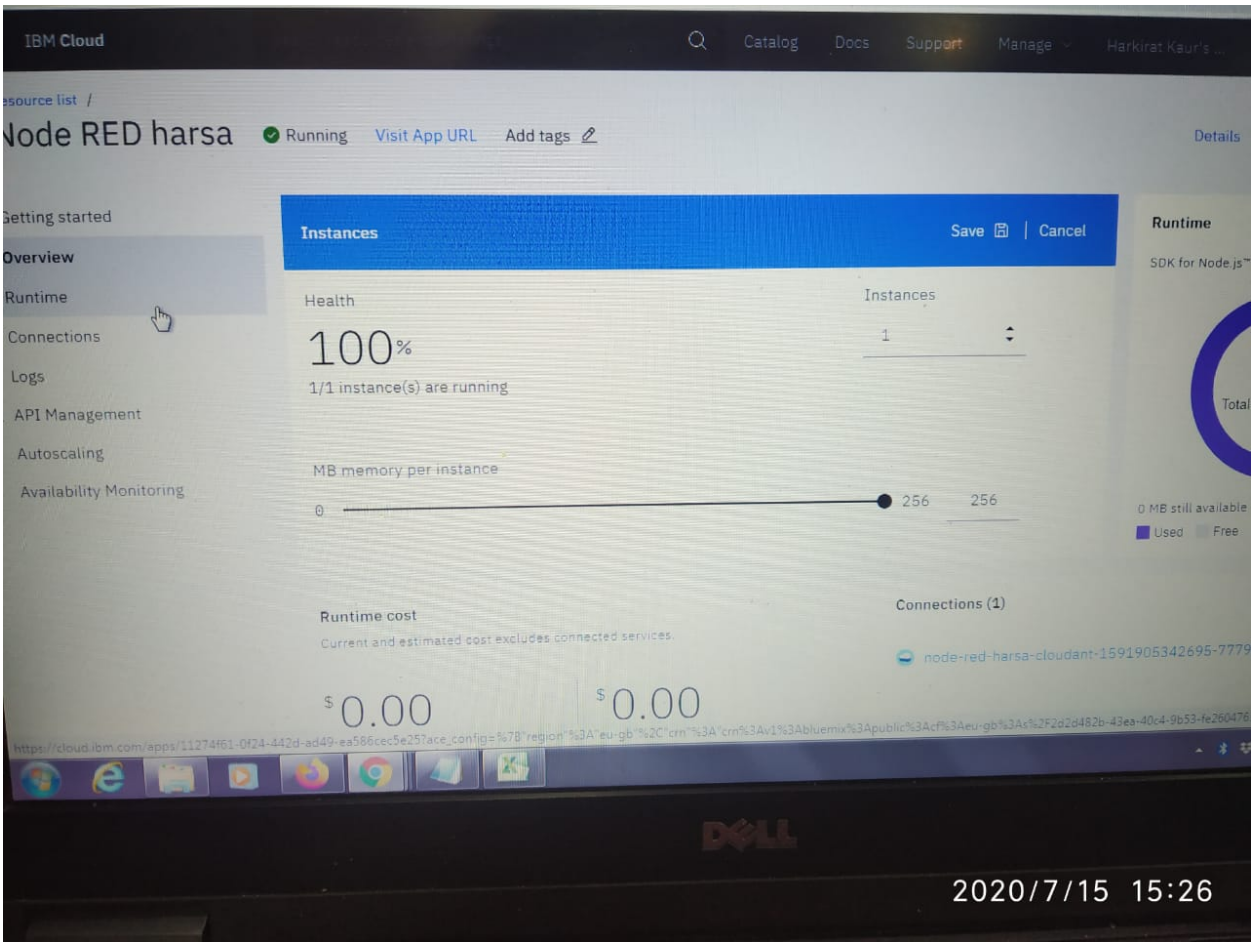
Day 1

I createdcloud account on cloud.ibm.com to use the ibm services and after verification activated the account.

Day 2

I created node red service and initiated the flows required and used for my project .


IBM Cloud
Catalog
Docs
Support
Manage
Harkirat Kaur's ...
esource list /
Node RED harsa
Running
Visit App URL
Add tags
Details
Getting started
Overview
Runtime
Connections
Logs
API Management
Autoscaling
Availability Monitoring
Instances
Save
Cancel
Health
100%
1/1 instance(s) are running
Instances
1
MB memory per instance
0
256
256
Runtime
SDK for Node.js™
Total
0 MB still available
Used
Free
Runtime cost
Current and estimated cost excludes connected services.
$0.00
$0.00
Connections (1)
node-red-harsa-cloudant-1591905342695-7779
https://cloud.ibm.com/apps/11274f61-0f24-442d-ad49-ea586cec5e25?ace_config=%78%22region%3A%22eu-gb%22%2C%22crn%3A%22crn%3Av1%3Abluemix%3Apublic%3Acf%3Aeu-gb%3As%2F2d2d482b-43ea-40c4-9b53-fe260476
DELL
2020/7/15 15:26

Day 3

I created the watson studio and installed the jupyter notebook and dashboard assests in it .i use the dashboard services as well as jupyter notebook to create the graphs andd visualizations.

Day 4

update the zoho writer and started completing on my project and saving the files till the project is made.

Last day:

Finishing the project and uploading the files on github with final touches.

PROJECT

IMPACT OF COVID 19 ON FOOD SECURITY-VISUALIZATION DASHBOARD

1.INTRODUCTION:

Alarmed by a potential rise in food insecurity during the COVID-19
pandemic, many countries and organizations are mounting special
efforts to keep agriculture safely running as an essential business,
markets well supplied in affordable and nutritious food, and consumers
still able to access and purchase food despite movement restrictions
and income losses.

1.2 PURPOSE

we should develop such a system that track the stored amount of food in
the godowns and also keeps track of supplied chains to market places.
moreover it keeps and tracks the record of farmers who sales how much
amount of crop so that a rough estimate will be shown to

government
that this is amount of food is stored and if the amount is decreasing
continously then it gives alert to the system to be prepared before to
overcome the problem of food security and everyone could get enough
food at a reasonable prices, because if food security is unbalanced then
it gives rise to prices hike of food and can cause situation of starvation.

2. LITERATURE SURVEY:

2.1 EXISTING PROBLEM

Now a days due to covid19 pandemic the world is suffering from the problem of food security.as we know that we have latest technology which can help us overcome this problem in a much effective and useful way.so if we use the latest technology in an efficient way we can solve this problem of food security which is impacted due to covid19.

Global markets for food staples are well supplied and prices are generally stable. Global production levels for the three most widely consumed staple(rice, wheat and maize) are at or near all-time highs. However, the prices of certain cash crops -- an important source of rural income -- have been depressed by the slowing of global demand.Given the status of global food supplies, export restrictions are unwarranted and could hurt food security in importing countries.

2.2 PROPOSED SOLUTION:

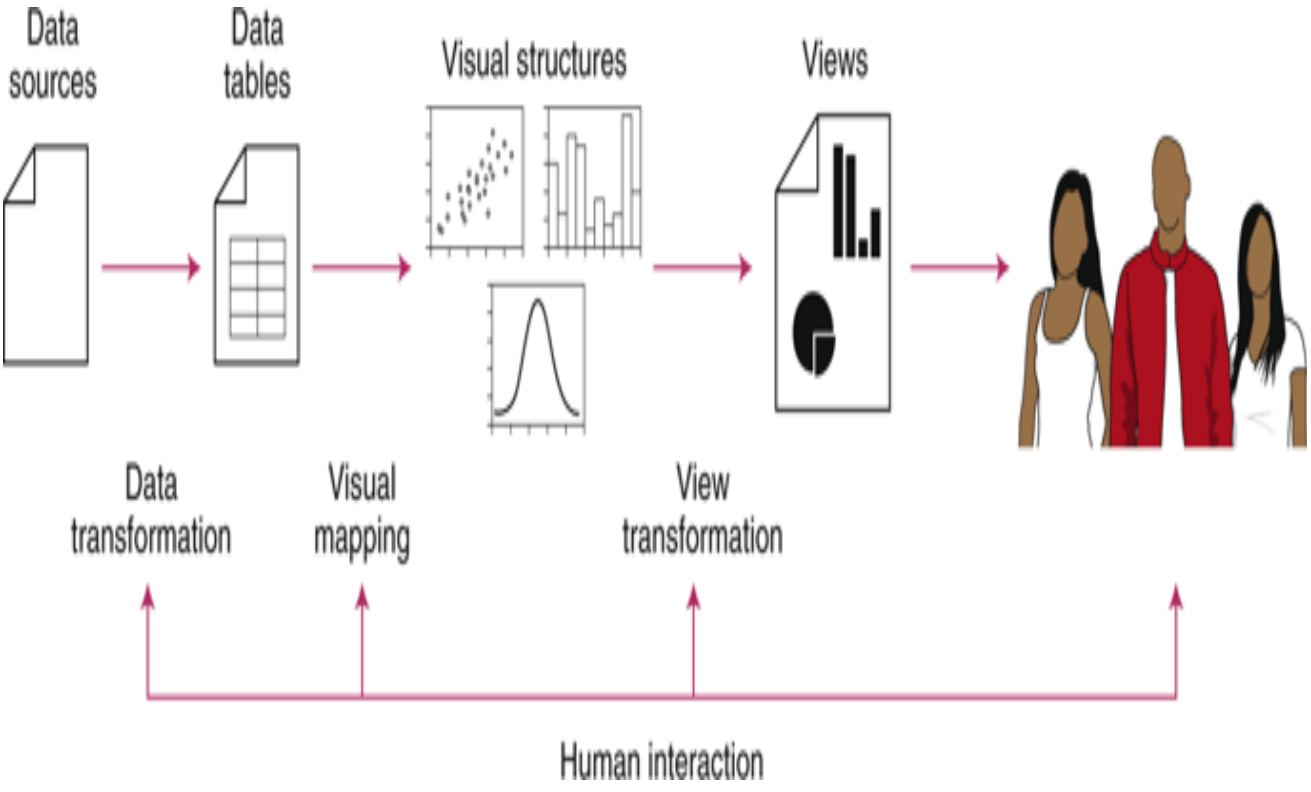
Developing a system which keeps record and predicts the minors and majors of food security and create alert when the problem of insecurity of food arises.We should develop such a system that shows statistics and visualized dashboard of the stored amount of food in the Godowns and also keeps track of supplied chains to market places.Moreover it keeps the record of farmers who sales how much amount of crop so that a rough estimate will be shown to government that this is amount of food is stored and if the amount is decreasing

continuously then it gives alert to the system to be prepared before to overcome the problem of food security and everyone could get enough food at a reasonable prices, because if food security is unbalanced then it gives rise to prices hike of food and can cause situation of starvation.Moreover it also predicts the after impact of COVID 19 on food security.

3. THEORITICAL ANALYSIS:

3.1 BLOCK DIAGRAM:

3.2 HARDWARE/ SOFTWARE DESIGNING:

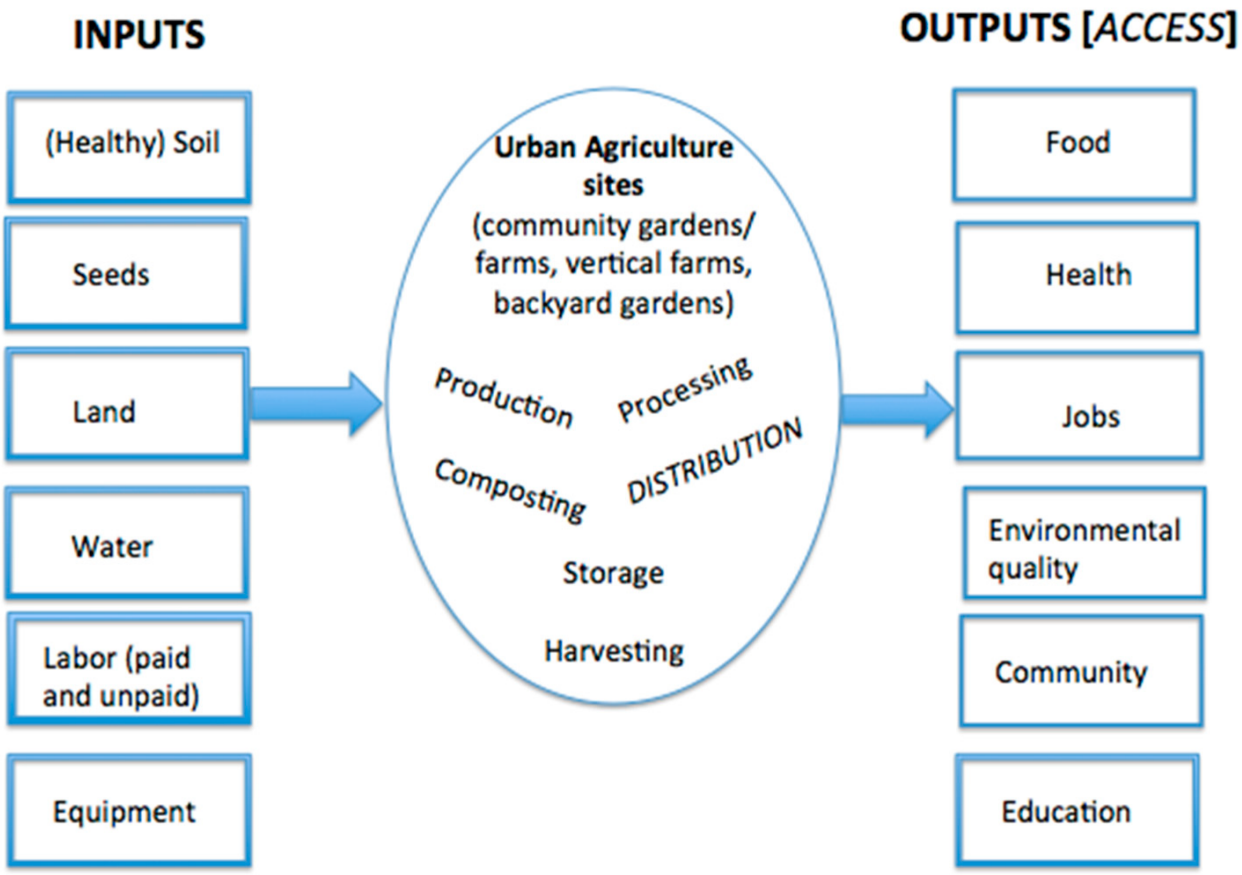


4. EXPERIMENTAL INVESTIGATION:

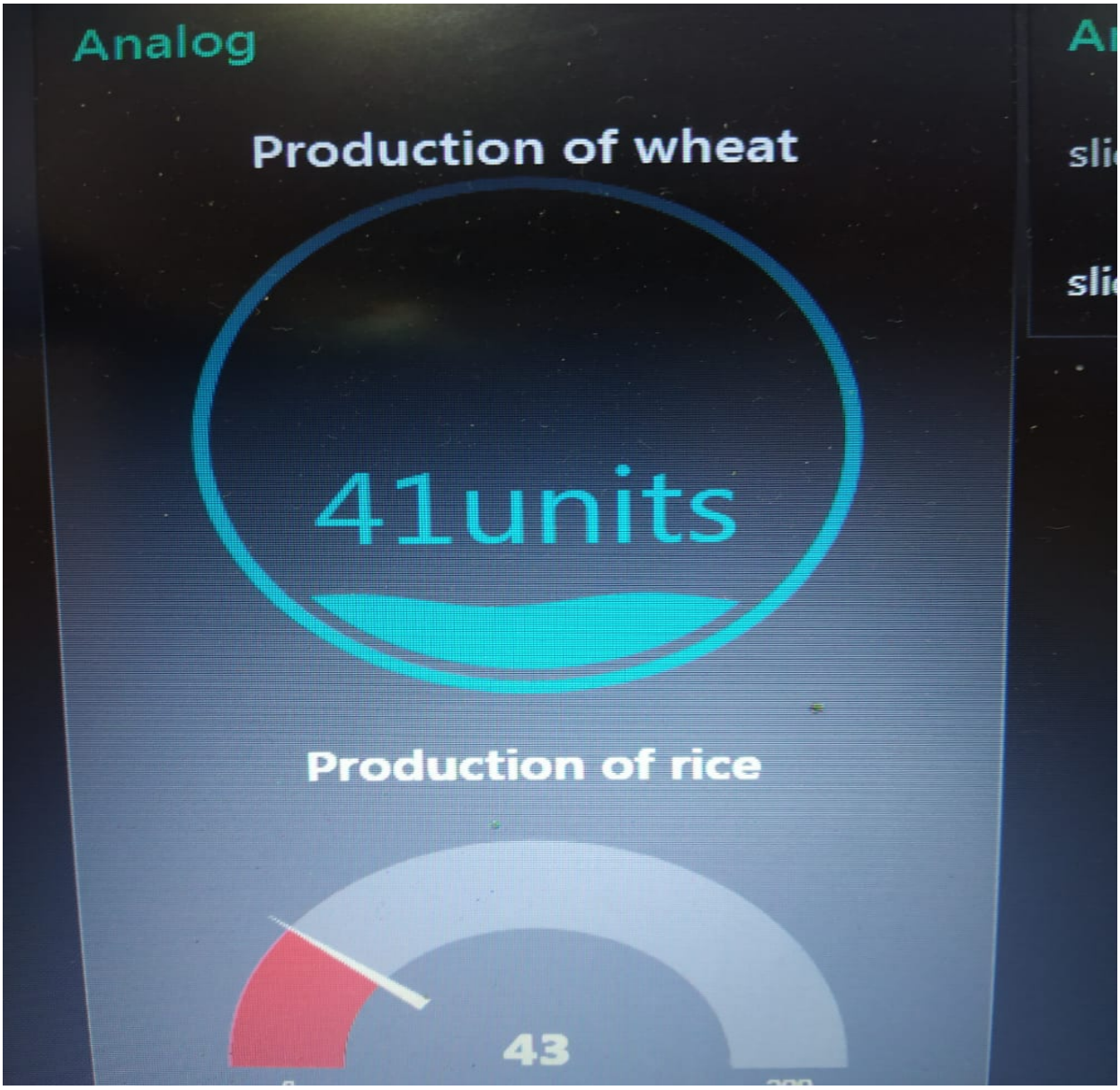
In this process of developing the project I have undergone many investigationprocesses to learn and understand new concepts so that I can build the news searchapplication successfully. For I had to learn and investigate following:

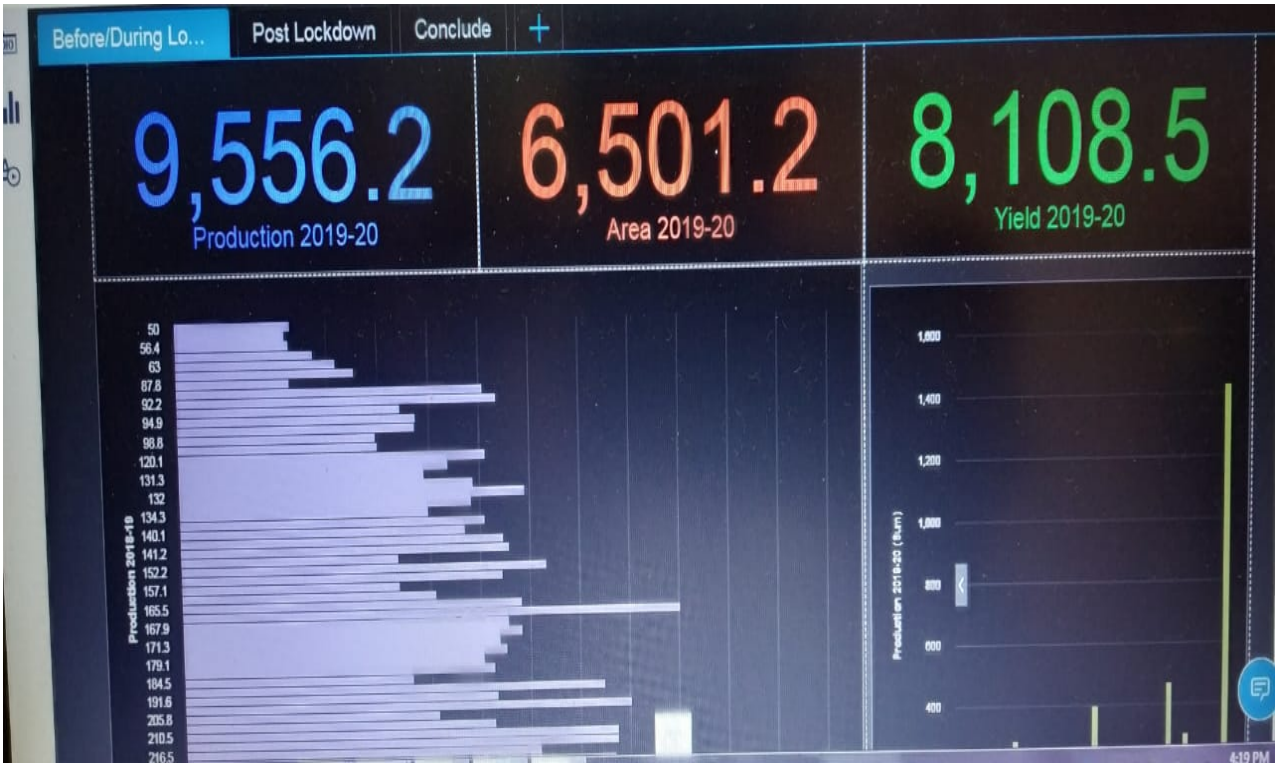
1.IBM Cloud.
2.Node Red.
3.Watson Studio
4. IBM Cloud Services
5. Zoho writer

5. FLOWCHART:


INPUTS
(Healthy) Soil
Seeds
Land
Water
Labor (paid and unpaid)
Equipment
Urban Agriculture sites
(community gardens/ farms, vertical farms, backyard gardens)
Production
Processing
Composting
DISTRIBUTION
Storage
Harvesting
OUTPUTS [ACCESS]
Food
Health
Jobs
Environmental quality
Community
Education

6. RESULT:




Before/During Lo...
Post Lockdown
Conclude
9,556.2
Production 2019-20
6,501.2
Area 2019-20
8,108.5
Yield 2019-20
Production 2019-20
50
56.4
63
87.8
92.2
94.9
98.8
120.1
131.3
132
134.3
140.1
141.2
152.2
157.1
165.5
167.9
171.3
179.1
184.5
191.6
205.8
210.5
216.5
Production 2019-20 (Sum)
1,600
1,400
1,200
1,000
800
600
400
4:19 PM

7.ADVANTAGES AND DISADVANTAGES:

ADVANTAGES:

The Watson Studio provides us various easy to use services like:
1.Dashboard to create interactive graphs and visualizations.
2.Its easy to use.
3. Its very efficient and understanble .
4.Reduces our time to write the code.

DISADVANTAGES:

1. To use more services we have to pay for its services.
2. The services require large amount of space.

8.APPLICATIONS:

With Watson Studio we can create various graphs and visualizations as well as insert the frameworks by importing i.e we do not have to write the whole code.Isn't it the easy thing?Moreover we can use the assets of watson studio to reduce our time and to easy our work .It provides a very good approach to create various industrial and community projects.

9. CONCLUSION:

This project give me the insights and basics working with the Watson Studio and its various services to create an interactive dashboard for my project which can help understand the problems and stats of food security during Covid 19.It provides easy approach to create various industrial and community projects.

10. FUTURE SCOPE:

This application can be used with other applications to analyze the food security data which can help to grow the business constantly which can provide the benefit to everyone from small scale to large scale people as it uses the interactive dashboard to predict the data.

11.BIBILOGRAPHY:

NAME:

HARKIRAT KAUR

Team: Smartinterny

COLLEGE:

GURU NANAK DEV UNIVERSITY, AMRITSAR, PUNJAB

WORK TITLE:

IMPACT OF COVID-19 ON FOOD SECURITY-VISUALIZATION DASHBOARD.

REFERNCES:

DOCUMENTATION **:**

https://github.com/IBM/visualize-food-insecurity

SLACK:**https://slack.com/intl/en-in/**

CLOUD:https://www.ibm.com/cloud/get-started

NODE RED
https://developer.ibm.com/tutorials/how-to-create-a-node-red-starter-application/

DEMO PROJECT TUTORIAL:

https://www.youtube.com/watch?v=X8ustpkAJ-U

APPENDIX:

LINK TO NODE RED WORKSPACE:

https://node-red-harsa.eu-gb.mybluemix.net/red/#flow/3c5383cf.55ef6c

LINK TO NODE RED UI:

https://node-red-harsa.eu-gb.mybluemix.net/ui/#!/4?socketid=CDJHskwhLYc3LTZSAAAG

LINK TO JUPYTER NOTEBOOK:

https://eu-gb.dataplatform.cloud.ibm.com/analytics/notebooks/v2/f2ec36a5-251c-4ea3-9b69-9b9e171c43fb?projectid=79a16ecf-472f-4c17-92f5-60357cf8d367&context=wdp

LINK TO DASHBOARD:

https://eu-gb.dataplatform.cloud.ibm.com/dashboards/82c2f99e-afc2-4439-95d6-d7949f9ea277?project_id=79a16ecf-472f-4c17-92f5-60357cf8d367&mode=undefined

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