

# VACCINE LOGISTICS MANAGEMENT INFORMATION SYSTEM

User Manual (Cold Chain)

August 2015



*This is a living document and changes will be made as per current or updated system.*

# Table of Contents

Revision History.....	6
List of Acronyms.....	7
<b>Overview.....</b>	<b>11</b>
<b>Background .....</b>	<b>11</b>
<b>Overview of Web-based LMIS.....</b>	<b>13</b>
<b>Vaccine Logistics Management Information System (vLMIS).....</b>	<b>15</b>
<b>vLMIS Features.....</b>	<b>17</b>
<b>Assumptions.....</b>	<b>18</b>
<b>System Requirements .....</b>	<b>18</b>
<b>Browser Support.....</b>	<b>18</b>
<b>Users &amp; User Roles.....</b>	<b>19</b>
<b>Anonymous/Guest User .....</b>	<b>19</b>
<b>Authenticated Users .....</b>	<b>20</b>
<b>EPI User – National.....</b>	<b>20</b>
<b>EPI User – Provincial.....</b>	<b>21</b>
<b>EPI User – District.....</b>	<b>22</b>
<b>EPI User - Tehsil.....</b>	<b>24</b>
<b>EPI User - UC.....</b>	<b>25</b>
<b>Policy User (National, Provincial and District) .....</b>	<b>26</b>
<b>Campaign User (National).....</b>	<b>26</b>
<b>Campaign User (Provincial).....</b>	<b>27</b>
<b>Campaign User (District).....</b>	<b>27</b>
<b>CCEM Operators (National, Provincial, District).....</b>	<b>28</b>
<b>Geographical Areas.....</b>	<b>29</b>

<b>Step-by-Step</b> .....	30
<b>vLMIS Homepage</b> .....	31
<b>Homepage Menu</b> .....	32
<b>Contact Us Tab</b> .....	32
<b>Frequently Asked Questions Tab</b> .....	32
<b>Changing Your Password</b> .....	35
<b>Forgot Password</b> .....	36
<b>Logging Out</b> .....	37
<b>CCEM Reports and Graphs</b> .....	39
<b>Overview</b> .....	39
<b>CCEM Reports</b> .....	40
<b>Storage</b> .....	41
<b>Inventory</b> .....	47
<b>Refrigerators Freezers</b> .....	49
<b>Cold Rooms</b> .....	58
<b>Cold Boxes</b> .....	61
<b>Generators and Stabilizers</b> .....	64
<b>CCEM Graphs</b> .....	67
<b>Storage</b> .....	68
<b>Refrigerator Freezers</b> .....	72
<b>Cold Boxes</b> .....	76
<b>Generators Stabilizers</b> .....	79
<b>Cold-chain</b> .....	82
<b>Cold Chain Logistics</b> .....	82
<b>Why is Cold Chain Logistics important?</b> .....	83
<b>Environmental factors</b> .....	84

<b>Cold Chain Module in vLMIS</b> .....	85
<b>Cold Chain Storage</b> .....	86
<b>Recommendations</b> .....	87
<b>CCEM</b> .....	88
<b>National CCEM Operator</b> .....	90
<b>Dashboard</b> .....	92
<b>Cold Chain</b> .....	97
<b>Maps</b> .....	130
<b>CCEM Reports</b> .....	132
<b>CCEM Graphs</b> .....	132
<b>Provincial CCEM Operator</b> .....	133
<b>Dashboard</b> .....	135
<b>Cold Chain</b> .....	140
<b>Maps</b> .....	172
<b>CCEM Reports</b> .....	174
<b>CCEM Graphs</b> .....	174
<b>District CCEM Operator</b> .....	175
<b>Dashboard</b> .....	177
<b>Cold Chain</b> .....	182
<b>Maps</b> .....	214
<b>CCEM Reports</b> .....	216
<b>CCEM Graphs</b> .....	216

## Revision History

Name	Date	Reason For Changes	Version
Pakistan Field Office	30 August 2014	First Draft	1.0
Pakistan Field Office	15 September 2014	Additions to CCEM Module	1.1

## List of Acronyms

AJK	Azad Jammu & Kashmir
AMC	Average Monthly Consumption
BCG	Bacillus Calmette–Guérin Vaccine
BHU	Basic Health Unit
bOPV	Bivalent oral polio vaccine
CCEM	Cold Chain Equipment Manager
DHCSO	District Health Communication Support Officer
DHQ	District Head Quarter Hospital
DMS	Deputy Medical Superintendent
DSV	District Superintendent Vaccination
EDO	Executive District Officer
EPI	Expanded Program on Immunization
FATA	Federally Administered Tribal Areas
GAVI	Global Alliance for Vaccines and Immunization
GOP	Government of Pakistan
HF	Health Facility
ICT	Information Communications Technologies
IM	Inventory Management

IT	Information Technology
JSI	John Snow, Inc.
KP	Khyber Pakhtunkhwa
LMIS	Logistics Management Information System
LQAS	Lot Quality Assurance Sampling
MIS	Management Information System
MIPC	Ministry of Inter Provincial Coordination
MNHRC	Ministry of National Health Services, Regulation and Coordination
NID	National Immunization Days
OPV	Oral Polio Vaccine
PEI	Polio Eradication Initiative
PPHI	Peoples Primary Healthcare Initiative
SDP	Service Delivery Point
SIADs	Short Interval Additional Dose Strategy
SIAs	Supplementary Immunization Activities
SOP	Standard Operating Procedure
Syr.	Syringe
THO	Taluka Health Officer
THQ	Tehsil Head Quarter Hospital
tOPV	Trivalent oral polio vaccine

TSI	Tehsil Sanitary Inspector
UC	Union Council
UNICEF	United Nations Children's Fund
UPEC	Union Council Polio Eradication Committee
USAID	United States Agency for International Development
WHO	World Health Organization



## 1

# Overview

## With Vaccine Logistics Management Information System

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The *Vaccine Logistics Management Information System User Guide* provides step-by-step instructions that help you get started with Vaccine Logistics Management Information System (vLMIS) functions and features and provides guidelines on managing relevant Vaccines Logistics data using the Vaccine Logistics Management Information System accounts.

This guide is organized according to the logical flow of Vaccine Logistics Management Information System features and describes tasks in the same order you can use while working with the product.

**Before You Begin...**

It is recommended to have a working internet connection for web-access to the application in order to review the product side-by-side when reading this manual.

## Background

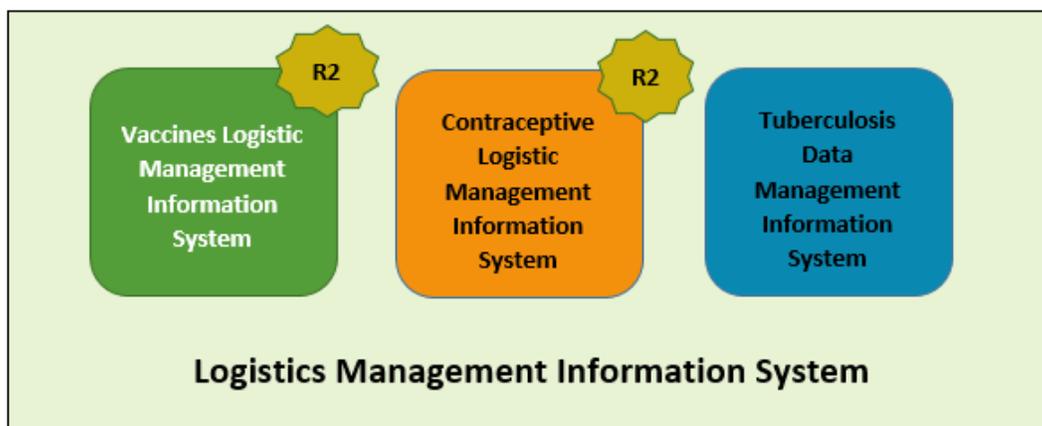
In July 2011, Pakistan's first web-based Logistics Management Information System (web-LMIS) for contraceptive products was launched, which is currently in use in all 143 districts. Following the success of the Logistics Management Information System for Contraceptives, the design of a web-based Tuberculosis Drug Management Information System (TBDMIS) was rolled-out in March, 2013 and now, Vaccine Logistics Management Information System has also been

incorporated into the current Logistics Management Information System in 54 priority districts in Pakistan, thus making the web-based Pakistan Logistics Management Information System as one automated logistics management information system for all health commodities, i.e., Contraceptives, Tuberculosis and Vaccines.

The Vaccine Logistics Management Information System (vLMIS) is designed to replace the current manual Vaccine Logistics Record keeping system and therefore considers the current system's strengths and challenges.

Among the strengths in the current vaccine logistics data is that key data items are collected, such as consumption, stock balance, and storage capacity. Some logistics-related key performance indicators have been defined and are tracked. Data is collected routinely and there is a defined process flow for reporting up the system. There are established forms and spreadsheets used to collect data, and a vaccine stock management software solution used at the National EPI Store. There is a culture of compiling and analyzing data for logistics decision making. The data on existing cold chain equipment (age, type, capacity, operability) in the national cold chain inventory as well as facility profile data has also been collected to help identify gaps in the cold chain storage capacity and functionality that need to be addressed.

However, there are significant challenges in the collection, use and management of vaccine logistics data. Routine reporting of logistics data is impeded by poor accuracy and timeliness of the reports and inadequate supervision and feedback on reporting. Wastage (due to open vial) data are under-reported and poorly tracked. Resupply is calculated based on demographic based targets (using population figures that are outdated) rather than consumption data, and stock balance is not always factored into resupply decisions. Because data is not available in real-time electronic form to all stakeholders, there is very limited visibility in the pipeline below the national level.



## Overview of Web-based LMIS

Pakistan Web-based LMIS provides transparency to all stakeholders based on user rights, is easy to use, and integrates both routine and special immunization campaign vaccine logistics data. Standardized reporting forms and Data triangulation is implemented to validate data and improve visibility in wastage rates.

Resupply quantities for routine EPI are calculated based on average monthly consumption and stock balances, and wastage rates are calculated automatically. The use of stock balance, consumption and issued data, losses and adjustments are also collected.

New routine reporting forms are automatically printed using vLMIS inventory management module in order to collect data from service delivery points, along with vaccine logistics standard operating procedures (SOPs) for each level of the supply chain.

The Vaccine Logistics Management Information System contains the following features:

1. A module for Vaccine reporting in the centralized web-accessible data repository of LMIS to report data from data providers. Data Providers can perform monthly data entry. This also includes being able to generate reports for themselves.

2. The data provided by different geographical levels tracks vaccines in different data entry forms. The Stock Issue and Receive Data, (National, Provincial, Divisional, District, Tehsil) users will enter vaccines logistics data with batch and expiry information, while Monthly Consumption data (Tehsil and Union Council level) users will report data without batch. Wastage will be calculated automatically with the help of consumed and unused vial information.
3. The cold-chain inventory and use is tracked in vLMIS. This module is capable of entering new cold chain assets as well as its current operational status. Each month, along with other logistics data, users will update the operational status of their cold chain assets.
4. The Administrator will manage vLMIS and create all of the necessary data in order to assist users to continue to provide and review logistics data.
5. Data Reviewers can access vLMIS using the 'guest' user account and get reports about the country's provinces and districts to help them in logistical decision-making regarding supply chain management in their assigned districts.

# Vaccine Logistics Management Information System (vLMIS)

The web-based Vaccine Logistics Management Information System has been designed to help plan and manage the immunization resources and ensure that vaccines are always available to meet demand at the right time, to the right place, at the right cost, in the right condition of the

Millions of people are alive today because of immunization programs from diseases such as diarrhea, pneumonia, polio, measles, tetanus, and other life-threatening illnesses. The current immunization programs save more than **2.5 million lives each year**; however, **24 million children still do not get** the complete routine immunizations scheduled for their first year of life, because of weak health systems and difficulties with delivering vaccines to remote locations on time.



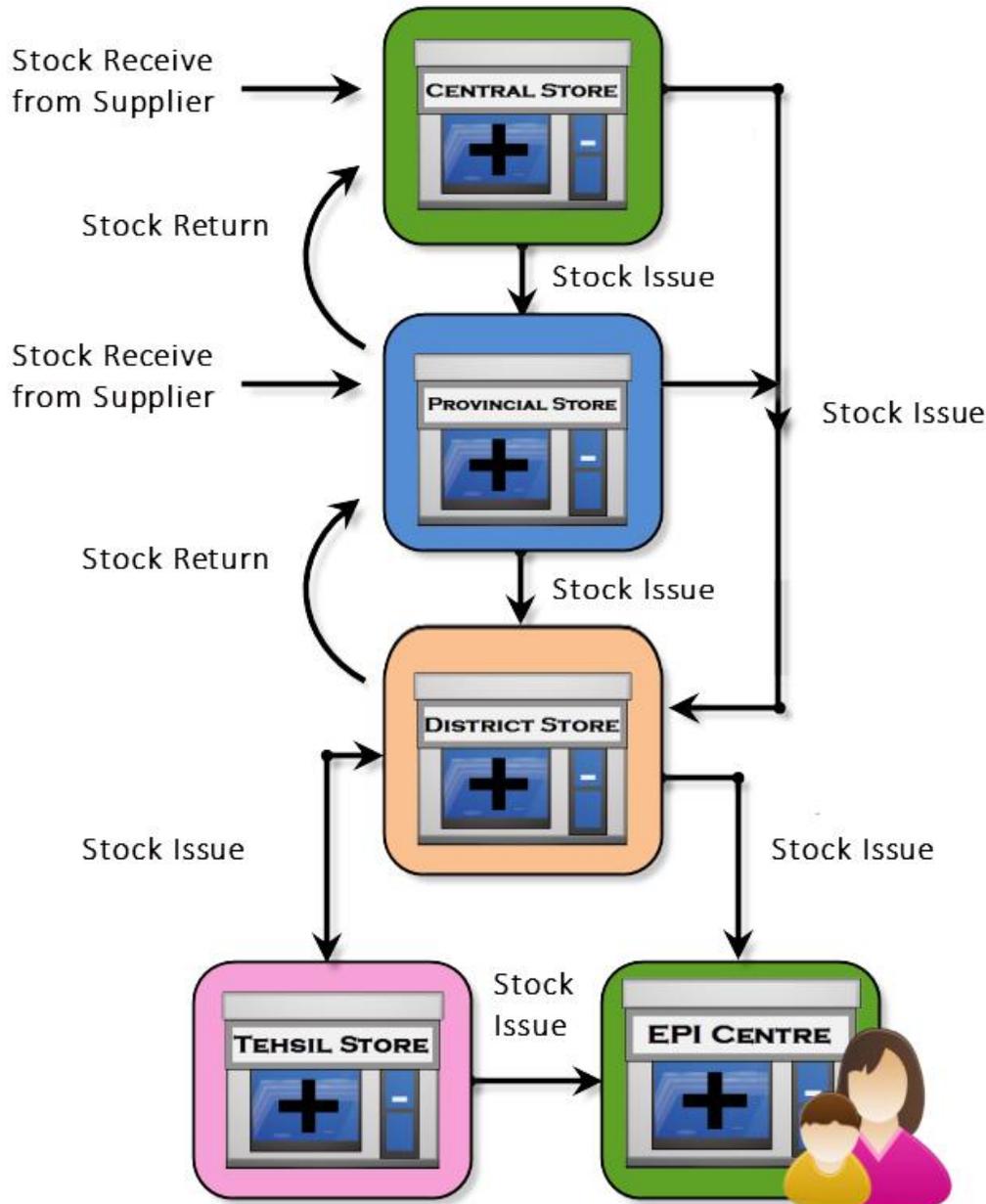
right product in the right amount – No matter where they live.

The web-based Vaccine Logistics Management Information System (vLMIS) is an extension of the Logistics Management Information System (LMIS) and is designed to replace the current paper-based logistics information system that is being used for managing the vaccine distribution and logistics.

The Vaccine Logistics Management Information System introduces systematic vaccine product management and create sustainable dependencies among different vaccine procurement procedures and geographical level operations.

The web-based Vaccine Logistics Management Information System (vLMIS) is easy to use and contextualized to fit local stakeholder's structure and the devolution of health and population programs to provincial governments. The system brings in district and EPI-level reporting by

aggregating facility-level data through paper-based reports. With a unified system for reporting and requisitioning, the vLMIS system is able to integrate information from all levels and sectors. The web-based vLMIS can be accessed at <http://lmis.gov.pk>.



## The Vaccine Supply Chain

## vLMIS Features

Vaccine Logistics Management Information System provides the following functions and features:

### Role-Based Access for Users

Users are authenticated based on their geographical levels and the roles that are associated with them.

### Inventory Management

Stock Issued, Received, and adjustments are recorded on transaction basis in vLMIS by the EPI Store Users.

### Automated Stock Transactions

Stock transactions are updated in the system and calculated automatically for transfers and adjustments using vLMIS for better management of inventory.

### Cold-Chain Assets

The details of Cold-chain assets, their location, status and capacity is tracked in vLMIS for maintaining the cold-chain of immunization vaccines.

### Batch Management

vLMIS offers batch management in order to maintain the First expiry first out process for vaccine during stock issue.

### Consumption Reporting

Service delivery point data will be collected and recorded daily and compiled and reported online monthly using vLMIS.

### Data Reports

Performance reports enable you to view the monthly reporting performance country-wide.

### Graph and Maps

Graphs and maps enable you to view and compare different Indicators and view performance and comparison reports over time.

## Assumptions

This user guide assumes that you already have Vaccine Logistics Management Information System accounts as per your geographical level and role. This user guide also assumes that you are familiar with basic web-application account login procedures.

## System Requirements

The Vaccines Logistics Management Information System is accessible from any Desktop PC, Mac, or Linux computer with Internet access and a supported Web-browser.

## Browser Support

The following browsers and later versions fully support vLMIS standard view:

- Mozilla Firefox (Windows, Mac, Linux)
- Google Chrome (Windows, Mac, Linux)
- Netscape (Windows, Mac, Linux)
- Safari (Mac)
- Internet Explorer 9 and above (Windows)

# Users & User Roles

## 2

### of Vaccines Logistics Management Information System

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This section explains the users and their roles in Vaccine Logistics Management Information System. The Vaccine Logistics Management Information System Users are basically store operators that manage and record the inventory and stock transactions. Each geographical level entails different user roles associated with their warehouse/store operations.

#### Anonymous/Guest User

The Anonymous or Guest user can be any web user with the following capabilities:

Feature	Responsibilities
Reports	View national and provincial level geographical and periodic logistics information in tabular formats.
CCEM Reports	View geographical and periodic CCEM information in tabular formats.
Campaign Reports	View geographical and periodic campaign information in tabular formats.

## Authenticated Users

The Authenticated users can log in to vLMIS and perform assigned functions. Each user is assigned responsibilities based on the role and geographical level.

### EPI User – National

Feature	Responsibilities
Inventory Management	Receive stock from provincial warehouses. Receive stock from supplier and create placement vouchers. Search for received stock. Issue stock to other warehouses (Province, District and Field stores) and create pick order forms. Search for issued stock. Manage Batches. Add placement locations for stock. Transfer stock to other locations.
Stock Adjustments	Manage adjustments. Search for adjustments
Manage Gate Pass	Issue a new gate pass. View the list of issued gate passes.
CCEM	Manage Cold Chain Assets. Asset Working Status update
Reports	View geographical and periodic logistics information in tabular formats.
CCEM Reports	View geographical and periodic CCEM information in tabular formats.
IM Graphs	View geographical and periodic inventory management information in graphical formats.
CCEM Graphs	View geographical and periodic cold-chain equipment management information in graphical formats.

Maps	View geographical and periodic logistics information in map formats.
Campaign Reports	View geographical and periodic campaign information in tabular formats.
Others	Change account password.

## EPI User – Provincial

Feature	Responsibilities
Inventory Management	<p>Receive stock from National warehouse.</p> <p>Receive stock from supplier and create placement vouchers.</p> <p>Search for received stock.</p> <p>Issue stock to other warehouses (National, Province, Division, District stores) and create pick order forms.</p> <p>Search for issued stock.</p> <p>Manage Batches.</p> <p>Add placement locations for stock.</p> <p>Transfer stock to other locations.</p>
Stock Adjustments	<p>Add adjustments.</p> <p>Search for adjustments</p>
Manage Gate Pass	<p>Issue a new gate pass.</p> <p>View the list of issued gate passes.</p>
CCEM	<p>Manage Cold Chain Assets.</p> <p>Asset Working Status update</p>
Reports	View geographical and periodic logistics information in tabular formats.
Maps	View geographical and periodic logistics information in map formats.

CCEM Reports	View geographical and periodic CCEM information in tabular formats.
IM Graphs	View geographical and periodic inventory management information in graphical formats.
CCEM Graphs	View geographical and periodic cold-chain equipment management information in graphical formats.
Campaign Reports	View geographical and periodic campaign information in tabular formats.
Others	Change account password.

## EPI User – District

Feature	Responsibilities
Inventory Management	<p>Receive stock from National / Provincial warehouse.</p> <p>Search for received stock.</p> <p>Issue stock to other warehouses (National, Province, Division, District stores) and create pick order forms.</p> <p>Search for issued stock.</p> <p>Manage Batches.</p> <p>Add placement locations for stock.</p> <p>Transfer stock to other locations.</p>
Stock Adjustments	<p>Add adjustments.</p> <p>Search for adjustments</p>
Manage Gate Pass	<p>Issue a new gate pass.</p> <p>View the list of issued gate passes.</p>
CCEM	<p>Manage Cold Chain Assets.</p> <p>Asset Working Status update</p>

<b>Reports</b>	View geographical and periodic logistics information in tabular formats.
<b>Maps</b>	View geographical and periodic logistics information in map formats.
<b>CCEM Reports</b>	View geographical and periodic CCEM information in tabular formats.
<b>IM Graphs</b>	View geographical and periodic inventory management information in graphical formats.
<b>CCEM Graphs</b>	View geographical and periodic cold-chain equipment management information in graphical formats.
<b>Campaign Reports</b>	View geographical and periodic campaign information in tabular formats.
<b>vLMIS Explorer</b>	View previously submitted Monthly Report data for the selected warehouse and the specified month and year.
<b>Others</b>	Change account password.

## EPI User - Tehsil

Feature	Responsibilities
Inventory Management	<p>Receive stock from Provincial / District warehouse.</p> <p>Search for received stock.</p> <p>Issue stock to other warehouses (National, Province, Division, District stores) and create pick order forms.</p> <p>Search for issued stock.</p> <p>Manage Batches.</p> <p>Add placement locations for stock.</p> <p>Transfer stock to other locations.</p>
Stock Adjustments	<p>Add adjustments.</p> <p>Search for adjustments</p>
Manage Gate Pass	<p>Issue a new gate pass.</p> <p>View the list of issued gate passes.</p>
CCEM	<p>Manage Cold Chain Assets.</p> <p>Asset Working Status update</p>
Reports	<p>View geographical and periodic logistics information in tabular formats.</p>
Maps	<p>View geographical and periodic logistics information in map formats.</p>
CCEM Reports	<p>View geographical and periodic CCEM information in tabular formats.</p>
IM Graphs	<p>View geographical and periodic inventory management information in graphical formats.</p>
CCEM Graphs	<p>View geographical and periodic cold-chain equipment management information in graphical formats.</p>
Monthly Stock Consumption	<p>Enter/View monthly reported data of products for the assigned Warehouse/Store.</p>

Others	Change account password.
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## EPI User - UC

Feature	Responsibilities
Monthly Stock Consumption	Enter/View monthly reported data of products for the assigned Warehouse/Store.
CCEM	Cold Chain Status Update.
Reports	View geographical and periodic logistics information in tabular formats.
CCEM Reports	View geographical and periodic CCEM information in tabular formats.
CCEM Graphs	View geographical and periodic cold-chain equipment management information in graphical formats.
Campaign Reports	View geographical and periodic campaign information in tabular formats.
Others	Change account password.

## Policy User (National, Provincial and District)

Feature	Responsibilities
Reports	View geographical and periodic logistics information in tabular formats.
CCEM Reports	View geographical and periodic CCEM information in tabular formats.
CCEM Graphs	View geographical and periodic cold-chain equipment management information in graphical formats.
IM Graphs	View geographical and periodic inventory management information in graphical formats.
Campaign Reports	View geographical and periodic campaign information in tabular formats.
Others	Change account password.

## Campaign User (National)

Feature	Responsibilities
Campaigns	Add Campaign Search Campaigns Data Entry History Campaigns Target LQAS Data Entry
Campaign Reports	View geographical and periodic campaign information in tabular formats.
Others	Change account password.

## Campaign User (Provincial)

Feature	Responsibilities
Campaigns	Add Campaign Search Campaigns Data Entry History Campaigns Target LQAS Data Entry
Campaign Reports	View geographical and periodic campaign information in tabular formats.
Others	Change account password.

## Campaign User (District)

Feature	Responsibilities
Campaigns	New Data Entry Data Entry History Reported UCs Campaign Readiness Campaign Readiness UCs
Campaign Reports	View geographical and periodic campaign information in tabular formats.
Others	Change account password.

## CCEM Operators (National, Provincial, District)

Feature	Responsibilities
CCEM	Search Refrigerator Add Refrigerator Search Vaccine Carriers Add Vaccine Carriers Search Ice Pack Add Ice Pack Search Cold Room Add Cold Room Search Voltage Regulator Add Voltage Regulator Search Generator Add Generator Search Transport Add Transport Transfer Asset Asset Status Update
CCEM Reports	View geographical and periodic CCEM information in tabular formats.
CCEM Graphs	View geographical and periodic cold-chain equipment management information in graphical formats.
Others	Change account password.

## Geographical Areas

The geographical distribution of areas is displayed below. Data is reported on 4<sup>th</sup> and 5<sup>th</sup> levels, while stock transactions are recorded on layer 1 – 3. Data in all layers is segregated in vLMIS. It is possible to enter aggregated data in layer 4 (Tehsil) and 5 (UC) level due to the lack of internet infrastructure in the sub districts and other remote areas.

Layer	Geographical Area
Layer 1	National
Layer 2	Provincial / Regional
Layer 3	District
Layer 4	Tehsil
Layer 5	UC

# Step-by-Step

# 3

## Process to using Vaccines Logistics Management Information System

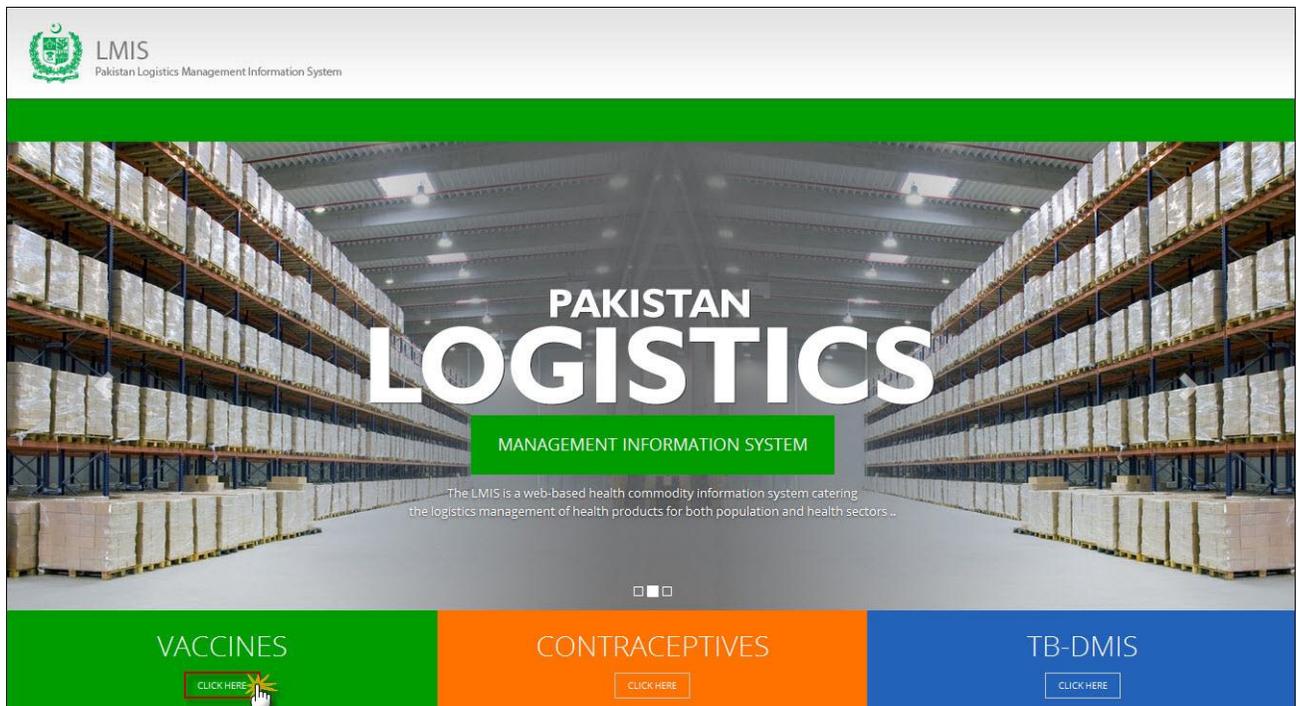
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This section explains the step-by-step instructions on getting started with vLMIS. In this section, you will learn about:

1. The Vaccine Logistics Management Information System User Interface.
2. Logging Into Vaccine Logistics Management Information System.
3. Changing your account password.
4. What to do if you forget your password.
5. Logging Out of Vaccine Logistics Management Information System.

## vLMIS Homepage

The Logistics Management Information System has a single landing page for its three modules for Contraceptives, TB, and Vaccines Management Information System. Enter the URL <http://lmis.gov.pk> to access the application homepage.



Users can also access vaccine LMIS application directly by using <http://v.lmis.gov.pk> URL. Once the user enters the URL <http://v.lmis.gov.pk>, a user interface (homepage) will appear. The homepage displays a basic introduction to the 'vaccine LMIS'.



### Before You Begin...

It is recommended to use vLMIS with Google or Mozilla Fire Fox. Older generations of browsers are also supported; however, their use can lead to issues with on-screen formatting and display.

Once you click Vaccines, homepage for vLMIS will display.

## Homepage Menu

The available menu items can be found on the top of homepage screen. The components are displayed adjacently, as shown in the image below:



## Contact Us Tab

The Contact Us tab contains addresses, telephone numbers and email addresses (where available) for key personnel as a system communication list. Therefore, the user of LMIS will be able to see contact details of other stakeholders and can contact them as needed.

## Frequently Asked Questions Tab

The menu also contains a FAQ's tab in order to provide guidance towards the most frequently asked and critical questions.

# Logging into Vaccine Logistics Management Information System

vLMIS is a web-based inventory and cold chain management application that makes it simple for beginners and experienced users to report inventory and cold chain data, view performance and graphical reports as well as maps.



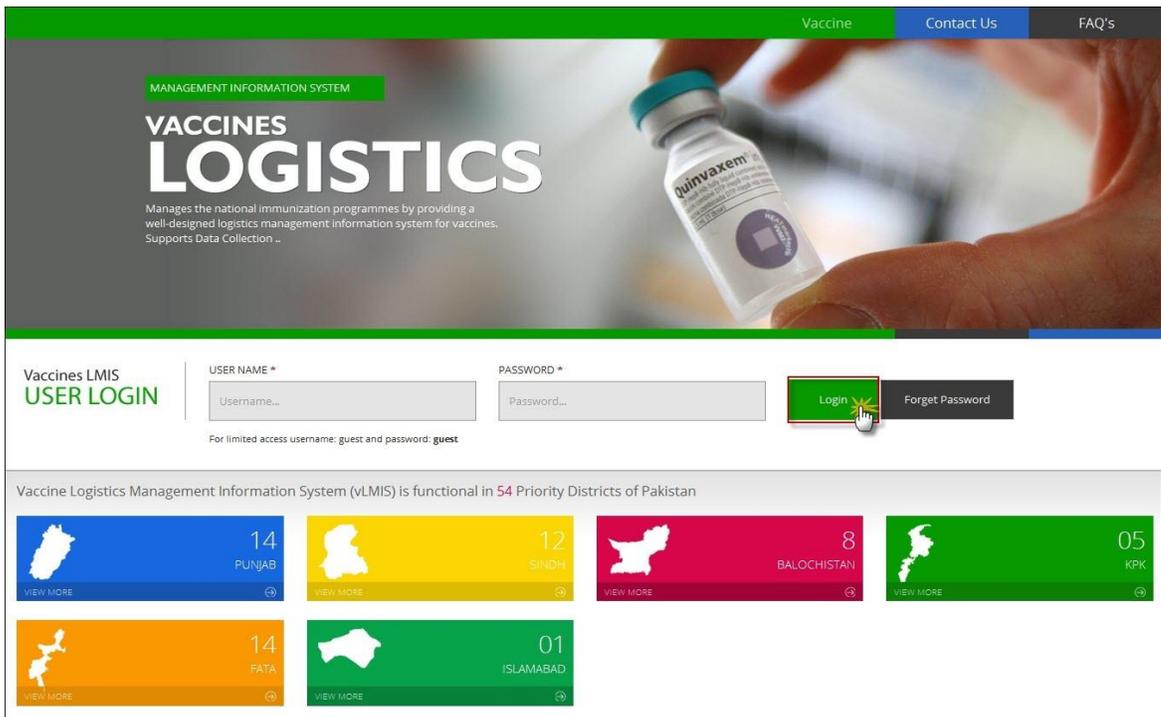
**Before You Begin...**

Make sure you have your correct log in credentials. When you register with vLMIS, the accounts and its related details along with the login domain details will be provided to you by the vLMIS Administrator.

To Log in to vLMIS:

1. Go to <http://v.lmis.gov.pk>
2. Click the button **Click Here** on the Vaccines tab.

vLMIS login page will be displayed.



3. Specify the **Username** and **Password** provided to you by the Administrator.



To login as a guest or anonymous user, you can simply provide the following credentials:

**Username:** guest

**Password:** guest



You can change the password provided to you by the administrator. See *"Changing Your Password"* for details.

Never give out your password to anyone for security purposes.

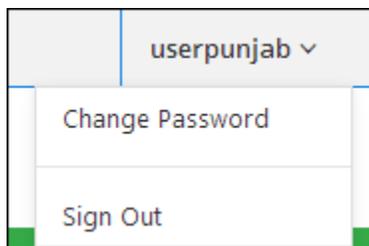
4. Click **Login**.

The Vaccine Logistics Management Information System Dashboard Screen displays.

# Changing Your Password

To change your vLMIS password:

1. Login to vLMIS application.  
The welcome screen displays.
2. On the right-side of the application, the user login name appears.
3. Under the login name, click Change Password as shown in the image below:



4. Specify the following:
  - **Old Password:** specify your old password.
  - **New Password:** specify the new password.
  - **Confirm New Password:** retype your password.

**Password Requirements**

Your password must have a combination of a capital alphabet and one Numeric.



Never give out your password to anyone for security purposes.

5. Click **Change Password**.  
Your password will be changed successfully.

## Forgot Password

In case you have forgotten your password:

1. Open the vLMIS login page by entering the URL: <http://v.lmis.gov.pk>.
2. In the Login section, click **Forgot Password** as shown in the image below:



You will be redirected to the Forgot Password Page.

3. In the Email entry box, enter your email address as validated in your account information by the Administrator.  
An email will be sent on your email address for resetting your password.
4. Click the Reset Password link in the email to go to reset password page.
5. Specify the following:
  - **New Password:** specify the new password.
  - **Confirm New Password:** retype your password.



**Password Requirements**  
Your password must have a combination of a capital alphabet and one Numeric.

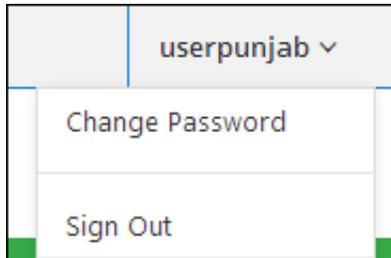


Never give out your password to anyone for security purposes.

6. Click **Change Password**.  
Your password will be changed successfully.

## Logging Out

When signed in, click **Sign out** on the right-side of the application, as shown in the image below:





# CCEM Reports and Graphs

## 4

### in Vaccine Logistics Management Information System

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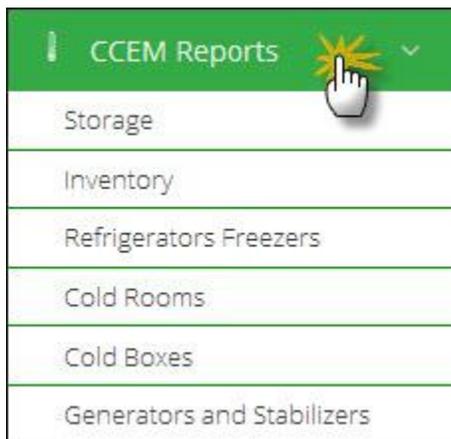
This section explains the step-by-step instructions on the CCEM reports and graphs features that can be used by the Vaccine Logistics Management Information system's users.

## Overview

The Vaccine Logistics Management Information System enables you to login as an authenticated user to view many reports and graphs. These users can view analytical reports and graphical data for any period using selection filters.

## CCEM Reports

The CCEM Reports section provides a list of frequently used reports that are generated quickly at the central level to help national cold chain managers to analyze the cold chain equipment. All CCEM reports can be found in the main menu which can be generated for a regional subset or a select health facility type.



## Storage

The storage menu can be viewed by selecting the “Storage” tab in the sub-menu. The drop down menu will be displayed as follows:



## Capacity at +2c to +8c

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

CCEM Reports

Vaccine storage capacity at +2c to +8c against requirements

Facility Type:  Office:  Province:

**Use Filter options to filter data in the table below**

Vaccine storage capacity at +2c to +8c against requirements											
Province	District	Facility Name	Facility Type	Actual Capacity (Ltr)	Required Capacity (Ltr)	Difference (Ltr)	Surplus > 30%	Surplus 10-30%	Match +/- 10%	Shortage 10-30%	Shortage >30%
Punjab	Rahim Yar Khar	District Rahim	District/Agency	0.00	755.32	-755.32	0	0	0	0	1
Punjab	Lahore	District Lahore	District/Agency	15.00	1607.74	-1592.74	0	0	0	0	1
Punjab	Muzaffargarh	District Muzaff	District/Agency	0.00	678.51	-678.51	0	0	0	0	1
Punjab	Rahim Yar Khar	EPI CENTRE Ch	District/Agency	0.00	755.32	-755.32	0	0	0	0	1
Punjab	Multan	EPI CENTRE Qac	District/Agency	10.00	713.14	-703.14	0	0	0	0	1
Punjab	Rajanpur	EPI CENTRE Raj	District/Agency	20.00	276.84	-256.84	0	0	0	0	1
Punjab	Rawalpindi	U.C No. 12	District/Agency	0.00	768.14	-768.14	0	0	0	0	1
Punjab	Dera Ghazi Kha	EPI CENTRE Urb	District/Agency	0.00	402.23	-402.23	0	0	0	0	1

## Capacity at -20c

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

CCEM Reports

Vaccine storage capacity at -20c against requirements
▼

Facility Type      Office      Province \*

Vaccine storage capacity at -20c against requirements											
Province	District	Facility Name	Facility Type	Actual Capacity (Ltr)	Required Capacity (Ltr)	Difference (Ltr)	Surplus > 30%	Surplus 10-30%	Match +/- 10%	Shortage 10-30%	Shortage >30%
Punjab	Rahim Yar Khar	District Rahim	District/Agency	3130.00	0.00	3130.00	0	0	0	0	0
Punjab	Lahore	District Lahore	District/Agency	5969.00	0.00	5969.00	0	0	0	0	0
Punjab	Muzaffargarh	District Muzaff	District/Agency	3060.00	0.00	3060.00	0	0	0	0	0
Punjab	Rahim Yar Khar	EPI CENTRE Cha	District/Agency	3130.00	0.00	3130.00	0	0	0	0	0
Punjab	Multan	EPI CENTRE Qad	District/Agency	14050.00	0.00	14050.00	0	0	0	0	0
Punjab	Rajanpur	EPI CENTRE Raji	District/Agency	220.00	0.00	220.00	0	0	0	0	0
Punjab	Rawalpindi	U.C No. 12	District/Agency	120.00	0.00	120.00	0	0	0	0	0
Punjab	Dera Ghazi Kha	EPI CENTRE Urb	District/Agency	370.00	0.00	370.00	0	0	0	0	0

**Use Filter options to filter data in the table below**

## Cold-box and Vaccine Carrier Capacity

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

CCEM Reports

Coldbox And Vaccine Carrier Capacity By Facility

Facility Type:  Office:  Province:  Districts:

Coldbox And Vaccine Carrier Capacity By Facility

Province	Distrcit	Tehsil	UC	Facility Name	Facility Type	Net Storage	Quantity Present	Quantity Not Working
Punjab	Punjab	Punjab	Rahim Yar Khan	District Rahim Yar K	District/Agency vacc	364.8	2224	0
Punjab	Punjab	Punjab	Lahore	District Lahore Stor	District/Agency vacc	900.0	7284	0
Punjab	Punjab	Punjab	Muzaffargarh	District Muzaffargar	District/Agency vacc	391.2	4356	80
Punjab	Rahim Yar Khan	LIAQUAITPUR	CHANGNI	EPI CENTRE Changni	District/Agency vacc	364.8	2224	0
Punjab	Multan	Multan Urban	Qadir Abad	EPI CENTRE Qadir Ab	District/Agency vacc	210.0	1533	15
Punjab	Rajanpur	Rajanpur	Rajanpur Gharbi	EPI CENTRE Rajanpur	District/Agency vacc	456.4	658	8
Punjab	Rawalpindi	City	U.C No. 12	U.C No. 12	District/Agency vacc	95.4	189	0
Punjab	Dera Ghazi Khan	Dera Ghazi Khan	Urban 6	EPI CENTRE Urban 6	District/Agency vacc	138.6	506	42

Use Filter options to filter data in the table below

## Capacity Shortages (+4C)

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

CCEM Reports

---

**Capacity shortages 4c by area**

Facility Type:

Office:

Province\*:

**Capacity shortages 4c by area**

Province	District	Facility Type	Net Storage (Ltr) Actual	Net Storage (Ltr) Required	Net Storage (Ltr) Difference	Surplus > 30%	Surplus 10-30%	Match +/- 10%	Shortage 10-30%	Storage >30%
Punjab	Dera Ghazi Khan	District/Agency	0.00	402.23	-402.23	0	0	0	0	1
Punjab	Lahore	District/Agency	15.00	1607.74	-1592.74	0	0	0	0	1
Punjab	Multan	District/Agency	10.00	713.14	-703.14	0	0	0	0	1
Punjab	Muzaffargarh	District/Agency	0.00	678.51	-678.51	0	0	0	0	1
Punjab	Rahim Yar Khan	District/Agency	0.00	755.32	-755.32	0	0	0	0	2
Punjab	Rajanpur	District/Agency	20.00	276.84	-256.84	0	0	0	0	1
Punjab	Rawalpindi	District/Agency	0.00	768.14	-768.14	0	0	0	0	1

**Use Filter options to filter data in the table below**

## Capacity Shortages (-20C)

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

CCEM Reports

Capacity Shortages -20c by area
▼

Facility Type

District/Agency vaccine store
▼

Office

Province
▼

Province \*

Punjab
▼

Search

Capacity Shortages -20c by area										
Province	District	Facility Type	Net Storage (Ltr) Actual	Net Storage (Ltr) Required	Net Storage (Ltr) Difference	Surplus > 30%	Surplus 10-30%	Match +/- 10%	Shortage 10-30%	Storage >30%
Punjab	Dera Ghazi Khan	District/Agency	370.00	0.00	370.00	0	0	0	0	0
Punjab	Lahore	District/Agency	5969.00	0.00	5969.00	0	0	0	0	0
Punjab	Multan	District/Agency	14050.00	0.00	14050.00	0	0	0	0	0
Punjab	Muzaffargarh	District/Agency	3060.00	0.00	3060.00	0	0	0	0	0
Punjab	Rahim Yar Khan	District/Agency	3130.00	0.00	3130.00	0	0	0	0	0
Punjab	Rajanpur	District/Agency	220.00	0.00	220.00	0	0	0	0	0
Punjab	Rawalpindi	District/Agency	120.00	0.00	120.00	0	0	0	0	0

**Use Filter options to filter data in the table below**

# Inventory

The inventory menu can be viewed by selecting the “Inventory” tab in the sub-menu. The drop down menu will be displayed as follows:



## All Cold Chain Equipment

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

### CCEM Reports

Inventory List Of All Cold Chain Equipment By Facility ▼

Level

Province

Warehouse

**Use Filter options to filter data in the table below**

**Refrigerators/Freezers in this Facility**

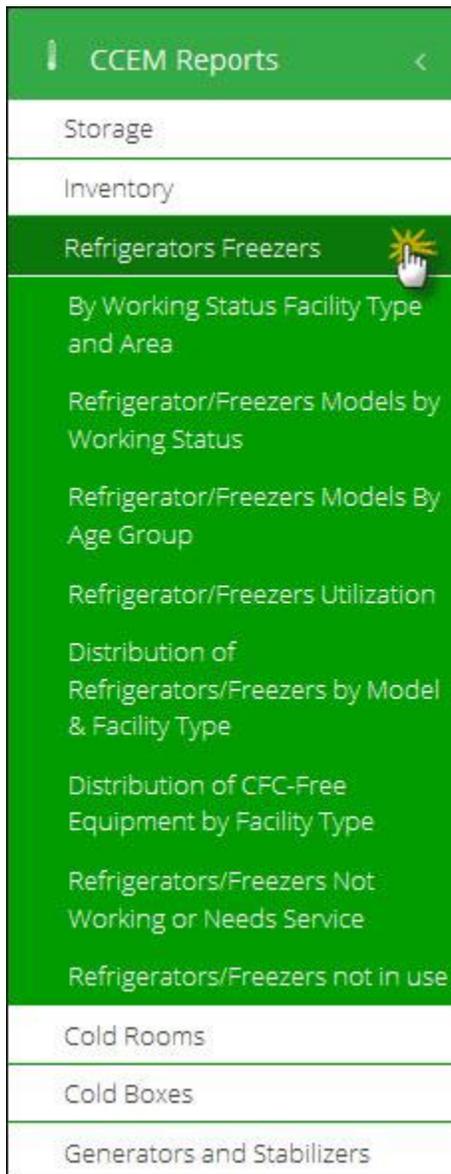
Standard Library ID	Model Name	Manufacture Name	Serial Number	Refrigerant Gas Type	Net Volume +2/+8C	Net Volume -20C	Year of Supply	Source of Supply	Working Status
SB300	131	Vestfrost	1232w		0.0	0.0	04-08-2014	WHO	Working well
SB300	131	Vestfrost	123456		0.0	0.0	13-08-2014	GAVI	Working well

**Voltage Regulators in this Facility**

Facility Code	Library Id	Manufacture Name	Model Number	Phases
	-45	-45	-45	
	-45	-45	-45	

## Refrigerators Freezers

The refrigerators freezers menu can be viewed by selecting the “Refrigerators Freezers” tab in the sub-menu. The drop down menu will be displayed as follows:



## By Working Status Facility Type and Area

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

A report for refrigerator/freezers according to the working status, facility type and area will be displayed.

CCEM Reports

Refrigerator/Freezers by Working Status Facility Type and Area
▼

Facility Type

Select
▼

Office

National
▼

Search

**Use Filter options to filter data in the table**

This report provides information about the refrigerators/freezers/ILRs with respect to their working status, facility type and area. It displays total number of refrigerators, quantity of working refrigerators, working percentage, quantity of working refrigerators needs service, percentage of refrigerators need service, quantity not working and not working percentage.

Refrigerator/Freezers by Working Status Facility Type and Area										
Province	District	Facility Type	Equipment Type	Total Refs/Freezers	Working #	Working %	Working Needs Service #	Working Needs Service %	Not Working #	Not Working %
National	National	National vaccine store	Icelined refrigerator	1	1	100.0	0	0.0	0	0.0
Balochistan	Balochistan	Provincial vaccine store	Chest freezer, AC electricity	14	14	100.0	0	0.0	0	0.0
Sindh	Sindh	Provincial vaccine store	Chest refrigerator, AC electricity	1	1	100.0	0	0.0	0	0.0
Balochistan	Balochistan	Provincial vaccine store	Icepak freezer, AC electricity	3	3	100.0	0	0.0	0	0.0
Sindh	Sindh	Provincial vaccine store	Icelined refrigerator	16	16	100.0	0	0.0	0	0.0
Punjab	Rahim Yar Khan	District/Agency vaccine store	Chest freezer, AC electricity	128	128	100.0	0	0.0	0	0.0
Punjab	Dera Ghazi Khan	District/Agency vaccine store	Chest refrigerator, AC electricity	58	58	100.0	0	0.0	0	0.0
Khyber Pakhtunkhwa	Mardan	District/Agency vaccine store	Chest refrigerator, electricity & gas	13	13	100.0	0	0.0	0	0.0

## Refrigerators/Freezers Models by Working Status

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

A report for the refrigerator/freezers models available according to the working status is displayed.

CCEM Reports

Refrigerator/Freezers Models by Working Status
▼

Facility Type: Basic Health Unit ▼

Office: National ▼

Search

Refrigerator/Freezers Models by Working Status

Model	Total #	Working Well #	Working Well %	Working Needs Service #	Working Needs Service %	Not Working #	Not Working %
9166AD	3	3	100.0	0	0.0	0	0.0
FCW 200	3	3	100.0	0	0.0	0	0.0
FCW 300	1	1	100.0	0	0.0	0	0.0
MF 114	14	14	100.0	0	0.0	0	0.0
MF 214	5	5	100.0	0	0.0	0	0.0
MF 314	4	4	100.0	0	0.0	0	0.0
Mk 142	1	1	100.0	0	0.0	0	0.0
MK 302	1	1	100.0	0	0.0	0	0.0
Mk142	1	1	100.0	0	0.0	0	0.0
PC-2009	1	1	100.0	0	0.0	0	0.0
PC-2009	1	1	100.0	0	0.0	0	0.0
PC-2009	2	2	100.0	0	0.0	0	0.0
TCW 1990	1	1	100.0	0	0.0	0	0.0
Unknown	4	4	100.0	0	0.0	0	0.0
Unknown	1	1	100.0	0	0.0	0	0.0

**Use Filter options to filter data in the table**

## Refrigerators/Freezers Models by Age Group

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

A report for refrigerator/freezers models according to the age group will be displayed.

CCEM Reports

Refrigerator/Freezers Models by Age Group
▼

Facility Type

Office

Province \*

Search

Refrigerator/Freezers Models by Age Group											
Model	Total #	0-2 Years #	0-2 Years %	3-5 Years #	3-5 Years %	6-10 Years #	6-10 Years %	>10 Years #	>10 Years %	Unknown #	Unknown %
131	2	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00
1990	1	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00
407-A	1	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00
9144	3	0	0.00	2	66.67	0	0.00	1	33.33	0	0.00
9155	2	0	0.00	0	0.00	1	50.00	1	50.00	0	0.00
9166AD	3	0	0.00	1	33.33	1	33.33	1	33.33	0	0.00
9170WBAD	1	0	0.00	0	0.00	1	100.00	0	0.00	0	0.00
CF32A	1	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00
CF32A	2	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00
CF32A	1	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00
CF-32-A	1	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00
DF500P	1	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00
DM3	2	0	0.00	0	0.00	0	0.00	1	50.00	1	50.00

Use Filter options to filter data in the table

## Refrigerators/Freezers Utilization

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

A report about the utilization of refrigerator/freezers in the selected province / district will be displayed.

CCEM Reports

Refrigerator/Freezers Utilization
▼

Facility Type

Office

Province \*

Refrigerator/Freezers Utilization									
Model	Total #	In Use #	In Use %	In Store #	In Store %	Not Used #	Not Used %	Unknown Status #	Unknown Status %
131	2	2	100.0	0	0.0	0	0.0	0	0.0
CF32A	1	1	100.0	0	0.0	0	0.0	0	0.0
MF 214	3	3	100.0	0	0.0	0	0.0	0	0.0
Unknown	2	2	100.0	0	0.0	0	0.0	0	0.0
Unknown	2	2	100.0	0	0.0	0	0.0	0	0.0
407-A	1	1	100.0	0	0.0	0	0.0	0	0.0
MF304	1	1	100.0	0	0.0	0	0.0	0	0.0
Unknown	2	2	100.0	0	0.0	0	0.0	0	0.0
Unknown	2	2	100.0	0	0.0	0	0.0	0	0.0
Unknown	1	1	100.0	0	0.0	0	0.0	0	0.0
Unknown	1	1	100.0	0	0.0	0	0.0	0	0.0
Unknown	1	1	100.0	0	0.0	0	0.0	0	0.0
Unknown	1	1	100.0	0	0.0	0	0.0	0	0.0
Unknown	1	1	100.0	0	0.0	0	0.0	0	0.0
Unknown	1	1	100.0	0	0.0	0	0.0	0	0.0
Unknown	6	6	100.0	0	0.0	0	0.0	0	0.0

**Use Filter options to filter data in the table**

## Distribution of Refrigerators/Freezers by Model & Facility Type

User can select following filters according to their requirements. Available filters are as follows:

1. Office
2. Province

Click **Search**.

A report for the distribution of refrigerator/freezers according to the model and facility type will be displayed.

Distribution of Refrigerators/Freezers by Model and Facility Type

Office: Province  Province:  Search

District/ Agency vaccine store	Rural health centre	Basic Health Unit	DHQ hospital	MCH Center	Others	Civil Hospital CH	Dispensary	Hospital - Private	Teaching hospital	Tehsil/ Taluka HQ Hospital	Tehsil/ Town vaccine store	Community Health Center CHC	Urban Health Center UHC	Provincial vaccine store	Clinic Private
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0
0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Distribution of CFC-Free Equipment by Facility Type

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

CCEM Reports

Distribution of CFC-Free Equipment by Facility Type
▼

Facility Type Office Province \*

District/Agency vaccine store ▼
Province ▼
Punjab ▼
Search

Distribution of CFC-Free Equipment by Facility Type							
Facility Type	Total #	CFC Free #	CFC Free %	Not CFC Free #	Not CFC Free %	Unknown #	Unknown %
Provincial vaccine stor	36	35	97.22	1	2.78	0	0.00
District/Agency vaccini	367	326	88.83	41	11.17	0	0.00
DHQ hospital	38	34	89.47	4	10.53	0	0.00
Teaching hospital	15	14	93.33	1	6.67	0	0.00
Hospital - Private	38	34	89.47	4	10.53	0	0.00
Rural health centre	200	180	90.00	20	10.00	0	0.00
Basic Health Unit	763	709	92.92	54	7.08	0	0.00
Dispensary	169	148	87.57	21	12.43	0	0.00
Tehsil/Town vaccine st	65	57	87.69	8	12.31	0	0.00
Others	149	129	86.58	20	13.42	0	0.00
Civil Hospital CH	61	49	80.33	12	19.67	0	0.00
Community Health Cer	47	38	80.85	9	19.15	0	0.00
MCH Center	21	18	85.71	3	14.29	0	0.00
Clinic Private	5	5	100.00	0	0.00	0	0.00
Urban Health Center UI	2	2	100.00	0	0.00	0	0.00
Tehsil/Town MCH Center	0	0	0.00	0	0.00	0	0.00

## Refrigerators/Freezers Not Working or Needs Service

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

Refrigerators/Freezers not working or needs service
▼

Facility Type

Office

Province \*

Refrigerators/Freezers not working or needs service														
Province	District	Tehsil	UC	Facility Name	Facility Type	Catalog ID	Model	Make	Serial No	Net Vol +4	Net Vol -20	Year of Supply	Working Status	Equipment Utilization
Islamabad	Islamabad	Rural Islam	Chirrah	BHU Chirrah	Basic Health	E003010	MK 074	Vestfrost	20004110737	9.999999999	0	2000	Working we	In use
Islamabad	Islamabad	Rural Islam	Jagiot	BHU Jagiot	Basic Health	Domestic	PR 23 2D	PEL	6975	9.999999999	9.999999999	2007	Working we	In use
Islamabad	Islamabad	Rural Islam	Kirpa	BHU Jhang	Basic Health	Domestic	PR 23 2d Alt	PEL	6965	9.999999999	9.999999999	1999	Working we	In use
Islamabad	Islamabad	Rural Islam	Koral	BHU Bhukka	Basic Health	Domestic	PR 232 D Alt	PEL	6932	9.999999999	9.999999999	2004	Working we	In use
Islamabad	Islamabad	Rural Islam	Shah Allah	BHU Shah Al	Basic Health	Domestic	PR-23 2D Alt	PEL	6905	9.999999999	9.999999999	2007	Working we	In use
Islamabad	Islamabad	Rural Islam	Sohan	BHU Sohan	Basic Health	E362M	TCW 1990	Dometic	1111019	9.999999999	0	2000	Working we	In use
Islamabad	Islamabad	Rural Islam	Tumair	BHU Tumair	Basic Health	Domestic	PR-23-2D	PEL	6872	9.999999999	9.999999999	1999	Working we	In use

## Refrigerators/Freezers not in use

User can select following filters according to their requirements. Available filters are as follows:

1. Office
2. Province

Click **Search**.

CCEM Reports

Refrigerators/Freezers not in use

Office Province \*

Province ▼

Punjab ▼

Search

Refrigerators/Freezers not in use													
Province	District	Tehsil	UC	Facility Name	Facility Type	Catalog ID	Model	Make	Serial No	Net Vol +4	Net Vol -20	Year of Supply	Working Status
Punjab	Punjab	Punjab	Rahim Yar K	District Rah	District/Ager	SB300	131	Vestfrost	90370742	0.0	0.0	2000	Working well
Punjab	Punjab	Punjab	Lahore	District Lah	District/Ager	E397M	MF 214	Vestfrost	2003460008	0.0	10.0	2000	Working well
Punjab	Punjab	Punjab	Muzaffargar	District Muz	District/Ager	E003010	MK 074	Vestfrost	20013405847	10.0	0.0	2000	Working well
Punjab	Rawalpindi	City	U. Coucil No.	MCD Ratta A	Dispensary	E357M	MK 144	Vestfrost	20073989367	10.0	0.0	2011	Working well
Punjab	Lahore	Lahore	Gujjar Pora	16A	Others	E003010	MK 074	Vestfrost	20122351155	10.0	0.0	2012	Working well
Punjab	Multan	Multan Rural	18-MR	BHU 18/MR	Basic Health	E003010	MK 074	Vestfrost	20113642444	10.0	0.0	2012	Working well
Punjab	Rahim Yar K	Rahim Yar K	THQ Liaquat	THQ Hospita	Tehsil/Taluk	E396M	MF 114	Vestfrost	20084838954	0.0	10.0	2009	Working well
Punjab	Lahore	Lahore	Sultan Mehn	38A	Dispensary	E003010	MK 074	Vestfrost	20104634510	10.0	0.0	2012	Working well
Punjab	Rahim Yar K	SADIQABAD	City A	EPI Center C	Teaching ho	E362M	TCW 1990	Dometic	12261	10.0	0.0	2010	Working well
Punjab	Rawalpindi	Rural(Rwp)	Baga Shiekh	RHC Baga Sh	Tehsil/Taluk	E357M	MK 144	Vestfrost	20013405600	10.0	0.0	2007	Working well
Punjab	Muzaffargar	Muzaffargar	Basira	RHC Basira	Dispensary	E003010	MK 074	Vestfrost	20122350989	10.0	0.0	2013	Working well
Punjab	Dera Ghazi K	Dera Ghazi K	Choti Zarien	RHC Choti Z	Rural health	E003010	MK 074	Vestfrost	20114154994	10.0	0.0	2012	Working well
Punjab	Rawalpindi	Rural(Rwp)	Chountra	RHC Chountr	Basic Health	E003010	MK 074	Vestfrost	20064335234	10.0	0.0	2008	Working well
Punjab	Muzaffargar	Muzaffargar	City No-2	DHQ City No	DHQ hospital	E003010	MK 074	Vestfrost	20112414477	10.0	0.0	2011	Working well
Punjab	Lahore	Cantt	CT-10 B	SSH CT-10 B	Basic Health	WF210	WF-210	Waves	10020201040	0.0	10.0	2006	Working well

## Cold Rooms

This menu can be viewed by selecting the “Cold Rooms” tab in the sub-menu. The drop down menu will be displayed as follows:



## 4 and -20 by Model and Working Status

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

CCEM Reports

Cold Rooms +4C and -20C By Model And Working Status

Facility Type:  Office:  Province\*:




Cold Rooms +4C and -20C By Model And Working Status										
Facility Type	Model Name	Manufacturer	Equipment Type	Total	Working #	Working %	Working Needs Service #	Working Needs Service %	Not Working #	Not Working %
District/Agency \	107A	BIBIR	Cold Rooms	1	1	100.00	0	0.00	0	0.00
District/Agency \	N/A	Haier	Cold Rooms	2	2	100.00	0	0.00	0	0.00
District/Agency \	Foster Solo Plus	FOSTER	Cold Rooms	1	1	100.00	0	0.00	0	0.00
District/Agency \	PVO90D	Porkka	Cold Rooms	2	2	100.00	0	0.00	0	0.00
District/Agency \	Unknown	Unknown	Cold Rooms	1	1	100.00	0	0.00	0	0.00

## Cold Room Facilities and Working Status

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

CCEM Reports

---

Listing Of Cold Room Facilities And Working Status
▼

Facility Type:  Office:  Province\*:

Listing Of Cold Room Facilities And Working Status											
Facility Type	Model Name	Manufacturer	Equipment Type	Total	Working #	Working %	Working Needs Service #	Working Needs Service %	Not Working #	Not Working %	Serial No
District/Agency 107A		BIBIR	Cold Rooms	1	1	100.00	0	0.00	0	0.00	
District/Agency II/A		Haier	Cold Rooms	2	2	100.00	0	0.00	0	0.00	
District/Agency Foster Solo Plu		FOSTER	Cold Rooms	1	1	100.00	0	0.00	0	0.00	
District/Agency PVO90D		Porkka	Cold Rooms	2	2	100.00	0	0.00	0	0.00	
District/Agency Unknown		Unknown	Cold Rooms	1	1	100.00	0	0.00	0	0.00	

## Cold Boxes

This menu can be viewed by selecting the “Cold Boxes” tab in the sub-menu. The drop down menu will be displayed as follows:



## Cold box and Vaccine Carriers by Working Status

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

CCEM Reports

Coldbox And Vaccine Carriers By Working Status

Facility Type:  Office:  Province\*:




Coldbox And Vaccine Carriers By Working Status						
Facility Type	Model Name	Manufacturer	Equipment Type	Total	Working	Not Working
District/Agency vaccine st	Carrier	INALSA	Vaccine Carrier	442	442	0
District/Agency vaccine st	Rotary International	Unknown	Vaccine Carrier	1670	1670	0
District/Agency vaccine st	RCW12	Dometic	Vaccine Carrier	65	65	0
District/Agency vaccine st	AICB 243S	Beijing Jialihengye Interna	Vaccine Carrier	5	5	0
District/Agency vaccine st	RCW25	Dometic	Vaccine Carrier	281	281	0
District/Agency vaccine st	TESTING MODEL	TESTING MAKE	Vaccine Carrier	3	3	0

## Cold Boxes/Carriers Quantity

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

### CCEM Reports

#### Quantity Of Cold Boxes Carriers

Facility Type: District/Agency vaccine store | Office: Province | Province\*: Punjab | Search

Quantity Of Cold Boxes Carriers			
Facility Type	Vaccine Carriers (Min)	Vaccine Carriers (Max)	Vaccine Carriers (Mean)
District/Agency vaccine store	2	1000	85

## Generators and Stabilizers

This menu can be viewed by selecting the “Generators and Stabilizers” tab in the sub-menu. The drop down menu will be displayed as follows:



## Standby Generators by Facility Type and Working Status

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

CCEM Reports

Standby Generators By Facility Type And Working Status

Facility Type:  Office:  Province\*:




Standby Generators By Facility Type And Working Status							
Facility Type	Total	Working #	Working %	Working Needs Service #	Working Needs Service %	Not Working #	Not Working %
District/Agency vaccine	6	6	100.00	0	0.00	0	0.00

## Voltage Stabilizers and Regulators Working Status

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

**Voltage Stabilizers And Regulators Working Status** ▼

Facility Type

Province \*

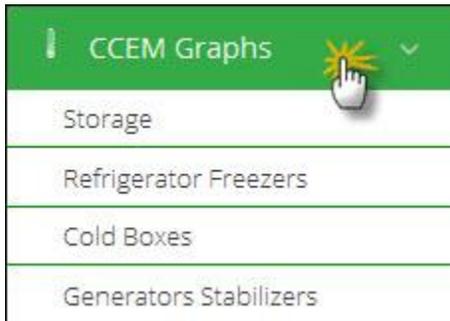
**Use Filter options to filter data in the table below**

This report provides information about the Voltage Stabilizers And Regulators with respect to their working status at each facility type. It displays total number of stabilizers, quantity of generators in working condition, percentage of stabilizers in working condition, quantity of stabilizers in working but needs service, percentage of stabilizers in working but needs service, quantity of stabilizers not working and percentage of stabilizers not working.

Voltage Stabilizers And Regulators Working Status										
Facility Type	Model Name	Manufacturer	Equipment Type	Total	Working #	Working %	Working Needs Service #	Working Needs Service %	Not Working #	Not Working %
Provincial vaccine store	SVS 04-22	Sollatek	Stablizers	1	1	100.00	0	0.00	0	0.00
Provincial vaccine store	R-16	Rimco	Stablizers	1	1	100.00	0	0.00	0	0.00
Provincial vaccine store	FF500/4R	Advance Galatrek	Stablizers	2	2	100.00	0	0.00	0	0.00
Provincial vaccine store	A21	Universal	Stablizers	1	1	100.00	0	0.00	0	0.00
Provincial vaccine store	30 KVA	MEH Pakistan	Stablizers	1	1	100.00	0	0.00	0	0.00
Provincial vaccine store	FF 500/4R	Advance Galatrek	Stablizers	1	1	100.00	0	0.00	0	0.00
Provincial vaccine store	Voltright	Sollatek	Stablizers	1	1	100.00	0	0.00	0	0.00

## CCEM Graphs

Clicking on **CCEM Graph** menu displays the list of Graphs related to cold-chain equipment management, as shown in the image below:

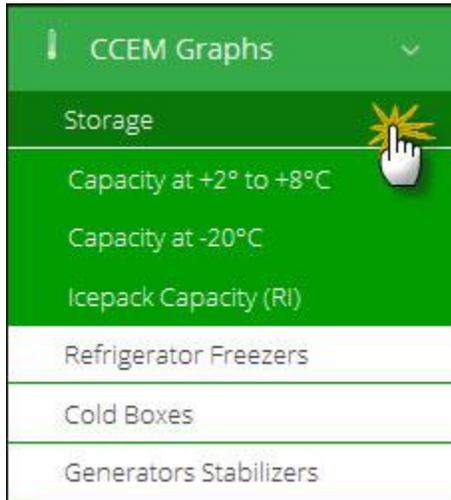


There are the following different types of graph reports:

- **Storage:** enables you to compare different indicators to determine capacity.
- **Refrigerator Freezers:** enables you to the status of refrigerators and freezers.
- **Cold Boxes:** enables you to determine the status of cold-boxes.
- **Generators Stabilizers:** enables you to determine the status of generators and stabilizers.

## Storage

Clicking on **Storage** sub-menu displays the list of Graphs related to storage management, as shown in the image below:



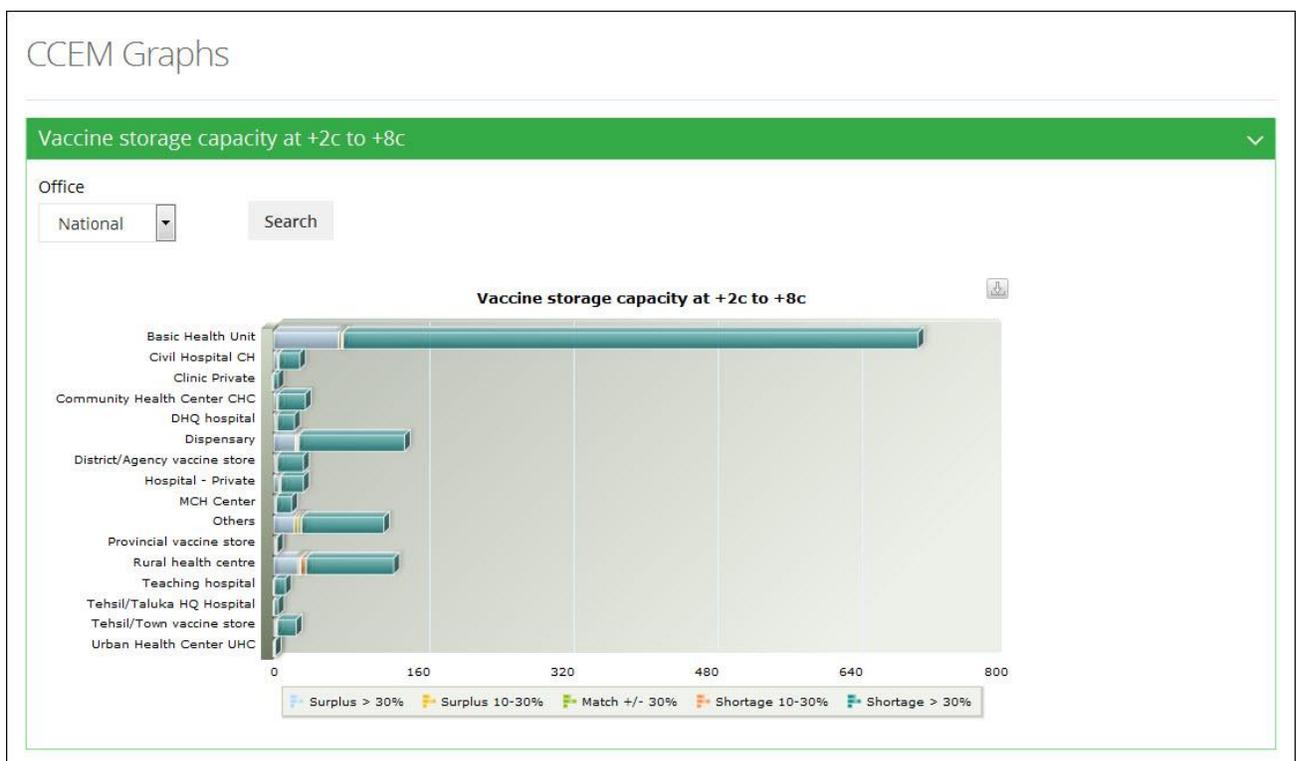
## Capacity at +2c to +8c

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

The desired graph is displayed as follows:



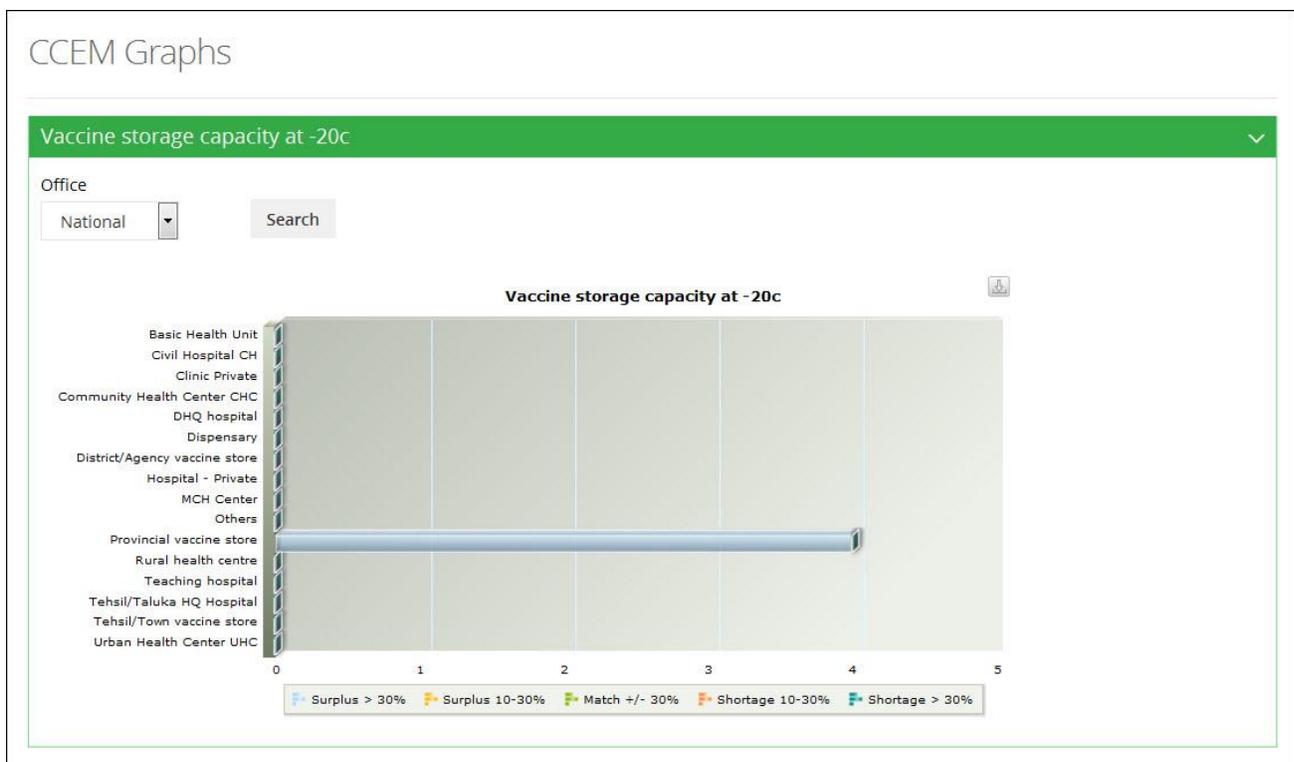
## Capacity at -20C

User can select following filters according to their requirements. Available filters are as follows:

1. Office
2. Province
3. District

Click **Search**.

The desired graph is displayed as follows:



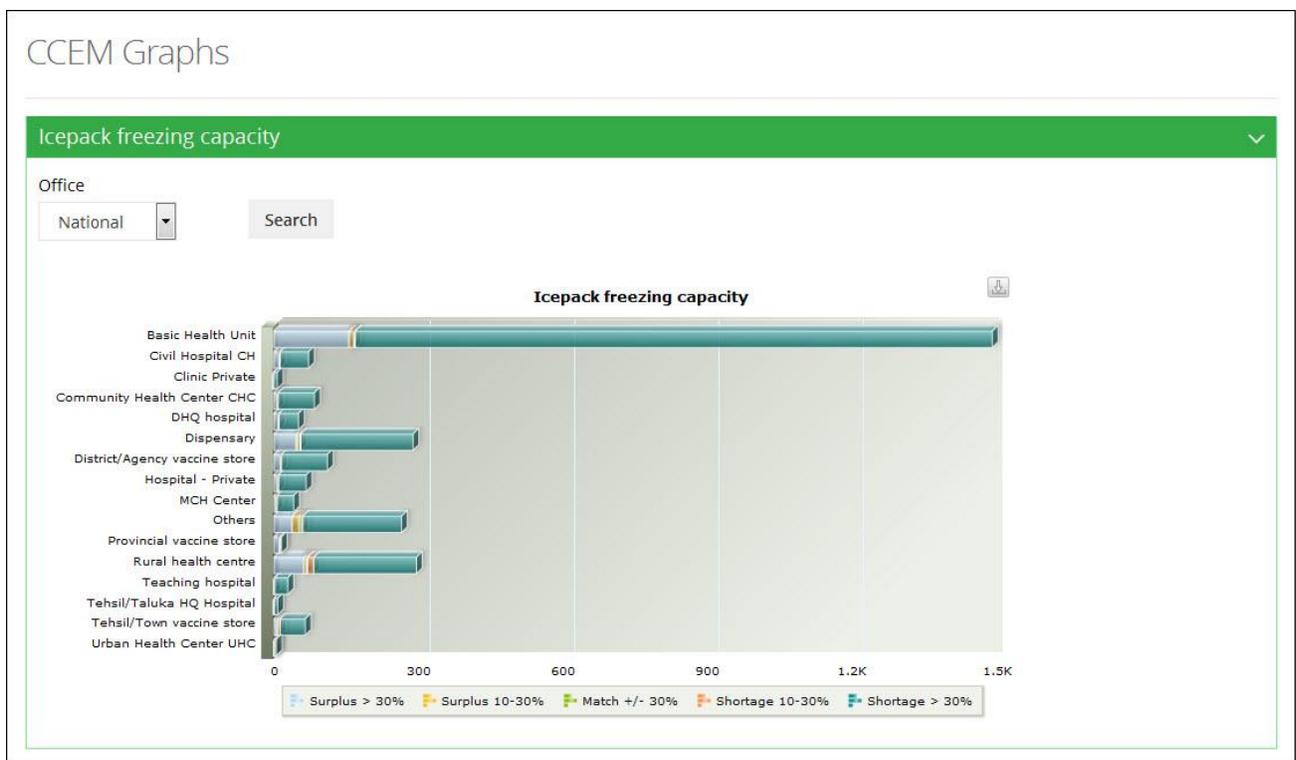
## Icepack Capacity (RI)

User can select following filters according to their requirements. Available filters are as follows:

1. Office
2. Province
3. District

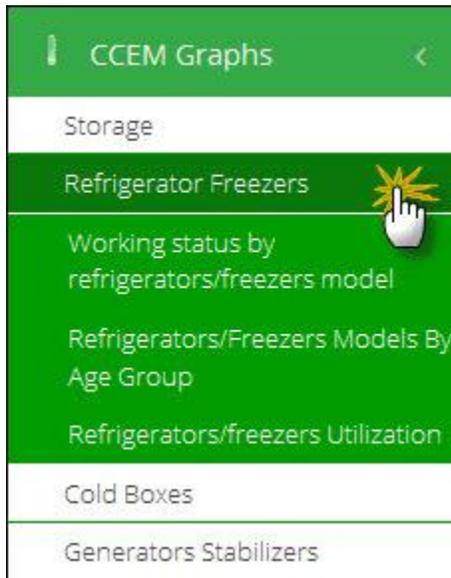
Click **Search**.

The desired graph is displayed as follows:



## Refrigerator Freezers

Clicking on **Refrigerator Freezers** sub-menu displays the list of Graphs related to cold-chain equipment management, as shown in the image below:



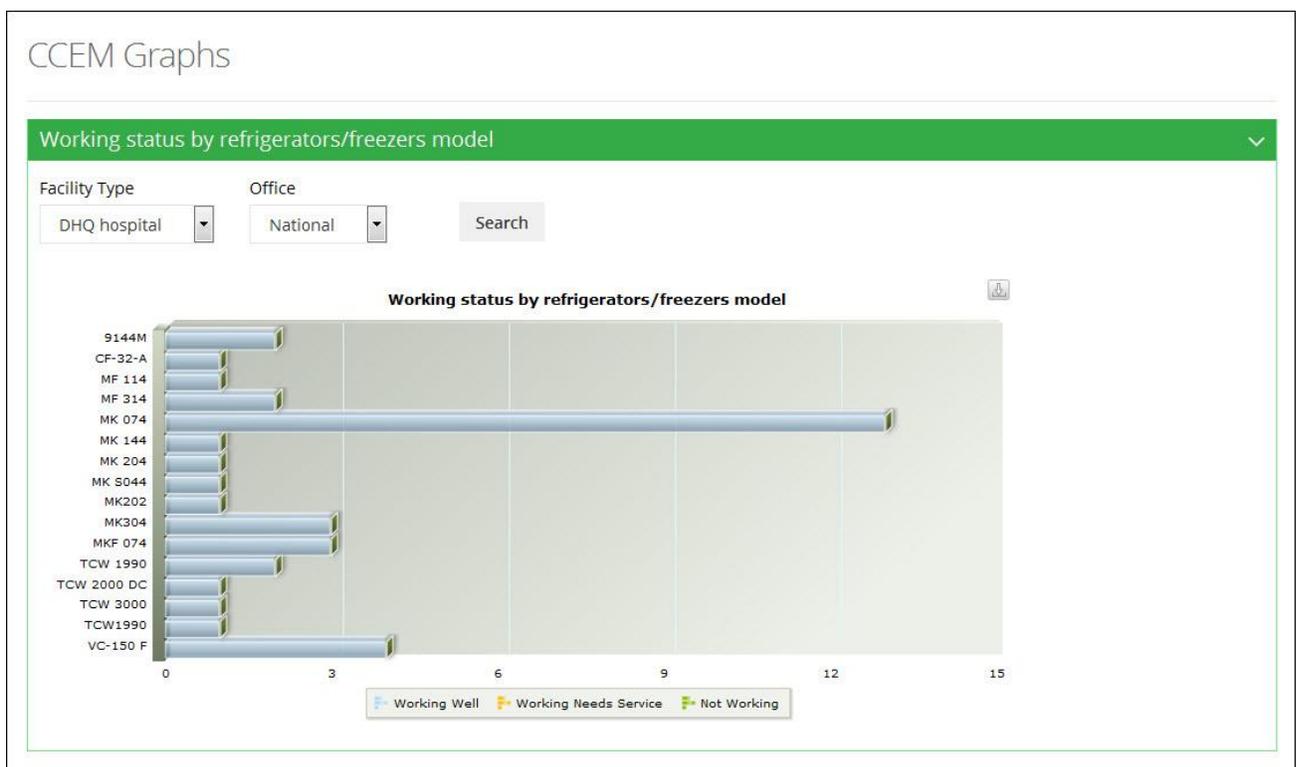
## Working Status by Refrigerators Model

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

Click **Search**.

The desired graph is displayed as follows:



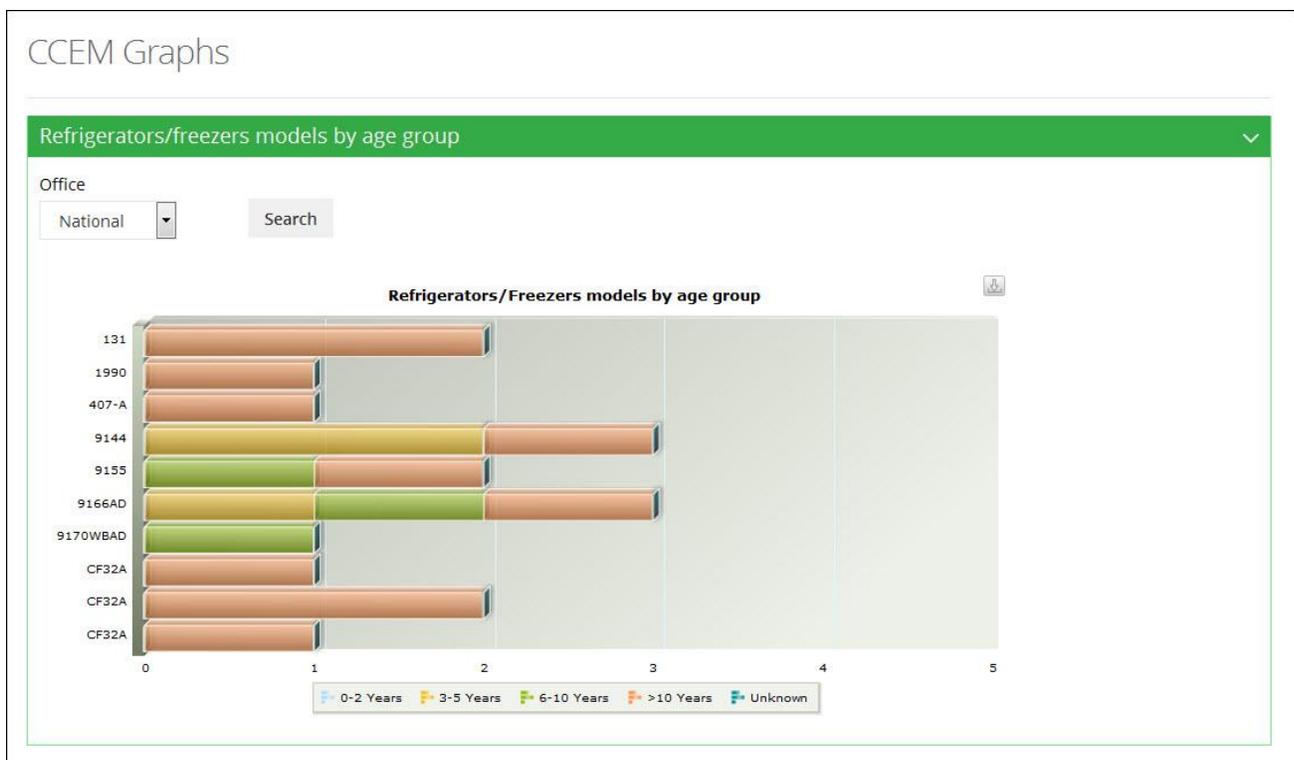
## Refrigerators / Freezers Model By Age Group

User can select following filters according to their requirements. Available filters are as follows:

1. Office
2. Province
3. District

Click **Search**.

The desired graph is displayed as follows:



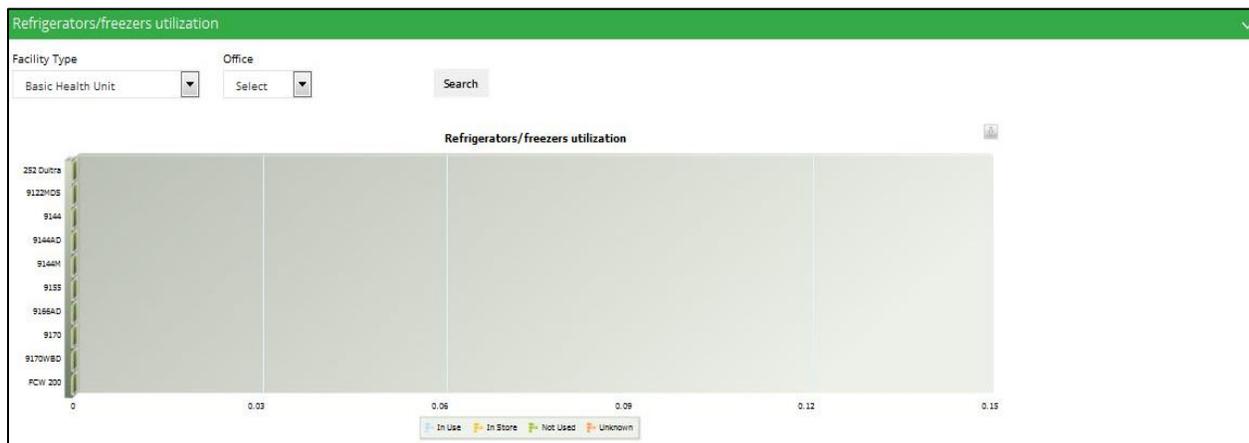
## Refrigerators / Freezers Utilization

User can select following filters according to their requirements. Available filters are as follows:

1. Facility Type
2. Office
3. Province
4. District

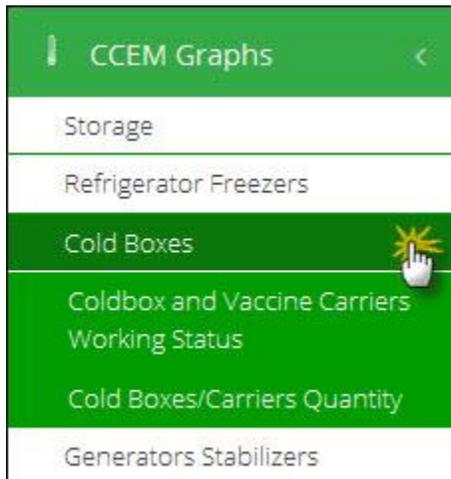
Click **Search**.

The desired graph is displayed as follows:



## Cold Boxes

Clicking on **Cold Boxes** sub-menu displays the list of Graphs related to cold-chain equipment management, as shown in the image below:



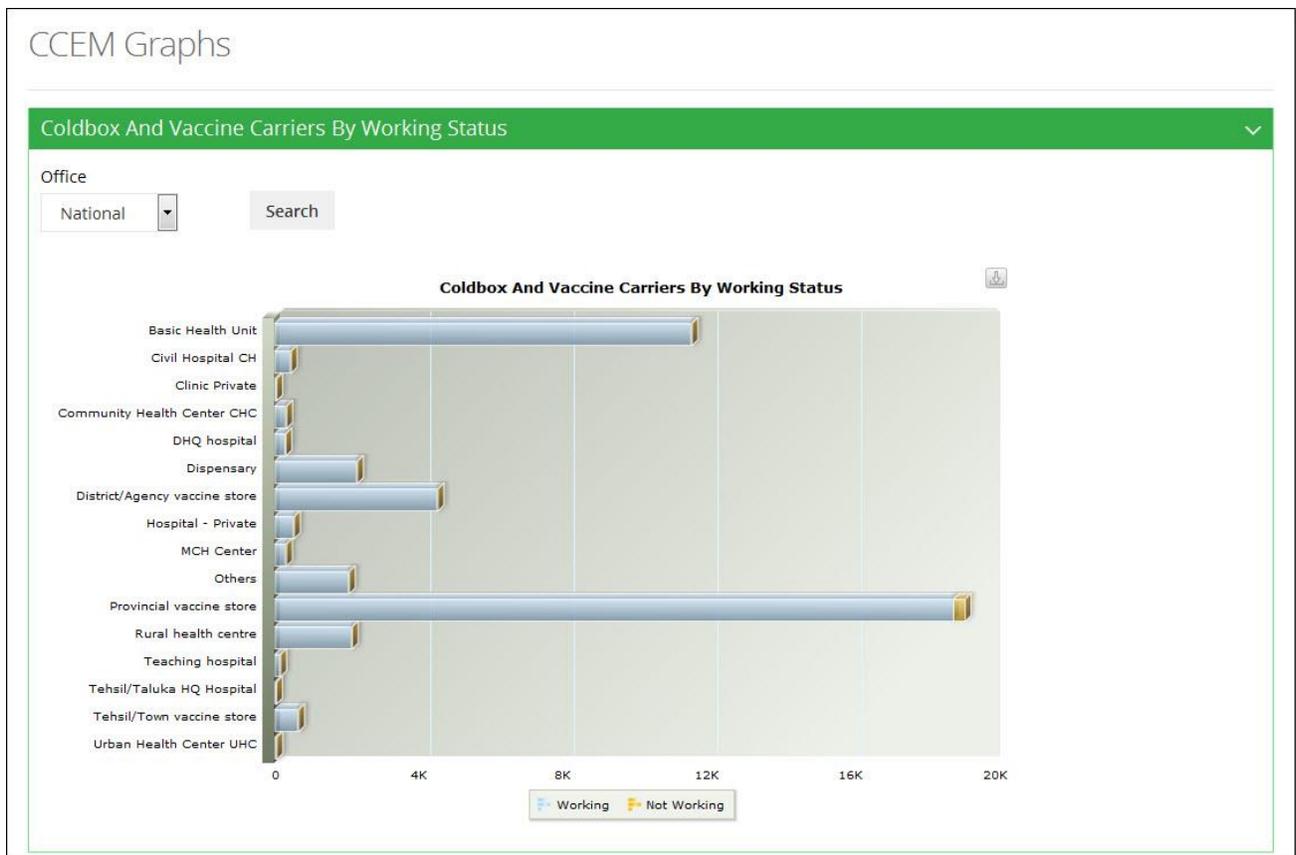
## Cold-box and Vaccine Carriers Working Status

User can select following filters according to their requirements. Available filters are as follows:

1. Office
2. Province
3. District

Click **Search**.

The desired graph is displayed as follows:



## Cold-boxes / Carrier Quantity

User can select following filters according to their requirements. Available filters are as follows:

1. Office
2. Province
3. District

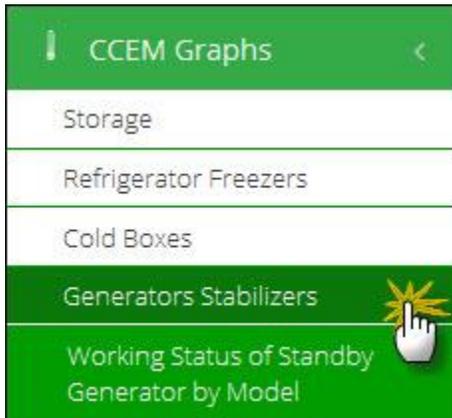
Click **Search**.

The desired graph is displayed as follows:



## Generators Stabilizers

Clicking on **Generators Stabilizers** sub-menu displays the list of Graphs related to cold-chain equipment management, as shown in the image below:



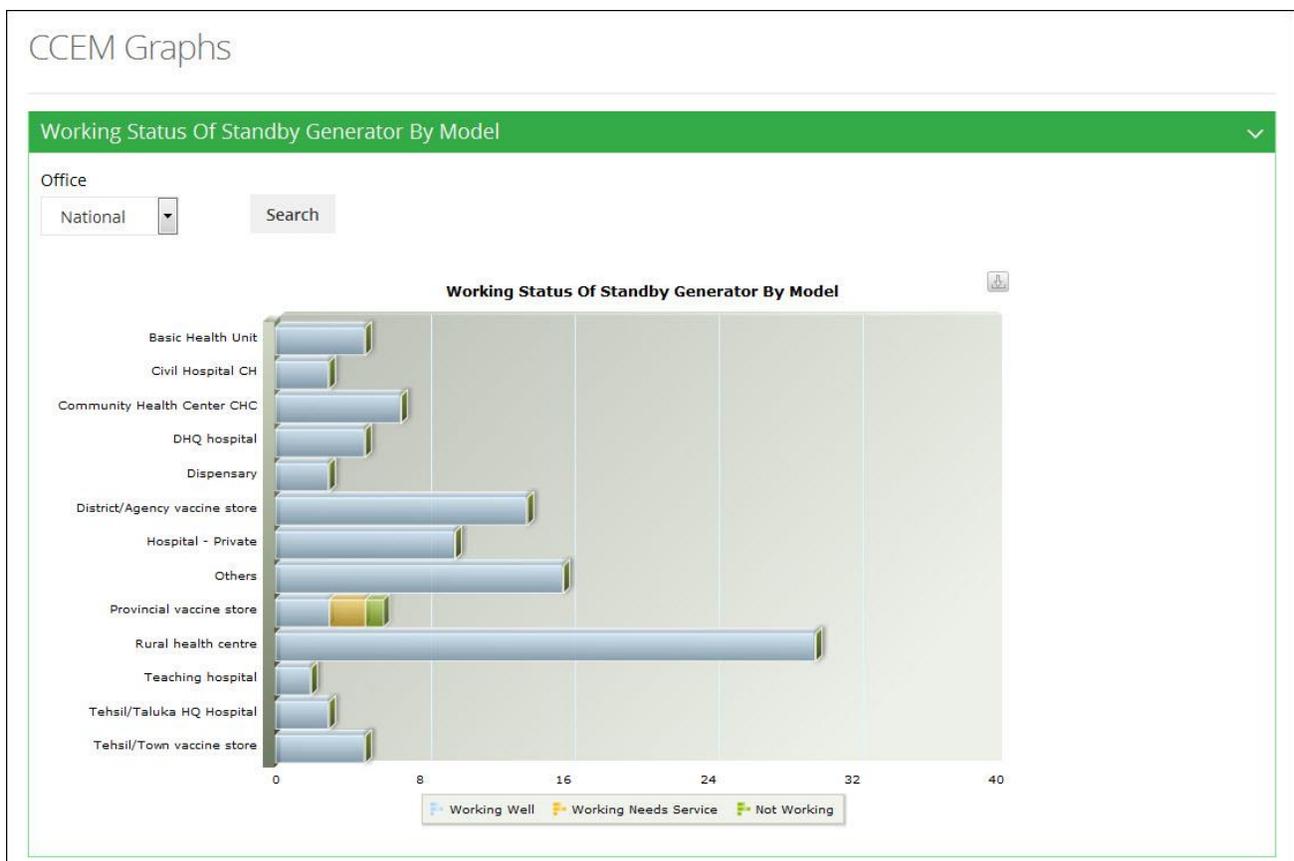
## Working Status of Standby Generator by Model

User can select following filters according to their requirements. Available filters are as follows:

1. Office
2. Province
3. District

Click **Search**.

The desired graph is displayed as follows:





# Cold-chain

# 5

## in Vaccine Logistics Management Information System

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This section explains the overview of the cold-chain logistics and its importance in the Logistics Management Information System.

### Cold Chain Logistics

The Expanded Program on Immunization (EPI) was launched in 1978 in Pakistan to reduce death, disease, and disability due to vaccine preventable diseases (VPDs), and to contribute to the strengthening of national health systems. EPI services are provided through the public health delivery network through fixed centers and outreach services.

Improving routine immunization is one of the key indicators of EPI for ensuring a reduction in childhood mortality in Pakistan. However, improving routine immunization remains a major challenge in Pakistan. Many children are being needlessly affected by measles and other vaccine preventable diseases despite the availability of safe and effective vaccines, one of the factors being that there is inadequate capacity to manage vaccine cold chain effectively. A huge part of vaccines is wasted or expired due to ineffective cold chain during the supply chain process, therefore in June 2013, the USAID | DELIVER PROJECT, in collaboration with federal and provincial Expanded Program on Immunization (EPI) stakeholders, UNICEF and WHO collaborated to review the performance of vaccine and cold chain logistics management and supply chain systems and decided that it was essential to integrate vaccine logistics into an

online system, possibly extending the existing Pakistan Web-based LMIS to include a Vaccine and a Cold Chain Logistics module.

The requirements of the vaccine and cold chain logistics management system were discussed and all stakeholders worked to define a common vision for the enhancement of the Web-based LMIS for vaccines. Based on their review, stakeholders endorsed the Web-based LMIS in Pakistan (supported by the USAID | DELIVER PROJECT and John Snow, Inc.) as a model for a new vLMIS that would be accessible through a web portal, provide transparency to all stakeholders based on user rights, is easy to use, enables reporting via mobile devices (SMS), and integrates both routine and campaign vaccine logistics data. Standardized reporting forms were also recommended, along with more timely review and tracking reporting rates and timeliness. Data triangulation is recommended to validate data and improve visibility in wastage rates. One important recommendation was that the resupply quantities for routine EPI should be calculated based on average monthly consumption and stock balances, and that wastage rates should be calculated automatically if feasible. Finally, there was a consensus that timely budget release, appropriate training, improved monitoring and supervision, and adequate IT support were vital to improving vaccine logistics data collection, management, and use.

This report was presented to the Ministry of National Health Services, Regulation and Coordination, includes the findings of the assessment, as well as the recommended high-level functional and system requirements for extending the Web-based LMIS to include a vaccine logistics management information system (vLMIS) module.

## **Why is Cold Chain Logistics important?**

Cold chain logistics refer to the system of people, policies, procedures, vehicles, fuel, equipment, and technologies that work together to make sure that vaccines given to people are safe and effective. Because most vaccines have specific temperature requirements, the cold chain logistics management system would prevent both excessive heat and cold from damaging the vaccines from the time of manufacturing until they are used. The refrigerated movement of

temperature sensitive vaccines, pharmaceuticals and medical supplies is vital for the shelf life of vaccine drugs relies heavily on controlled and uncompromised transfer of shipments.

An effective logistics system is incomplete without a well-maintained cold chain for safe and effective immunization service delivery. An improperly functioning cold chain can lead to wasted vaccines, missed opportunities to immunize due to lack of vaccines, and children receiving vaccines that do not protect them as intended or that actually make them sick.

Insufficient, outdated and broken cold chain equipment are often cited as major problems affecting routine immunization efforts during country immunization program reviews and supervisory visits. Additional problems are lack of technically-trained staff and inadequate financing for procuring new equipment and transporting technicians and/or broken equipment.

Outdated equipment is still in use and often needed as back-up due to delays in providing new equipment, insufficient stock capacity (both permanent and temporary, if the equipment is being used for immunization campaigns), or occasional problems with new equipment (e.g. lack of spare parts or appropriate tools).

There is often a lack of field-based procurement and repair plans, which means that cold chain and logistics inventories are not sufficiently linked with new equipment projections. This makes it difficult for countries to prioritize districts and provinces with the greatest need for new equipment.

## **Environmental factors**

Poor or unreliable energy sources, a common problem in developing countries, weaken the effectiveness of equipment and shorten its lifespan. Also, equipment in remote areas is difficult to reach with timely repairs and routine maintenance, which are necessary to avoid more costly repairs or replacement.

The Expanded Program on Immunization emphasizes monitoring vaccine stocks and temperatures at all levels of storage, distribution and administration in order to avoid or reduce wastage.

Monitoring tools include vaccine vial monitors and freeze watch indicators. In addition, electronic temperature data loggers have been introduced at the regional level to 1) monitor the transportation of freeze-sensitive vaccines and 2) randomly study the storage temperatures of some refrigerators over a defined period of time.

There is inadequate capacity to manage cold chain effectively.

## **Cold Chain Module in vLMIS**

The National Vaccine Management Committee (NVMC) requested USAID to support enhancing the existing web-LMIS to include a module for managing vaccine and cold chain data. This new module will be referred to as the vaccine logistics management information system (vLMIS).

The reason for developing an online cold chain module is the lack of cold chain data. Despite the heavy investment by development partners and the GOP, no credible information and inventory systems exist at the municipal Union Council (UC), district, provincial, nor even federal levels.

Logistics management information system (LMIS) data for vaccines below the national level is mainly paper-based and therefore largely inaccessible to vertical program managers. The data currently originates from forms filled at the health facilities and is only partially turned into accessible digital information in Excel spreadsheets at either district or provincial levels.

The limited information for vertical program managers and district administrations is manually aggregated through the districts and/or provinces. It is sometimes estimated and often incomplete. This hinders the ability of managers to procure the right quantities and effectively oversee supply chain performance.

Currently, UNICEF is supporting a national cold chain inventory that will collect data on existing cold chain equipment (age, type, capacity, operability) as well as facility profile data. This will help identify gaps in the cold chain storage capacity and functionality that need to be addressed.

However, there are significant challenges in the collection, use and management of cold chain since Wastage (due to open vial) data are under-reported and poorly tracked.

Key data requirements were also agreed, emphasizing simplicity and minimal data for the initial version of the vLMIS (with suggestions for future additions) and mandating use of stock balance, consumption and issues data, losses and adjustments as the essential data items to collect. New routine reporting forms will be developed to collect this data from service delivery points, along with vaccine logistics standard operating procedures (SOPs) for each level of the supply chain. Data will be entered at either the Union Council level (if Internet access is available) or at the district level, and the vLMIS will also include a warehouse management system module for inventory management at the district, provincial, and national EPI stores. The vLMIS will also receive periodic SMS reports from vaccinators (more frequent than monthly, but period is yet to be determined) that include consumption, wastage, and balance. These data will be used to validate the monthly reports from service delivery points. The system will enable continued use of the existing SOPs and forms for polio campaigns, but the inventory data from stores will be integrated and vaccinators will report via SMS daily during the campaigns.

The design, construction and testing of the vLMIS is expected to be completed by December 2013, and will be deployed for a pilot phase to the polio endemic districts first before national rollout. A vLMIS Project Charter will be developed and approved by the NVMC to ensure adequate stakeholder engagement and commitment to the vLMIS, to document project parameters and deliverables, and to establish project management and governance structures.

## **Cold Chain Storage**

Currently, there is a well-established network of cold stores at each level down to the district (except in Azad Jammu and Kashmir, and Gilgit-Baltistan). At the national level, cold and bulk

storage is sufficient for all commodities, but not at provincial, district, or sub-district and UC level. Punjab has upgraded cold chain equipment provided by USAID in 2013, and Khyber Pakhtunkhwa has started upgrading its cold store. Good storage conditions are maintained at federal level, while conditions vary from province to province and district to district. Cold chain equipment is maintained at all levels (with a few exceptions at district & UC levels) and cold chain failures are dealt with timely and appropriately at the provincial level, with some delays at district & sub district level. There are some personnel trained in and capable of providing cold chain maintenance.

Cold & bulk storage space is inadequate at provincial (except in Punjab), district, and SDP levels, and the cold rooms at both national and provincial levels are not purpose built for maximum operational and energy efficiency, as they now rely on multiple smaller cold rooms that vent heat into the bulk storage area. Interruption of electricity supply is common place and there is a lack of power back up at all levels. The quality of cold chain equipment at district & sub-district levels is not optimal, and many lack voltage stabilizers. There is a shortage of trained and qualified cold chain technicians to service all EPI stores and equipment in a timely manner.

## **Recommendations**

The cold chain system needs to be upgraded at all levels, with particular attention to provincial level and below. Design standards that emphasize operational and energy efficiency should be developed for national, provincial, and district cold stores so that investments in upgrades contribute to optimize storage procedures, reduced energy consumption and cost containment. Upgrades must also include back up power systems; if generators are included, adequate long-term budget support is required for fuel. At lower levels, solar ice liners refrigerators (ILRs) should be based on the newest sustainable technology (solar chill) for areas with high incidence of power interruptions. Any new equipment investment must also include training for technical staff on maintaining and repairing new technology, and additional technical staff should be trained and posted at both provincial and district level to meet demand. Where possible,

purpose built vehicles for the maintenance and repair of cold chain equipment should be procured and stocked with spare parts to improve efficiency of available technical staff.

Cold chain module should include the following features so that the capacity of National Immunization Programs is strengthened and every individual can benefit from vaccines of assured quality delivered in the right amount at the right time through efficient logistics, proper vaccine management, and a well-functioning cold chain system. The proposed requirements are:

1. Management information system capable of collecting cold chain asset data, its capacity and working status so that adequate numbers of vaccines are stored for every immunization session.
2. Cold chain asset status is provided on monthly basis so that vaccine wastage is minimized without affecting coverage and new vaccine introduction is not constrained by lack of storage/transport capacity.
3. Cold chain inventory control system to ensure proper management and distribution of cold chain supplies.
4. Storage and warehouses to have adequate capacity of cold chain assets to ensure vaccine shelf life.
5. Tracked distribution of cold chain assets to warehouses so that Vaccines are stored and transported without temperature damage.

## **CCEM**

A vaccine's cold chain is a temperature-controlled supply chain. It is essential for the effectiveness of the vaccines that an unbroken cold chain with uninterrupted series of storage and distribution activities are maintained for the given temperature range. In vLMIS, users can provide the Cold-chain assets information containing its capacity and working status for each month in order to record the cold-chain maintenance data.

In vLMIS, CCEM operators at the National, Provincial and District level will be able to perform following four activities:

- Add an Asset
- Search an Asset
- Transfer an Asset
- Update Asset Working Status

## Introduction to Cold chain Assets

In vLMIS, cold-chain assets can be divided into two main categories:

1. Registered (Non-quantifiable Assets)
2. Non-Registered (Quantifiable Assets)

Registered assets are those assets which are not added with mentioned quantity. Non-registered assets on the other hand, will consist of a defined quantity.

Currently, there are seven types of cold-chain assets in the vLMIS. All these assets fall into the above mentioned categories.

### Registered Assets

1. Refrigerators
2. Cold Room
3. Generator
4. Transport

### Non-Registered Assets

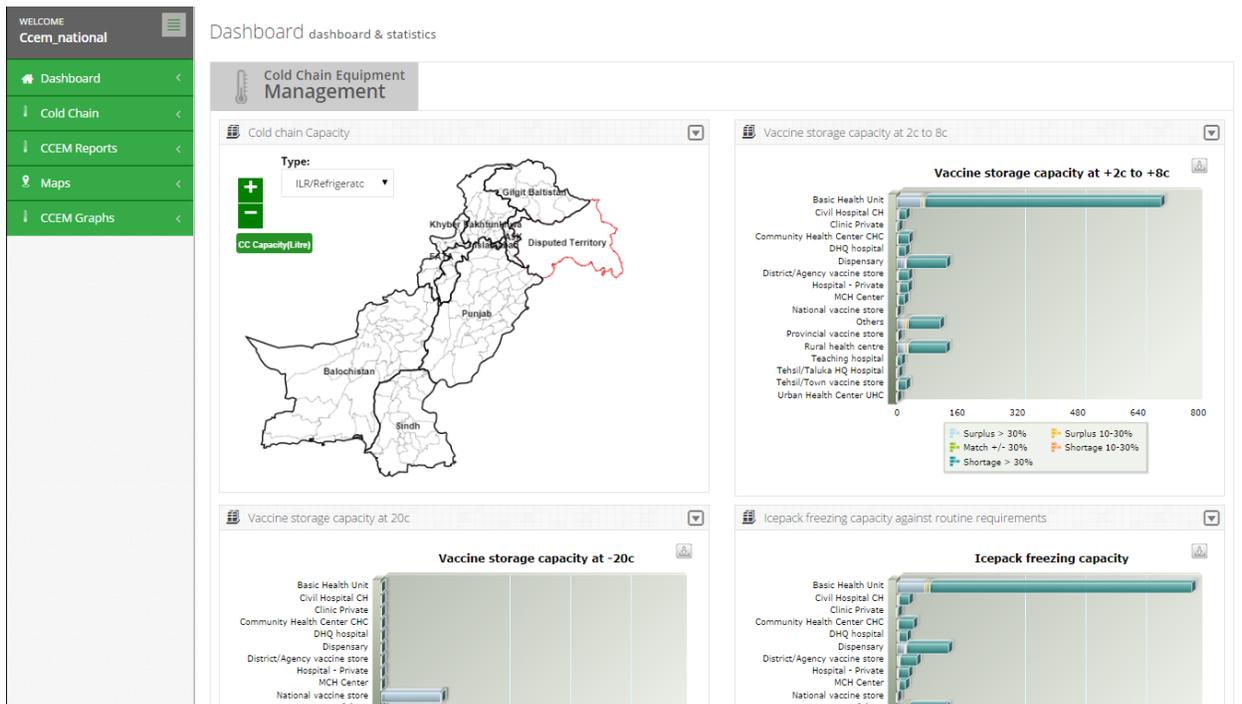
5. Vaccine Carriers
6. Ice Pack
7. Voltage Regulator

Among the registered assets, refrigerators and cold rooms consist of temperature alarms to ensure that the set temperature levels are achieved for vaccines. Generator and transport do not require temperature regulation.

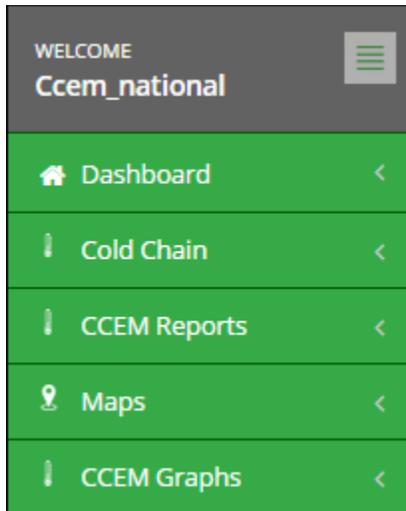
# National CCEM Operator

It is essential for the effectiveness of the vaccines that an unbroken cold chain with an uninterrupted series of storage and distribution activities is maintained for the given temperature range.

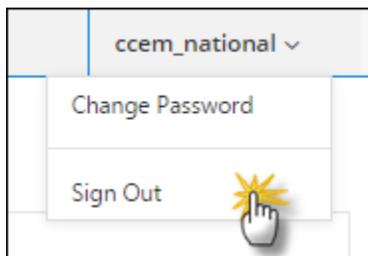
Logging in to the National User account displays the account’s Home page screen by default.



On the left side of the dashboard screen, the CCEM operator at the national level will see the following tabs:



User can sign out of the application by using the following link on the right side of the screen.



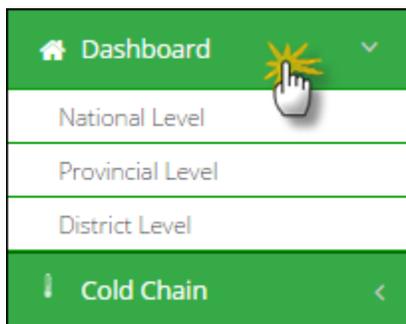
The CCEM National level operator screen includes the following features:

- **Dashboard:** User can view CCEM dashboard containing graphs, maps and analytical reports by using this tab.
- **CCEM:** enables the account user to report the cold chain asset's status of the assigned warehouse/stores, which helps identify the working condition of the cold-chain machine.
- **CCEM Reports:** user can view the data analysis reports for cold chain equipment. Refer to the "CCEM Reports" section for details.
- **CCEM Graphs:** user can view CCEM graphs for analyzing data. Refer to the "CCEM Graphs" section for details.
- **Maps:** enables user to view the geographical map for Cold-chain capacity.

## Dashboard

Dashboard is a visual display of the most important information needed to achieve one or more objectives; consolidated and arranged on a single screen so the information can be monitored at a glance.

For CCEM users, dashboard for cold chain equipment management will be available. User can view the dashboard at three level as shown below:



## Cold Chain Equipment Management

Cold Chain Equipment Management dashboard allows users to view the cold chain capacity map by clicking on this tab.

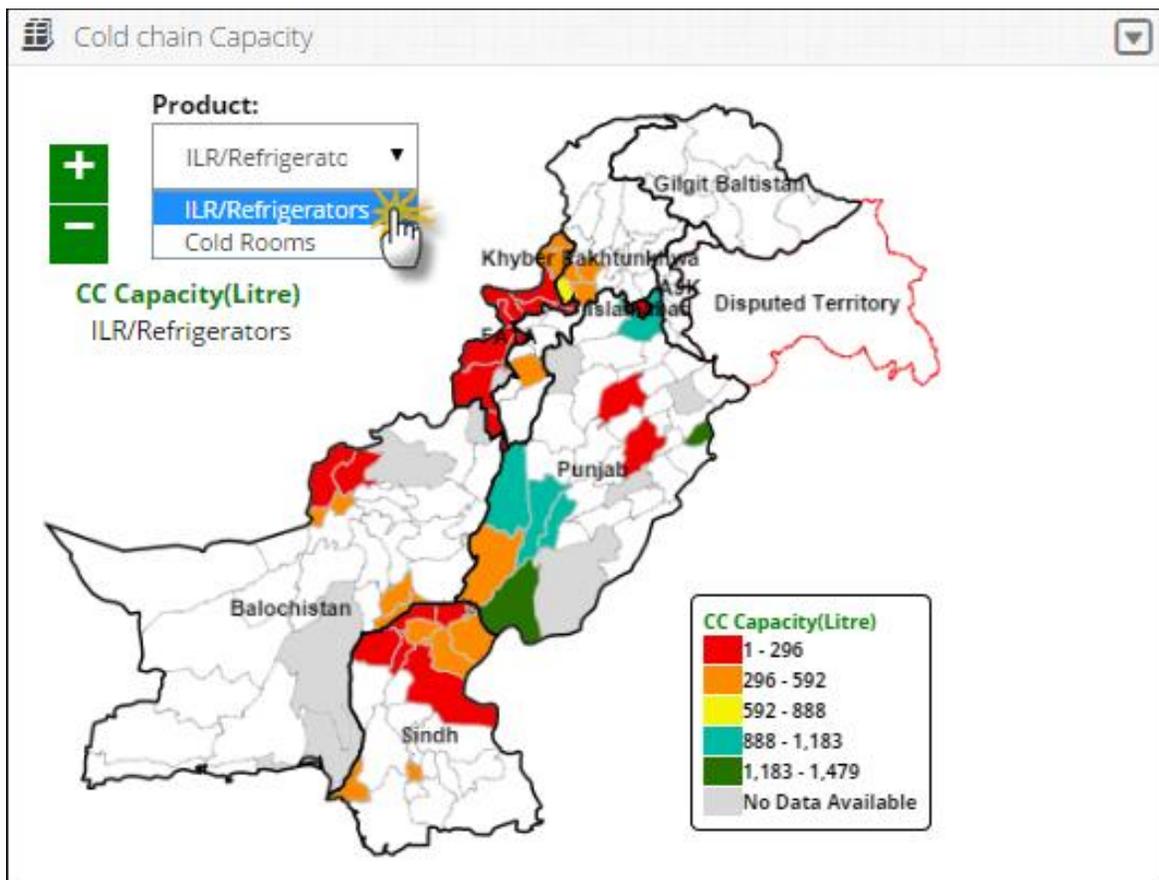
- **Cold Chain Capacity**  
This map shows a map highlighting the cold chain capacity of each district.
- **Vaccine storage capacity at +2c to +8c**  
To show the storage capacity of vaccines at certain temperature range within selected health facilities.
- **Vaccine storage capacity at +20c**  
To show the storage capacity of vaccines at 20 degrees centigrade within selected health facilities.
- **Icepack freezing capacity against routine requirements**  
To show the icepack freezing capacity within selected health facilities.

## Cold Chain Capacity

Cold Chain Capacity will be displayed through map.

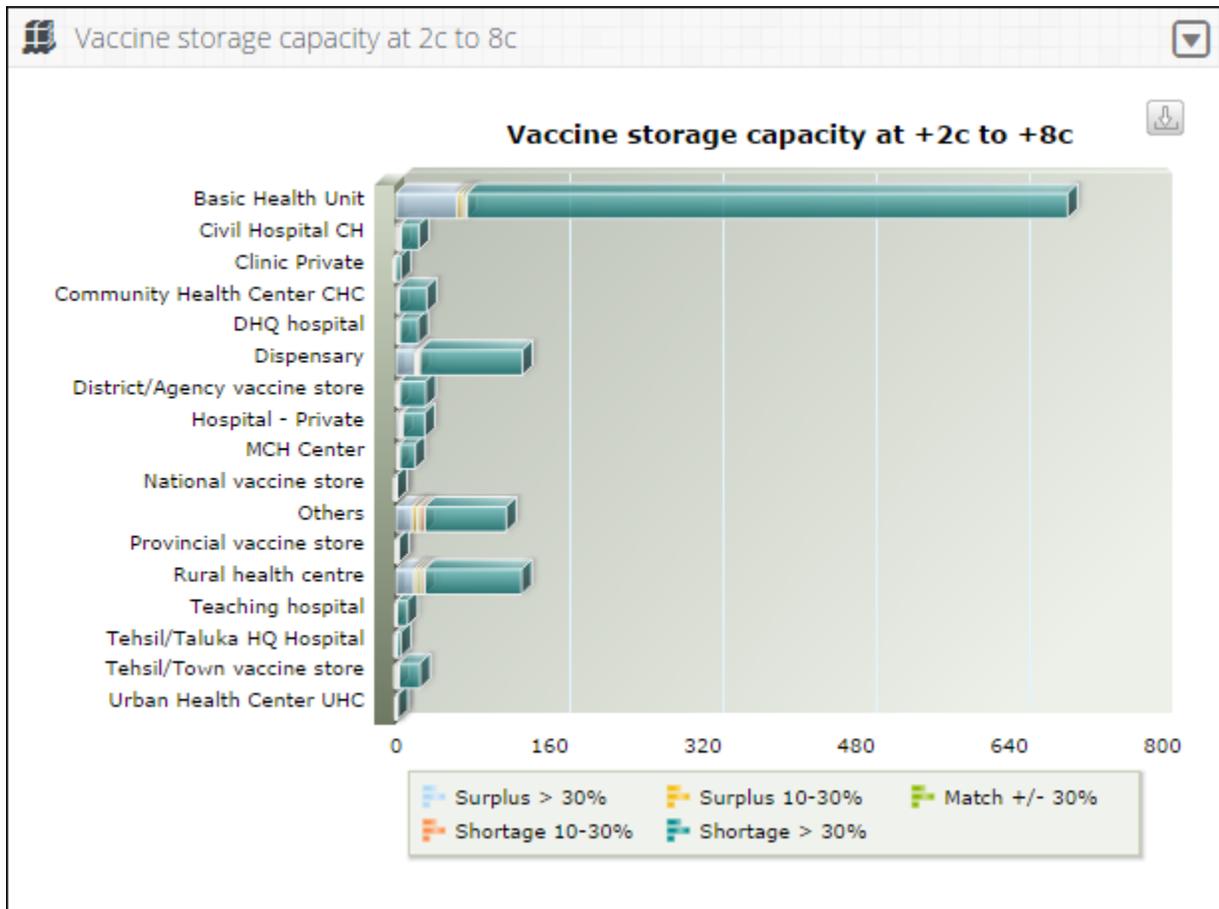
The user can choose product from the drop-down menu.

- ILR/Refrigerators
- Cold Rooms



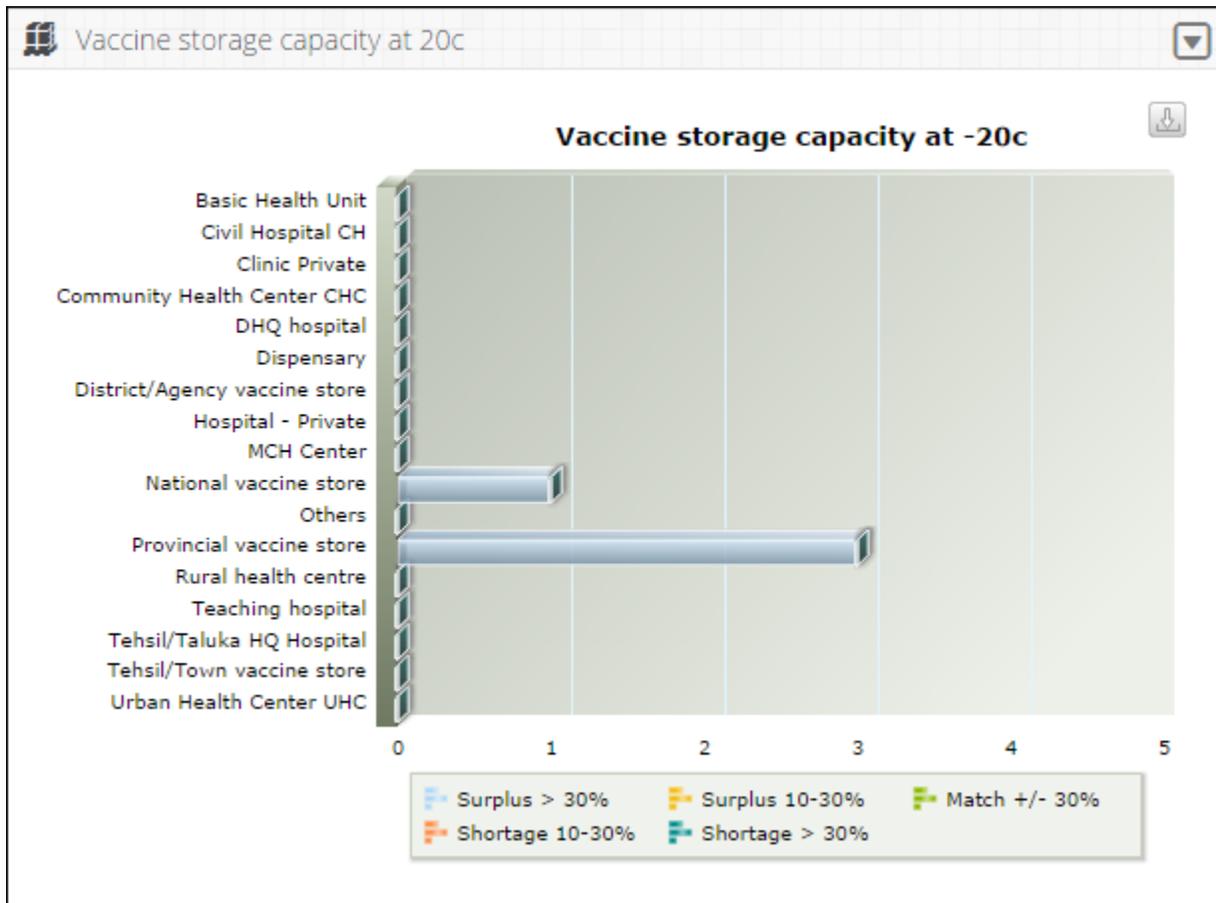
## Vaccine Storage Capacity at +2c to +8c

Vaccine Storage Capacity at +2c to +8c will be displayed in the form of a bar graph. The user can view the health facilities list on the vertical axis while the capacity range is shown on the horizontal axis.



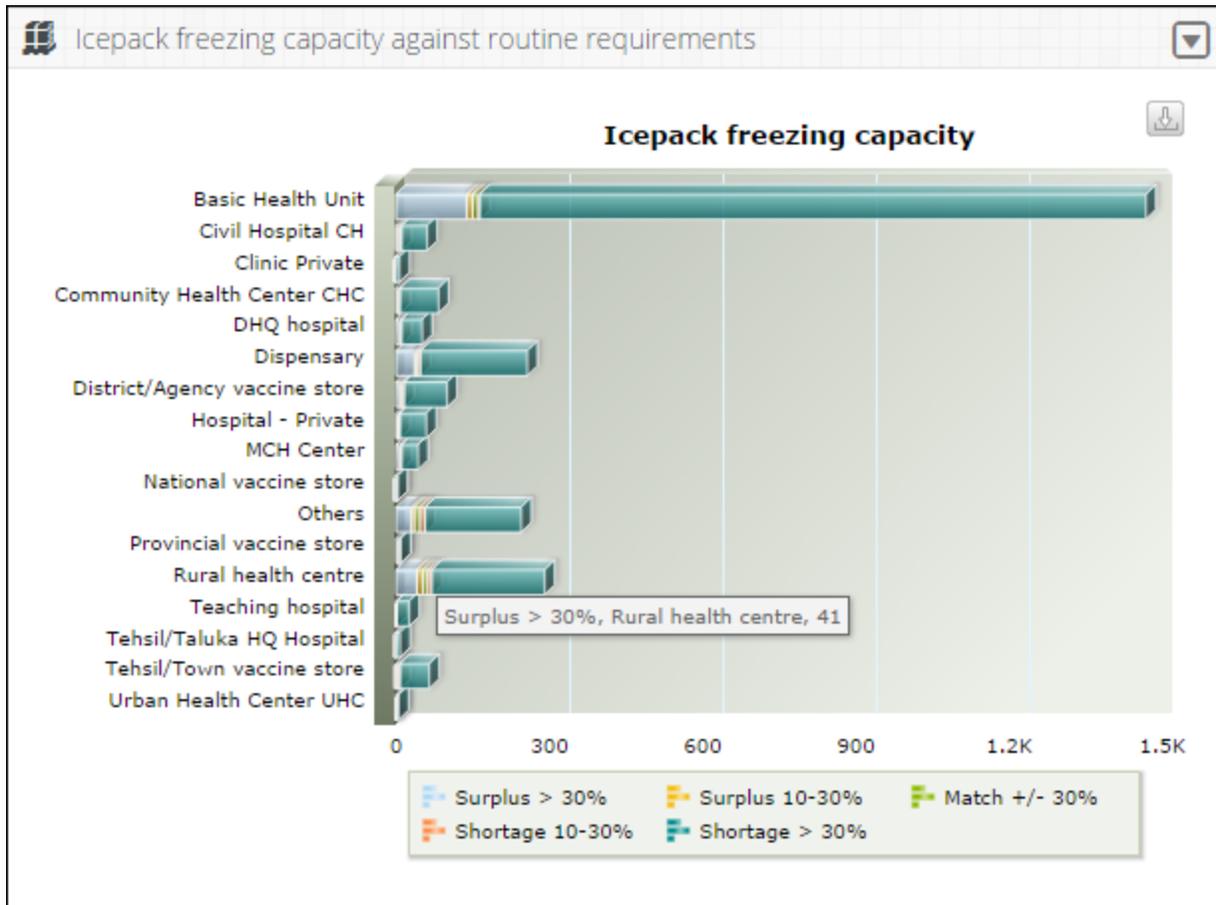
## Vaccine Storage Capacity at +20c

Vaccine Storage Capacity at +20c will be displayed in the form of a bar graph. The user can view the health facilities list on the vertical axis while the capacity range is shown on the horizontal axis.



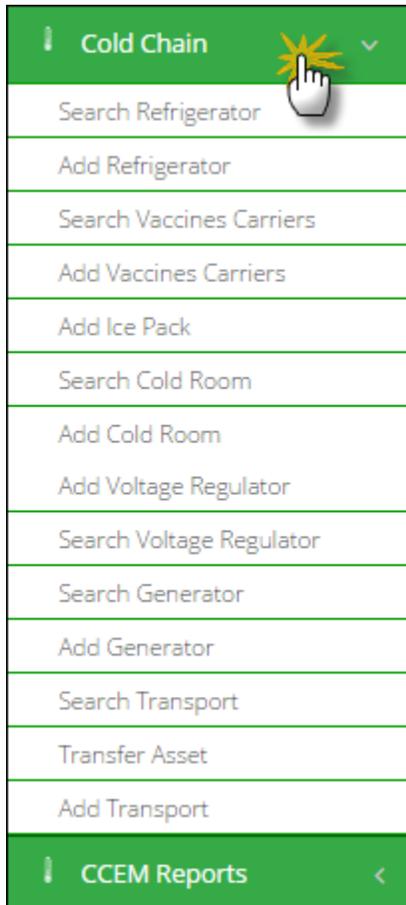
## Icepack freezing capacity against routine requirements

Cold chain equipment management dashboard will also display icepack freezing capacity graph against routine requirements in the form of a bar graph. The user can view the health facilities list on the vertical axis while the capacity range is shown on the horizontal axis.



## Cold Chain

Click **Cold Chain** from the main menu to display a list of options.



## Introduction to Cold chain Assets

In vLMIS, cold-chain assets can be divided into two main categories:

3. Registered (Non-quantifiable Assets)
4. Non-Registered (Quantifiable Assets)

Registered assets are those assets which are not added with mentioned quantity. Non-registered assets on the other hand, will consist of a defined quantity.

Currently, there are seven types of cold-chain assets in the vLMIS. All these assets fall into the above mentioned categories.

### Registered Assets

8. Refrigerators
9. Cold Room
10. Generator
11. Transport

### Non-Registered Assets

12. Vaccine Carriers
13. Ice Pack
14. Voltage Regulator

Among the registered assets, refrigerators and cold rooms consist of temperature alarms to ensure that the set temperature levels are achieved for vaccines. Generator and transport do not require temperature regulation.

## Add Refrigerator

To add a new refrigerator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Add Refrigerator**.  
New/Add Refrigerator/Freezer/ILR Asset Page displays.
3. Specify the following filters:
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the adjustment.
  - **Source of Supply:** select the supplier source from the list.
  - **Utilization:** select the utilization of the asset.
  - **Working Status:** select the status of the Asset from the list.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the asset is not allocated.
    - Warehouse:** select the warehouse to place the asset.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
  - **Catalogue ID:** select the Catalogue ID from the list. You can also add a new catalogue ID by clicking **Add**. It will display a new window with following options:
    - **Catalogue ID:** specify the Catalogue ID.

- **Make:** specify the make of the asset being added.
  - **Model:** specify the model of the asset being added.
  - **Asset Sub-Type:** Select asset sub-type from the list.
  - **Dimensions:** Add the dimensions of the asset in feet.
  - **Capacity:** Add the capacity of the asset in liters.
  - **CFC Free Sticker:** select one of the options from Not Applicable, Yes and No.
- **Serial No.:** Enter the asset’s serial number.
  - **Working Since (Year):** Enter the year since the working of the asset.

Cold Chain

New/Add Refrigerator/Freezer/ILR Asset

Asset Id / Equipment Code	Source of Supply	
<input type="text" value="AE1234"/>	<input type="text" value="WHO"/>	
Utilization *	Working Status *	
<input type="text" value="In use"/>	<input type="text" value="Working well"/>	
Placed At*		
<input checked="" type="radio"/> Unallocated <input type="radio"/> Select Warehouse		
Catalogue ID	Make *	Model *
<input type="text" value="Domestic - Candy - R134A"/>	<input type="text" value="Candy"/>	<input type="text" value="R134A"/>
<input type="button" value="Add"/>		
Asset Sub Type *	CFC Free Sticker	
<input type="text" value="Select Asset Sub Types"/>	<input type="radio"/> Not Applicable <input type="radio"/> Yes <input type="radio"/> No	
Dimensions (Feet)	Capacity (Liters)*	
<input type="text" value="Length"/>	<input type="text" value="0"/>	
<input type="text" value="Length"/>	<input type="text" value="9.999999999"/>	
<input type="text" value="Height"/>	<input type="text" value="0"/>	
	<input type="text" value="9.999999999"/>	
Serial Number	Working Since (Year)	
<input type="text" value="S1234"/>	<input type="text" value="12/11/2013"/>	
<input type="button" value="Save"/>		

4. Click **Save** to save the new asset.

## Search Refrigerator

To search a refrigerator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Refrigerator**.  
Search Refrigerator/Freezer/ILR Asset Page displays.
3. Specify the following filters:
  - **Asset Sub-Type:** Select asset sub-type from the list.
  - **Source of Supply:** select the supplier source from the list.
  - **Working Status:** select the status of the Asset from the list.
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the adjustment.
  - **Catalogue ID:** specify the Catalogue ID.
  - **Make:** specify the make of the asset being added.
  - **Model:** specify the model of the asset being added.
  - **Serial No.:** Enter the asset's serial number.
  - **Gross Capacity From:** Add the gross capacity of the asset in liters.
  - **Gross Capacity to:** Add the gross capacity of the asset in liters.
  - **Working From:** Enter the year since the working of the asset.
  - **Working To:** Enter the year till the optimal working of the asset.
  - **CFC Free Sticker:** select one of the options from Not Applicable, Yes and No.
  - **Placed at:** Specify one of the following:

**Unallocated:** specifies that the asset is not allocated.

**Warehouse:** select the warehouse to place the asset.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

- **Working Since (Year):** Enter the year since the working of the asset.

4. Click **Search**.

Cold Chain

Search Refrigerator/Freezer/ILR Asset ▼

Asset Sub Type <input type="text" value="Select Asset Sub Types"/>	Source of Supply <input type="text" value="Select Source Of Supply"/>	Working Status <input type="text" value="Select working status"/>	Asset Id / Equipment Code <input type="text"/>
Catalogue ID <input type="text"/>	Make <input type="text" value="Select Makes"/>	Model <input type="text" value="Select Make First"/>	Serial Number <input type="text"/>
Gross Capacity From <input type="text"/>	Gross Capacity To <input type="text"/>	Working Since From <input type="text"/>	Working Since To <input type="text"/>

CFC Free Sticker  
 Not Applicable  Yes  No  
 Unallocated  Select Warehouse

Placed At

Search
Reset

Report Type  Detail View  Summary View

District	Facility	Make	Model	Capacity	Working Status	Date	-
		Test	Test	For 20 : 4 For 4 : 4	Unknown	2014-08-05 00:00:00	<span style="color: red; font-size: small;">Edit</span>   <span style="color: red; font-size: small;">More</span>
			Test	For 20 : 4 For 4 : 4	Unknown	2014-08-05 12:11:51	<span style="color: red; font-size: small;">Edit</span>   <span style="color: red; font-size: small;">More</span>
			Test	For 20 : 4 For 4 : 4	Unknown	2014-08-05 12:12:58	<span style="color: red; font-size: small;">Edit</span>   <span style="color: red; font-size: small;">More</span>
		LG	PK2014	For 20 : 10 For 4 : 10	Working well	2004-08-20 00:00:00	<span style="color: red; font-size: small;">Edit</span>   <span style="color: red; font-size: small;">More</span>
		pastunabdqta	123	For 20 : 1 For 4 : 1	Working well	2014-08-05 00:00:00	<span style="color: red; font-size: small;">Edit</span>   <span style="color: red; font-size: small;">More</span>

5. **Report Type:** select the report type such as summary view or detail view.

## Add Vaccine Carriers

To add a new vaccine carrier:

1. Sign in to the User account.

User Home Page displays.

2. Under **CCEM**, click **Add Vaccine Carriers**.

Add Vaccine Carriers Page displays.

3. Specify the following filters:

- **Placed at:** Specify one of the following:

**Unallocated:** specifies that the asset is not allocated.

**Warehouse:** select the warehouse to place the asset.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

- **Catalogue ID:** select the Catalogue ID from the list. You can also add a new catalogue ID by clicking **Add**. It will display a new window with following options:

- **Catalogue ID:** specify the Catalogue ID.
- **Make:** specify the make of the asset being added.
- **Model:** specify the model of the asset being added.
- **Dimensions:** Add the dimensions of the asset in feet.

4. Add **Total Available for Vaccination Activities** and click **Save**.

### Add Vaccine Carriers

Placed At \*  
 Unallocated  Select Warehouse

Catalogue ID  
E455M - VCDESG D161429 - TP001

**Add**

Make \* VCDESG D161429 Model \* TP001

Total Available For Vaccination Activities  
100

Internal Dimensions  
Length  
Width  
Height

**Save**

## Search Vaccine Carriers

To search a vaccine carrier:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Vaccine Carriers**.  
Vaccine Carrier Search Page displays.
3. Specify the following filters:
  - a. **Catalogue ID**: specify the Catalogue ID.
  - b. **Make**: specify the make of the asset being added.
  - c. **Model**: specify the model of the asset being added.
  - d. **Placed at**: Specify one of the following:

**Unallocated**: specifies that the asset is not allocated.

**Warehouse**: select the warehouse to place the asset.

- **Office**: In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Click **Search**.

Cold Chain

**Vaccine Carrier Search** ▼

Catalogue ID

Make  Model

Placed At  Unallocated  Select Warehouse

Search Reset

---

**Vaccine Carrier Search** ▼

Report Tpe  Detail View  Summary View

District	Facility	Make	Model	Date	
		Oyster	Yellow Box	08/12/2014	<span>More</span>

5. **Report Type:** select the report type such as summary view or detail view.

## Add Ice Packs

To add ice packs:

1. Sign in to the User account.

User Home Page displays.

2. Under **CCEM**, click **Add Ice Packs**.

Add Ice Packs Page displays.

3. Specify the following filters:

- **Placed at:** Specify one of the following:

**Unallocated:** specifies that the asset is not allocated.

**Warehouse:** select the warehouse to place the asset.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Add **Quantity** before the ice pack size required to be added.
5. Click **Add**.

### Add Ice Packs

Placed At \*  Unallocated  
 Select Warehouse

Office \*  Province  Warehouse

Ice Pack Sizes

0.2	<input type="text" value="100"/>
0.3	<input type="text" value="200"/>
0.4	<input type="text" value="50"/>

## Search Ice Pack

To search an ice pack:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Ice Pack**.  
Ice Pack Search Page displays.
3. Specify the following filters:
  - a. **Make**: specify the make of the asset being added.
  - b. **Model**: specify the model of the asset being added.
  - c. **Placed at**: Specify one of the following:

**Unallocated**: specifies that the asset is not allocated.

**Warehouse**: select the warehouse to place the asset.

- **Office**: In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Click **Search**.

Cold Chain

**Ice Pack Search** ▼

Make  Model

Placed At  
 Unallocated  Select Warehouse

**Search** **Reset**

---

**Ice Pack Search** ▼

Report Tpe  
 Detail View  Summary View

District	Facility	Make	Model	Quantity	Date	
		Ariston Italy	0.2	1	08/08/2014	<b>More</b>
		Ariston Italy	0.3	2	08/08/2014	<b>More</b>
		Ariston Italy	0.4	3	08/08/2014	<b>More</b>

Showing 1 to 3 of 3 entries

5. **Report Type:** select the report type such as summary view or detail view.

## Add Cold Room

To add a cold room:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Add Cold Room**.  
Add Cold Room Page displays.
3. Specify the following filters:
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the asset.
  - **Source of Supply:** select the supplier source from the list.
  - **Utilization:** select the utilization of the cold room.
  - **Working Status:** select the status of the cold room from the list.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the cold room is not allocated.
    - Warehouse:** select the warehouse to place the cold room.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
  - **Type:** select the type of the cold room.
  - **Internal Storage Dimensions:** specify the storage dimensions of the cold room such as length, width and height.
  - **Make:** specify the make of the cold room being added.

- **Model:** specify the model of the asset being added.
- **Internal gross volume:** specify in meters.
- **Net storage volume for vaccine/packs:** specify the volume in meters.
- **Year of Supply:** specify the year of supply for the cold room.
- **Number of cooling system:** specify the number of cooling systems in the cold room.
- **Number of phases:** select the number of phases.
- **Refrigerator gas type:** select the type of refrigerator gas.
- Specify if there is a **Voltage Stabilizer** or not.
- Specify if the cold room **has working backup generator**.
- **Temperature recording system:** select the temperature recording system from the list.
- **Type of recording system:** select the type of recording system.

Add Cold Room

**Add Cold Room** ✓

Asset Id / Equipment Code <input type="text"/>	Source of Supply WHO <input type="text"/>
Utilization * In use <input type="text"/>	Working Status * Working well <input type="text"/>
Placed At* <input checked="" type="radio"/> Unallocated <input type="radio"/> Select Warehouse	
Type * Select <input type="text"/>	Internal Storage Dimensions(m) Length <input type="text"/> Width <input type="text"/> Height <input type="text"/>
Make * Haier <input type="text"/>	Internal gross volume (m3) * Gross Capacity <input type="text"/>
Model * HBD-116 <input type="text"/>	Net storage volume for vaccine/packs (m3) * Net Capacity <input type="text"/>
Year of Supply <input type="text"/>	Number of cooling system <input type="text"/>
Number of phases <input checked="" type="radio"/> One <input type="radio"/> Three	Refrigerator gas type R12 <input type="text"/>
Has voltage stabilizer <input type="radio"/> Yes <input checked="" type="radio"/> No	Has working backup generator Yes- automatic startup <input type="text"/>
Temperature recording system Provided, operating <input type="text"/>	Type of recording system Chart recorder (clockwork) <input type="text"/>

**Save**

4. Click **Save** to save the new cold room.

A new cold room would be added.

## Search Cold Room

To search a cold room:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Cold Room**.  
Cold Room Search Page displays.
3. Specify the following filters:
  - **Type**: select the type of the cold room.
  - **Working Status**: select the status of the cold room from the list.
  - **Source of Supply**: select the supplier source from the list.
  - **Number of cooling system**: specify the number of cooling systems in the cold room.
  - **Asset ID/Equipment Code**: is an automatically generated unique identifier for the asset.
  - Specify if there is a **Voltage Stabilizer** or not.
  - **Make**: specify the make of the cold room being added.
  - **Model**: specify the model of the asset being added.
  - **Capacity From, Capacity to**: Add the capacity of the cold room.
  - **Year of Supply From, to**: specify the year of supply for the cold room.
  - **Placed at**: Specify one of the following:
    - Unallocated**: specifies that the cold room is not allocated.
    - Warehouse**: select the warehouse to place the cold room.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Click **Search**.

### Search Cold Room

Type

Source of Supply

Asset ID/Equipment Code

Make

Capacity from

Year of Supply from

Working Status

Number of cooling system

Has voltage stabilizer  Yes  No

Model

Capacity to

Year of Supply to

Placed At  Unallocated  Select Warehouse

Report Tpe  Detail View  Summary View

District	Facility	Make	Model	Capacity	Working Status	Date	
		PS40	Bright Light Solar	0		08/07/2014	<a href="#">Edit</a>   <a href="#">More</a>
		ACMA	ACMA	3	Not working	08/08/2014	<a href="#">Edit</a>   <a href="#">More</a>
		TESTING MODEL	TESTING MAKE		Working well	08/12/2014	<a href="#">Edit</a>   <a href="#">More</a>
		MK 074	Forter Refigerator	0	Working well	08/12/2014	<a href="#">Edit</a>   <a href="#">More</a>
		HBD-116	Haier	50	Working well	08/13/2014	<a href="#">Edit</a>   <a href="#">More</a>
		HBD-116	Haier	50	Working well	08/19/2014	<a href="#">Edit</a>   <a href="#">More</a>

5. **Report Type:** select the report type such as summary view or detail view.

## Add Voltage Regulator

To add a voltage regulator:

1. Sign in to the User account.

User Home Page displays.

2. Under **CCEM**, click **Add Voltage Regulator**.

Add Voltage Regulator Page displays.

3. Specify the following filters:

- **Placed at:** Specify one of the following:

**Unallocated:** specifies that the voltage regulator is not allocated.

**Warehouse:** select the warehouse to place the regulator.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. **Catalogue ID:** specify the Catalogue ID.

5. Add **Quantity** before the ice pack size required to be added.

6. Click **Add**.

Cold Chain

**New/Add Voltage Regulator Asset**

Placed At \*  
 @Unallocated @Select Warehouse

Catalogue ID:  Quantity:

**Add**

Make:  Model:

**Add**

10 records per page Search:

Catalogue ID	Quantity	Make	Model
-45	1911	-45	-45
-45	22	-45	-45
-45	55	-45	-45
-45	55	-45	-45
-45	12	-45	-45
CAT8888	80	TESTING MAKE	TESTING MODEL
E7/12		Advance Galatrek	FF/SOOPA
E7/12		Advance Galatrek	FF/SOOPA
E7/12		Advance Galatrek	FF/SOOPA
E7/12		Advance Galatrek	FF/SOOPA

Showing 1 to 10 of 553 entries

< 1 2 3 4 5 >

7. User can also search a specific regulator from the list.

## Search Voltage Regulator

To search a voltage regulator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Voltage Regulator**.  
Search Voltage Regulator Page displays.
3. **Catalogue ID**: specify the Catalogue ID.
4. **Make**: specify the make of the voltage regulator.
5. **Model**: specify the model of the voltage regulator.

6. Specify the following filters:

- **Placed at**: Specify one of the following:

**Unallocated**: specifies that the voltage regulator is not allocated.

**Warehouse**: select the warehouse to place the regulator.

- **Office**: In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

7. **Catalogue ID**: specify the Catalogue ID.
8. Add **Quantity** before the ice pack size required to be added.
9. Click **Search**.

Cold Chain

**Search Voltage Regulator**

Catalogue ID

Make:  Model:

Placed At:  Unallocated  Select Warehouse

Report Tpe:  Detail View  Summary View

[Search](#) [Reset](#)

District	Facility	Make	Model	Working Status	Date	-
		Sollatek	SV5 04-22		2014-08-05 00:00:00	<a href="#">More</a>
		Sollatek	SV5 04-22		2014-08-12 00:00:00	<a href="#">More</a>
		Sollatek	SV5 04-22		2014-08-13 00:00:00	<a href="#">More</a>
		Sollatek	SV5 04-22		2014-08-16 00:00:00	<a href="#">More</a>

10. **Report Type:** select the report type such as summary view or detail view.

## Add Generator

To add a new generator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Add Generator**.  
Add Generator Page displays.
3. Specify the following filters:
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the adjustment.
  - **Source of Supply:** select the supplier source from the list.
  - **Utilization:** select the utilization of the asset.
  - **Working Status:** select the status of the Asset from the list.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the asset is not allocated.
    - Warehouse:** select the warehouse to place the asset.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
  - **Make:** specify the make of the asset being added.
  - **Model:** specify the model of the asset being added.

- **Serial No.:** Enter the asset's serial number.
- **Number of phases:** select the number of phases.
- **Power Rating:** Enter the power rating of the generator.
- **Power Source:** Select the power source of the generator.
- Specify if the generator has an **Automatic Start Mechanism** or not.
- **Year of Supply:** specify the year of supply for the generator.
- **Use for:** select the use for the generator.

Add Generator

Add Generator
▼

<p>Asset Id / Equipment Code</p> <input style="width: 90%;" type="text"/>	<p>Source of Supply</p> <input style="width: 90%;" type="text" value="WHO"/>
<p>Utilization *</p> <input style="width: 90%;" type="text" value="In use"/>	<p>Working Status *</p> <input style="width: 90%;" type="text" value="Working well"/>
<p>Placed At*</p> <p><input checked="" type="radio"/> Unallocated <input type="radio"/> Select Warehouse</p>	
<p>Make *</p> <input style="width: 90%;" type="text" value="Siemens"/>	<p>Model *</p> <input style="width: 90%;" type="text" value="Seimens"/>
<p>Serial Number *</p> <input style="width: 90%;" type="text" value="S1234"/>	<p>No. of Phases</p> <p><input checked="" type="radio"/> One <input type="radio"/> Three</p>
<p>Power Rating</p> <input style="width: 90%;" type="text" value="100"/>	<p>Power Source</p> <input style="width: 90%;" type="text" value="Diesel"/>
<p>Automatic Start Mechanism</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>	
<p>Use For</p> <input style="width: 90%;" type="text" value="Cold Rooms"/>	<p>Year of Supply</p> <input style="width: 90%;" type="text" value="14/01/2014"/>

4. Click **Save** to save the new generator.

## Search Generator

To search a generator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Generator**.  
Search Generator Page displays.
3. Specify the following filters:
  - **Working Status:** select the status of the Asset from the list.
  - **Source of Supply:** select the supplier source from the list.
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the adjustment.
  - **Make:** specify the make of the asset being added.
  - **Model:** specify the model of the asset being added.
  - **Year of Supply from, to:** specify the year of supply for the generator.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the asset is not allocated.
    - Warehouse:** select the warehouse to place the asset.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
4. Click **Search**.

### Search Generator

**Working Status**

**Source of Supply**

**Make**

**Year of Supply From**

**Serial Number**

**Equipment ID/Asset Code**

**Model**

**Year of Supply To**

Placed At  Unallocated  Select Warehouse

Report Type  Detail View  Summary View

District	Facility	Make	Model	Serial Number	Working Status	Working Since	-
		TESTING MAKE	TESTING MODEL	59999	Working well	2014-05-12 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		BIBIR	107A	-45	Working well	2014-08-12 14:06:49	<a href="#">Edit</a> <a href="#">More</a>
		ACMA	ACMA	1234	Working well	2014-08-05 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Hitochi	S-11W-W4A	123	Working well	2014-08-06 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Lambordini	K633780	1	Working well	2014-08-13 23:03:32	<a href="#">Edit</a> <a href="#">More</a>
		Ferguson	T4236	123	Working well	2014-08-05 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Country Man	KDE 6700 TA	SN123	Working well	2014-08-16 12:02:57	<a href="#">Edit</a> <a href="#">More</a>
		SDMO	3TUB-106	SNAEG123	Working well	2014-08-14 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		YANMAR	YDG2000E-5B	SNAEG123	Working well	2014-08-19 09:37:44	<a href="#">Edit</a> <a href="#">More</a>

5. **Report Type:** select the report type such as summary view or detail view.

## Add Transport

To add a new transport:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Add Transport**.  
Add Transport Page displays.
3. Specify the following filters:
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the transport.
  - **Source of Supply:** select the supplier source from the list.
  - **Utilization:** select the utilization of the.
  - **Working Status:** select the status of the transport from the list.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the transport is not allocated.
    - Warehouse:** select the warehouse to place the transport.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
  - **Transport Type:** select the transport type.
  - **Registration No.:** specify the registration number. This field is optional.
  - **Make:** specify the make of the transport being added.
  - **Model:** specify the model of the transport being added.

- **Manufacture Year:** select the manufacture year of the transport.
- **% use for EPI:** specify the percent use for EPI. This is an optional field.
- **Fuel Type:** select the fuel type being used.

Cold Chain

**New/Add Transport Asset**

Asset Id / Equipment Code: E1234

Source of Supply: WHO

Utilization \*: In use

Working Status \*: Working well

Placed At\*:  Unallocated  Select Warehouse

Transport Type: Select Asset Sub Types

Registration No.:

Make\*: Suzuki

Model\*: SV1800P

Manufacture Year: 08/01/2014

% Used For EPI:

Fuel Type: Select Fuel Types

Comments:

**Save**

4. Click **Save** to save the new transport.

## Search Transport

To search a transport:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Transport**.  
Search Transport Page displays.
3. Specify the following filters:
  - **Transport Type**: select the transport type.
  - **Working Status**: select the status of the Asset from the list.
  - **Source of Supply**: select the supplier source from the list.
  - **Fuel Type**: select the fuel type being used.
  - **Registration No.:** specify the registration number. This field is optional.
  - **Make**: specify the make of the asset being added.
  - **Model**: specify the model of the asset being added.
  - **Manufacture Year from, to**: specify the year of manufacture for the transport.
  - **Placed at**: Specify one of the following:
    - Unallocated**: specifies that the asset is not allocated.
    - Warehouse**: select the warehouse to place the asset.
      - **Office**: In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
4. Click **Search**.

Cold Chain

Search Transport Asset

Transport Type: Select Asset Sub Types

Working Status: Select working status

Source of Supply: Select Source Of Supply

Fuel Type: Select Fuel Types

Registration No.:

Make: Select Makes

Model: Select Make First

Manufacture Year From:

Manufacture Year To:

Placed At:  Unallocated  Select Warehouse

Report Type:  Detail View  Summary View

District	Facility	Make	Model	Fuel Type	Working Status	Date	-
		Electrolux	TFW791	Petrol		2014-08-01 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		TESTING MAKE	TESTING MODEL	Petrol	Working well	2014-06-17 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Electrolux	TCW1151	Petrol	Working well	2014-08-08 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Toyota	Toyota	Petrol	Working well	2013-08-01 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Suzuki	Sprinter	Diesel	Working well	2013-12-01 00:00:00	<a href="#">Edit</a> <a href="#">More</a>

5. **Report Type:** select the report type such as summary view or detail view.

## Transfer Asset

To transfer an Asset:

1. Sign in to the User account.  
The User Home Page displays.
2. Click **Transfer Asset** under **CCEM**.  
The Transfer Asset page displays.
3. In **From Office**, select the office.

**Office:** In this drop-down, select the office. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

The Asset's details are displayed.

Transfer Asset

From Office \* Province Warehouse \*

Province Punjab Province EPI Store Punjab EPI Store

S. No.	Assets	Model	Asset ID	Quantity	Transfer Quantity/Asset
1	Vaccine Carriers-Cold Boxes	Rotary International	201838	5243	3000
2	Vaccine Carriers-Cold Boxes	RCW12	203135	4649	1000
3	Vaccine Carriers-Cold Boxes	RCW25	203322	600	
4	Ice Packs	HURREE	400032		<input checked="" type="checkbox"/>
5	Ice Packs	POV90L	400059		<input checked="" type="checkbox"/>
6	Ice Packs	POV90L	400060		<input type="checkbox"/>
7	Ice Packs	Local	400061		<input type="checkbox"/>
34	Cold Rooms	0.2		10	
35	Freezer-ILRs-Refregerators	model	00000		<input type="checkbox"/>
36	Vehicles	Pickup Single Cabin	A00000		<input type="checkbox"/>

To Office \* Province \* Warehouse \*

District Punjab District Bhakkar

Transfer

4. In **Transfer Quantity/Asset**, specify the quantity you want to transfer.

S. No.	Assets	Model	Asset ID	Quantity	Transfer Quantity/Asset
1	Vaccine Carriers-Cold Boxes	Rotary International	201838	5243	3000

In **To Office**, specify the location that you want to transfer to.

To Office \* Province \* Warehouse \*

District Punjab District Bhakkar

Transfer

5. Click **Transfer**.

## Maps

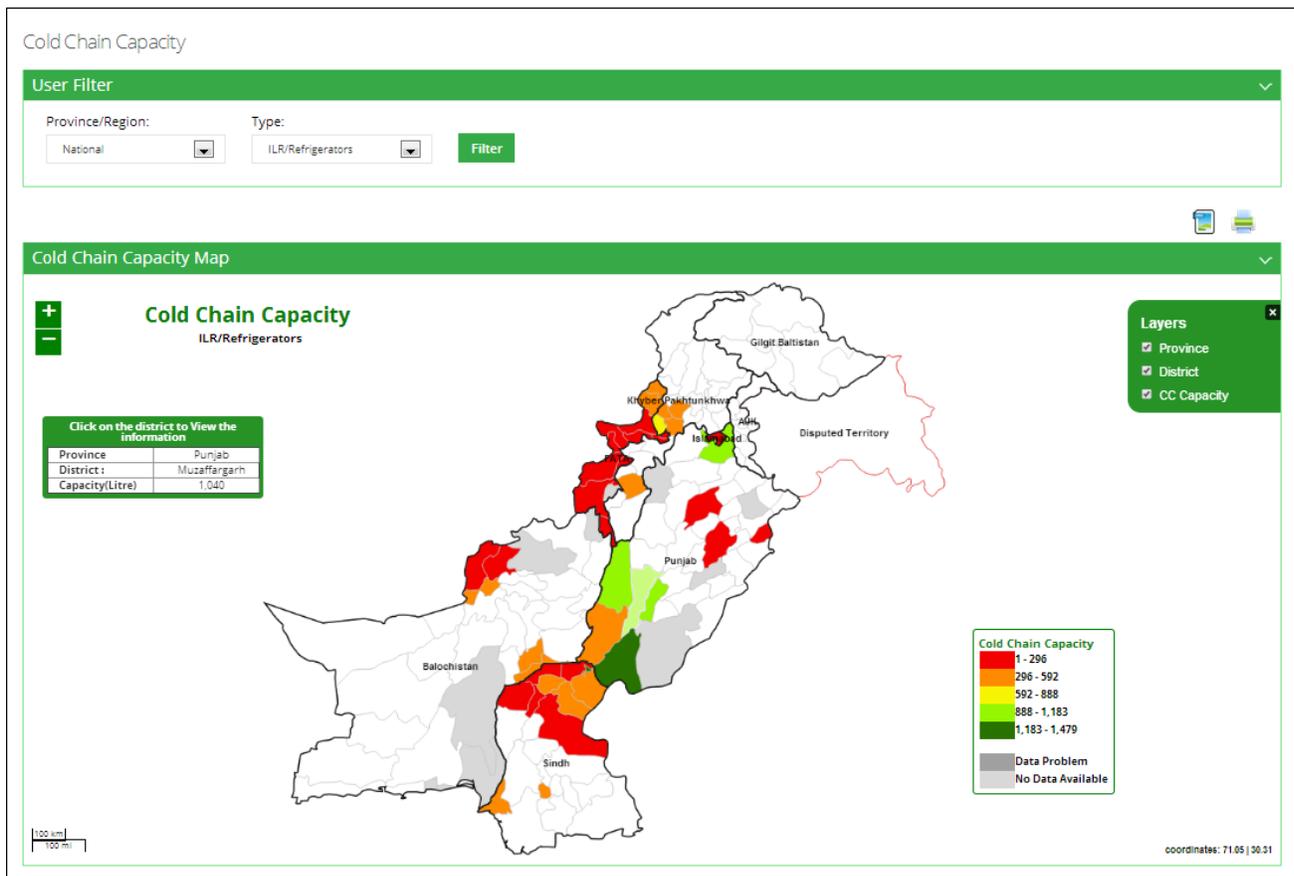
The LMIS also has the capability of generating easy to interpret maps with color codes. These interactive maps would be made available through the Government of Pakistan website and help in increasing the use of the existing information disseminates by Government of Pakistan through the web-based vLMIS by providing the information a more captivating approach to both promote the importance of supply chain and use of data in decision making.

This application is helpful for the health managers at all levels of administrative tiers for planning, identification of possible supply chain problems and new areas of improvements. In addition, GIS dashboards combined with other reports and graphs of vLMIS application give quick overview of monthly situation of commodities and reporting status. This is a good epidemiological tool to combine outputs of web-mapping application with other sources for data for research activities.

CCEM operators can view cold-chain capacity map by using the Maps tab from the main menu. Once the cold-chain indicator for which the map is to be viewed is selected, the user will be directed towards a page to select from various filters.

## Cold Chain Capacity Map

This map shows the cold-chain capacity of each district within the selected province. User can see filter options such as Province/Region and Type of refrigerators or cold rooms to analyze the cold chain capacity rate for each district in the selected province based on the number of facilities in that district. The detailed information can be seen once the user clicks a particular district on the map.



## **CCEM Reports**

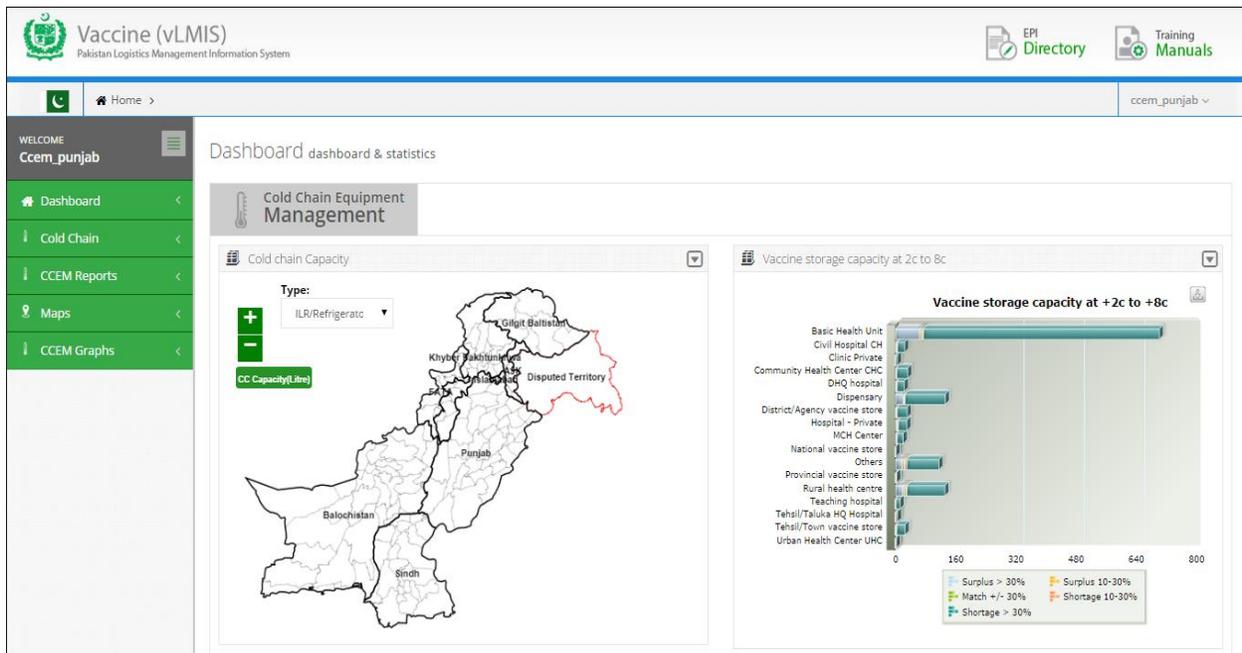
Refer to the “CCEM Reports” section of the user manual.

## **CCEM Graphs**

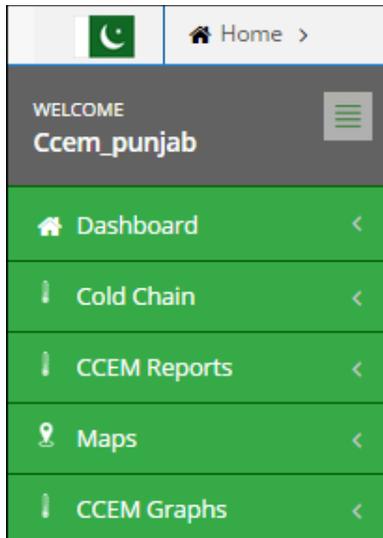
Refer to the “CCEM Graphs” section of the user manual.

# Provincial CCEM Operator

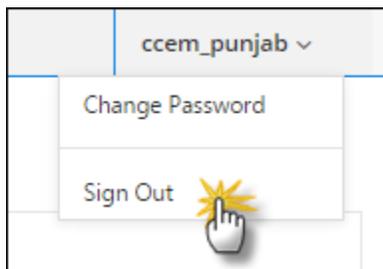
It is essential for the effectiveness of the vaccines that an unbroken cold chain with an uninterrupted series of storage and distribution activities is maintained for the given temperature range. Logging in to the Provincial User account displays the account’s Home page screen by default.



On the left side of the dashboard screen, the CCEM operator at the provincial level will see the following tabs:



User can sign out of the application by using the following link on the right side of the screen.



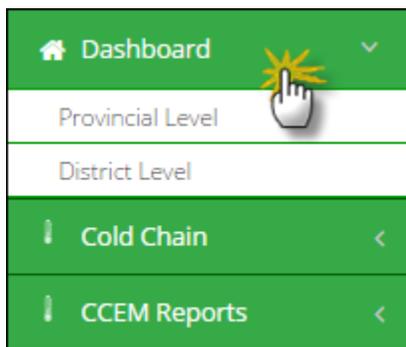
The CCEM Provincial level operator screen includes the following features:

- **Dashboard:** User can view CCEM dashboard containing graphs, maps and analytical reports by using this tab.
- **CCEM:** enables the account user to report the cold chain asset's status of the assigned warehouse/stores, which helps identify the working condition of the cold-chain machine.
- **CCEM Reports:** user can view the data analysis reports for cold chain equipment. Refer to the "CCEM Reports" section for details.
- **CCEM Graphs:** user can view CCEM graphs for analyzing data. Refer to the "CCEM Graphs" section for details.
- **Maps:** enables user to view the geographical map for Cold-chain capacity.

## Dashboard

Dashboard is a visual display of the most important information needed to achieve one or more objectives; consolidated and arranged on a single screen so the information can be monitored at a glance.

For CCEM users, dashboard for cold chain equipment management will be available. User can view the dashboard at three level as shown below:



## Cold Chain Equipment Management

Cold Chain Equipment Management dashboard allows users to view the cold chain capacity map by clicking on this tab.

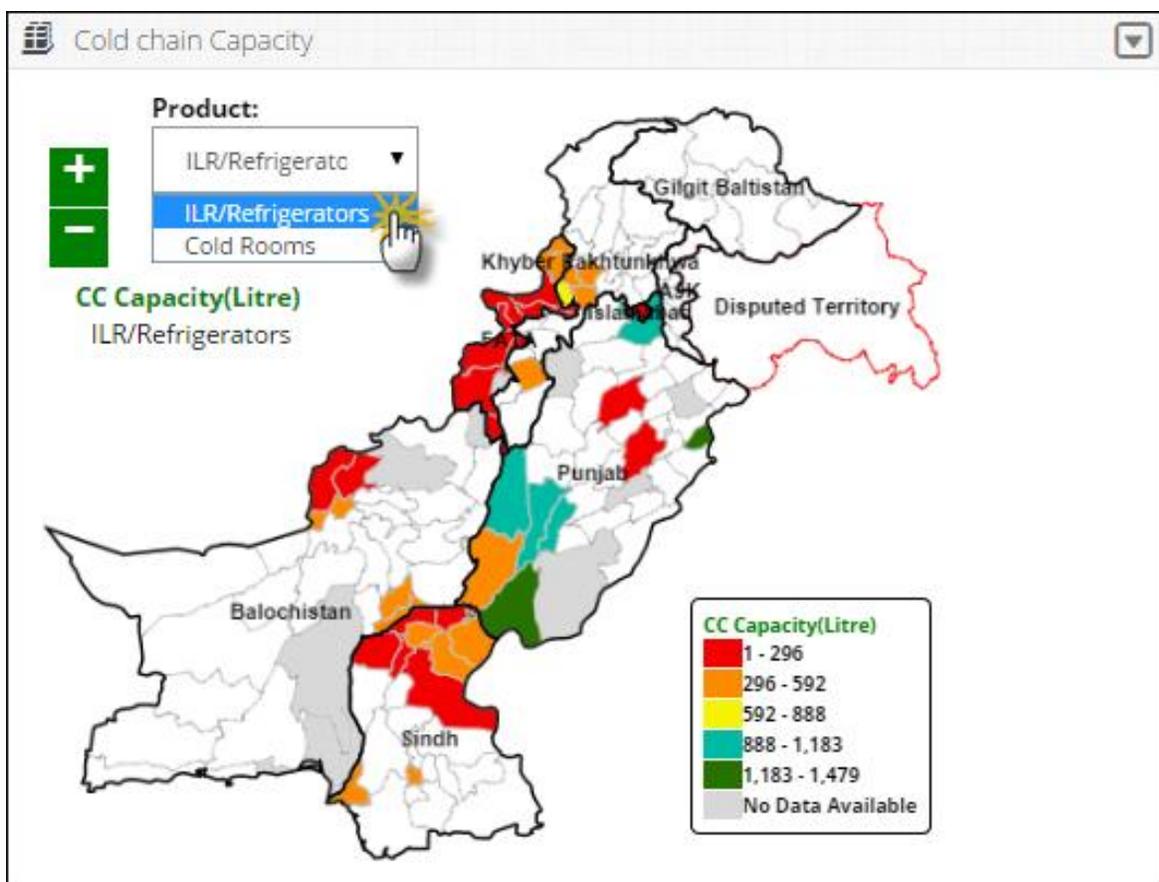
- **Cold Chain Capacity**  
This map shows a map highlighting the cold chain capacity of each district.
- **Vaccine storage capacity at +2c to +8c**  
To show the storage capacity of vaccines at certain temperature range within selected health facilities.
- **Vaccine storage capacity at +20c**  
To show the storage capacity of vaccines at 20 degrees centigrade within selected health facilities.
- **Icepack freezing capacity against routine requirements**  
To show the icepack freezing capacity within selected health facilities.

## Cold Chain Capacity

Cold Chain Capacity will be displayed through map.

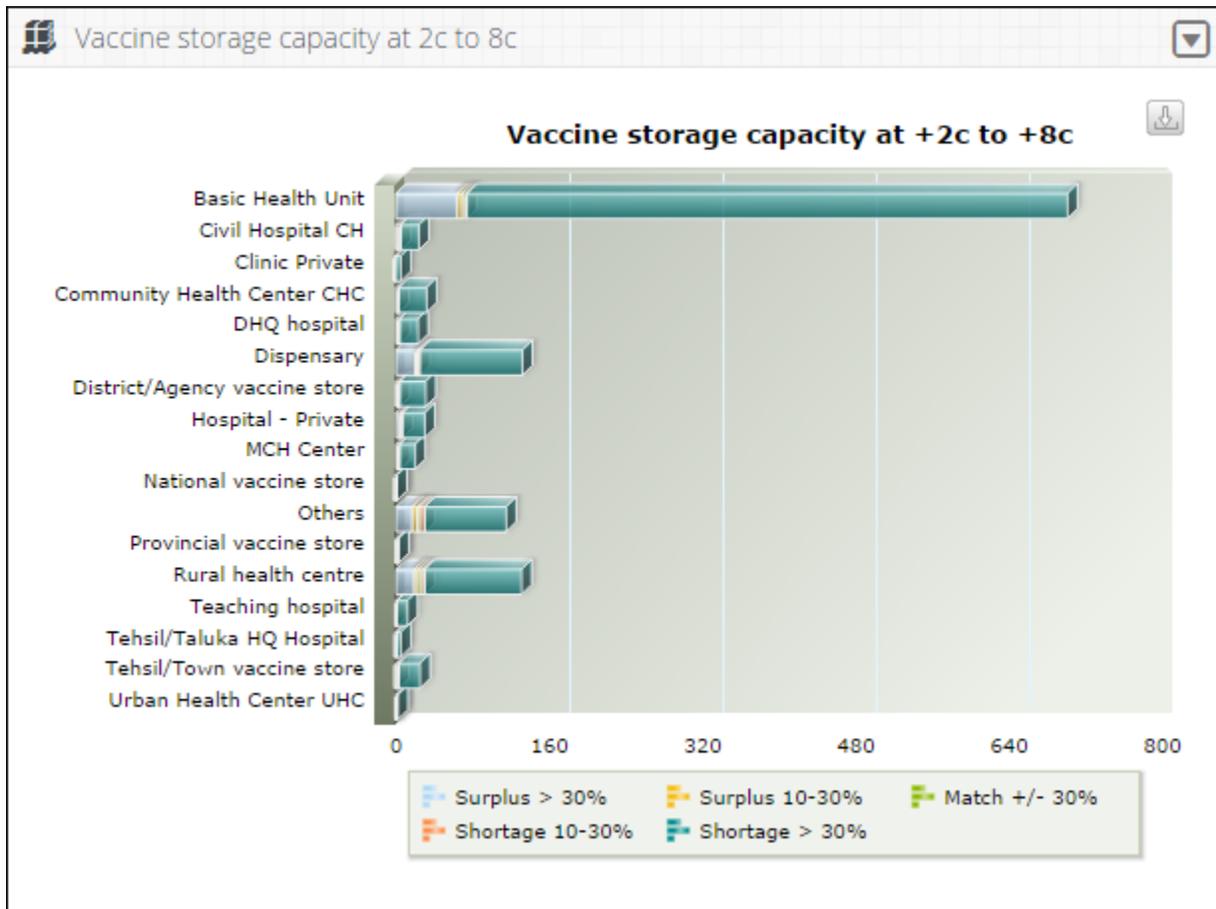
The user can choose product from the drop-down menu.

- ILR/Refrigerators
- Cold Rooms



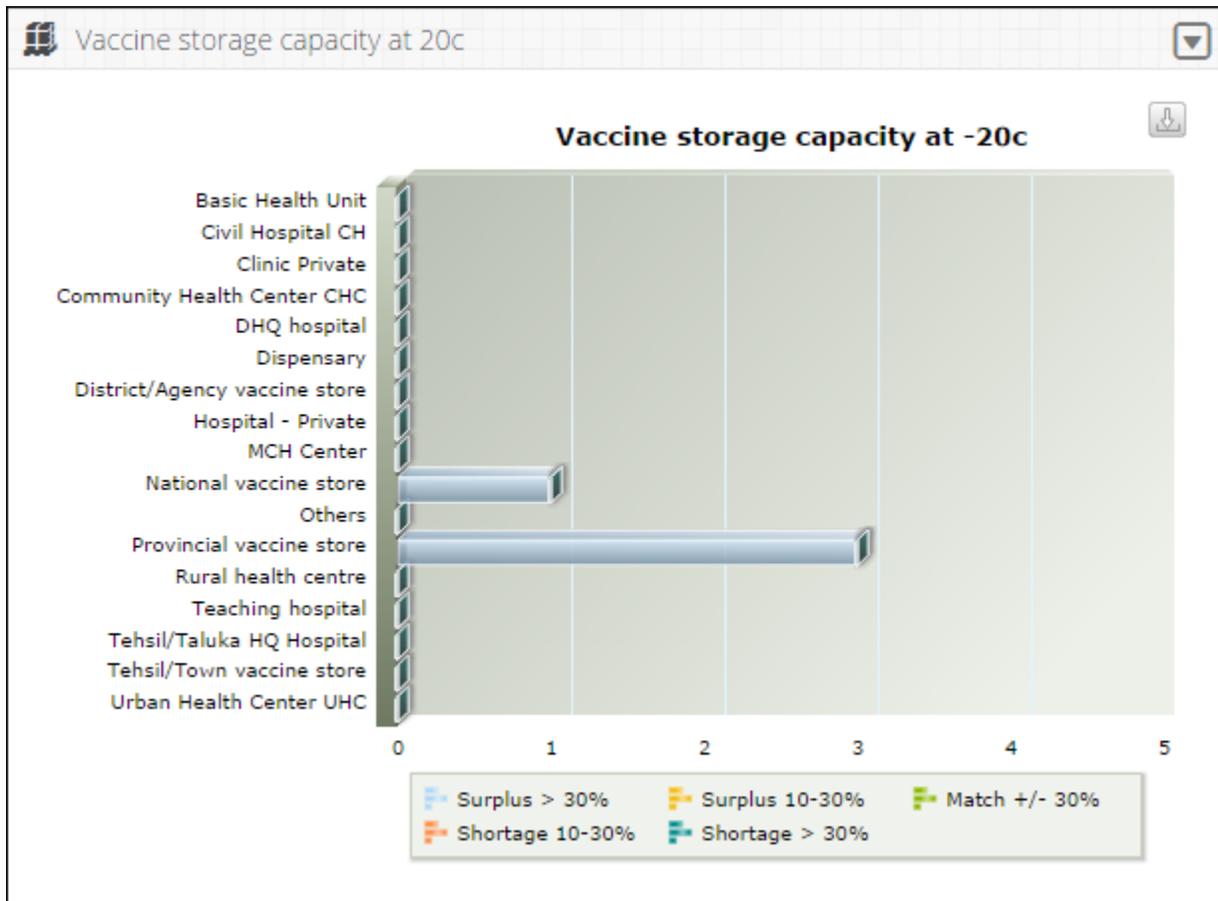
## Vaccine Storage Capacity at +2c to +8c

Vaccine Storage Capacity at +2c to +8c will be displayed in the form of a bar graph. The user can view the health facilities list on the vertical axis while the capacity range is shown on the horizontal axis.



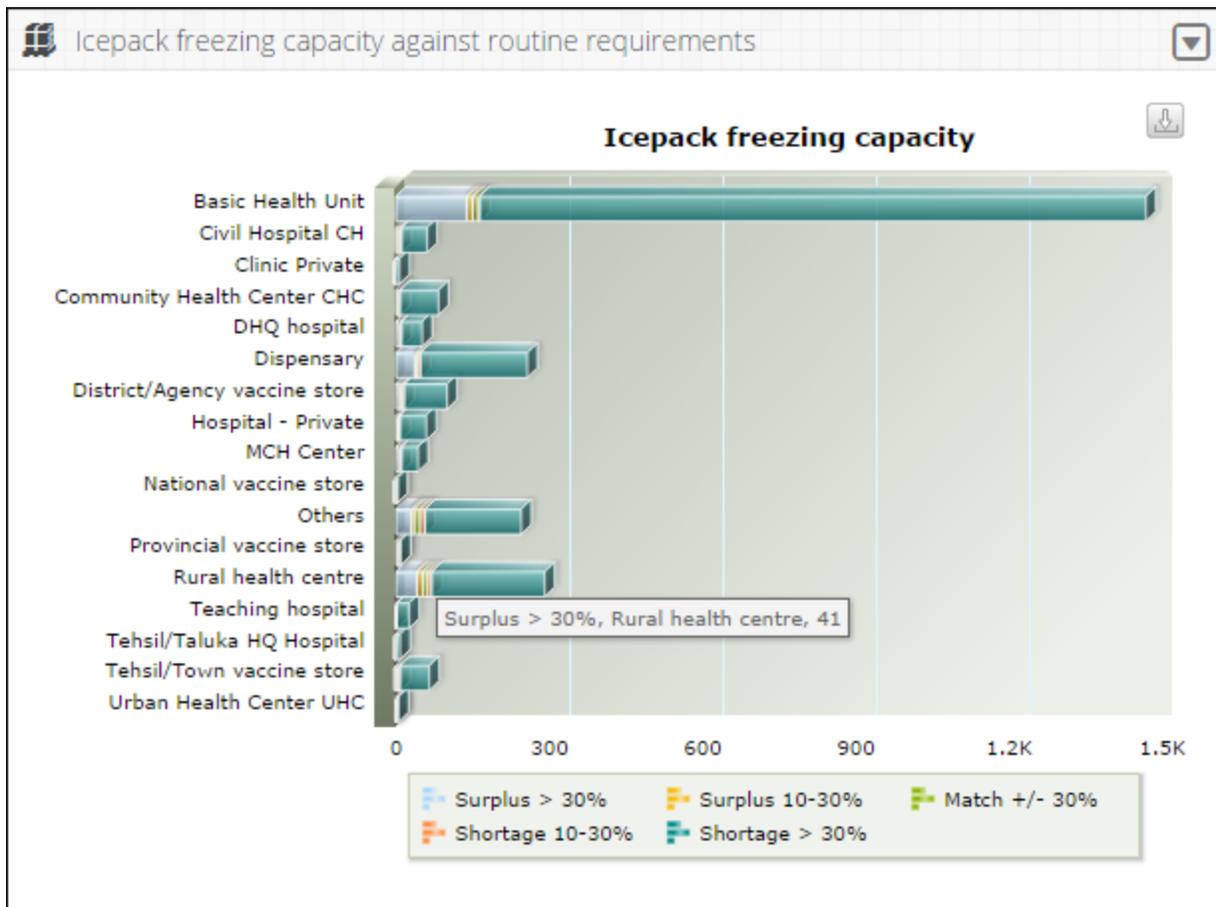
## Vaccine Storage Capacity at +20c

Vaccine Storage Capacity at +20c will be displayed in the form of a bar graph. The user can view the health facilities list on the vertical axis while the capacity range is shown on the horizontal axis.



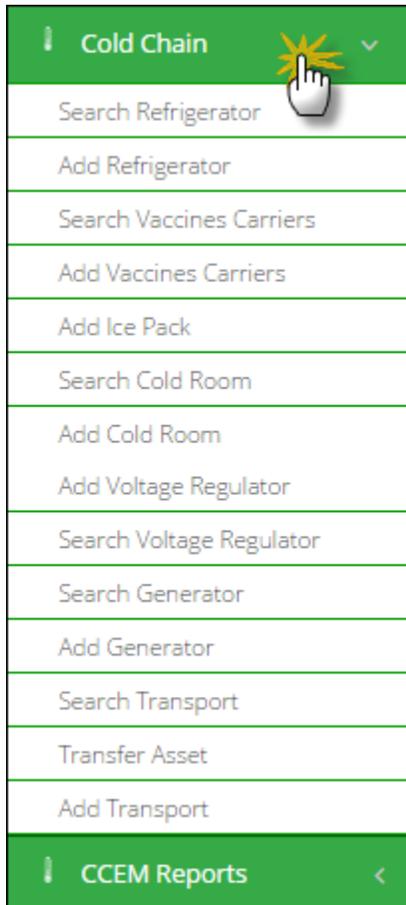
## Icepack freezing capacity against routine requirements

Cold chain equipment management dashboard will also display icepack freezing capacity graph against routine requirements in the form of a bar graph. The user can view the health facilities list on the vertical axis while the capacity range is shown on the horizontal axis.



## Cold Chain

Click **Cold Chain** from the main menu to display a list of options.



## Add Refrigerator

To add a new refrigerator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Add Refrigerator**.  
New/Add Refrigerator/Freezer/ILR Asset Page displays.
3. Specify the following filters:
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the adjustment.
  - **Source of Supply:** select the supplier source from the list.
  - **Utilization:** select the utilization of the asset.
  - **Working Status:** select the status of the Asset from the list.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the asset is not allocated.
    - Warehouse:** select the warehouse to place the asset.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
  - **Catalogue ID:** select the Catalogue ID from the list. You can also add a new catalogue ID by clicking **Add**. It will display a new window with following options:
    - **Catalogue ID:** specify the Catalogue ID.
    - **Make:** specify the make of the asset being added.

- **Model:** specify the model of the asset being added.
- **Asset Sub-Type:** Select asset sub-type from the list.
- **Dimensions:** Add the dimensions of the asset in feet.
- **Capacity:** Add the capacity of the asset in liters.
- **CFC Free Sticker:** select one of the options from Not Applicable, Yes and No.
- **Serial No.:** Enter the asset’s serial number.
- **Working Since (Year):** Enter the year since the working of the asset.

Cold Chain

New/Add Refrigerator/Freezer/ILR Asset

Asset Id / Equipment Code	Source of Supply	
<input type="text" value="AE1234"/>	<input type="text" value="WHO"/>	
Utilization *	Working Status *	
<input type="text" value="In use"/>	<input type="text" value="Working well"/>	
Placed At*	<input checked="" type="radio"/> Unallocated <input type="radio"/> Select Warehouse	
Catalogue ID	Make *	Model *
<input type="text" value="Domestic - Candy - R134A"/>	<input type="text" value="Candy"/>	<input type="text" value="R134A"/>
<b>Add</b>		
Asset Sub Type *	CFC Free Sticker	
<input type="text" value="Select Asset Sub Types"/>	<input checked="" type="radio"/> Not Applicable <input type="radio"/> Yes <input type="radio"/> No	
Dimensions (Feet)	Capacity (Liters)*	
<input type="text" value="Length"/>	<input type="text" value="0"/>	
<input type="text" value="Length"/>	<input type="text" value="9.999999999"/>	
<input type="text" value="Height"/>	<input type="text" value="0"/>	
	<input type="text" value="9.999999999"/>	
Serial Number	Working Since (Year)	
<input type="text" value="S1234"/>	<input type="text" value="12/11/2013"/>	
<b>Save</b>		

4. Click **Save** to save the new asset.

## Search Refrigerator

To search a refrigerator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Refrigerator**.  
Search Refrigerator/Freezer/ILR Asset Page displays.
3. Specify the following filters:
  - **Asset Sub-Type:** Select asset sub-type from the list.
  - **Source of Supply:** select the supplier source from the list.
  - **Working Status:** select the status of the Asset from the list.
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the adjustment.
  - **Catalogue ID:** specify the Catalogue ID.
  - **Make:** specify the make of the asset being added.
  - **Model:** specify the model of the asset being added.
  - **Serial No.:** Enter the asset's serial number.
  - **Gross Capacity From:** Add the gross capacity of the asset in liters.
  - **Gross Capacity to:** Add the gross capacity of the asset in liters.
  - **Working From:** Enter the year since the working of the asset.
  - **Working To:** Enter the year till the optimal working of the asset.
  - **CFC Free Sticker:** select one of the options from Not Applicable, Yes and No.
  - **Placed at:** Specify one of the following:

**Unallocated:** specifies that the asset is not allocated.

**Warehouse:** select the warehouse to place the asset.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

- **Working Since (Year):** Enter the year since the working of the asset.

4. Click **Search**.

Cold Chain

Search Refrigerator/Freezer/ILR Asset ▼

Asset Sub Type <input type="text" value="Select Asset Sub Types"/>	Source of Supply <input type="text" value="Select Source Of Supply"/>	Working Status <input type="text" value="Select working status"/>	Asset Id / Equipment Code <input type="text"/>
Catalogue ID <input type="text"/>	Make <input type="text" value="Select Makes"/>	Model <input type="text" value="Select Make First"/>	Serial Number <input type="text"/>
Gross Capacity From <input type="text"/>	Gross Capacity To <input type="text"/>	Working Since From <input type="text"/>	Working Since To <input type="text"/>

CFC Free Sticker  
 Not Applicable  Yes  No  
 Unallocated  Select Warehouse

Placed At

Search
Reset

Report Type  Detail View  Summary View

District	Facility	Make	Model	Capacity	Working Status	Date	-
		Test	Test	For 20 : 4 For 4 : 4	Unknown	2014-08-05 00:00:00	<a href="#">Edit</a>   <a href="#">More</a>
			Test	For 20 : 4 For 4 : 4	Unknown	2014-08-05 12:11:51	<a href="#">Edit</a>   <a href="#">More</a>
			Test	For 20 : 4 For 4 : 4	Unknown	2014-08-05 12:12:58	<a href="#">Edit</a>   <a href="#">More</a>
		LG	PK2014	For 20 : 10 For 4 : 10	Working well	2004-08-20 00:00:00	<a href="#">Edit</a>   <a href="#">More</a>
		pastunabdqta	123	For 20 : 1 For 4 : 1	Working well	2014-08-05 00:00:00	<a href="#">Edit</a>   <a href="#">More</a>

5. **Report Type:** select the report type such as summary view or detail view.

## Add Vaccine Carriers

To add a new vaccine carrier:

1. Sign in to the User account.

User Home Page displays.

2. Under **CCEM**, click **Add Vaccine Carriers**.

Add Vaccine Carriers Page displays.

3. Specify the following filters:

- **Placed at:** Specify one of the following:

**Unallocated:** specifies that the asset is not allocated.

**Warehouse:** select the warehouse to place the asset.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

- **Catalogue ID:** select the Catalogue ID from the list. You can also add a new catalogue ID by clicking **Add**. It will display a new window with following options:

- **Catalogue ID:** specify the Catalogue ID.
- **Make:** specify the make of the asset being added.
- **Model:** specify the model of the asset being added.
- **Dimensions:** Add the dimensions of the asset in feet.

4. Add **Total Available** for Vaccination Activities.
5. Click **Save**.

### Add Vaccine Carriers

Placed At \*  
 Unallocated  Select Warehouse

Catalogue ID  
E455M - VCDESG D161429 - TP001

**Add**

Make \* VCDESG D161429 Model \* TP001

Total Available For Vaccination Activities  
100

Internal Dimensions  
Length  
Width  
Height

**Save**

## Search Vaccine Carriers

To search a vaccine carrier:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Vaccine Carriers**.  
Vaccine Carrier Search Page displays.
3. Specify the following filters:
  - a. **Catalogue ID**: specify the Catalogue ID.
  - b. **Make**: specify the make of the asset being added.
  - c. **Model**: specify the model of the asset being added.
  - d. **Placed at**: Specify one of the following:

**Unallocated**: specifies that the asset is not allocated.

**Warehouse**: select the warehouse to place the asset.

- **Office**: In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Click **Search**.

Cold Chain

**Vaccine Carrier Search** ▼

Catalogue ID

Make  Model

Placed At  Unallocated  Select Warehouse

Search Reset

---

**Vaccine Carrier Search** ▼

Report Tpe  Detail View  Summary View

District	Facility	Make	Model	Date	
		Oyster	Yellow Box	08/12/2014	<span>More</span>

5. **Report Type:** select the report type such as summary view or detail view.

## Add Ice Packs

To add ice packs:

1. Sign in to the User account.

User Home Page displays.

2. Under **CCEM**, click **Add Ice Packs**.

Add Ice Packs Page displays.

3. Specify the following filters:

- **Placed at:** Specify one of the following:

**Unallocated:** specifies that the asset is not allocated.

**Warehouse:** select the warehouse to place the asset.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Add **Quantity** before the ice pack size required to be added.
5. Click **Add**.

Add Ice Packs

Placed At \*  Unallocated  
 Select Warehouse

Office \*  Province  Warehouse

Ice Pack Sizes

0.2	<input type="text" value="100"/>
0.3	<input type="text" value="200"/>
0.4	<input type="text" value="50"/>

## Search Ice Pack

To search an ice pack:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Ice Pack**.  
Ice Pack Search Page displays.
3. Specify the following filters:
  - a. **Make**: specify the make of the asset being added.
  - b. **Model**: specify the model of the asset being added.
  - c. **Placed at**: Specify one of the following:

**Unallocated**: specifies that the asset is not allocated.

**Warehouse**: select the warehouse to place the asset.

- **Office**: In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Click **Search**.

Cold Chain

**Ice Pack Search** ▼

Make  Model

Placed At  
 Unallocated  Select Warehouse

**Search** **Reset**

---

**Ice Pack Search** ▼

Report Tpe  
 Detail View  Summary View

District	Facility	Make	Model	Quantity	Date	
		Ariston Italy	0.2	1	08/08/2014	<b>More</b>
		Ariston Italy	0.3	2	08/08/2014	<b>More</b>
		Ariston Italy	0.4	3	08/08/2014	<b>More</b>

Showing 1 to 3 of 3 entries

5. **Report Type:** select the report type such as summary view or detail view.

## Add Cold Room

To add a cold room:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Add Cold Room**.  
Add Cold Room Page displays.
3. Specify the following filters:
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the asset.
  - **Source of Supply:** select the supplier source from the list.
  - **Utilization:** select the utilization of the cold room.
  - **Working Status:** select the status of the cold room from the list.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the cold room is not allocated.
    - Warehouse:** select the warehouse to place the cold room.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
  - **Type:** select the type of the cold room.
  - **Internal Storage Dimensions:** specify the storage dimensions of the cold room such as length, width and height.
  - **Make:** specify the make of the cold room being added.

- **Model:** specify the model of the asset being added.
- **Internal gross volume:** specify in meters.
- **Net storage volume for vaccine/packs:** specify the volume in meters.
- **Year of Supply:** specify the year of supply for the cold room.
- **Number of cooling system:** specify the number of cooling systems in the cold room.
- **Number of phases:** select the number of phases.
- **Refrigerator gas type:** select the type of refrigerator gas.
- Specify if there is a **Voltage Stabilizer** or not.
- Specify if the cold room **has working backup generator**.
- **Temperature recording system:** select the temperature recording system from the list.
- **Type of recording system:** select the type of recording system.

Add Cold Room

**Add Cold Room** ✓

Asset Id / Equipment Code <input type="text"/>	Source of Supply WHO <input type="text"/>
Utilization * In use <input type="text"/>	Working Status * Working well <input type="text"/>
Placed At* <input checked="" type="radio"/> Unallocated <input type="radio"/> Select Warehouse	
Type * Select <input type="text"/>	Internal Storage Dimensions(m) Length <input type="text"/> Width <input type="text"/> Height <input type="text"/>
Make * Haier <input type="text"/>	Internal gross volume (m3) * Gross Capacity <input type="text"/>
Model * HBD-116 <input type="text"/>	Net storage volume for vaccine/packs (m3) * Net Capacity <input type="text"/>
Year of Supply <input type="text"/>	Number of cooling system <input type="text"/>
Number of phases <input checked="" type="radio"/> One <input type="radio"/> Three	Refrigerator gas type R12 <input type="text"/>
Has voltage stabilizer <input type="radio"/> Yes <input checked="" type="radio"/> No	Has working backup generator Yes- automatic startup <input type="text"/>
Temperature recording system Provided, operating <input type="text"/>	Type of recording system Chart recorder (clockwork) <input type="text"/>

**Save**

4. Click **Save** to save the new cold room.

A new cold room would be added.

## Search Cold Room

To search a cold room:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Cold Room**.  
Cold Room Search Page displays.
3. Specify the following filters:
  - **Type**: select the type of the cold room.
  - **Working Status**: select the status of the cold room from the list.
  - **Source of Supply**: select the supplier source from the list.
  - **Number of cooling system**: specify the number of cooling systems in the cold room.
  - **Asset ID/Equipment Code**: is an automatically generated unique identifier for the asset.
  - Specify if there is a **Voltage Stabilizer** or not.
  - **Make**: specify the make of the cold room being added.
  - **Model**: specify the model of the asset being added.
  - **Capacity From, Capacity to**: Add the capacity of the cold room.
  - **Year of Supply From, to**: specify the year of supply for the cold room.
  - **Placed at**: Specify one of the following:
    - Unallocated**: specifies that the cold room is not allocated.
    - Warehouse**: select the warehouse to place the cold room.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Click **Search**.

### Search Cold Room

Type

Source of Supply

Asset ID/Equipment Code

Make

Capacity from

Year of Supply from

Working Status

Number of cooling system

Has voltage stabilizer  Yes  No

Model

Capacity to

Year of Supply to

Placed At  Unallocated  Select Warehouse

Report Tpe  Detail View  Summary View

District	Facility	Make	Model	Capacity	Working Status	Date	
		PS40	Bright Light Solar	0		08/07/2014	<a href="#">Edit</a>   <a href="#">More</a>
		ACMA	ACMA	3	Not working	08/08/2014	<a href="#">Edit</a>   <a href="#">More</a>
		TESTING MODEL	TESTING MAKE		Working well	08/12/2014	<a href="#">Edit</a>   <a href="#">More</a>
		MK 074	Forter Refigerator	0	Working well	08/12/2014	<a href="#">Edit</a>   <a href="#">More</a>
		HBD-116	Haier	50	Working well	08/13/2014	<a href="#">Edit</a>   <a href="#">More</a>
		HBD-116	Haier	50	Working well	08/19/2014	<a href="#">Edit</a>   <a href="#">More</a>

5. **Report Type:** select the report type such as summary view or detail view.

## Add Voltage Regulator

To add a voltage regulator:

1. Sign in to the User account.

User Home Page displays.

2. Under **CCEM**, click **Add Voltage Regulator**.

Add Voltage Regulator Page displays.

3. Specify the following filters:

- **Placed at:** Specify one of the following:

**Unallocated:** specifies that the voltage regulator is not allocated.

**Warehouse:** select the warehouse to place the regulator.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. **Catalogue ID:** specify the Catalogue ID.

5. Add **Quantity** before the ice pack size required to be added.

6. Click **Add**.

Cold Chain

**New/Add Voltage Regulator Asset**

Placed At \*  
 @Unallocated @Select Warehouse

Catalogue ID:  Quantity:

**Add**

Make:  Model:

**Add**

10 records per page Search:

Catalogue ID	Quantity	Make	Model
-45	1911	-45	-45
-45	22	-45	-45
-45	55	-45	-45
-45	55	-45	-45
-45	12	-45	-45
CAT8888	80	TESTING MAKE	TESTING MODEL
E7/12		Advance Galatrek	FF/SOOPA
E7/12		Advance Galatrek	FF/SOOPA
E7/12		Advance Galatrek	FF/SOOPA
E7/12		Advance Galatrek	FF/SOOPA

Showing 1 to 10 of 553 entries

< 1 2 3 4 5 >

7. User can also search a specific regulator from the list.

## Search Voltage Regulator

To search a voltage regulator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Voltage Regulator**.  
Search Voltage Regulator Page displays.
3. **Catalogue ID**: specify the Catalogue ID.
4. **Make**: specify the make of the voltage regulator.
5. **Model**: specify the model of the voltage regulator.

6. Specify the following filters:

- **Placed at**: Specify one of the following:

**Unallocated**: specifies that the voltage regulator is not allocated.

**Warehouse**: select the warehouse to place the regulator.

- **Office**: In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

7. **Catalogue ID**: specify the Catalogue ID.
8. Add **Quantity** before the ice pack size required to be added.

9. Click **Search**.

Cold Chain

**Search Voltage Regulator**

Catalogue ID

Make:  Model:

Placed At:  Unallocated  Select Warehouse

Report Tpe:  Detail View  Summary View

District	Facility	Make	Model	Working Status	Date	-
		Sollatek	SVS 04-22		2014-08-05 00:00:00	<a href="#">More</a>
		Sollatek	SVS 04-22		2014-08-12 00:00:00	<a href="#">More</a>
		Sollatek	SVS 04-22		2014-08-13 00:00:00	<a href="#">More</a>
		Sollatek	SVS 04-22		2014-08-16 00:00:00	<a href="#">More</a>

10. **Report Type:** select the report type such as summary view or detail view.

## Add Generator

To add a new generator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Add Generator**.  
Add Generator Page displays.
3. Specify the following filters:
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the adjustment.
  - **Source of Supply:** select the supplier source from the list.
  - **Utilization:** select the utilization of the asset.
  - **Working Status:** select the status of the Asset from the list.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the asset is not allocated.
    - Warehouse:** select the warehouse to place the asset.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
  - **Make:** specify the make of the asset being added.
  - **Model:** specify the model of the asset being added.

- **Serial No.:** Enter the asset's serial number.
- **Number of phases:** select the number of phases.
- **Power Rating:** Enter the power rating of the generator.
- **Power Source:** Select the power source of the generator.
- Specify if the generator has an **Automatic Start Mechanism** or not.
- **Year of Supply:** specify the year of supply for the generator.
- **Use for:** select the use for the generator.

### Add Generator

#### Add Generator

Asset Id / Equipment Code	Source of Supply
<input type="text"/>	WHO
Utilization *	Working Status *
In use	Working well
Placed At*	
<input checked="" type="radio"/> Unallocated <input type="radio"/> Select Warehouse	
Make *	Model *
Siemens	Seimens
Serial Number *	No. of Phases
S1234	<input checked="" type="radio"/> One <input type="radio"/> Three
Power Rating	Power Source
100	Diesel
Automatic Start Mechanism	Year of Supply
<input checked="" type="radio"/> Yes <input type="radio"/> No	14/01/2014
Use For	
Cold Rooms	

4. Click **Save** to save the new generator.

## Search Generator

To search a generator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Generator**.  
Search Generator Page displays.
3. Specify the following filters:
  - **Working Status:** select the status of the Asset from the list.
  - **Source of Supply:** select the supplier source from the list.
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the adjustment.
  - **Make:** specify the make of the asset being added.
  - **Model:** specify the model of the asset being added.
  - **Year of Supply from, to:** specify the year of supply for the generator.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the asset is not allocated.
    - Warehouse:** select the warehouse to place the asset.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Click **Search**.

Search Generator

Working Status: Working well

Serial Number:

Source of Supply: Select Source Of Supply

Equipment ID/Asset Code:

Make: Select

Model: Select Make First

Year of Supply From:

Year of Supply To:

Placed At:  Unallocated  Select Warehouse

Report Tpe:  Detail View  Summary View

District	Facility	Make	Model	Serial Number	Working Status	Working Since	-
		TESTING MAKE	TESTING MODEL	S9999	Working well	2014-05-12 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		BIBIR	107A	-45	Working well	2014-08-12 14:06:49	<a href="#">Edit</a> <a href="#">More</a>
		ACMA	ACMA	1234	Working well	2014-08-05 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Hitochi	S-11W-W4A	123	Working well	2014-08-06 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Lambordini	K633780	1	Working well	2014-08-13 23:03:32	<a href="#">Edit</a> <a href="#">More</a>
		Ferguson	T4236	123	Working well	2014-08-05 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Country Man	KDE 6700 TA	SN123	Working well	2014-08-16 12:02:57	<a href="#">Edit</a> <a href="#">More</a>
		SDMO	3TUB-106	SNAEG123	Working well	2014-08-14 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		YANMAR	YDG2000E-5B	SNAEG123	Working well	2014-08-19 09:37:44	<a href="#">Edit</a> <a href="#">More</a>

5. **Report Type:** select the report type such as summary view or detail view.

## Add Transport

To add a new transport:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Add Transport**.  
Add Transport Page displays.
3. Specify the following filters:
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the transport.
  - **Source of Supply:** select the supplier source from the list.
  - **Utilization:** select the utilization of the.
  - **Working Status:** select the status of the transport from the list.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the transport is not allocated.
    - Warehouse:** select the warehouse to place the transport.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
  - **Transport Type:** select the transport type.
  - **Registration No.:** specify the registration number. This field is optional.
  - **Make:** specify the make of the transport being added.
  - **Model:** specify the model of the transport being added.

- **Manufacture Year:** select the manufacture year of the transport.
- **% use for EPI:** specify the percent use for EPI. This is an optional field.
- **Fuel Type:** select the fuel type being used.

Cold Chain

**New/Add Transport Asset**

Asset Id / Equipment Code E1234	Source of Supply WHO		
Utilization * In use	Working Status * Working well		
Placed At* <input checked="" type="radio"/> Unallocated <input type="radio"/> Select Warehouse			
Transport Type Select Asset Sub Types	Registration No. 	Make* Suzuki	Model* SV1800P
Manufacture Year 08/01/2014	% Used For EPI 	Fuel Type Select Fuel Types	
Comments 			
<b>Save</b>			

4. Click **Save** to save the new transport.

## Search Transport

To search a transport:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Transport**.  
Search Transport Page displays.
3. Specify the following filters:
  - **Transport Type**: select the transport type.
  - **Working Status**: select the status of the Asset from the list.
  - **Source of Supply**: select the supplier source from the list.
  - **Fuel Type**: select the fuel type being used.
  - **Registration No.:** specify the registration number. This field is optional.
  - **Make**: specify the make of the asset being added.
  - **Model**: specify the model of the asset being added.
  - **Manufacture Year from, to**: specify the year of manufacture for the transport.
  - **Placed at**: Specify one of the following:
    - Unallocated**: specifies that the asset is not allocated.
    - Warehouse**: select the warehouse to place the asset.
      - **Office**: In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
4. Click **Search**.

**Cold Chain**

Search Transport Asset

**Transport Type**  
 Select Asset Sub Types

**Working Status**  
 Select working status

**Source of Supply**  
 Select Source Of Supply

**Fuel Type**  
 Select Fuel Types

**Registration No.**

**Make**  
 Select Makes

**Model**  
 Select Make First

**Manufacture Year From**

**Manufacture Year To**

Placed At  Unallocated  Select Warehouse

Report Type  Detail View  Summary View

District	Facility	Make	Model	Fuel Type	Working Status	Date	
		Electrolux	TFW791	Petrol		2014-08-01 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		TESTING MAKE	TESTING MODEL	Petrol	Working well	2014-06-17 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Electrolux	TCW1151	Petrol	Working well	2014-08-08 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Toyota	Toyota	Petrol	Working well	2013-08-01 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Suzuki	Sprinter	Diesel	Working well	2013-12-01 00:00:00	<a href="#">Edit</a> <a href="#">More</a>

5. **Report Type:** select the report type such as summary view or detail view.

## Transfer Asset

To transfer an Asset:

1. Sign in to the User account.  
The User Home Page displays.
2. Click **Transfer Asset** under **CCEM**.  
The Transfer Asset page displays.
3. In **From Office**, select the office.

**Office:** In this drop-down, select the office. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

The Asset's details are displayed.

Transfer Asset

▼

**From Office \***      Province      **Warehouse \***

Province      Punjab      Punjab EPI Store

S. No.	Assets	Model	Asset ID	Quantity	Transfer Quantity/Asset
1	Vaccine Carriers-Cold Boxes	Rotary International	201838	5243	<input type="text" value="3000"/>
2	Vaccine Carriers-Cold Boxes	RCW12	203135	4649	<input type="text" value="1000"/>
3	Vaccine Carriers-Cold Boxes	RCW25	203322	600	<input type="text"/>
4	Ice Packs	HURREE	400032		<input checked="" type="checkbox"/>
5	Ice Packs	POV90L	400059		<input checked="" type="checkbox"/>
6	Ice Packs	POV90L	400060		<input type="checkbox"/>
7	Ice Packs	Local	400061		<input type="checkbox"/>
34	Cold Rooms	0.2		10	<input type="text"/>
35	Freezer-ILRs-Refrigerators	model	00000		<input type="checkbox"/>
36	Vehicles	Pickup Single Cabin	A00000		<input type="checkbox"/>

**To Office \***      Province \*      **Warehouse \***

District      Punjab      District Bhakkar

Transfer

4. In **Transfer Quantity/Asset**, specify the quantity you want to transfer.

S. No.	Assets	Model	Asset ID	Quantity	Transfer Quantity/Asset
1	Vaccine Carriers-Cold Boxes	Rotary International	201838	5243	<input type="text" value="3000"/>

5. In **To Office**, specify the location that you want to transfer to.

To Office *	Province *	Warehouse *	<input type="button" value="Transfer"/>
<input type="text" value="District"/>	<input type="text" value="Punjab"/>	<input type="text" value="District Bhakkar"/>	

6. Click **Transfer**.

## Maps

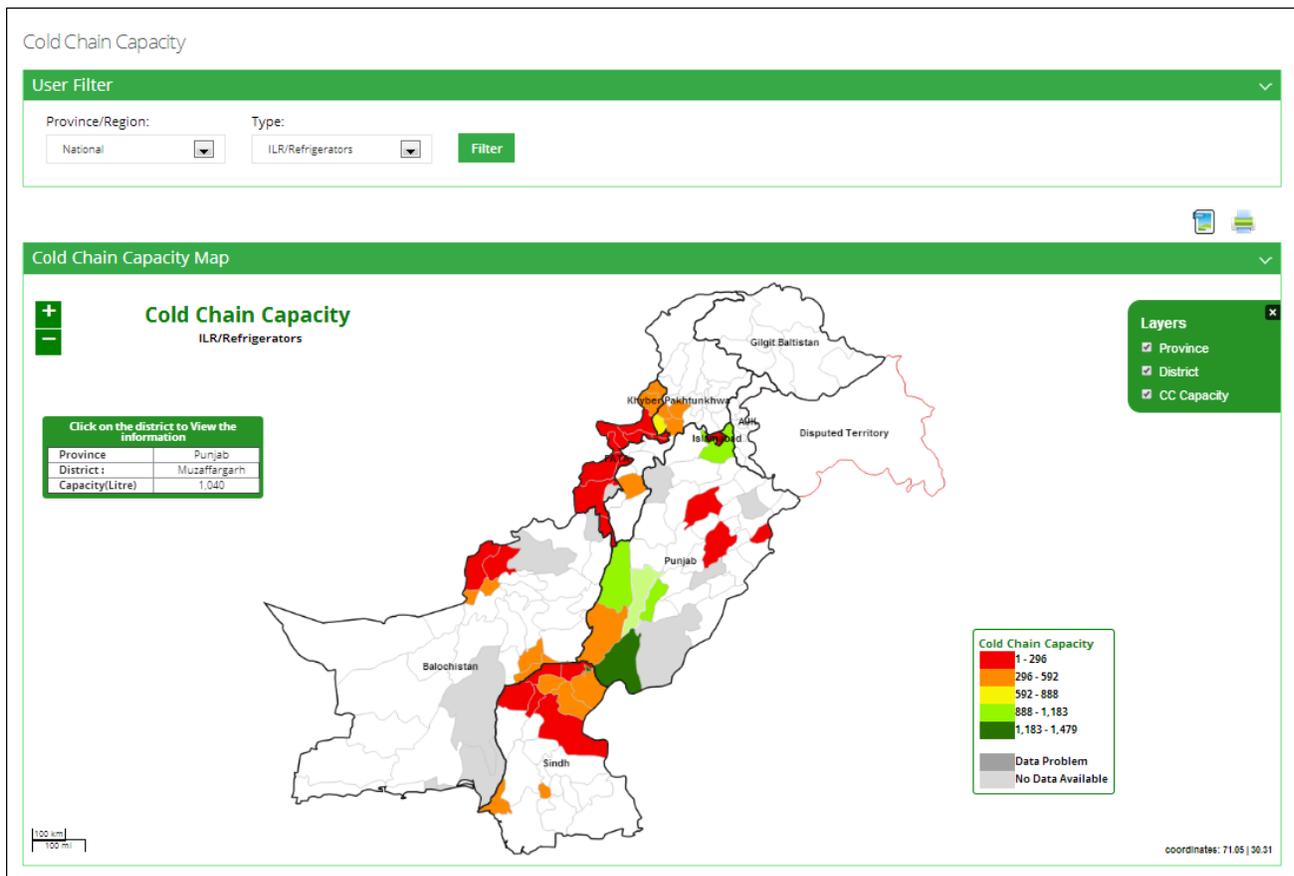
The LMIS also has the capability of generating easy to interpret maps with color codes. These interactive maps would be made available through the Government of Pakistan website and help in increasing the use of the existing information disseminated by Government of Pakistan through the web-based vLMIS by providing the information a more captivating approach to both promote the importance of supply chain and use of data in decision making.

This application is helpful for the health managers at all levels of administrative tiers for planning, identification of possible supply chain problems and new areas of improvements. In addition, GIS dashboards combined with other reports and graphs of vLMIS application give quick overview of monthly situation of commodities and reporting status. This is a good epidemiological tool to combine outputs of web-mapping application with other sources for data for research activities.

CCEM operators can view cold-chain capacity map by using the Maps tab from the main menu. Once the cold-chain indicator for which the map is to be viewed is selected, the user will be directed towards a page to select from various filters.

## Cold Chain Capacity Map

This map shows the cold-chain capacity of each district within the selected province. User can see filter options such as Province/Region and Type of refrigerators or cold rooms to analyze the cold chain capacity rate for each district in the selected province based on the number of facilities in that district. The detailed information can be seen once the user clicks a particular district on the map.



## **CCEM Reports**

Refer to the “CCEM Reports” section of the user manual.

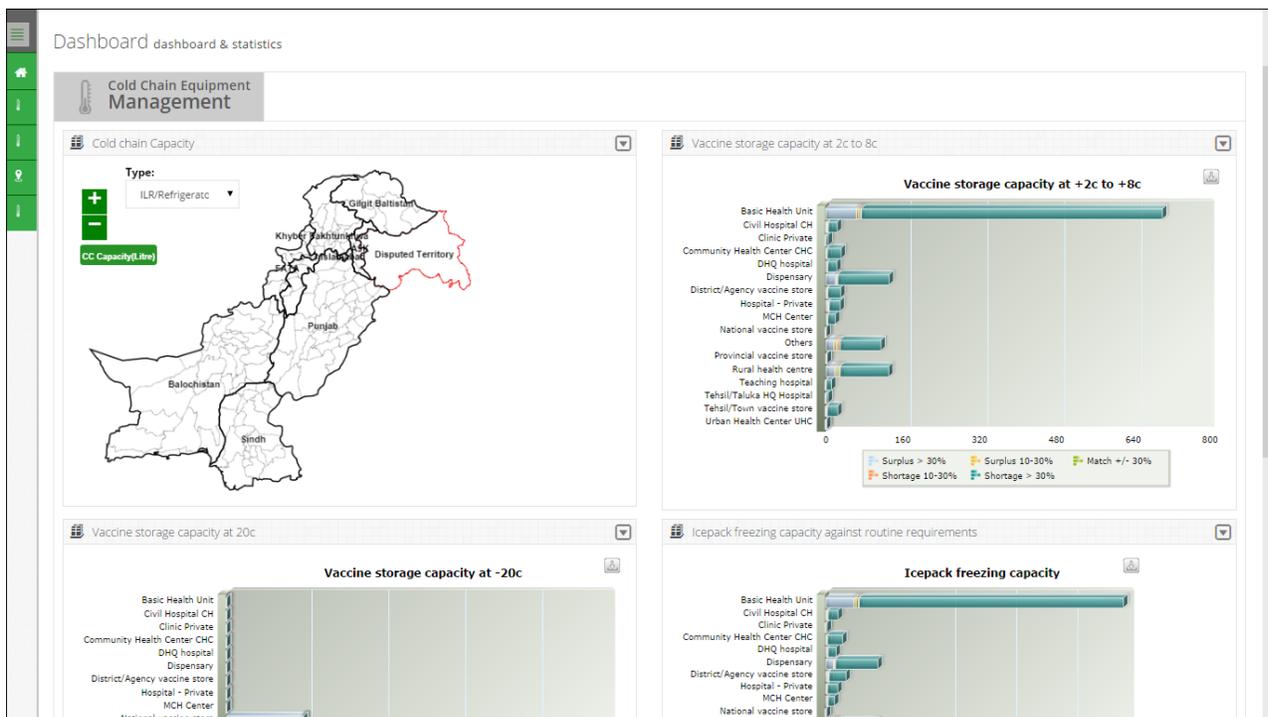
## **CCEM Graphs**

Refer to the “CCEM Graphs” section of the user manual.

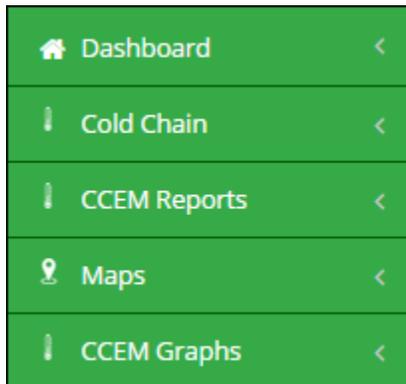
# District CCEM Operator

It is essential for the effectiveness of the vaccines that an unbroken cold chain with an uninterrupted series of storage and distribution activities is maintained for the given temperature range.

Logging in to the District User account displays the account's Home page screen by default.



On the left side of the dashboard screen, the CCEM operator at the district level will see the following tabs:



The CCEM District level operator screen includes the following features:

- **Dashboard:** User can view CCEM dashboard containing graphs, maps and analytical reports by using this tab.
- **CCEM:** enables the account user to report the cold chain asset's status of the assigned warehouse/stores, which helps identify the working condition of the cold-chain machine.
- **CCEM Reports:** user can view the data analysis reports for cold chain equipment. Refer to the "CCEM Reports" section for details.
- **CCEM Graphs:** user can view CCEM graphs for analyzing data. Refer to the "CCEM Graphs" section for details.
- **Maps:** enables user to view the geographical map for Cold-chain capacity.

## Dashboard

Dashboard is a visual display of the most important information needed to achieve one or more objectives; consolidated and arranged on a single screen so the information can be monitored at a glance.

For CCEM users, dashboard for cold chain equipment management will be available. User can view the dashboard at the district level.

## Cold Chain Equipment Management

Cold Chain Equipment Management dashboard allows users to view the cold chain capacity map by clicking on this tab.

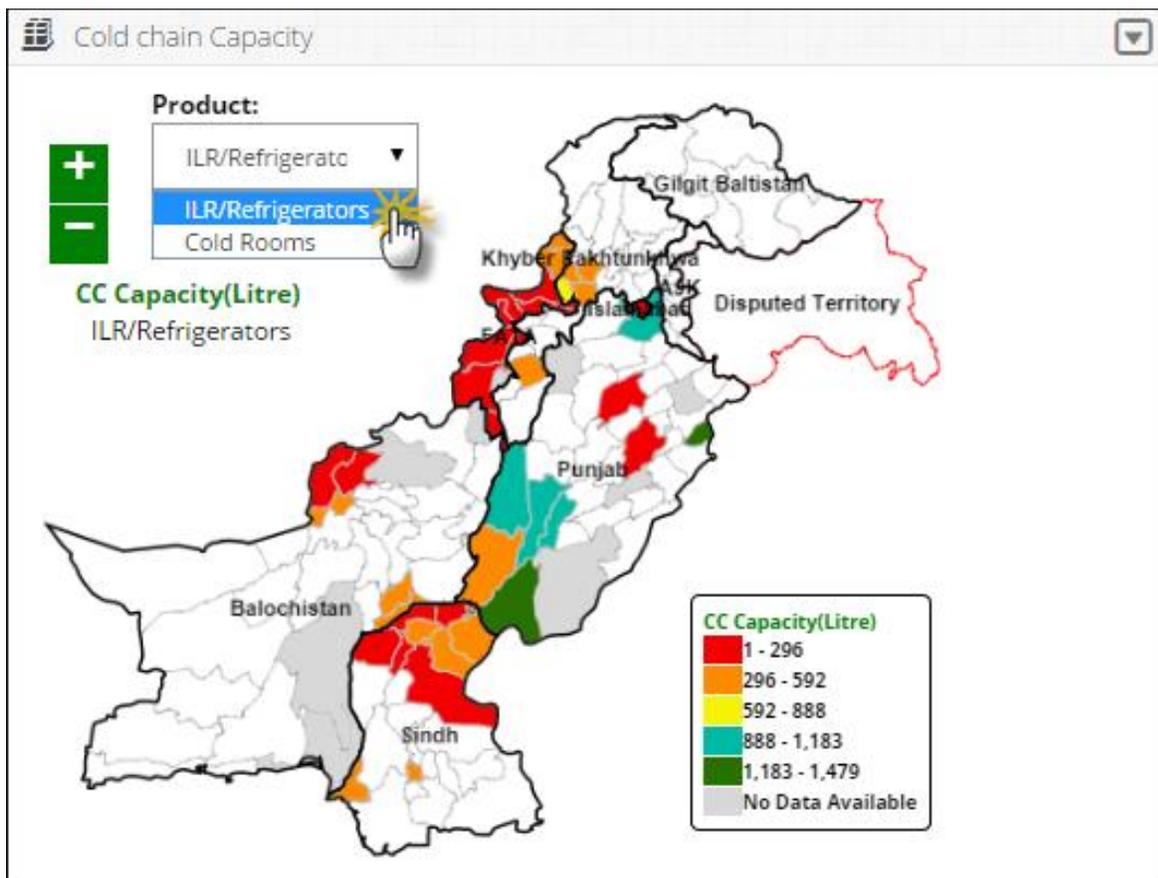
- **Cold Chain Capacity**  
This map shows a map highlighting the cold chain capacity of each district.
- **Vaccine storage capacity at +2c to +8c**  
To show the storage capacity of vaccines at certain temperature range within selected health facilities.
- **Vaccine storage capacity at +20c**  
To show the storage capacity of vaccines at 20 degrees centigrade within selected health facilities.
- **Icepack freezing capacity against routine requirements**  
To show the icepack freezing capacity within selected health facilities.

## Cold Chain Capacity

Cold Chain Capacity will be displayed through map.

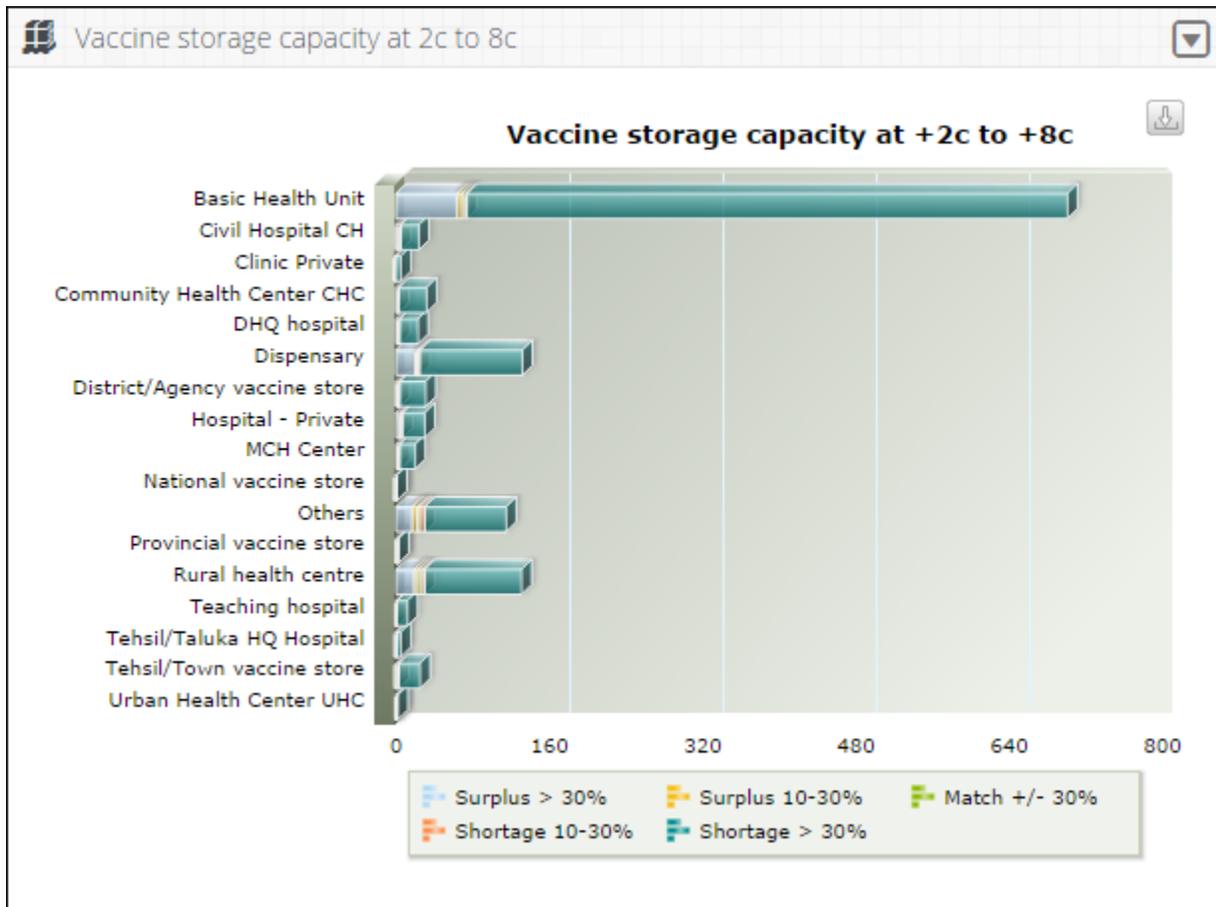
The user can choose product from the drop-down menu.

- ILR/Refrigerators
- Cold Rooms



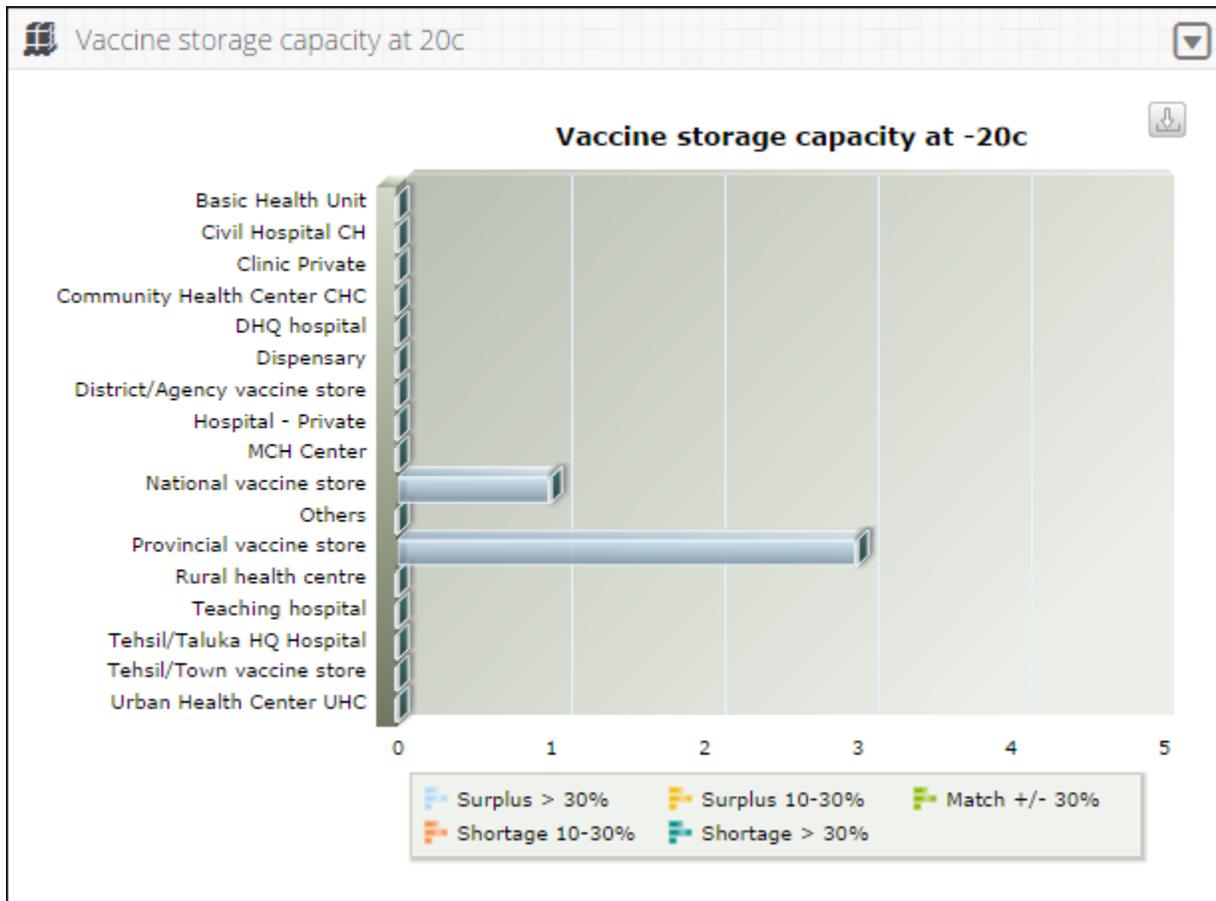
## Vaccine Storage Capacity at +2c to +8c

Vaccine Storage Capacity at +2c to +8c will be displayed in the form of a bar graph. The user can view the health facilities list on the vertical axis while the capacity range is shown on the horizontal axis.



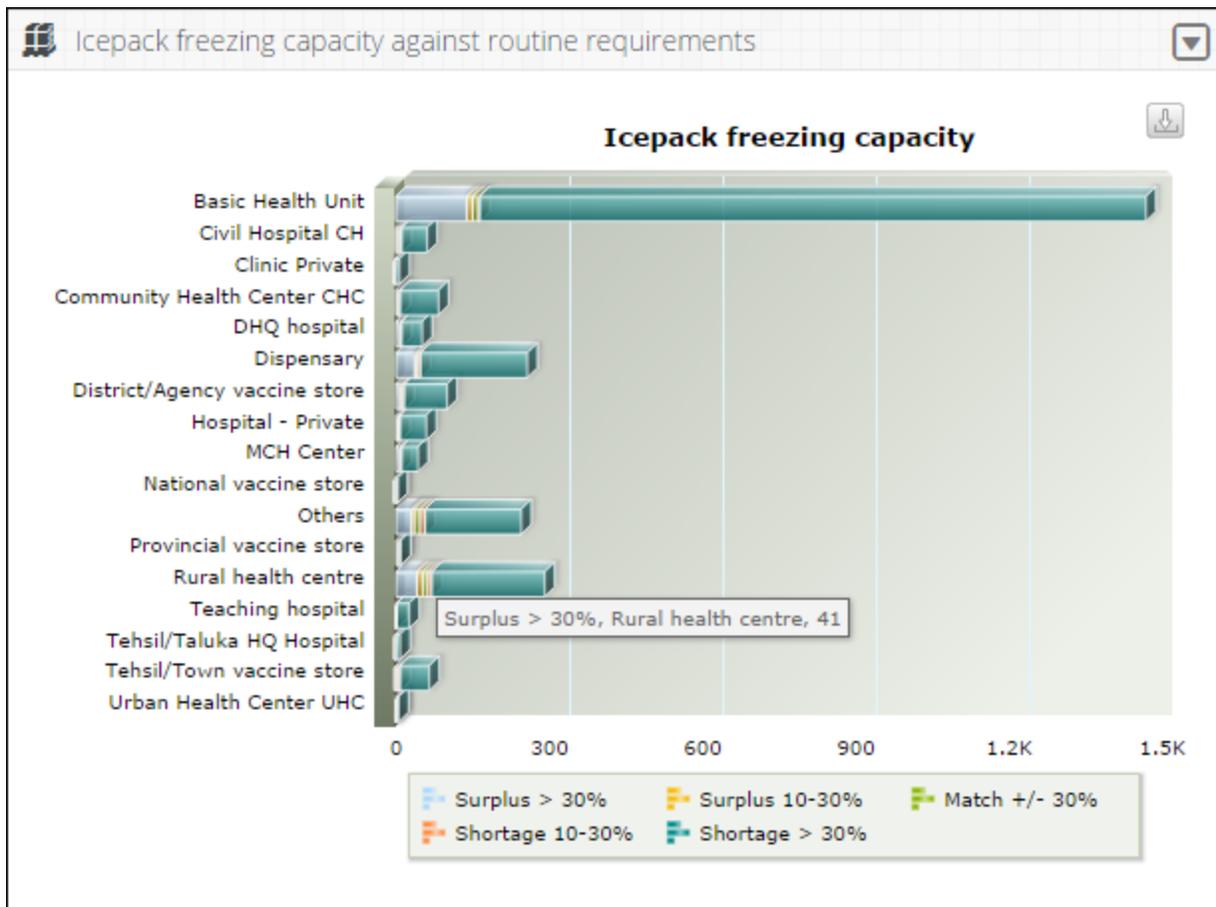
## Vaccine Storage Capacity at +20c

Vaccine Storage Capacity at +20c will be displayed in the form of a bar graph. The user can view the health facilities list on the vertical axis while the capacity range is shown on the horizontal axis.



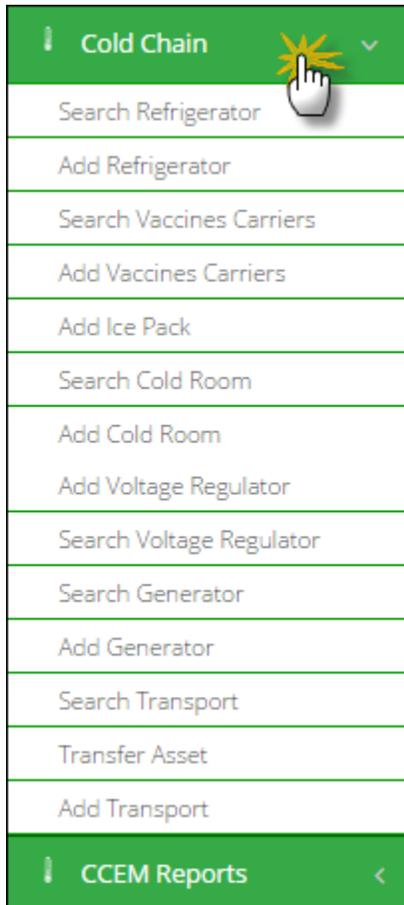
## Icepack freezing capacity against routine requirements

Cold chain equipment management dashboard will also display icepack freezing capacity graph against routine requirements in the form of a bar graph. The user can view the health facilities list on the vertical axis while the capacity range is shown on the horizontal axis.



## Cold Chain

Click **Cold Chain** from the main menu to display a list of options.



## Add Refrigerator

To add a new refrigerator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Add Refrigerator**.  
New/Add Refrigerator/Freezer/ILR Asset Page displays.
3. Specify the following filters:
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the adjustment.
  - **Source of Supply:** select the supplier source from the list.
  - **Utilization:** select the utilization of the asset.
  - **Working Status:** select the status of the Asset from the list.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the asset is not allocated.
    - Warehouse:** select the warehouse to place the asset.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
  - **Catalogue ID:** select the Catalogue ID from the list. You can also add a new catalogue ID by clicking **Add**. It will display a new window with following options:
    - **Catalogue ID:** specify the Catalogue ID.
    - **Make:** specify the make of the asset being added.

- **Model:** specify the model of the asset being added.
- **Asset Sub-Type:** Select asset sub-type from the list.
- **Dimensions:** Add the dimensions of the asset in feet.
- **Capacity:** Add the capacity of the asset in liters.
- **CFC Free Sticker:** select one of the options from Not Applicable, Yes and No.
- **Serial No.:** Enter the asset’s serial number.
- **Working Since (Year):** Enter the year since the working of the asset.

Cold Chain

New/Add Refrigerator/Freezer/ILR Asset

Asset Id / Equipment Code	Source of Supply	
<input type="text" value="AE1234"/>	<input type="text" value="WHO"/>	
Utilization *	Working Status *	
<input type="text" value="In use"/>	<input type="text" value="Working well"/>	
Placed At*	<input checked="" type="radio"/> Unallocated <input type="radio"/> Select Warehouse	
Catalogue ID	Make *	Model *
<input type="text" value="Domestic - Candy - R134A"/>	<input type="text" value="Candy"/>	<input type="text" value="R134A"/>
<b>Add</b>		
Asset Sub Type *	CFC Free Sticker	
<input type="text" value="Select Asset Sub Types"/>	<input checked="" type="radio"/> Not Applicable <input type="radio"/> Yes <input type="radio"/> No	
Dimensions (Feet)	Capacity (Liters)*	
<input type="text" value="Length"/>	<input type="text" value="0"/>	
<input type="text" value="Length"/>	<input type="text" value="9.999999999"/>	
<input type="text" value="Height"/>	<input type="text" value="0"/>	
	<input type="text" value="9.999999999"/>	
Serial Number	Working Since (Year)	
<input type="text" value="S1234"/>	<input type="text" value="12/11/2013"/>	
<b>Save</b>		

4. Click **Save** to save the new asset.

## Search Refrigerator

To search a refrigerator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Refrigerator**.  
Search Refrigerator/Freezer/ILR Asset Page displays.
3. Specify the following filters:
  - **Asset Sub-Type:** Select asset sub-type from the list.
  - **Source of Supply:** select the supplier source from the list.
  - **Working Status:** select the status of the Asset from the list.
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the adjustment.
  - **Catalogue ID:** specify the Catalogue ID.
  - **Make:** specify the make of the asset being added.
  - **Model:** specify the model of the asset being added.
  - **Serial No.:** Enter the asset's serial number.
  - **Gross Capacity From:** Add the gross capacity of the asset in liters.
  - **Gross Capacity to:** Add the gross capacity of the asset in liters.
  - **Working From:** Enter the year since the working of the asset.
  - **Working To:** Enter the year till the optimal working of the asset.
  - **CFC Free Sticker:** select one of the options from Not Applicable, Yes and No.
  - **Placed at:** Specify one of the following:

**Unallocated:** specifies that the asset is not allocated.

**Warehouse:** select the warehouse to place the asset.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

- **Working Since (Year):** Enter the year since the working of the asset.

4. Click **Search**.

Cold Chain

Search Refrigerator/Freezer/ILR Asset ▼

Asset Sub Type <input type="text" value="Select Asset Sub Types"/>	Source of Supply <input type="text" value="Select Source Of Supply"/>	Working Status <input type="text" value="Select working status"/>	Asset Id / Equipment Code <input type="text"/>
Catalogue ID <input type="text"/>	Make <input type="text" value="Select Makes"/>	Model <input type="text" value="Select Make First"/>	Serial Number <input type="text"/>
Gross Capacity From <input type="text"/>	Gross Capacity To <input type="text"/>	Working Since From <input type="text"/>	Working Since To <input type="text"/>

CFC Free Sticker  
 Not Applicable  Yes  No  
 Unallocated  Select Warehouse

Placed At

Search
Reset

Report Type  Detail View  Summary View

District	Facility	Make	Model	Capacity	Working Status	Date	-
		Test	Test	For 20 : 4 For 4 : 4	Unknown	2014-08-05 00:00:00	<a href="#">Edit</a>   <a href="#">More</a>
			Test	For 20 : 4 For 4 : 4	Unknown	2014-08-05 12:11:51	<a href="#">Edit</a>   <a href="#">More</a>
			Test	For 20 : 4 For 4 : 4	Unknown	2014-08-05 12:12:58	<a href="#">Edit</a>   <a href="#">More</a>
		LG	PK2014	For 20 : 10 For 4 : 10	Working well	2004-08-20 00:00:00	<a href="#">Edit</a>   <a href="#">More</a>
		pastunabdqta	123	For 20 : 1 For 4 : 1	Working well	2014-08-05 00:00:00	<a href="#">Edit</a>   <a href="#">More</a>

5. **Report Type:** select the report type such as summary view or detail view.

## Add Vaccine Carriers

To add a new vaccine carrier:

1. Sign in to the User account.

User Home Page displays.

2. Under **CCEM**, click **Add Vaccine Carriers**.

Add Vaccine Carriers Page displays.

3. Specify the following filters:

- **Placed at:** Specify one of the following:

**Unallocated:** specifies that the asset is not allocated.

**Warehouse:** select the warehouse to place the asset.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

- **Catalogue ID:** select the Catalogue ID from the list. You can also add a new catalogue ID by clicking **Add**. It will display a new window with following options:

- **Catalogue ID:** specify the Catalogue ID.
- **Make:** specify the make of the asset being added.
- **Model:** specify the model of the asset being added.
- **Dimensions:** Add the dimensions of the asset in feet.

4. Add **Total Available for Vaccination Activities** and click **Save**.

### Add Vaccine Carriers

Placed At \*  
 Unallocated  Select Warehouse

Catalogue ID  
E455M - VCDESG D161429 - TP001

**Add**

Make \* VCDESG D161429 Model \* TP001

Total Available For Vaccination Activities  
100

Internal Dimensions  
Length  
Width  
Height

**Save**

## Search Vaccine Carriers

To search a vaccine carrier:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Vaccine Carriers**.  
Vaccine Carrier Search Page displays.
3. Specify the following filters:
  - a. **Catalogue ID**: specify the Catalogue ID.
  - b. **Make**: specify the make of the asset being added.
  - c. **Model**: specify the model of the asset being added.
  - d. **Placed at**: Specify one of the following:

**Unallocated**: specifies that the asset is not allocated.

**Warehouse**: select the warehouse to place the asset.

- **Office**: In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Click **Search**.

Cold Chain

**Vaccine Carrier Search** ▼

Catalogue ID

Make  Model

Placed At  Unallocated  Select Warehouse

**Vaccine Carrier Search** ▼

Report Type  Detail View  Summary View

District	Facility	Make	Model	Date	
		Oyster	Yellow Box	08/12/2014	<input type="button" value="More"/>

5. **Report Type:** select the report type such as summary view or detail view.

## Add Ice Packs

To add ice packs:

1. Sign in to the User account.

User Home Page displays.

2. Under **CCEM**, click **Add Ice Packs**.

Add Ice Packs Page displays.

3. Specify the following filters:

- **Placed at:** Specify one of the following:

**Unallocated:** specifies that the asset is not allocated.

**Warehouse:** select the warehouse to place the asset.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Add **Quantity** before the ice pack size required to be added.
5. Click **Add**.

Add Ice Packs

Placed At \*  Unallocated  
 Select Warehouse

Office \*  Province  Warehouse

Ice Pack Sizes

0.2	<input type="text" value="100"/>
0.3	<input type="text" value="200"/>
0.4	<input type="text" value="50"/>

## Search Ice Pack

To search an ice pack:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Ice Pack**.  
Ice Pack Search Page displays.
3. Specify the following filters:
  - a. **Make**: specify the make of the asset being added.
  - b. **Model**: specify the model of the asset being added.
  - c. **Placed at**: Specify one of the following:

**Unallocated**: specifies that the asset is not allocated.

**Warehouse**: select the warehouse to place the asset.

- **Office**: In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Click **Search**.

Cold Chain

Ice Pack Search
▼

**Make**

Select Makes ▼

**Model**

Select Make First ▼

Placed At

Unallocated  Select Warehouse

Search
Reset

Ice Pack Search
▼

**Report Tpe**

Detail View  Summary View

District	Facility	Make	Model	Quantity	Date	
		Ariston Italy	0.2	1	08/08/2014	<span style="background-color: #f44336; color: white; padding: 2px 5px; font-size: 0.8em;">More</span>
		Ariston Italy	0.3	2	08/08/2014	<span style="background-color: #f44336; color: white; padding: 2px 5px; font-size: 0.8em;">More</span>
		Ariston Italy	0.4	3	08/08/2014	<span style="background-color: #f44336; color: white; padding: 2px 5px; font-size: 0.8em;">More</span>

Showing 1 to 3 of 3 entries

5. **Report Type:** select the report type such as summary view or detail view.

## Add Cold Room

To add a cold room:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Add Cold Room**.  
Add Cold Room Page displays.
3. Specify the following filters:
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the asset.
  - **Source of Supply:** select the supplier source from the list.
  - **Utilization:** select the utilization of the cold room.
  - **Working Status:** select the status of the cold room from the list.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the cold room is not allocated.
    - Warehouse:** select the warehouse to place the cold room.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
  - **Type:** select the type of the cold room.
  - **Internal Storage Dimensions:** specify the storage dimensions of the cold room such as length, width and height.
  - **Make:** specify the make of the cold room being added.

- **Model:** specify the model of the asset being added.
- **Internal gross volume:** specify in meters.
- **Net storage volume for vaccine/packs:** specify the volume in meters.
- **Year of Supply:** specify the year of supply for the cold room.
- **Number of cooling system:** specify the number of cooling systems in the cold room.
- **Number of phases:** select the number of phases.
- **Refrigerator gas type:** select the type of refrigerator gas.
- Specify if there is a **Voltage Stabilizer** or not.
- Specify if the cold room **has working backup generator**.
- **Temperature recording system:** select the temperature recording system from the list.
- **Type of recording system:** select the type of recording system.

Add Cold Room

**Add Cold Room**

Asset Id / Equipment Code

Source of Supply

Utilization \*

Working Status \*

Placed At\*  
 Unallocated  Select Warehouse

Type \*

Internal Storage Dimensions(m)  
 Length   
 Width   
 Height

Make \*

Internal gross volume (m3) \*  
 Gross Capacity

Model \*

Net storage volume for vaccine/packs (m3) \*  
 Net Capacity

Year of Supply

Number of cooling system

Number of phases  
 One  Three

Refrigerator gas type

Has voltage stabilizer  Yes  No

Has working backup generator

Temperature recording system

Type of recording system

**Save**

4. Click **Save** to save the new cold room.

A new cold room would be added.

## Search Cold Room

To search a cold room:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Cold Room**.  
Cold Room Search Page displays.
3. Specify the following filters:
  - **Type**: select the type of the cold room.
  - **Working Status**: select the status of the cold room from the list.
  - **Source of Supply**: select the supplier source from the list.
  - **Number of cooling system**: specify the number of cooling systems in the cold room.
  - **Asset ID/Equipment Code**: is an automatically generated unique identifier for the asset.
  - Specify if there is a **Voltage Stabilizer** or not.
  - **Make**: specify the make of the cold room being added.
  - **Model**: specify the model of the asset being added.
  - **Capacity From, Capacity to**: Add the capacity of the cold room.
  - **Year of Supply From, to**: specify the year of supply for the cold room.
  - **Placed at**: Specify one of the following:
    - Unallocated**: specifies that the cold room is not allocated.
    - Warehouse**: select the warehouse to place the cold room.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Click **Search**.

### Search Cold Room

Type

Source of Supply

Asset ID/Equipment Code

Make

Capacity from

Year of Supply from

Working Status

Number of cooling system

Has voltage stabilizer  Yes  No

Model

Capacity to

Year of Supply to

Placed At  Unallocated  Select Warehouse

Report Tpe  Detail View  Summary View

District	Facility	Make	Model	Capacity	Working Status	Date	
		PS40	Bright Light Solar	0		08/07/2014	<a href="#">Edit</a>   <a href="#">More</a>
		ACMA	ACMA	3	Not working	08/08/2014	<a href="#">Edit</a>   <a href="#">More</a>
		TESTING MODEL	TESTING MAKE		Working well	08/12/2014	<a href="#">Edit</a>   <a href="#">More</a>
		MK 074	Forter Refigerator	0	Working well	08/12/2014	<a href="#">Edit</a>   <a href="#">More</a>
		HBD-116	Haier	50	Working well	08/13/2014	<a href="#">Edit</a>   <a href="#">More</a>
		HBD-116	Haier	50	Working well	08/19/2014	<a href="#">Edit</a>   <a href="#">More</a>

5. **Report Type:** select the report type such as summary view or detail view.

## Add Voltage Regulator

To add a voltage regulator:

1. Sign in to the User account.

User Home Page displays.

2. Under **CCEM**, click **Add Voltage Regulator**.

Add Voltage Regulator Page displays.

3. Specify the following filters:

- **Placed at:** Specify one of the following:

**Unallocated:** specifies that the voltage regulator is not allocated.

**Warehouse:** select the warehouse to place the regulator.

- **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. **Catalogue ID:** specify the Catalogue ID.

5. Add **Quantity** before the ice pack size required to be added.

6. Click **Add**.

Cold Chain

**New/Add Voltage Regulator Asset**

Placed At \*  
 @Unallocated @Select Warehouse

Catalogue ID:  Quantity:

**Add**

Make:  Model:

**Add**

10 records per page Search:

Catalogue ID	Quantity	Make	Model
-45	1911	-45	-45
-45	22	-45	-45
-45	55	-45	-45
-45	55	-45	-45
-45	12	-45	-45
CAT8888	80	TESTING MAKE	TESTING MODEL
E7/12		Advance Galatrek	FF/SOOPA
E7/12		Advance Galatrek	FF/SOOPA
E7/12		Advance Galatrek	FF/SOOPA
E7/12		Advance Galatrek	FF/SOOPA

Showing 1 to 10 of 553 entries

< 1 2 3 4 5 >

7. User can also search a specific regulator from the list.

## Search Voltage Regulator

To search a voltage regulator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Voltage Regulator**.  
Search Voltage Regulator Page displays.
3. **Catalogue ID**: specify the Catalogue ID.
4. **Make**: specify the make of the voltage regulator.
5. **Model**: specify the model of the voltage regulator.
6. Specify the following filters:

- **Placed at**: Specify one of the following:

**Unallocated**: specifies that the voltage regulator is not allocated.

**Warehouse**: select the warehouse to place the regulator.

- **Office**: In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

7. **Catalogue ID**: specify the Catalogue ID.
8. Add **Quantity** before the ice pack size required to be added.
9. Click **Search**.

Cold Chain

**Search Voltage Regulator**

Catalogue ID

Make

Model

Placed At  
 Unallocated  Select Warehouse

Report Tpe  
 Detail View  Summary View

District	Facility	Make	Model	Working Status	Date	-
		Sollatek	SV5 04-22		2014-08-05 00:00:00	<a href="#">More</a>
		Sollatek	SV5 04-22		2014-08-12 00:00:00	<a href="#">More</a>
		Sollatek	SV5 04-22		2014-08-13 00:00:00	<a href="#">More</a>
		Sollatek	SV5 04-22		2014-08-16 00:00:00	<a href="#">More</a>

10. **Report Type:** select the report type such as summary view or detail view.

## Add Generator

To add a new generator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Add Generator**.  
Add Generator Page displays.
3. Specify the following filters:
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the adjustment.
  - **Source of Supply:** select the supplier source from the list.
  - **Utilization:** select the utilization of the asset.
  - **Working Status:** select the status of the Asset from the list.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the asset is not allocated.
    - Warehouse:** select the warehouse to place the asset.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
  - **Make:** specify the make of the asset being added.
  - **Model:** specify the model of the asset being added.

- **Serial No.:** Enter the asset's serial number.
- **Number of phases:** select the number of phases.
- **Power Rating:** Enter the power rating of the generator.
- **Power Source:** Select the power source of the generator.
- Specify if the generator has an **Automatic Start Mechanism** or not.
- **Year of Supply:** specify the year of supply for the generator.
- **Use for:** select the use for the generator.

### Add Generator

#### Add Generator

Asset Id / Equipment Code	Source of Supply
<input type="text"/>	WHO
Utilization *	Working Status *
In use	Working well
Placed At*	
<input checked="" type="radio"/> Unallocated <input type="radio"/> Select Warehouse	
Make *	Model *
Siemens	Seimens
Serial Number *	No. of Phases
S1234	<input checked="" type="radio"/> One <input type="radio"/> Three
Power Rating	Power Source
100	Diesel
Automatic Start Mechanism	Year of Supply
<input checked="" type="radio"/> Yes <input type="radio"/> No	14/01/2014
Use For	
Cold Rooms	

4. Click **Save** to save the new generator.

## Search Generator

To search a generator:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Generator**.  
Search Generator Page displays.
3. Specify the following filters:
  - **Working Status:** select the status of the Asset from the list.
  - **Source of Supply:** select the supplier source from the list.
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the adjustment.
  - **Make:** specify the make of the asset being added.
  - **Model:** specify the model of the asset being added.
  - **Year of Supply from, to:** specify the year of supply for the generator.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the asset is not allocated.
    - Warehouse:** select the warehouse to place the asset.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

4. Click **Search**.

Search Generator

**Working Status**  
Working well

**Source of Supply**  
Select Source Of Supply

**Make**  
Select

**Year of Supply From**

**Serial Number**

**Equipment ID/Asset Code**

**Model**  
Select Make First

**Year of Supply To**

Placed At  Unallocated  Select Warehouse

Report Tpe  Detail View  Summary View

District	Facility	Make	Model	Serial Number	Working Status	Working Since	-
		TESTING MAKE	TESTING MODEL	S9999	Working well	2014-05-12 00:00:00	<input type="button" value="Edit"/> <input type="button" value="More"/>
		BIBIR	107A	-45	Working well	2014-08-12 14:06:49	<input type="button" value="Edit"/> <input type="button" value="More"/>
		ACMA	ACMA	1234	Working well	2014-08-05 00:00:00	<input type="button" value="Edit"/> <input type="button" value="More"/>
		Hitochi	S-11W-W4A	123	Working well	2014-08-06 00:00:00	<input type="button" value="Edit"/> <input type="button" value="More"/>
		Lambordini	K633780	1	Working well	2014-08-13 23:03:32	<input type="button" value="Edit"/> <input type="button" value="More"/>
		Ferguson	T4236	123	Working well	2014-08-05 00:00:00	<input type="button" value="Edit"/> <input type="button" value="More"/>
		Country Man	KDE 6700 TA	SN123	Working well	2014-08-16 12:02:57	<input type="button" value="Edit"/> <input type="button" value="More"/>
		SDMO	3TUB-106	SNAEG123	Working well	2014-08-14 00:00:00	<input type="button" value="Edit"/> <input type="button" value="More"/>
		YANMAR	YDG2000E-5B	SNAEG123	Working well	2014-08-19 09:37:44	<input type="button" value="Edit"/> <input type="button" value="More"/>

5. **Report Type:** select the report type such as summary view or detail view.

## Add Transport

To add a new transport:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Add Transport**.  
Add Transport Page displays.
3. Specify the following filters:
  - **Asset ID/Equipment Code:** is an automatically generated unique identifier for the transport.
  - **Source of Supply:** select the supplier source from the list.
  - **Utilization:** select the utilization of the.
  - **Working Status:** select the status of the transport from the list.
  - **Placed at:** Specify one of the following:
    - Unallocated:** specifies that the transport is not allocated.
    - Warehouse:** select the warehouse to place the transport.
      - **Office:** In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
  - **Transport Type:** select the transport type.
  - **Registration No.:** specify the registration number. This field is optional.
  - **Make:** specify the make of the transport being added.
  - **Model:** specify the model of the transport being added.

- **Manufacture Year:** select the manufacture year of the transport.
- **% use for EPI:** specify the percent use for EPI. This is an optional field.
- **Fuel Type:** select the fuel type being used.

Cold Chain

**New/Add Transport Asset**

Asset Id / Equipment Code E1234	Source of Supply WHO		
Utilization * In use	Working Status * Working well		
Placed At* <input checked="" type="radio"/> Unallocated <input type="radio"/> Select Warehouse			
Transport Type Select Asset Sub Types	Registration No. 	Make* Suzuki	Model* SV1800P
Manufacture Year 08/01/2014	% Used For EPI 	Fuel Type Select Fuel Types	
Comments 			
<b>Save</b>			

4. Click **Save** to save the new transport.

## Search Transport

To search a transport:

1. Sign in to the User account.  
User Home Page displays.
2. Under **CCEM**, click **Search Transport**.  
Search Transport Page displays.
3. Specify the following filters:
  - **Transport Type**: select the transport type.
  - **Working Status**: select the status of the Asset from the list.
  - **Source of Supply**: select the supplier source from the list.
  - **Fuel Type**: select the fuel type being used.
  - **Registration No.:** specify the registration number. This field is optional.
  - **Make**: specify the make of the asset being added.
  - **Model**: specify the model of the asset being added.
  - **Manufacture Year from, to**: specify the year of manufacture for the transport.
  - **Placed at**: Specify one of the following:
    - Unallocated**: specifies that the asset is not allocated.
    - Warehouse**: select the warehouse to place the asset.
      - **Office**: In this drop-down, select the office to which you want to issue the asset. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the **Issue To** drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.
4. Click **Search**.

Cold Chain

Search Transport Asset

Transport Type: Select Asset Sub Types

Working Status: Select working status

Source of Supply: Select Source Of Supply

Fuel Type: Select Fuel Types

Registration No.:

Make: Select Makes

Model: Select Make First

Manufacture Year From:

Manufacture Year To:

Placed At:  Unallocated  Select Warehouse

Report Type:  Detail View  Summary View

District	Facility	Make	Model	Fuel Type	Working Status	Date	-
		Electrolux	TFW791	Petrol		2014-08-01 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		TESTING MAKE	TESTING MODEL	Petrol	Working well	2014-06-17 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Electrolux	TCW1151	Petrol	Working well	2014-08-08 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Toyota	Toyota	Petrol	Working well	2013-08-01 00:00:00	<a href="#">Edit</a> <a href="#">More</a>
		Suzuki	Sprinter	Diesel	Working well	2013-12-01 00:00:00	<a href="#">Edit</a> <a href="#">More</a>

5. **Report Type:** select the report type such as summary view or detail view.

## Transfer Asset

To transfer an Asset:

1. Sign in to the User account.  
The User Home Page displays.
2. Click **Transfer Asset** under **CCEM**.  
The Transfer Asset page displays.
3. In **From Office**, select the office.

**Office:** In this drop-down, select the office. On selecting the **Office** level, specify the office location in the adjacent drop-down list. On selecting the location, the drop-down displays the relevant warehouse store names in the selected province. Select the required warehouse/store.

The Asset's details are displayed.

Transfer Asset

From Office \* Province Warehouse \*

Province Punjab Province EPI Store Punjab EPI Store

S. No.	Assets	Model	Asset ID	Quantity	Transfer Quantity/Asset
1	Vaccine Carriers-Cold Boxes	Rotary International	201838	5243	3000
2	Vaccine Carriers-Cold Boxes	RCW12	203135	4649	1000
3	Vaccine Carriers-Cold Boxes	RCW25	203322	600	
4	Ice Packs	HURREE	400032		<input checked="" type="checkbox"/>
5	Ice Packs	POV90L	400059		<input checked="" type="checkbox"/>
6	Ice Packs	POV90L	400060		<input type="checkbox"/>
7	Ice Packs	Local	400061		<input type="checkbox"/>
34	Cold Rooms	0.2		10	
35	Freezer-ILRs-Refregerators	model	00000		<input type="checkbox"/>
36	Vehicles	Pickup Single Cabin	A00000		<input type="checkbox"/>

To Office \* Province \* Warehouse \*

District Punjab District Bhakkar

Transfer

4. In **Transfer Quantity/Asset**, specify the quantity you want to transfer.

S. No.	Assets	Model	Asset ID	Quantity	Transfer Quantity/Asset
1	Vaccine Carriers-Cold Boxes	Rotary International	201838	5243	3000

5. In **To Office**, specify the location that you want to transfer to.

To Office \* Province \* Warehouse \*

District Punjab District Bhakkar

Transfer

6. Click **Transfer**.

## Maps

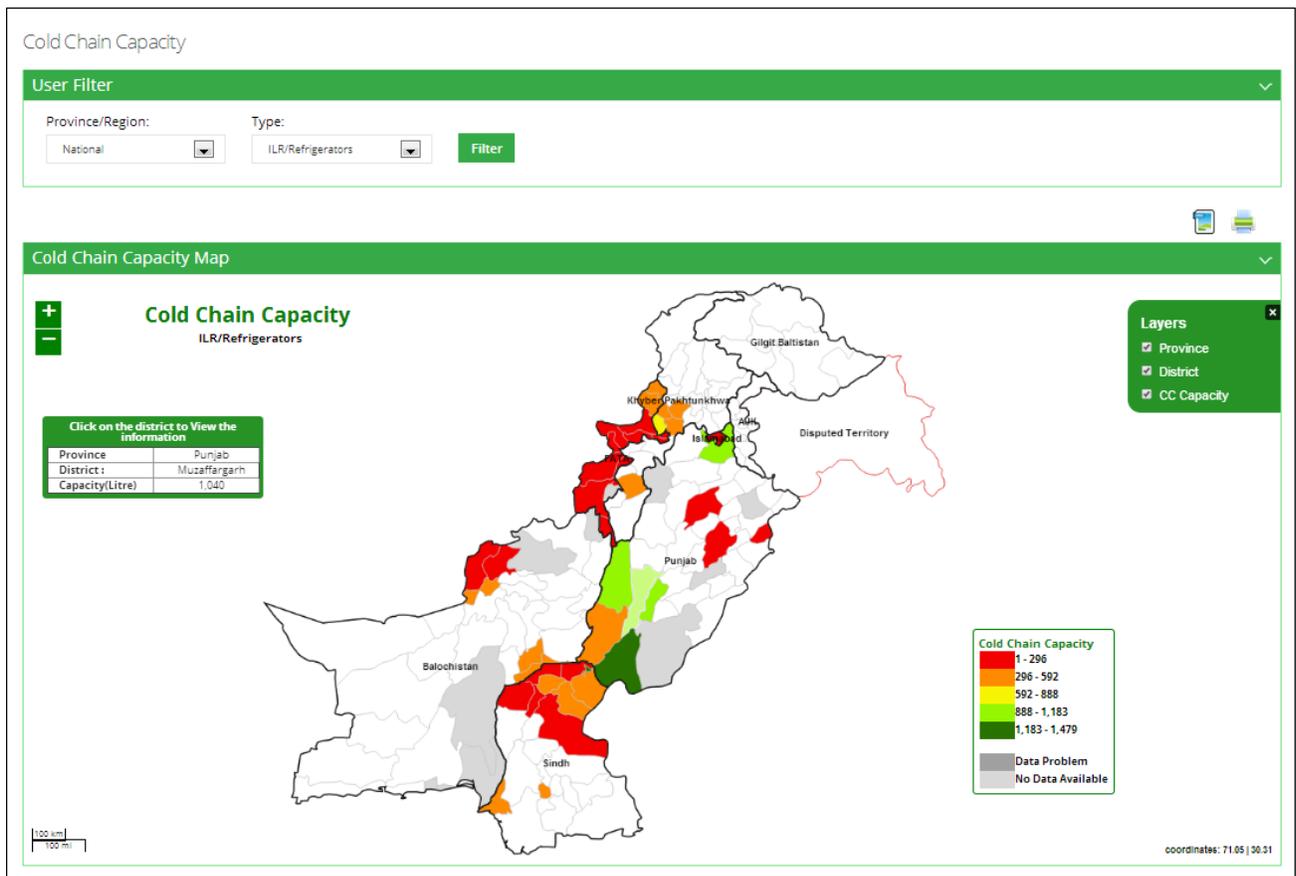
The LMIS also has the capability of generating easy to interpret maps with color codes. These interactive maps would be made available through the Government of Pakistan website and help in increasing the use of the existing information disseminates by Government of Pakistan through the web-based vLMIS by providing the information a more captivating approach to both promote the importance of supply chain and use of data in decision making.

This application is helpful for the health managers at all levels of administrative tiers for planning, identification of possible supply chain problems and new areas of improvements. In addition, GIS dashboards combined with other reports and graphs of vLMIS application give quick overview of monthly situation of commodities and reporting status. This is a good epidemiological tool to combine outputs of web-mapping application with other sources for data for research activities.

CCEM operators can view cold-chain capacity map by using the Maps tab from the main menu. Once the cold-chain indicator for which the map is to be viewed is selected, the user will be directed towards a page to select from various filters.

## Cold Chain Capacity Map

This map shows the cold-chain capacity of each district within the selected province. User can see filter options such as Province/Region and Type of refrigerators or cold rooms to analyze the cold chain capacity rate for each district in the selected province based on the number of facilities in that district. The detailed information can be seen once the user clicks a particular district on the map.



## **CCEM Reports**

Refer to the “CCEM Reports” section of the user manual.

## **CCEM Graphs**

Refer to the “CCEM Graphs” section of the user manual.



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