Data Governance Quality Index

Visualization User Manual for

PMO, DMEO and M/D Users

Version 1.2

Revision History**:**

Revision No	Revision Date	Revision By	Approved Date	Approved By	Description
1.0	08-11-2021	Pranav Rana	26-11-2021	Syamala Sharma Mokshi Chug	Initial Copy
1.1	21-12-2021	Pranav Rana	24-12-2021	Syamala Sharma Praveen Verma	update headers
1.2	17-02-2022	Somnath Mitra	18-02-2022		

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1 Preface

The first round of Data Governance Quality Index used a portal to collect information on the questionnaire from Ministries and Departments. The data collection was done as a one-time, data entry exercise which did not require very elaborate tool to perform the required tasks. However, as envisioned in the letter from PMO, the DGQI will continue as an on-going exercise with increased scope and complexity. Therefore, a new DGQI dashboard/ portal will need to be developed to support the required features of the activity. The main features of the dashboard would include quarterly/ ongoing basis updation of data, a separate module for broad action points, back-end support for Index score calculation and ranking, visualization of score and ranking among others.

About the dashboard:

Dashboard is created for the DEMO Admin to calculate DGQI scores of Ministry or Department, pillar or theme wise score, scheme & NSI wise DGQI score, action points compliance, summary of ministry of department DGQI score, and trend analysis.
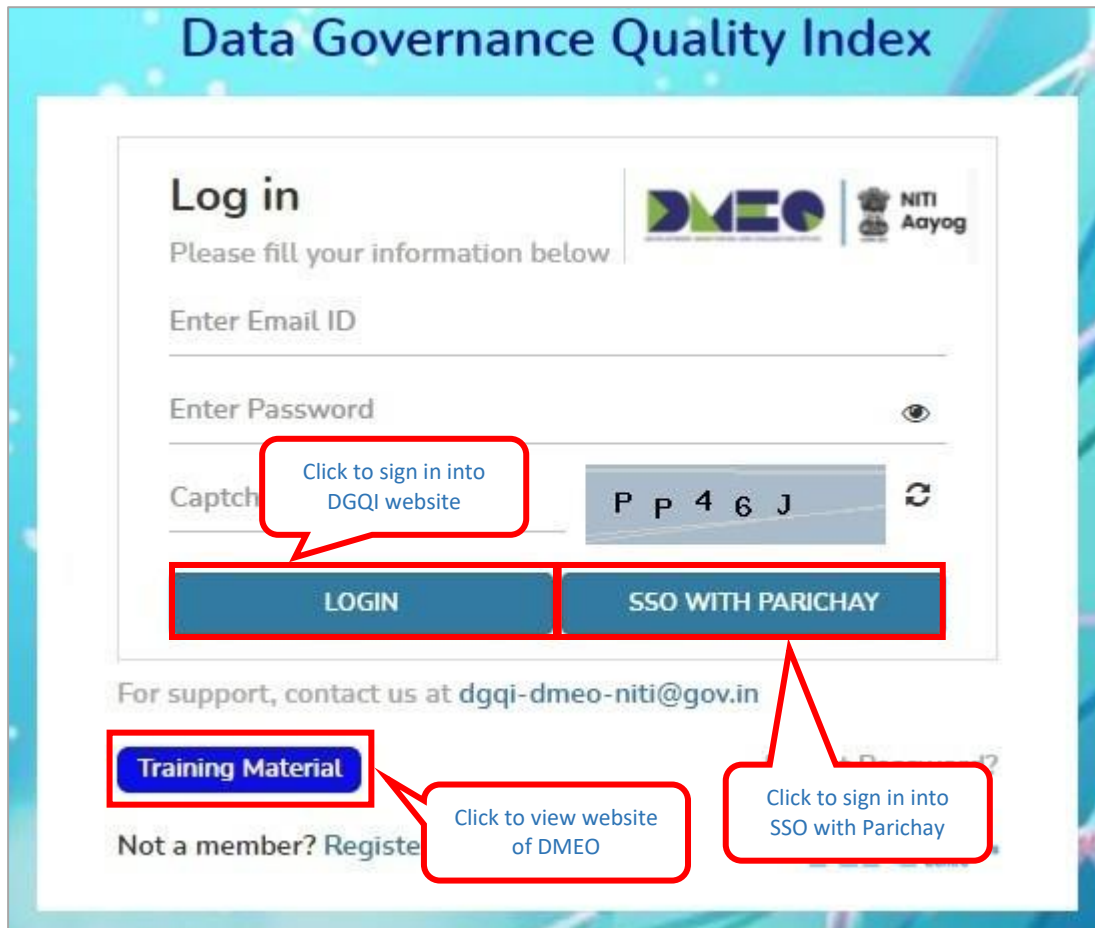
This manual illustrates the functionality for Visualization Module, how DEMO admin can calculate and view various scores of questionnaires. Care is taken to explain each function minutely.

2   Login

Enter site URL- https://dgqi.gov.in/ in browser press enter key.
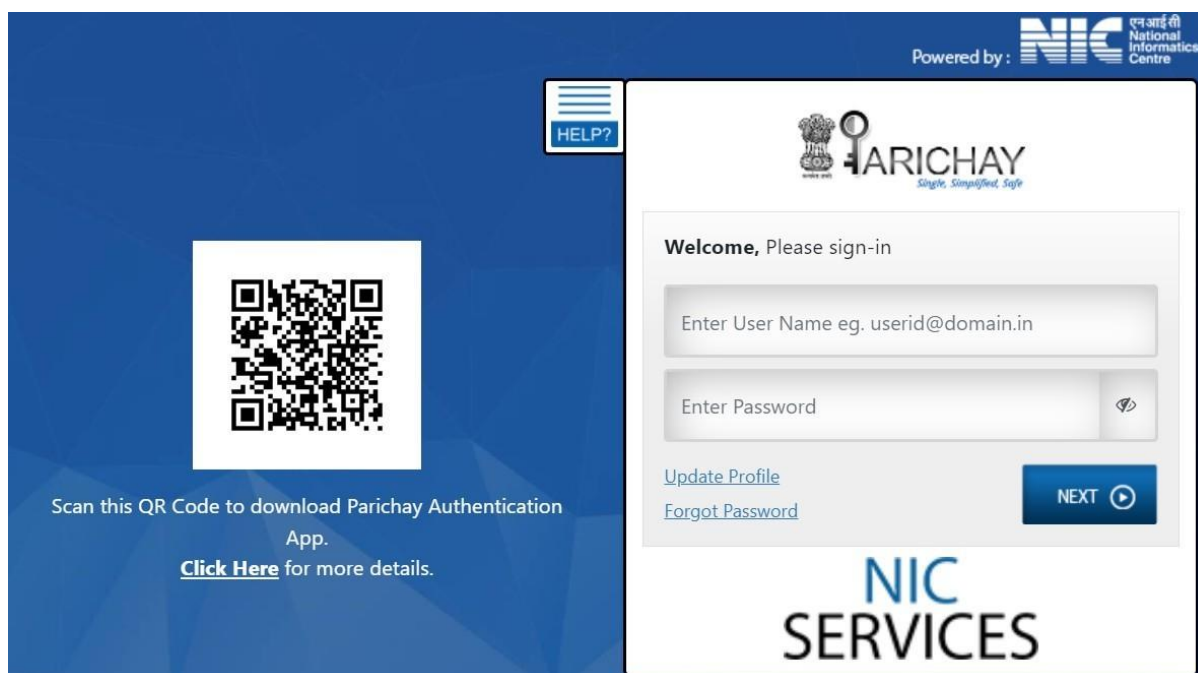
Login screen will be displayed.

Figure 2-1

- Enter user ID and password
- Enter CAPTCHA code as displayed
- Click **Forgot Password?** link in case of forgotten password.
- Click **LOGIN** to sign in into DGQI
- Click **Training Material** to view the website of DMEO

Note: The above log-in process will be same for all users (DMEO Admin, DMEO User, M/D Admin, M/D Data Entry) who have done **Normal Registration**.

For all users who have **Registered Through Parichay**, users may follow below steps:

- Click [SSO WITH PARICHAY] to sign in
- Users will be redirected to the Parichay log-in screen as below

- User will use their NIC email ids (.nic/.gov/. govcontractor) and password to log-in to the DGQI Dashboard.

3 Dashboard

Figure 3-1
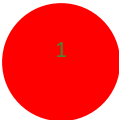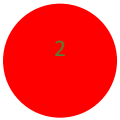
1	Displays summary performance with following information: • Overall DGQI score - govt. of India in speedometer with lowest score (in red needle), average score (in blue needle), and highest score (in green needle). On mouseover needle will display lowest score, average score, and highest score in popup. • Trend Analysis - Govt. of India Overall DGQI Score bar graph with DGQI-1 and DGQI-2 on X axis and overall DGQI score on Y axis. On mouseover of bar, popup will be displayed with DGQI score of total 5.
2	Displays pillar wise score with following information: • Data strategy - govt. of India speedometer with lowest score (in red needle), average score (in blue needle), and highest score (in green needle). On mouseover needle will display lowest score, average score, and highest score in popup. • Data Systems - Govt. of India speedometer with lowest score (in red needle), average score (in blue needle), and highest score (in green needle). On mouseover needle will display lowest score, average score, and highest score in popup. • Data driven outcomes - Govt. of India speedometer with lowest score (in red needle), average score (in blue needle), and highest score (in green needle). On mouseover needle will display lowest score, average score, and highest score in popup.
3	Displays key insights with following information: • Distribution of DGQI scores across M/Ds bar graph with DGQI score on X axis (0<=1, >1<=2, >2<=3, >3<=4, >4<=5) number of M/Ds on Y axis. On mouseover bar will display ministry score. • Top 5 M/D DGQI Score bar graph with ministries on X axis and DGQI score on Y axis. On mouseover bar will display ministry score. • Scheme-type wise DGQI score bar graph with CS, CSS and NSI on X axis and scheme type wise DGQI score on Y axis. On mouseover bar will display scheme type wise DGQI core. • Distribution of action point compliance across M/Ds bar graph with DGQI score (>75%, 50-75%, and <50%) and numbers of MDs on Y axis. On mouseover bar will display ministry. • Category wise Average DGQI Score bar graph with category on X axis and category wise DGQI score on Y axis. On mouseover bar category DGQI score out of 5.

4	• If user has any query on the dashboard, they can drop an email to the support email id : dgqi-dmeo-niti@gov.in given at the bottom of the landing page.

4   Detailed Performance

4.1   Ministries/Departments

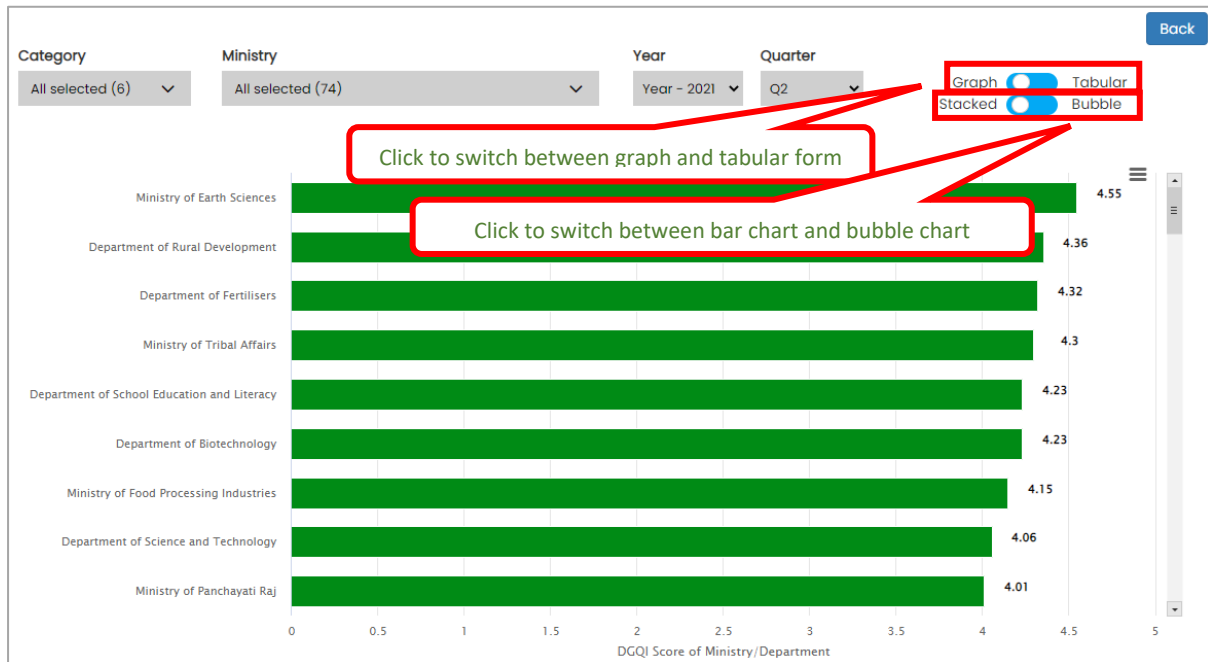Displays ministries or department wise DGQI score.

Figure 4-1

Enter following details:

- Select category from dropdown menu. There are 6 categories Admin, Economic, Infrastructure, Scientific, Social, Strategic, Skill Development and Entrepreneurship. Administrator can select multiple categories by checking ☐ checkboxes.
- Based on the selection of category, select ministry from dropdown by checking ☐ checkboxes
- Select year from dropdown
- Select quarter from dropdown
- Click 🔘 to switch between graph and tabular form
- Click 🔘 to switch between bar chart and bubble chart

Note: If administrator does not select anything from dropdown, by default all category, ministry, current year and quarter 2 will be displayed.

4.1.1 Graph Form
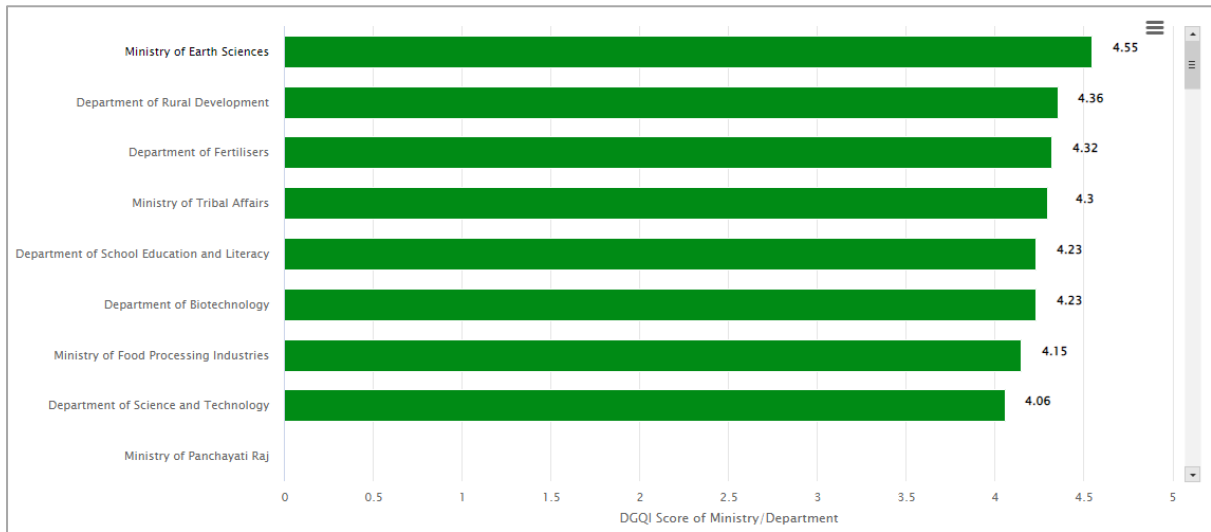
Figure 4-2

On X axis DGQI score of ministry/department will be displayed. The range is displayed in such a manner that data comes under 5. On Y axis various ministries are displayed. All the scores in the graph will be displayed in descending order, the highest score will be displayed first and lowest score will be displayed last.

Scores are calculated based on the data filled by ministry.

Click ≡ to view chart in full screen, print chart, and download.

Click ministry on Y axis;
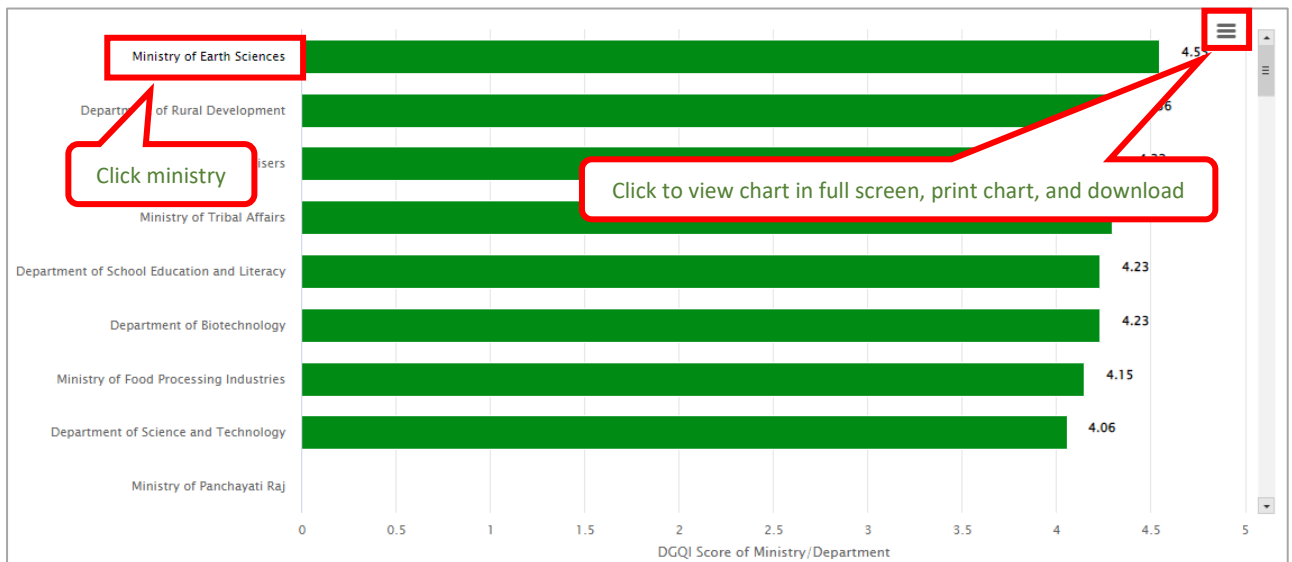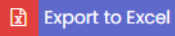
Figure 4-3

Overall performance of selected category, ministry, quarter and year is displayed;

Click [Export to Excel] to get DGQI score in Excel

Figure 4-4

Category, ministry, year and quarter will be displayed automatically in dropdown.

Total no. of CS/CSS/NSI, DGQI Average Score, and distance to frontier will be displayed with part A - details response by M/D, part B - details response by M/D, and best/worst performing CS scheme.

Action Point Compliance will be displayed with number of action points, number of completed action points, and percentage compliance.

Data Strategy Unit will be displayed with questions and answers.

Click [PartA - Details Response by M/D] to view part A- details response by M/D

Figure 4-5

Click **Back** to go back to previous screen

Click part A - details response by M/D;

Figure 4-6

Pillar and theme wise scores are displayed;

Click ➕ to expand theme or pillar

Theme details will be displayed with following column headings:

Question-	Answer	Score
1) Has the M/D constituted a Data & Strategy Unit (DSU) as a central unit for developing data strategy? (as per the D.O. letter from Sh. Bhaskar Khulbe, Advisor to PM dated 02.02.2021)	◉ Yes ○ No	5.00
2) (Respond if answer to 1 is 'yes', else skip to Q1 of next section) Who is the head of the DSU?	○ AS ◉ JS ○ Director ○ Below Director	5.00
3) Please select the verticals established under the DSU of your Ministry/Department. (as per the D.O. letter from Sh. Bhaskar Khulbe, Advisor to PM dated 02.02.2021)	☑ Monitoring Unit ☑ Statistics Unit ☐ Technology Unit ☐ Analytics Unit	3.00
4) Please provide the percentage of filled posts in DSU (number of posts filled up/ number of posts created by the Ministry/Department for the DSU) in the below provided table:	Monitoring Unit 10 Statistics Unit 20 Technology Unit 20	0.00

Figure 4-7

- Question
- Answer
- Score

Note: Part B- details response by M/D is similar to Part A- details response by M/D

Figure 4-8

Best and worst performing scheme score will be displayed with following column headings:

Figure 4-9

- Sr.No.
- Scheme Name
- Score

Note: If the scheme score is same in best performing, then it will display both scores. Similarly if the scheme score is same in worst performing, then it will display both scores.
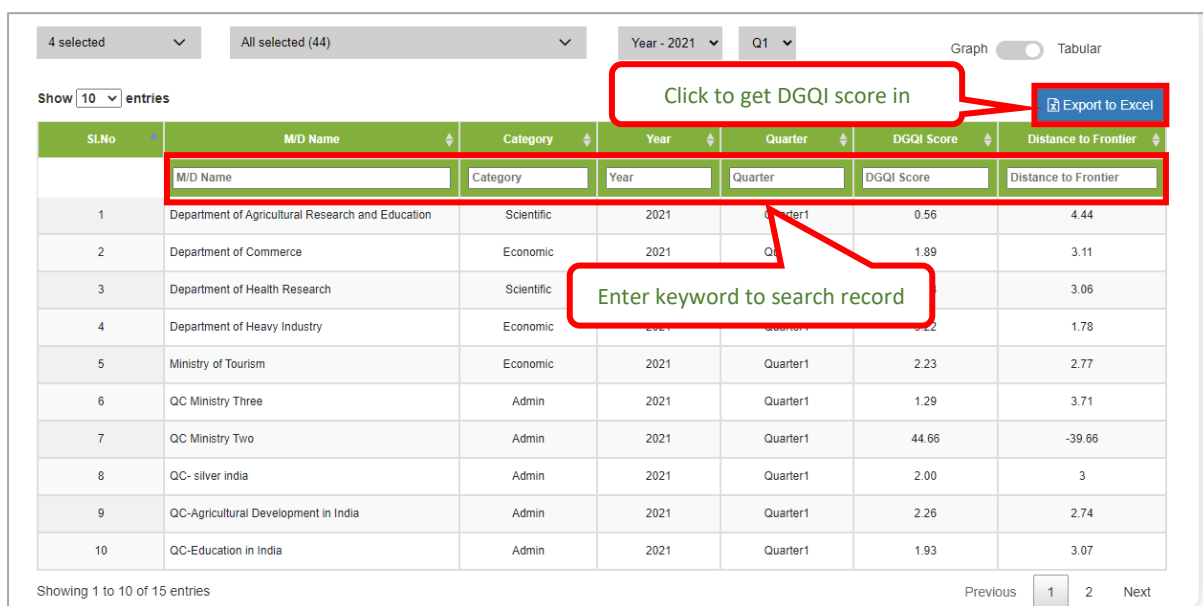
4.1.2   Tabular Form

Tabular form will be displayed based on the selection of category, ministry, year and quarter

Click [Export to Excel] to get DGQI score in Excel

Ministry or department wise DGQI score will be displayed with following column headings:

Figure 4-10

- Sl. No
- M/D Name
- Category
- Year
- Quarter
- DGQI Score
- Distance to Frontier (Distance to frontier= 5 - DGQI score)

Administrator can search the record typing keyword under specific column heading

DMEO NITI Aayog header logo

Data Governance Quality Index

4.1.3   Bubble Chart

Figure 4-11

Enter following details:

- Select category from dropdown menu. There are 6 categories Admin, Economic, Infrastructure, Scientific, Social, Strategic, Skill Development and Entrepreneurship. Administrator can select multiple categories by checking ☐checkboxes.
- Based on the selection of category, select ministry from dropdown by checking ☐ checkboxes
- Select year from dropdown
- Select quarter from dropdown

Click **Back** to go to previous screen

Note: If administrator does not select anything from dropdown, by default all category, ministry, current year and quarter 2 will be displayed.

On X axis no of schemes will be displayed. On Y axis overall DGQI score will be displayed.

On mouse hover of bubble, popup will be displayed with following details:

Figure 4-12

- Name
- Total Schemes
- Total Budget
- Overall DGQI score

Click ☰ to view chart in full screen, print chart, and download.

4.2   Themes and Pillars

Figure 4-13

Enter following details:

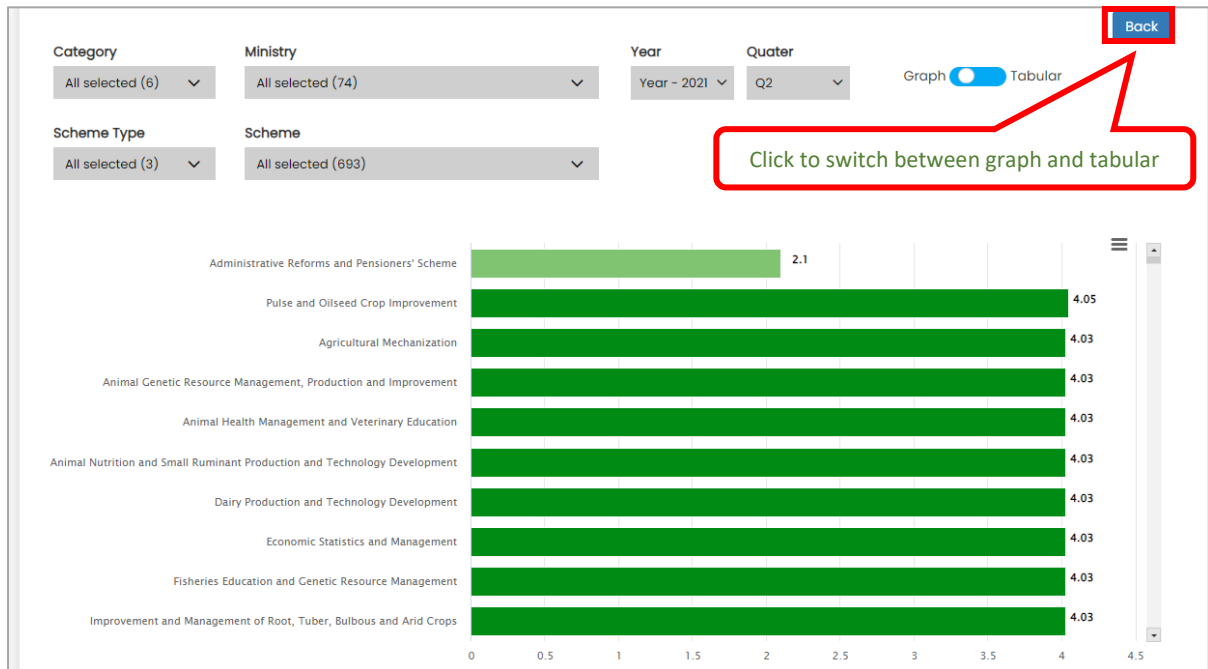- Select category from dropdown menu. There are 6 categories Admin, Economic, Infrastructure, Scientific, Social, Strategic, Skill Development and Entrepreneurship. Administrator can select multiple categories by checking ☐checkboxes.
- Based on the selection of category, select ministry from dropdown by checking ☐ checkboxes
- Select year from dropdown
- Select quarter from dropdown
- Select pillar from dropdown
- Select theme from dropdown. This option is available only if the administrator has click pillar 🔘 in toggle button
- Click 🔘 to switch between graph and tabular form
- Click 🔘 to switch between pillar chart and theme

Note: If administrator does not select anything from dropdown, by default all category, ministry, current year and quarter 2 will be displayed.

4.2.1 Graph Form
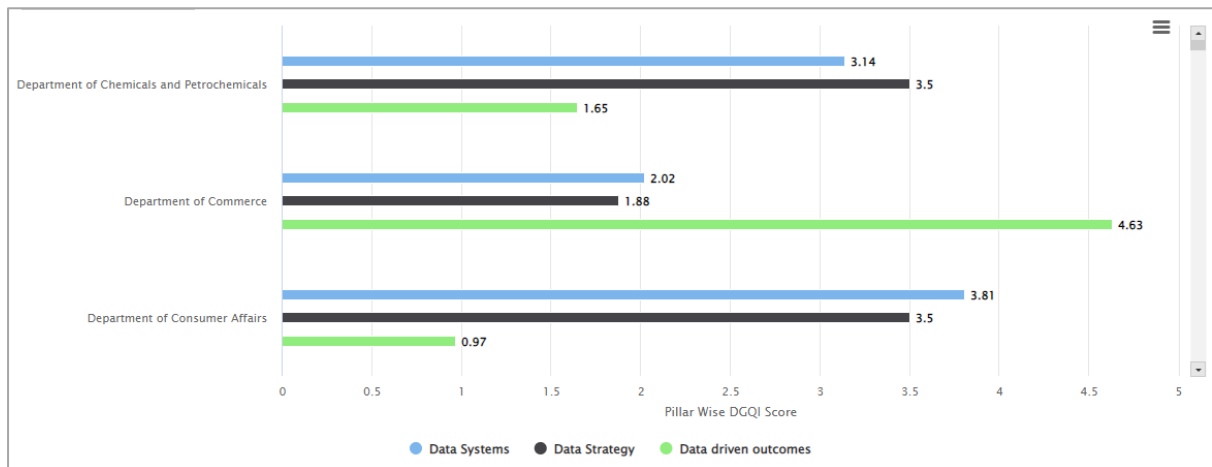
Figure 4-14

Graph displays pillar (data systems in sky blue color, data strategy in **black color**, and data driven outcomes in green color) wise DGQI score of ministry or department. On X axis range is displayed in such a manner that data comes under 5. On Y axis various ministries are displayed.

Scores are calculated based on the data filled by ministry.

On mouse hover of pillar, particular pillar will be highlighted in the graph.

Click ≡ to view chart in full screen, print chart, and download.

Click ministry on Y axis;
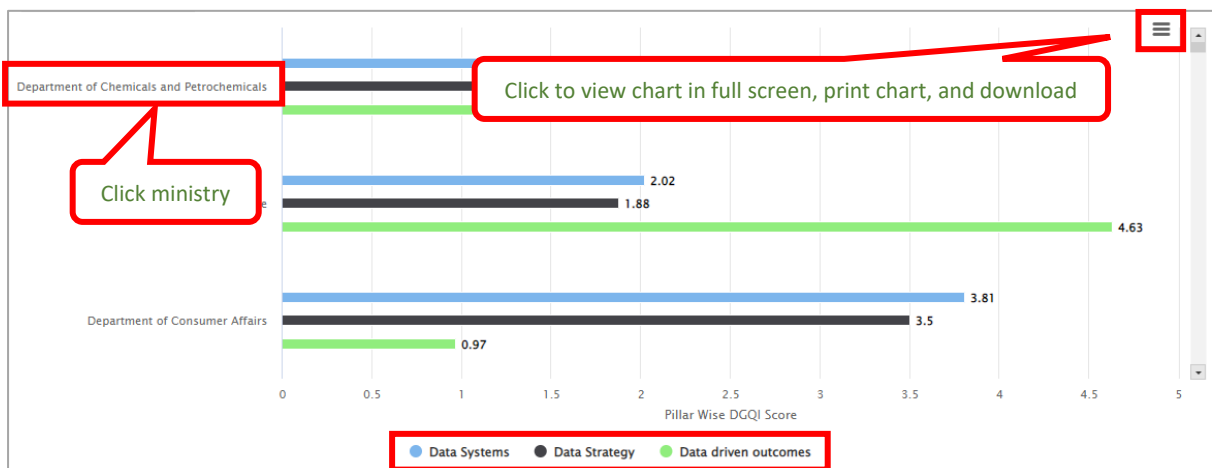
Figure 4-15

Overall performance of selected category, ministry, quarter and year is displayed;

On mouseover pillar wise DGQI score with particular ministry will be displayed in popup;
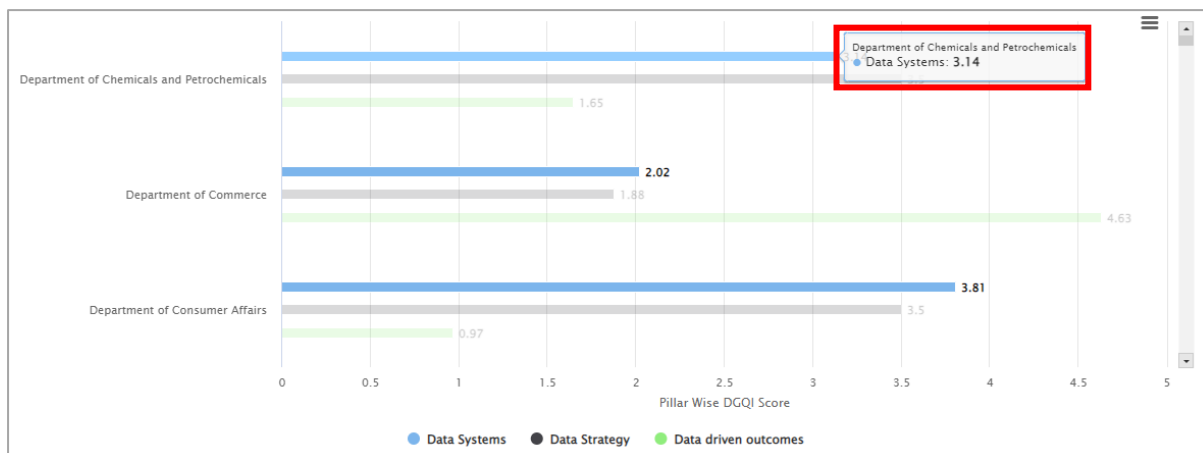
Figure 4-16

M/D Overall Performance for particular quarter and year is same as Ministries/Departments graph form
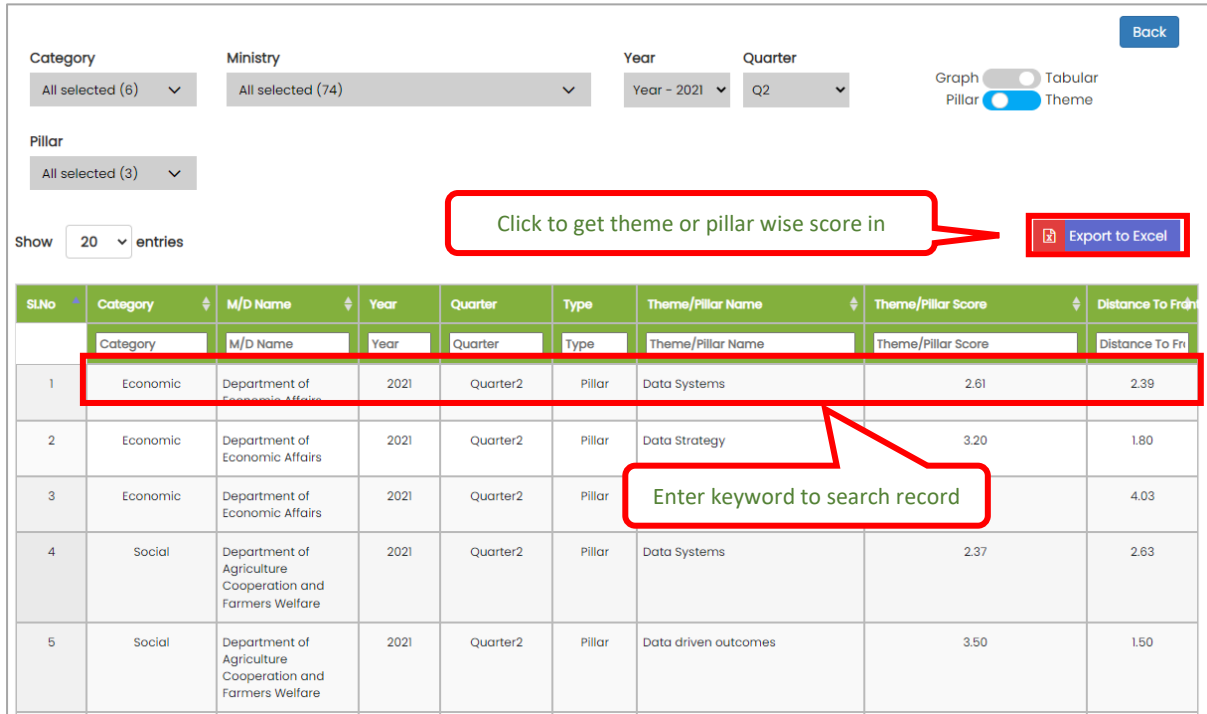
4.2.2   Tabular Form

Tabular form will be displayed based on the selection of category, ministry, year and quarter

Click [Export to Excel] to get theme or pillar wise score in Excel

Theme or pillar score will be displayed with following column headings:

Figure 4-17

- Sl.No
- Category
- M/D Name
- Year
- Quarter
- Type
- Theme/Pillar Name
- Theme/Pillar Score
- Distance to Frontier (Distance to frontier= 5 - DGQI score)

Administrator can search the record typing keyword under specific column heading

4.3 CS/CSS Schemes and NSIs

Displays scheme and NSIS wise DGQI score

Displays scheme and NSIS wise DGQI score

Figure 4-18

Enter following details:

- Select category from dropdown menu. There are 6 categories Admin, Economic, Infrastructure, Scientific, Social, Strategic, Skill Development and Entrepreneurship. Administrator can select multiple categories by checking ☐checkboxes.
- Based on the selection of category, select ministry from dropdown by checking ☐ checkboxes
- Select year from dropdown
- Select quarter from dropdown
- Select scheme type from dropdown
- Select scheme from dropdown
- Click ⬤ to switch between graph and tabular form
- Click **Back** to go to previous screen

4.3.1   Graph Form
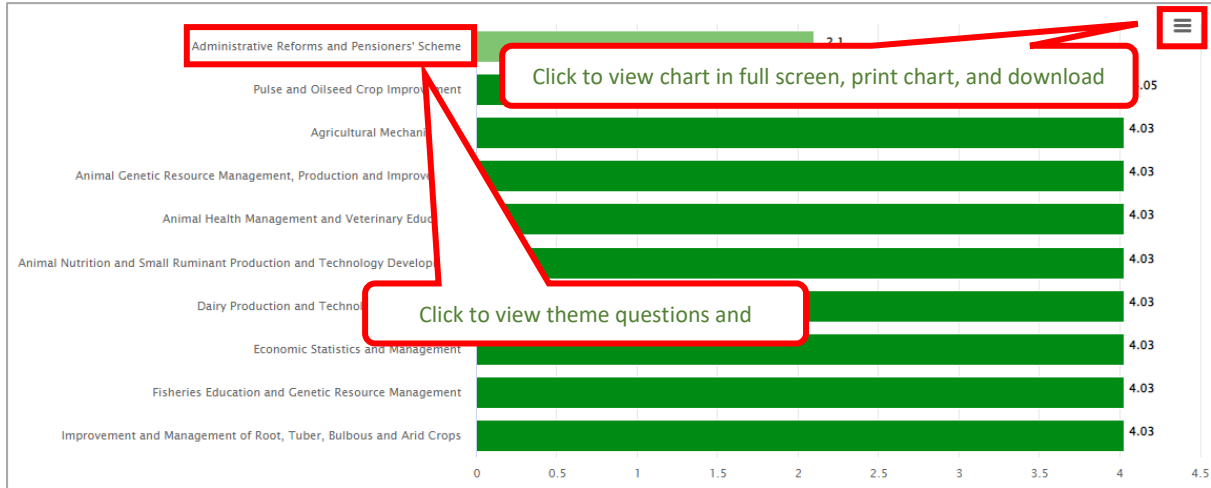
Figure 4-19

Graph displays scheme DGQI score; On X axis DGQI score is displayed in such a manner that data comes under 5. On Y axis schemes are displayed. All the scores in the graph will be displayed in descending order, the highest score will be displayed first and lowest score will be displayed last.

Click ☰ to view chart in full screen, print chart, and download.

Click particular scheme to view theme questions and scores

Figure 4-20

Pillar and theme wise scores are displayed;

Click ➕ to expand theme or pillar

Theme details will be displayed with following column headings:

Question–	Answer	Score
1) Are the data requirements of the scheme well defined and documented?	⦿ Yes ◯ No	5.00
2) Is data collected for all identified data requirements?		
a) Input Data Points	⦿ Yes ◯ No ◯ Partial	4.00
b) Output Data Points	⦿ Yes ◯ No ◯ Partial	
c) Outcome Data Points	◯ Yes ◯ No ⦿ Partial	
3) Is collected data reported digitally? (i.e. is there is a digital electronic database/MIS)?	⦿ Yes Please Provide Link, Usename and password (Optional) Link:https://pgportal.gov.in/CPGRAMSDashboard ◯ No i.e. On paper only	5.00

Figure 4-21

- Question
- Answer
- Score

4.3.2   Tabular Form

Tabular form will be displayed based on the selection of category, ministry, year and quarter

Click to get NSI wise DGQI score in Excel

Theme or pillar score will be displayed with following column headings:

Figure 4-22

- SI.No
- M/D Name
- Scheme Name
- Scheme Type
- Category
- Year
- Quarter
- DGQI Score
- Distance to Frontier (Distance to frontier= 5 - DGQI score)

Administrator can search the record typing keyword under specific column heading

4.4 Strategy Action Points

Displays percentage of completion till selected quarter (Q1 or Q2) of ministry.

Figure 4-23

Enter following details:

- Select category from dropdown menu. There are 6 categories Admin, Economic, Infrastructure, Scientific, Social, Strategic, Skill Development and Entrepreneurship. Administrator can select multiple categories by checking ☐ checkboxes.
- Based on the selection of category, select ministry from dropdown by checking ☐ checkboxes
- Select year from dropdown
- Select quarter from dropdown
- Click 🔵 to switch between graph and tabular form
- Click **Back** to go back to previous screen

Note: If administrator does not select anything from dropdown, by default all category, ministry, current year and quarter 2 will be displayed.

4.4.1   Graph Form

Figure 4-24

On X axis action point completion percentage are displayed. On Y axis ministries are displayed.

On mouseover action point completion score with particular ministry will be displayed in popup;
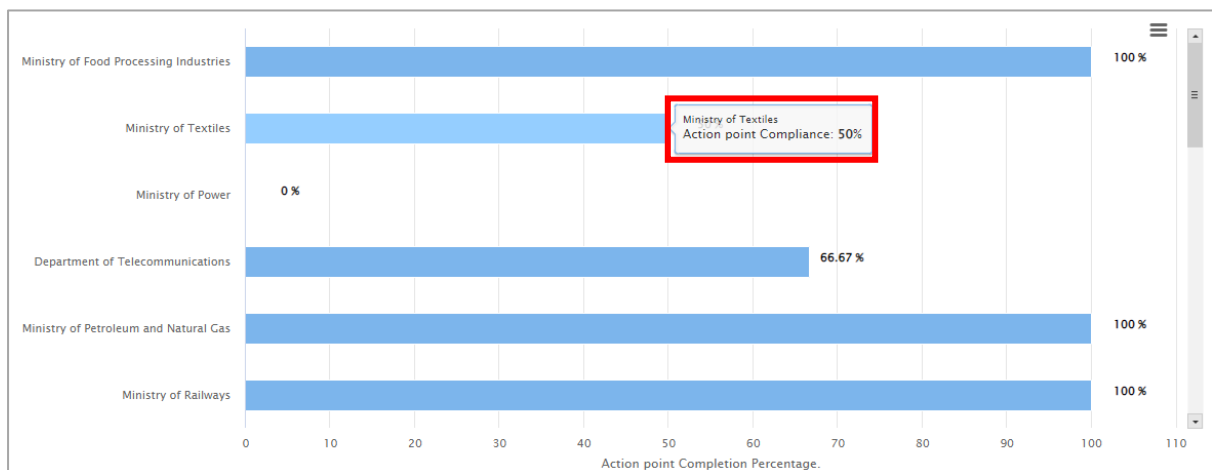
Figure 4-25

Click ≡ to view chart in full screen, print chart, and download.

Click ministry on Y axis.

Action point compliance graph will be displayed;
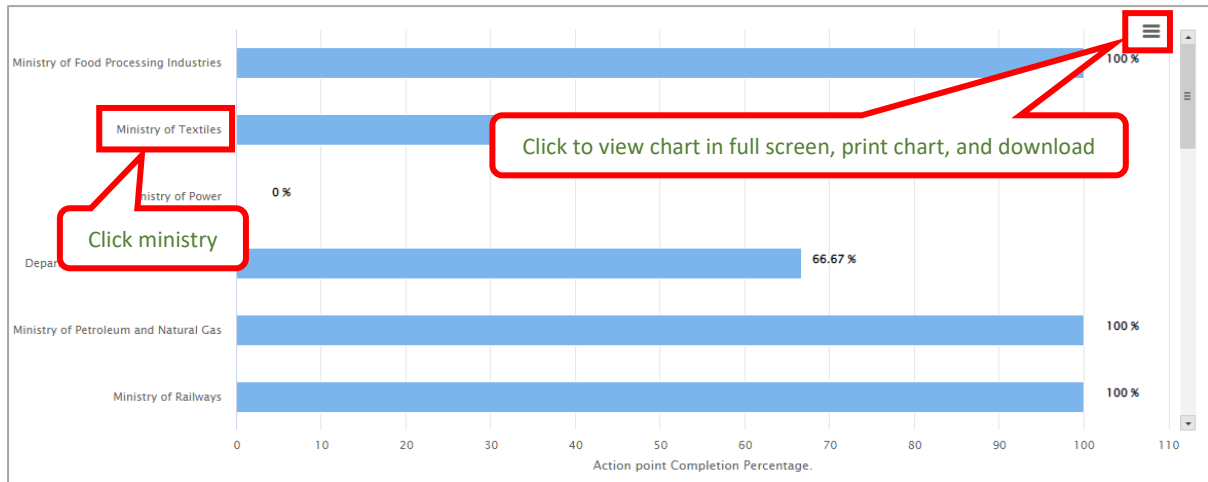
Figure 4-26

Based on the selection of category, ministry, year, and quarter, M/D overall performance for current year will be displayed same as ministries/departments graph form

4.4.2 Tabular Form

Tabular form will be displayed based on the selection of category, ministry, year, quarter, scheme type, and selected scheme.

Action points compliance will be displayed with following column headings:

Figure 4-27

- S.No
- M/D Name
- Category
- Year
- Quarter
- Total No. of Action Points
- Total No. of Action Point Completed
- Total No. of Action Point Due
- Action Point Compliance Percentage

Administrator can search the record typing keyword under specific column heading
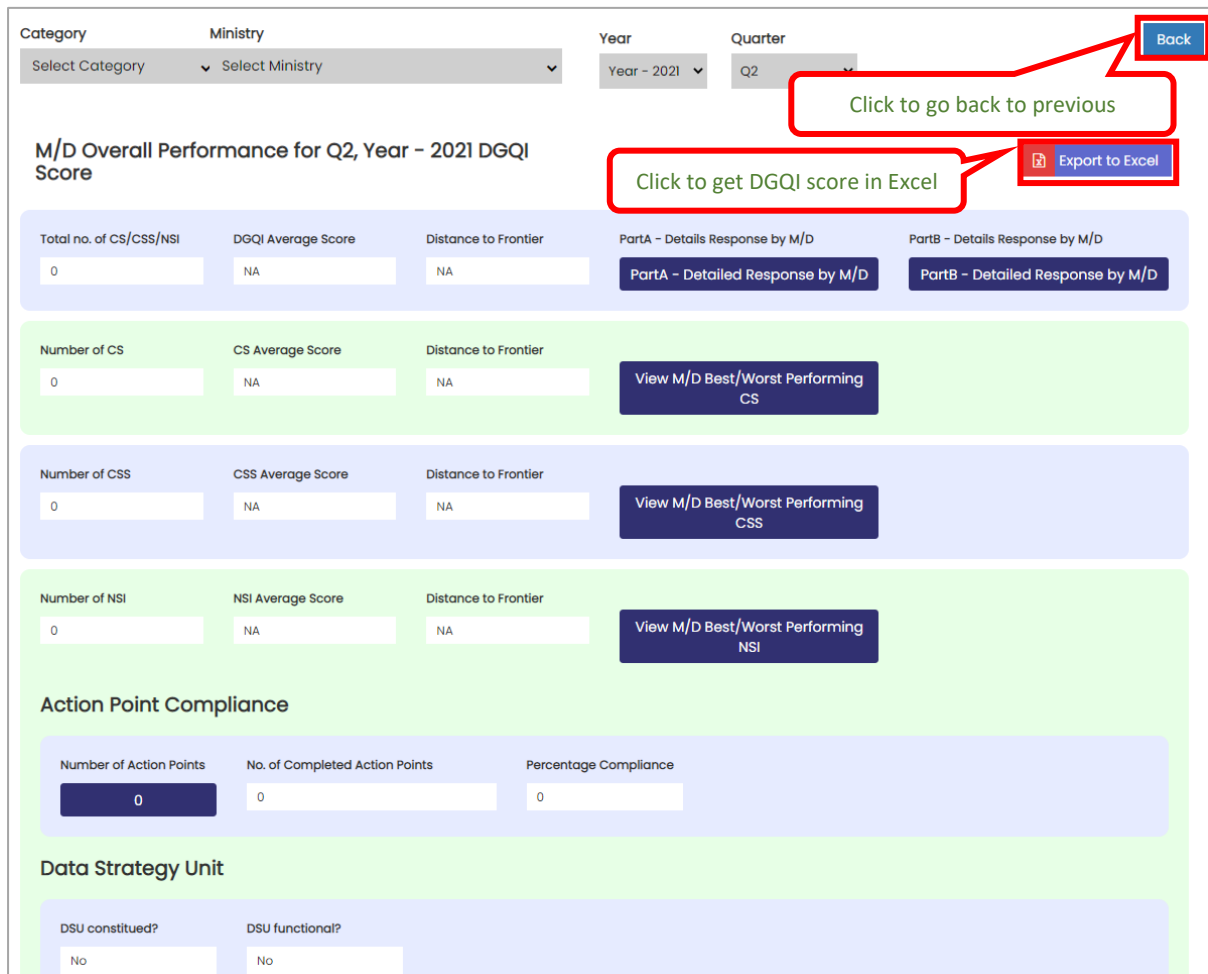
4.5 Ministry/Department Summary

Displays summary of selected category, ministry, year and quarter

Click [Export to Excel] to get DGQI score in Excel

Click [Back] to go back to previous screen

Figure 4-28

Enter following details:

- Select category from dropdown
- Select ministry from dropdown
- Select year from dropdown
- Select quarter from dropdown

Total no. of CS/CSS/NSI, DGQI Average Score, and distance to frontier will be displayed with part A - details response by M/D, part B - details response by M/D, and best/worst performing CS scheme.

Action Point Compliance will be displayed with number of action points, number of completed action points, and percentage compliance.

Data Strategy Unit will be displayed with questions and answers.

Click PartA - Details Response by M/D to view part A- details response by M/D

Figure 4-29

Click part A - details response by M/D.

Figure 4-30

Pillar and theme wise scores are displayed;

Click ➕ to expand theme or pillar

Theme details will be displayed with following column headings:

Figure 4-31

- Question
- Answer
- Score

Note: Part B- details response by M/D is similar to Part A- details response by M/D

Click [View Best/Worst Performing CS Scheme] to view best or worst performing SC scheme

Figure 4-32

Best and worst performing scheme will be displayed with following column headings:

Figure 4-33

- Sr. No.
- Scheme Name
- Score

Note: If the scheme score is same in best performing, then it will display both scores. Similarly, if the scheme score is same in worst performing, then it will display both scores.
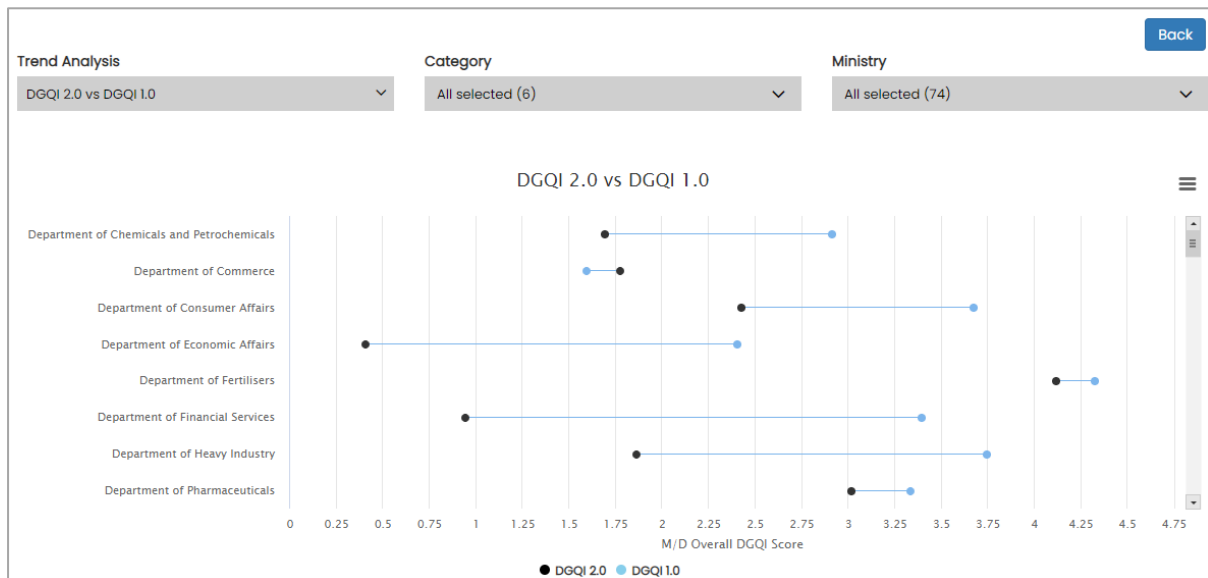
4.6 Trend Analysis

Figure 4-34

Enter following details:

- Select trend analysis from dropdown
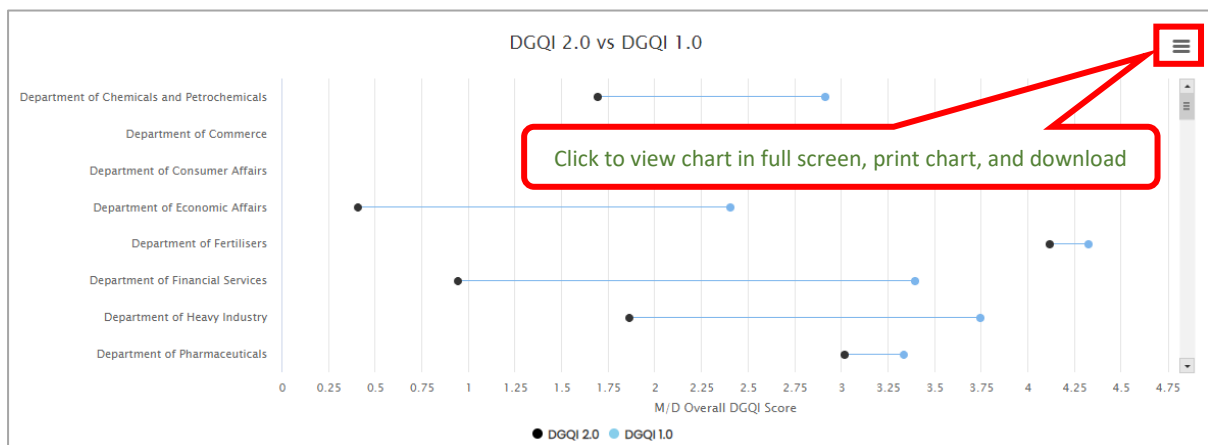- Select Category from dropdown
- Select ministry from dropdown

Figure 4-35

On X axis M/D overall DGQI score for DGQI 2.0 (current year) with **black dot** and DGQI 1.0 (previous year) blue dot is displayed. On Y axis, ministries are displayed.

Click ☰ to view chart in full screen, print chart, and download.

On mouseover on graph ministry with M/D overall DGQI score will be displayed in popup;
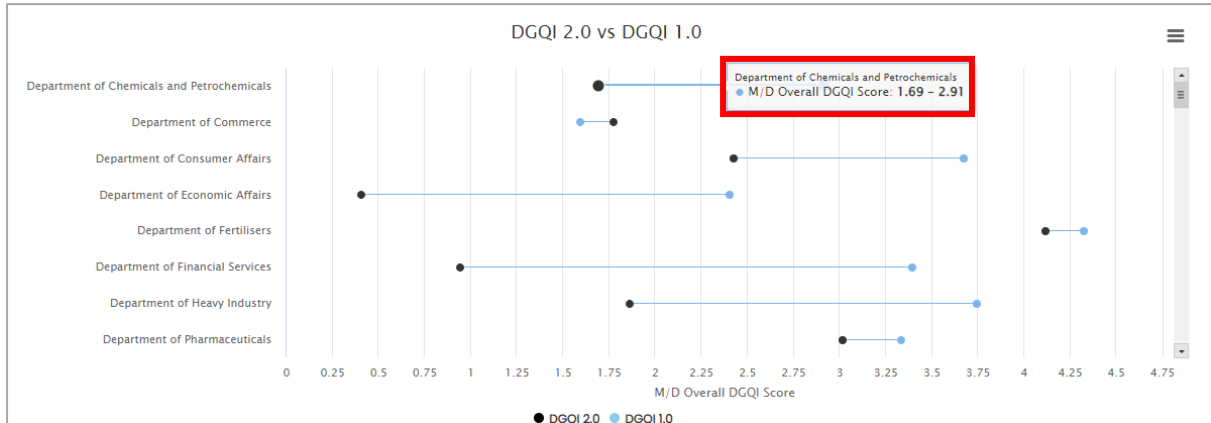
Figure 4-36

On selection of DGQI 2.0 score, administrator needs to select theme or pillar wise score or CS/CSS/NSI/average score from dropdown, theme/pillar from dropdown, category from dropdown, ministry from dropdown, theme/pillar from dropdown, year from dropdown, and quarter from dropdown.
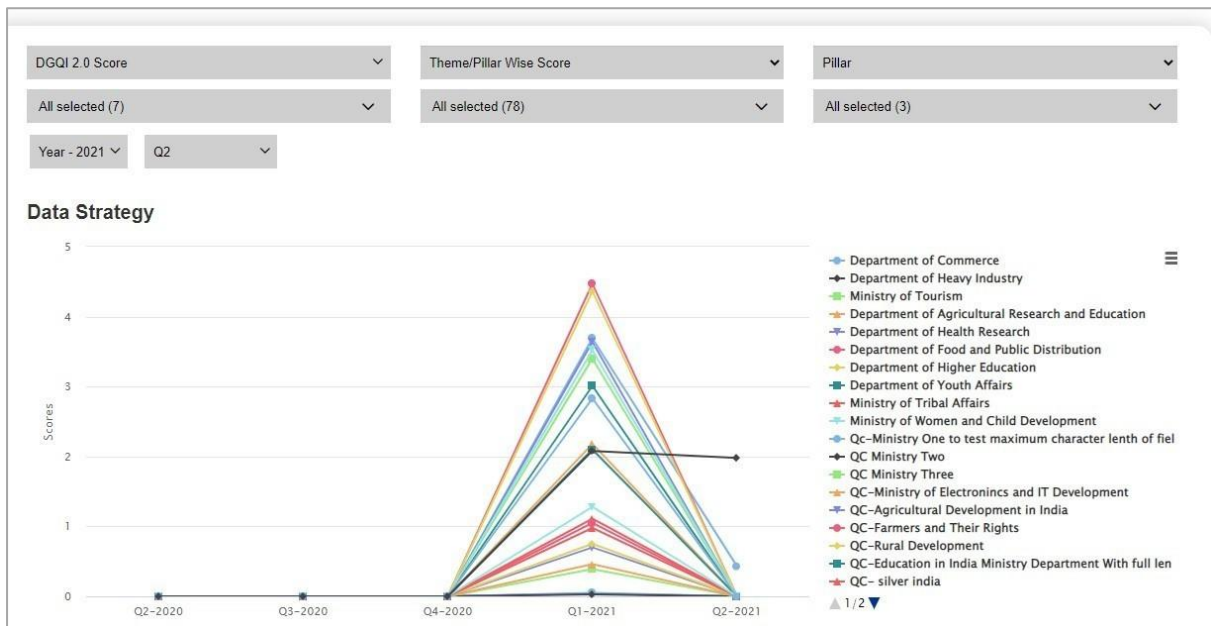

Figure 4-37

The graphs with selected theme/pillar will be displayed;

On X axis previous quarters from the selected year will be displayed. On Y axis scores for particular ministry will be displayed in various color dots.

Administrator can add or remove ministry from the graph by clicking on the ministries given on its right side.
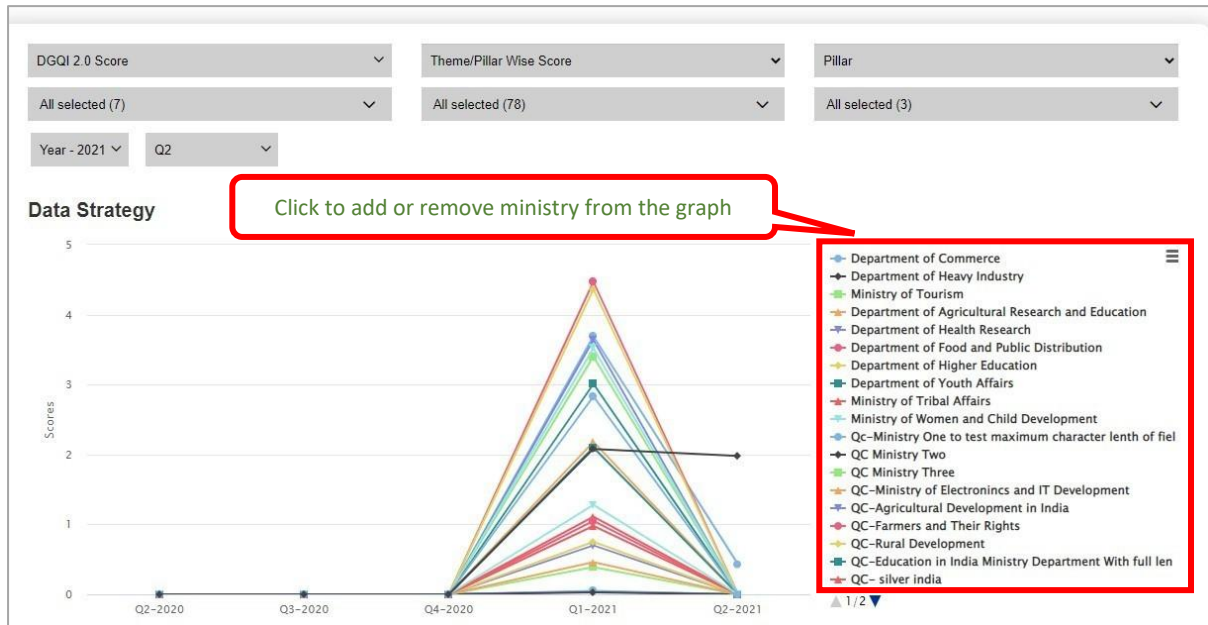
Figure 4-38

On selection of action point compliance, administrator needs to select theme or pillar wise score or CS/CSS/NSI/average score from dropdown, theme/pillar from dropdown, ministry from dropdown, year from dropdown, and quarter from dropdown.
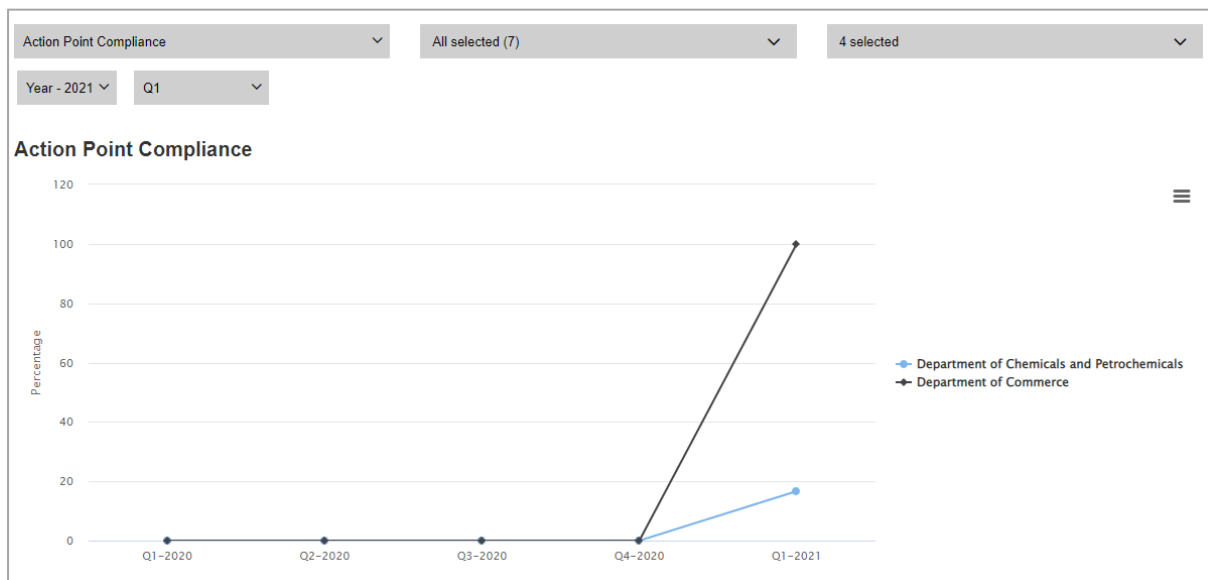

Figure 4-39

On X axis quarters will be displayed. On Y axis percentage will be displayed in various color dots.

Administrator can add or remove ministry from the graph by clicking on the ministries given on its right side.

Figure 4-40