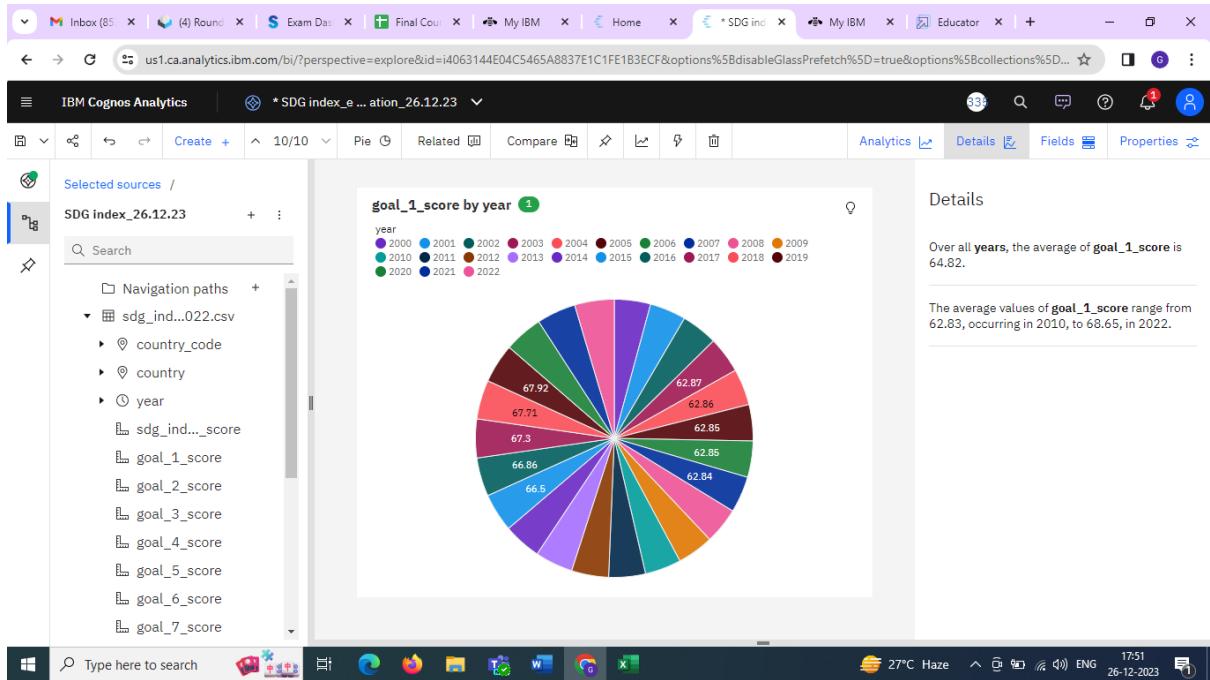


## SDG 13

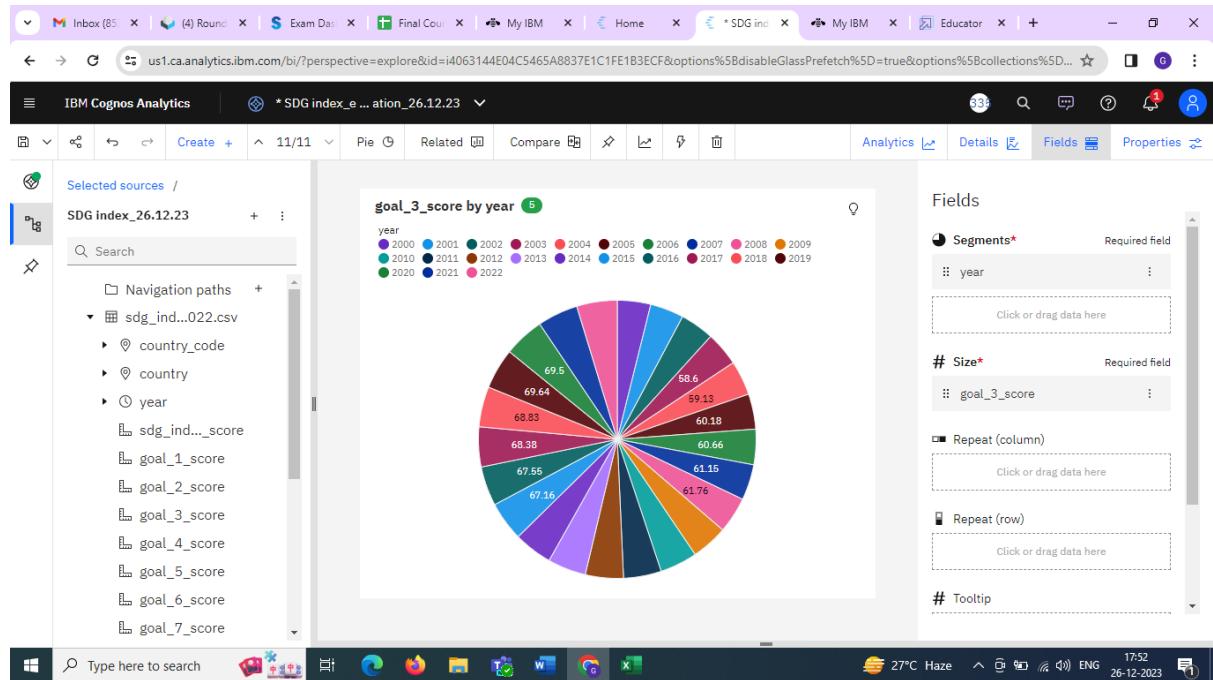




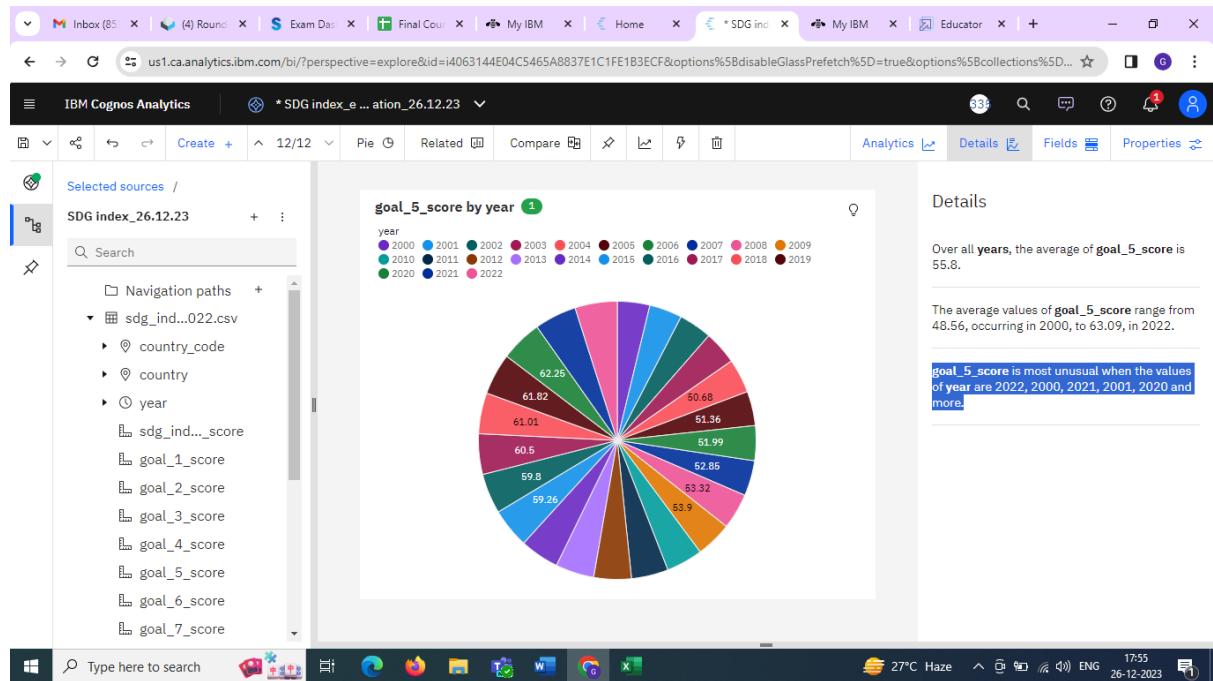
## Overall analysis of SDG 1



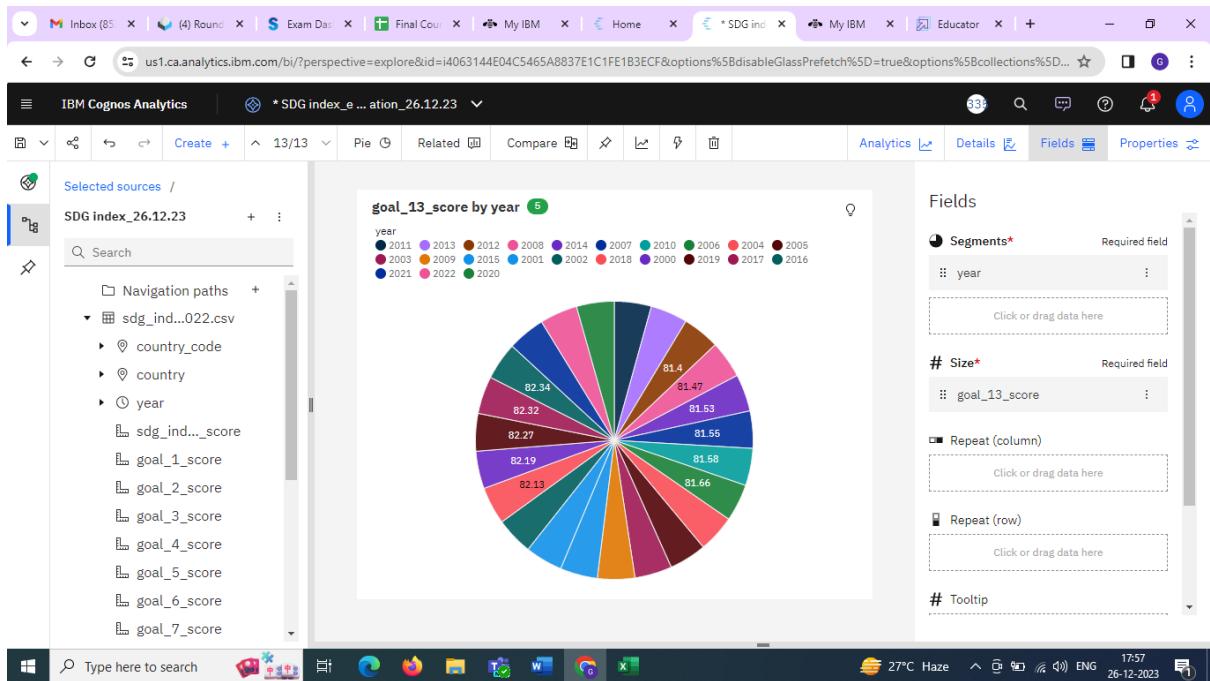
## SDG 3



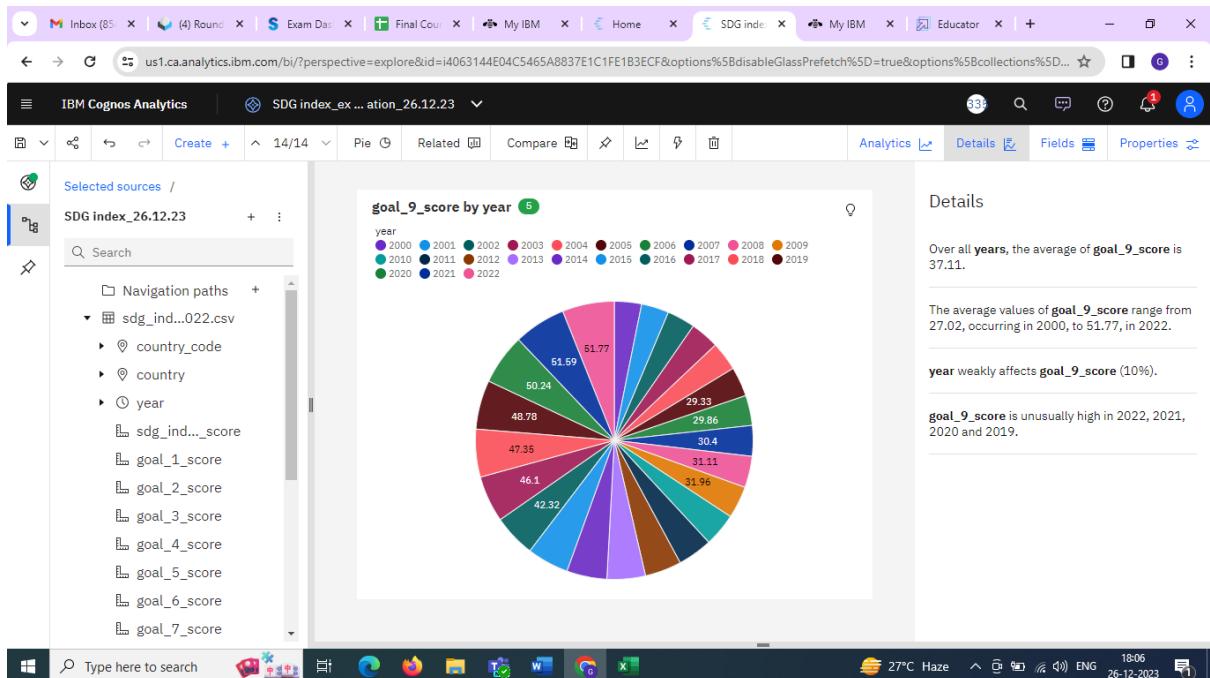
## SDG 5



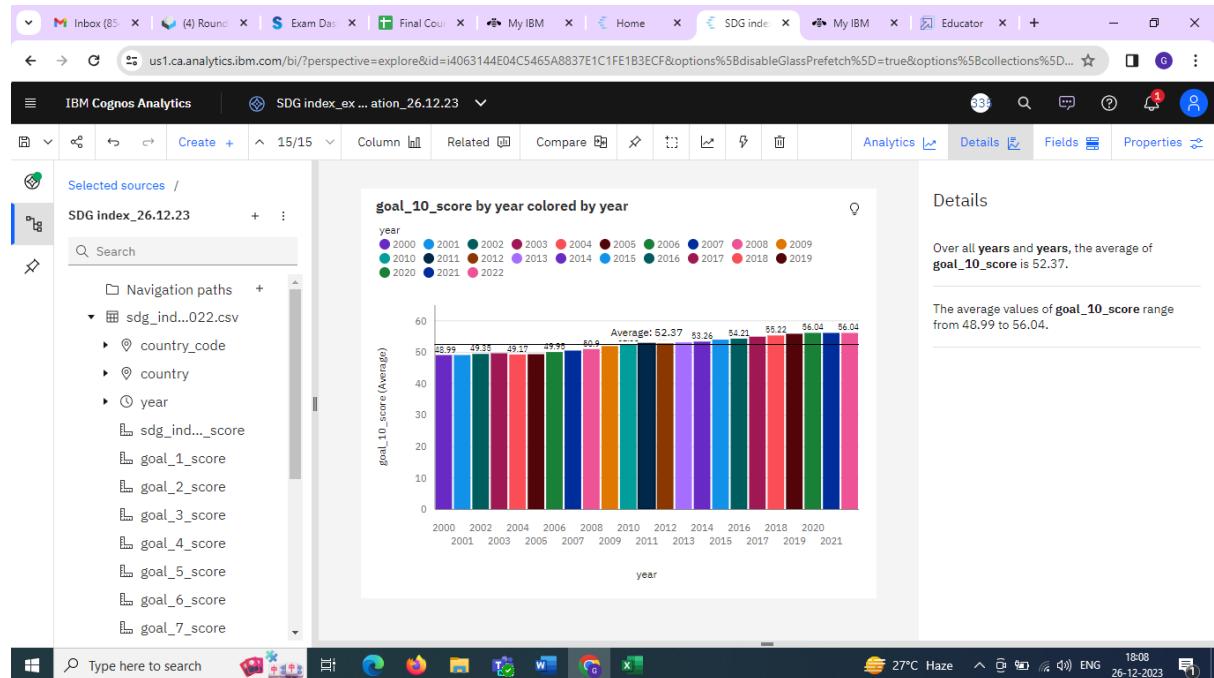
## SDG 13



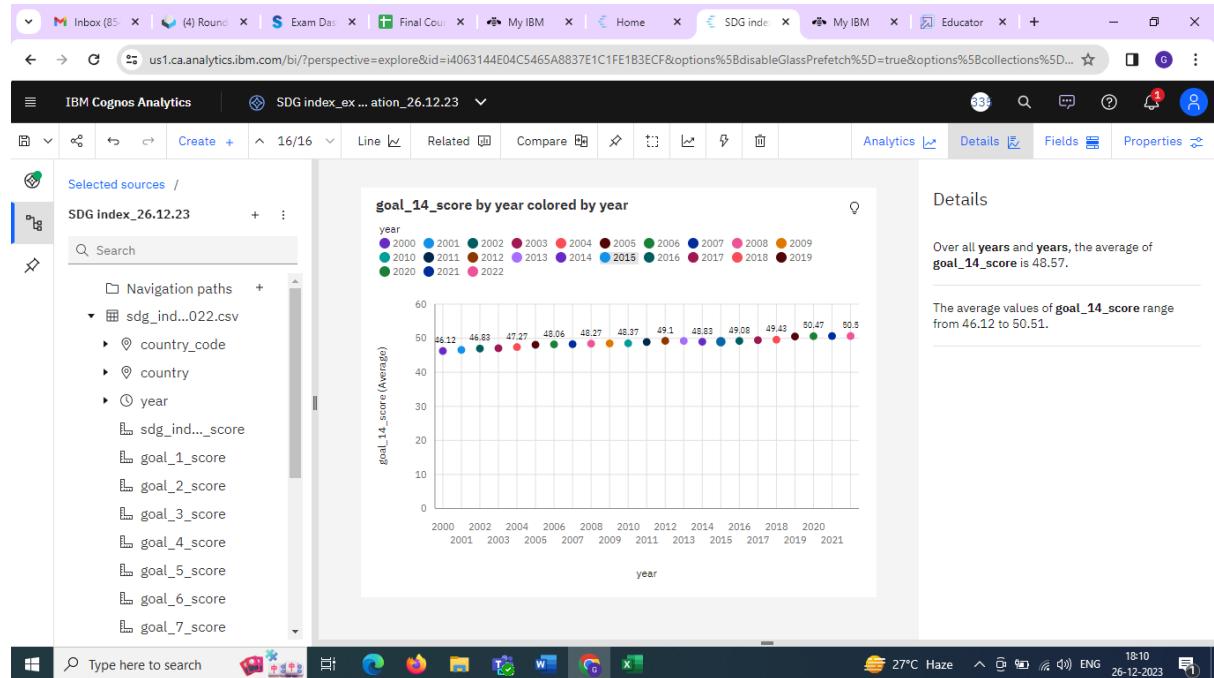
## SDG 9



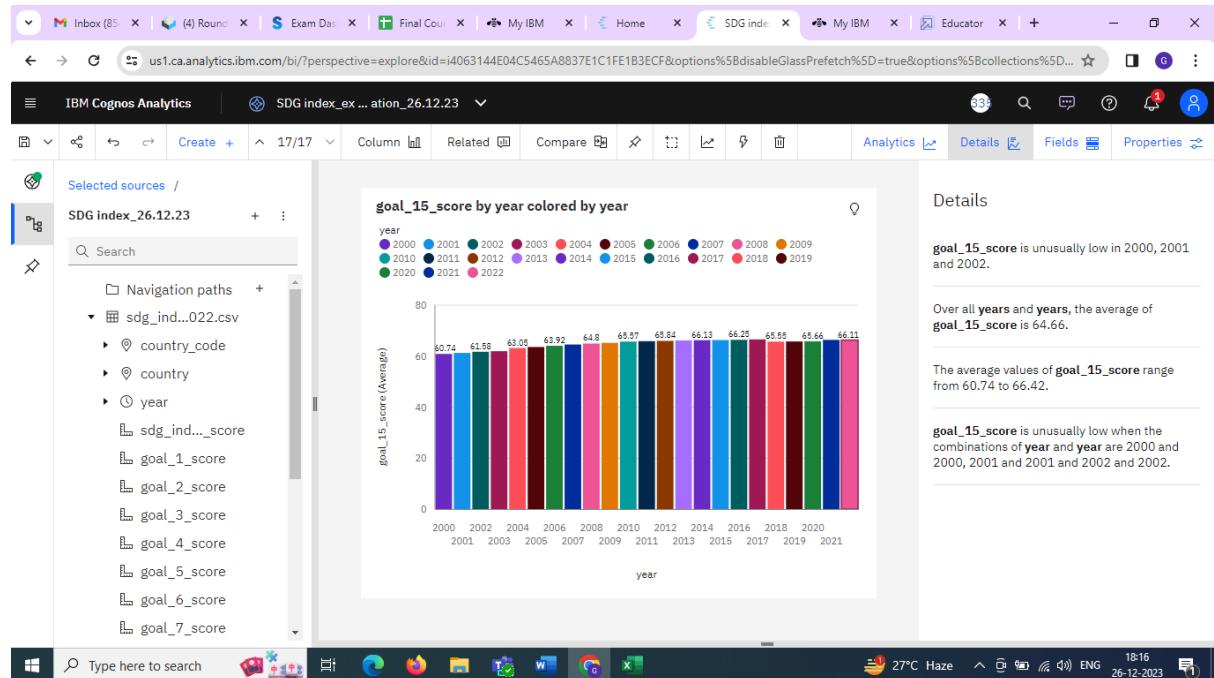
## SDG 10



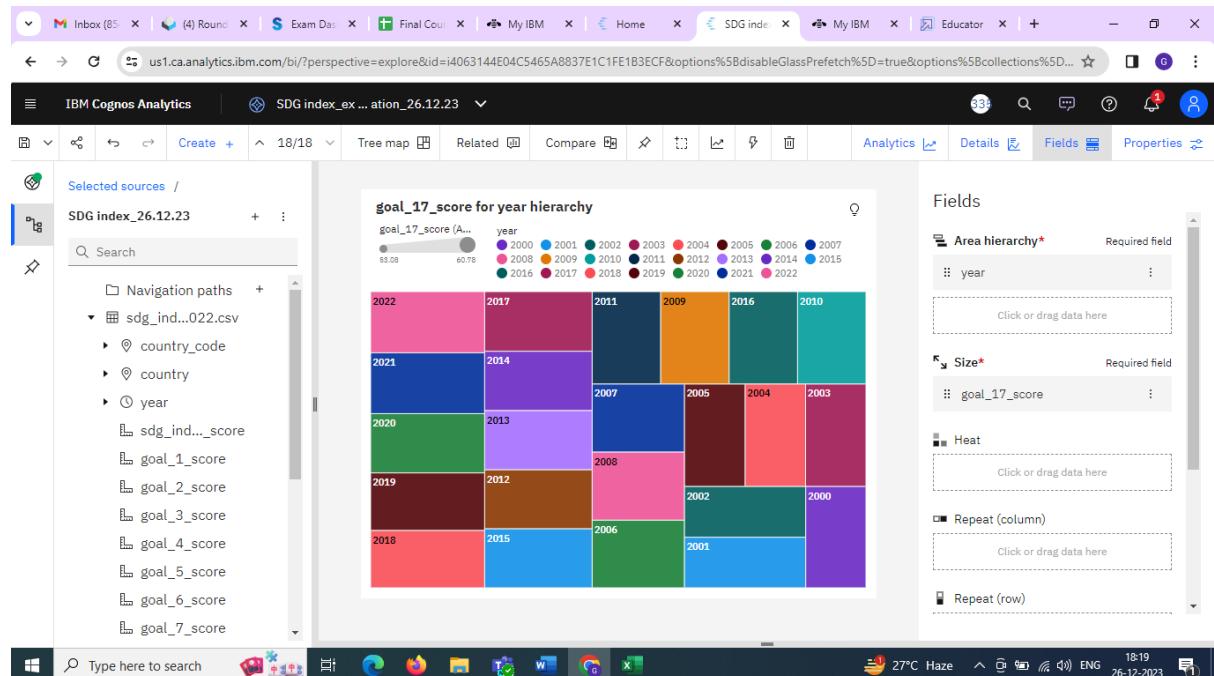
## SDG 14 – Life below water



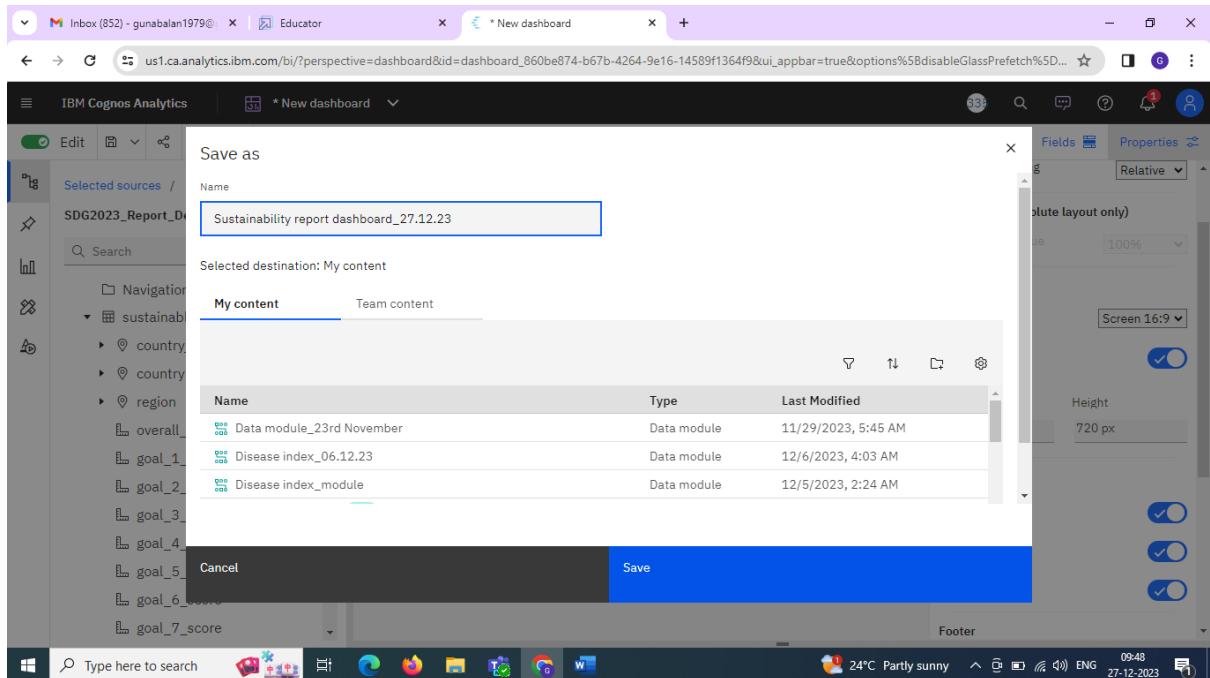
## SDG 15 – Life on Land



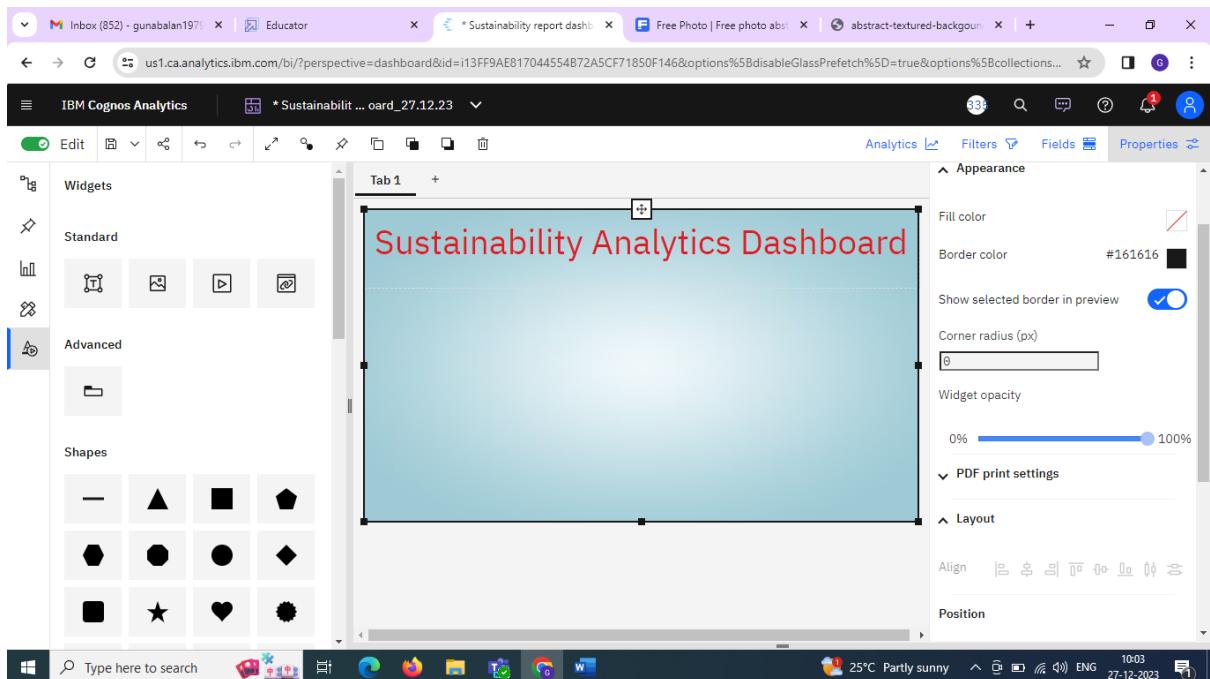
## SDG 17 – Sustainable partnership for goals



## Dashboard creation



## Background creation



Screenshot of the IBM Cognos Analytics interface showing a blank "Sustainability Analytics Dashboard".

The dashboard properties panel on the right is configured as follows:

- Canvas**:
  - Layout positioning: Relative
  - Page zoom (Absolute layout only): 100%
  - Default zoom value: 100%
- Page size**:
  - Preset: Screen 16:9
  - Fit page: Enabled
  - Width: 1280 px
  - Height: 720 px
- Grid**:
  - Show grid: Enabled

The left sidebar contains a "Widgets" section with categories: Standard (including icons for text, image, video, and link) and Advanced (including a folder icon). Below these are "Shapes" with various geometric icons.

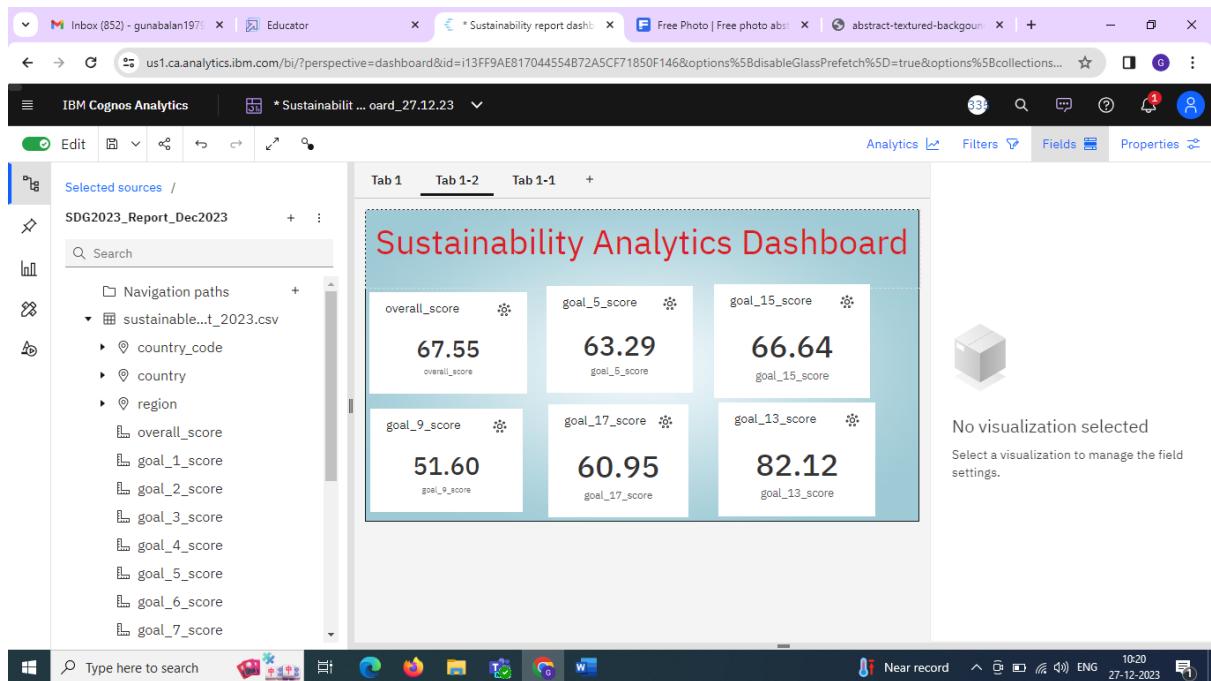
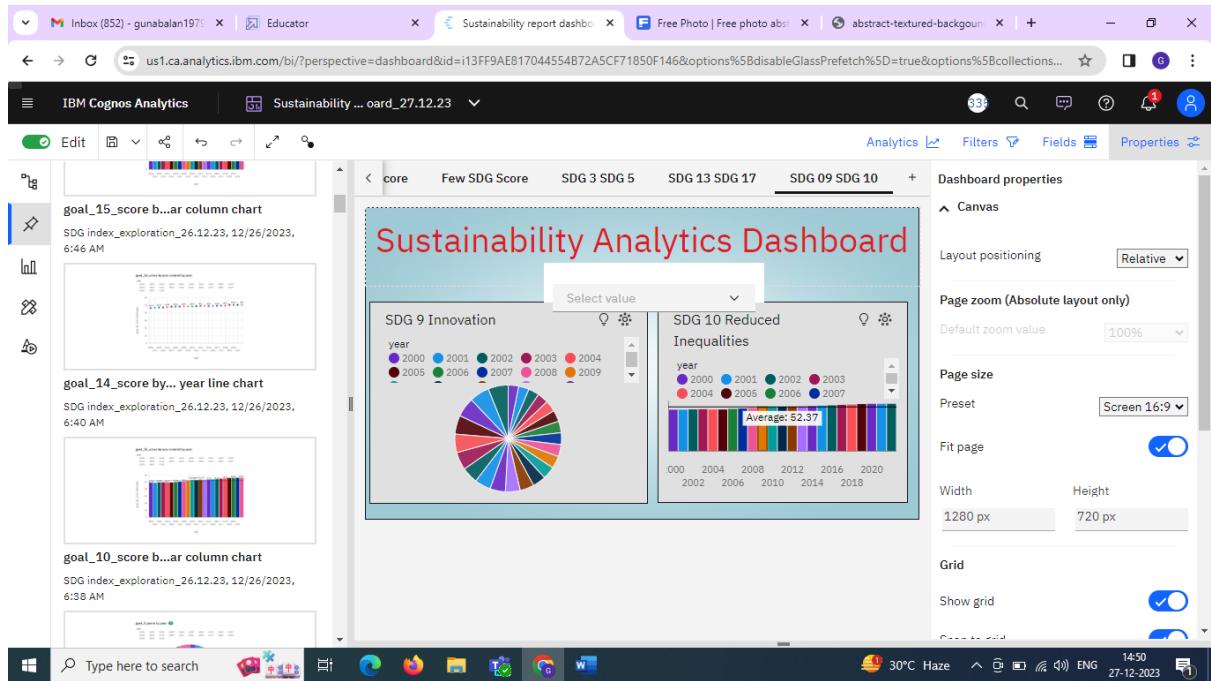
## Overall SDG score

Screenshot of the IBM Cognos Analytics interface showing the "Sustainability Analytics Dashboard" with three visualizations added:

- goal\_15\_score b...ar column chart**: SDG index\_exploration\_26.12.23, 12/26/2023, 6:46 AM
- goal\_14\_score by... year line chart**: SDG index\_exploration\_26.12.23, 12/26/2023, 6:40 AM
- goal\_10\_score b...ar column chart**: SDG index\_exploration\_26.12.23, 12/26/2023, 6:38 AM

The dashboard properties panel on the right is identical to the first screenshot, showing the same configuration for canvas, page size, and grid.

## SDG scores



Sustainability Analytics Dashboard

### SDG 5 - Gender Equality

Average: 34.91

Year	Score
2000	34.91
2001	34.91
2002	34.91
2003	34.91
2004	34.91
2005	34.91
2006	34.91
2007	34.91

### SDG 3 - Good Health and Well-Being

SDG 13 Climate Action

Select value

Year	Score
2011	83.08
2013	83.08
2012	83.08
2008	83.08
2014	83.08
2007	83.08
2010	83.08
2006	83.08
2004	83.08
2005	83.08

### SDG 17 - Partnership

Year	Score
2000	60.78
2001	60.78
2002	60.78
2003	60.78
2004	60.78
2005	60.78
2006	60.78
2007	60.78
2008	60.78
2009	60.78
2010	60.78
2011	60.78
2012	60.78
2013	60.78
2014	60.78
2015	60.78
2016	60.78
2017	60.78
2018	60.78
2019	60.78
2020	60.78
2021	60.78
2022	60.78

Sustainability Analytics Dashboard

### SDG 13 Climate Action

Select value

Year	Score
2011	83.08
2013	83.08
2012	83.08
2008	83.08
2014	83.08
2007	83.08
2010	83.08
2006	83.08
2004	83.08
2005	83.08

### SDG 17 - Partnership

Year	Score
2000	60.78
2001	60.78
2002	60.78
2003	60.78
2004	60.78
2005	60.78
2006	60.78
2007	60.78
2008	60.78
2009	60.78
2010	60.78
2011	60.78
2012	60.78
2013	60.78
2014	60.78
2015	60.78
2016	60.78
2017	60.78
2018	60.78
2019	60.78
2020	60.78
2021	60.78
2022	60.78

Sustainability report dashboard

us1.ca.analytics.ibm.com/bi/?perspective=dashboard&id=i13FF9AE817044554B72A5CF71850F146&options%5BdisableGlassPrefetch%5D=true&options%5Bcollections...

IBM Cognos Analytics

Sustainability ... ord\_27.12.23

Analytics Filters Fields Properties

goal\_15\_score b...ar column chart

SDG index\_exploration\_26.12.23, 12/26/2023, 6:46 AM

goal\_14\_score by... year line chart

SDG index\_exploration\_26.12.23, 12/26/2023, 6:40 AM

goal\_10\_score b...ar column chart

SDG index\_exploration\_26.12.23, 12/26/2023, 6:38 AM

SDG 9 Innovation

SDG 10 Reduced Inequalities

Sustainability Analytics Dashboard

Select value

year

2000 2001 2002 2003 2004  
2005 2006 2007 2008 2009

year

2000 2001 2002 2003 2004  
2005 2006 2007 2008 2009

Average: 52.37

000 2004 2008 2012 2016 2020  
2002 2006 2010 2014 2018

Dashboard properties

Canvas

Layout positioning Relative

Page zoom (Absolute layout only)

Default zoom value 100%

Page size

Preset Screen 16:9

Fit page

Width 1280 px Height 720 px

Grid

Show grid

Cancel

Type here to search

30°C Haze 14:42 27-12-2023

IBM Cognos Analytics

Sustainability ... ord\_27.12.23

Analytics Filters Fields Properties

goal\_1\_score by region pie chart

New exploration, 12/26/2023, 12:14 AM

overall\_score by...on column chart

New exploration, 12/26/2023, 12:13 AM

country and over...try regions map

New exploration, 12/26/2023, 12:04 AM

overall\_score by ...core point chart

Building PDF...

Sustainability Analytics Dashboard

Select value

SDG 9 Innovation

SDG 10 Reduced Inequalities

Cancel

Dashboard properties

Canvas

Layout positioning Relative

Page zoom (Absolute layout only)

Default zoom value 100%

Page size

Preset Screen 16:9

Fit page

Width 1280 px Height 720 px

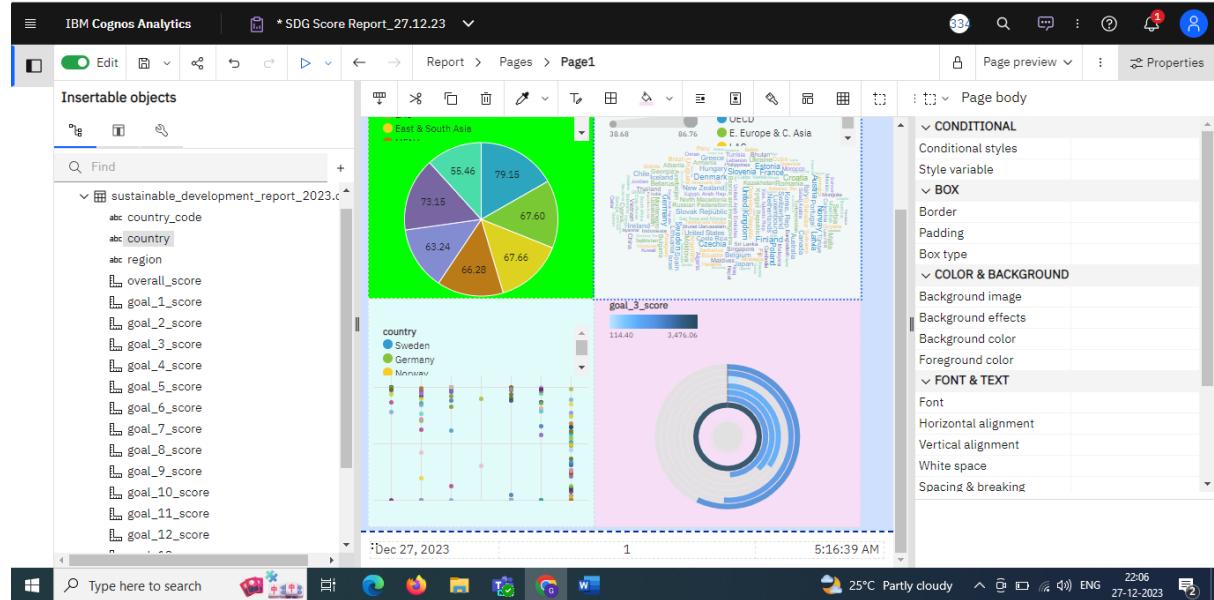
Grid

Show grid

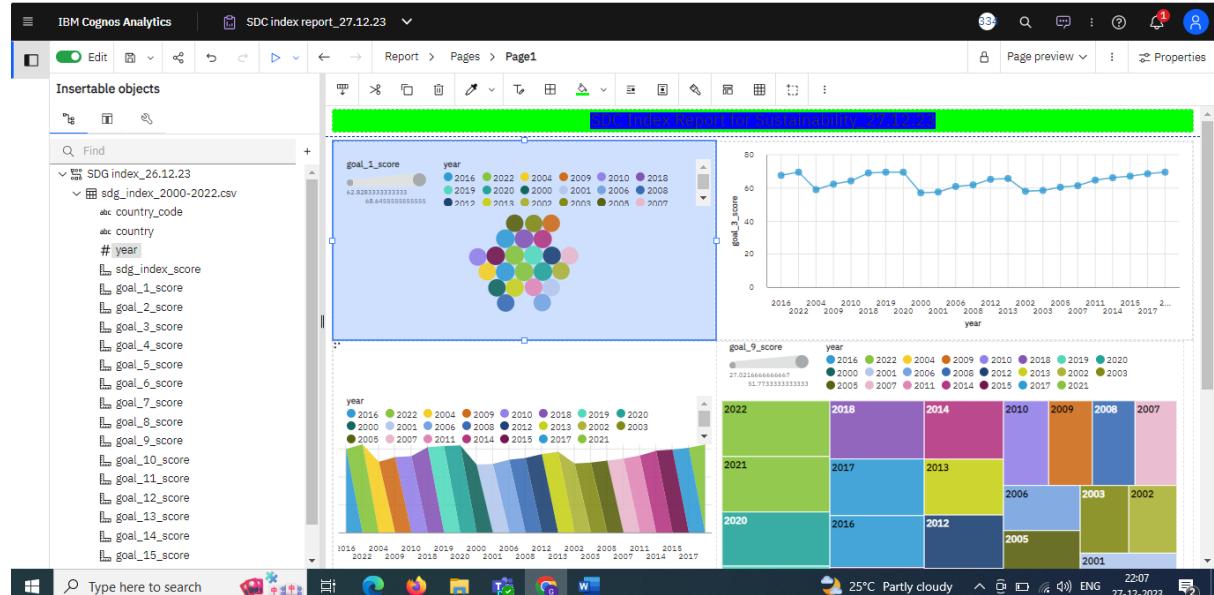
Cancel

## Report

### SDG Score report



### SDG index report



## Story

IBM Cognos Analytics SDG report story\_27.12.23

goal\_13\_score by year pie chart  
SDG index\_exploration\_26.12.23, 12/26/2023, 6:27 AM

goal\_5\_score by year pie chart  
SDG index\_exploration\_26.12.23, 12/26/2023, 6:25 AM

goal\_3\_score by year pie chart  
SDG index\_exploration\_26.12.23, 12/26/2023, 6:23 AM

**SDG Report Story**  
SUSTAINABLE DEVELOPMENT GOALS  
17 PARTNERSHIP FOR THE GOALS

Overall SDG score analysis  
OECD - 79.15  
SSA - 55.46

Overall SDG score by region

region	score
E. Europe & C. Asia	79.15
LAC	55.46
MENA	79.15
OECD	79.15
Oceania	79.15

Scene 1 of 5 | 0:00.0 | 0:10.0

Type here to search 28°C Partly sunny 13:03 28-12-2023

IBM Cognos Analytics SDG report story\_27.12.23

goal\_13\_score by year pie chart  
SDG index\_exploration\_26.12.23, 12/26/2023, 6:27 AM

goal\_5\_score by year pie chart  
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**SDG Report Story**  
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Overall SDG score by region

region	score
E. Europe & C. Asia	79.15
LAC	55.46
MENA	79.15
OECD	79.15
Oceania	79.15
Sub-Saharan Africa	55.46

**SDG 1 - Poverty**

average score is 59.78

year: 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023

Average: 59.78

Scene 2 of 5 | 0:00.0 | 0:05.0

IBM Cognos Analytics SDG report story\_27.12.23

goal\_13\_score by year pie chart  
SDG index\_exploration\_26.12.23, 12/26/2023, 6:27 AM

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SDG index\_exploration\_26.12.23, 12/26/2023, 6:25 AM

goal\_3\_score by year pie chart  
SDG index\_exploration\_26.12.23, 12/26/2023, 6:23 AM

**Overall SDG score by region**

region: E. Europe & C. Asia, LAC, MENA, OECD, Oceania, Sub-Saharan Africa

Overall SDG score analysis  
OECD - 79.15  
SSA - 55.46

**SDG 1 - Poverty**

average score is 59.78

year: 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023

Average: 59.78

**SDG 3 Good Health and Well-being**

average score is 52.55

year: 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023

Scene 3 of 5 | 0:00.0 | 0:05.0

IBM Cognos Analytics | SDG report story\_27.12.23

Analytics Filters Fields Properties

goal\_13\_score by year pie chart  
SDG index\_exploration\_26.12.23, 12/26/2023, 6:27 AM

goal\_5\_score by year pie chart  
SDG index\_exploration\_26.12.23, 12/26/2023, 6:25 AM

goal\_3\_score by year pie chart  
SDG index\_exploration\_26.12.23, 12/26/2023, 6:23 AM

**SDG 1 - Poverty**  
SDG 3 average score is 52.55.

**SDG 3 Good Health and Well-being**

**SDG 17 - Sustainable Partnership for goals**  
SDG 17 average score is 55.54.

Scene 4 of 5 | 0:00.0 | 0:05.0

28°C Partly sunny | ENG 13:04 28-12-2023

IBM Cognos Analytics | SDG report story\_27.12.23

Analytics Filters Fields Properties

goal\_13\_score by year pie chart  
SDG index\_exploration\_26.12.23, 12/26/2023, 6:27 AM

goal\_5\_score by year pie chart  
SDG index\_exploration\_26.12.23, 12/26/2023, 6:25 AM

goal\_3\_score by year pie chart  
SDG index\_exploration\_26.12.23, 12/26/2023, 6:23 AM

**SDG 3 Good Health and Well-being**  
SDG 17 average score is 55.54.

**SDG 17 - Sustainable Partnership for goals**

Scene 5 of 5 | 0:00.0 | 0:05.0

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