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Farmers guide

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I. ABSTRACT:

Farmers predict the local weather for the agriculture based on the observation and prediction on nature. In order to help them, by increasing the accuracy and the amount of data in predicting the weather, a tool called Farmer's Guide is developed. Numerical Weather Prediction methodology is used to predict the rainfall. It uses surface temperature, 100 years of average rainfall report & humidity as its prediction parameters. The tool also predicts the success percentage of the vegetation and the details of the vegetation that can be made during certain period with the help of weather.

Farmer's Guide's another aim is to provide Agricultural awareness to youth. This provides data about crop and harvesting details. With the help of the user input the app fetches and displays the details about the soil types that support, monsoon details, quantity of water that are available from the natural resources, percentage of success in production and its uses for the given crop. This guides the farmer to do an effective agriculture by predicting the outcome. This also provides the platform for trading by helping the farmers to find a wide retailer communication. So that the trading occurs soon and this gives an economical support.

II. INTRODUCTION

Agriculture is important to human beings because it forms the basis for food security. It helps human beings grow the most ideal food crops and raise the right animals with accordance to environmental factors. Farming is important because it provides food and jobs in a society. Industrial farming provides a large amount of food for a relatively low cost. Family farming improves the local land and reduces the family's dependency on commercially grown food and grocery stores. Farming and agriculture is essential to the success of society as a whole. Without farming, everyone would be forced to hunt and gather food, and it is not possible for the world's population

Farmer's Guide's is to provide Agricultural awareness to youth. . This provides data about crop and harvesting details. With the help of the user input the app fetches and displays the details about the soil types that support, monsoon details, quantity of water that are available from the natural resources, percentage of success in production and its uses for the given crop.

This guides the farmer to do an effective agriculture by predicting the outcome. This also provides the platform for trading by helping the farmers to find a wide retailer communication.

So that the trading occurs soon and this gives an economical support.

Some intelligent prediction/expectation of the local weather is essential for all agricultural activities. Mostly the farmers do it based on their understanding and observation on nature. An intelligent support system can be attempted with modern analytical tools and using database on the local weather information available. Predictive models can be made in support of farmers for each localities and make it available on line whenever they are in need.

Farmers predict the local weather for the agriculture based on the observation and prediction on nature. In order to help them, by increasing the accuracy and the amount of data in predicting the weather, a tool called Farmer's Guide is developed. Numerical Weather Prediction methodology is used to predict the rainfall. It uses surface temperature, 100 years of average rainfall report & humidity as its prediction parameters. The tool also predicts the success percentage of the vegetation and the details of the vegetation that can be made during certain period with the help of weather.

III. EXISTING SYSTEM

- A systems approach to agriculture is generally guided by an understanding of agroecology.
- Some intelligent prediction/expectation of the local weather is essential for all agricultural activities. Mostly the farmers do it based on their understanding and observation on nature.
- Average rainfall is calculated using mathematical regression technique.
- Online mandi websites (Recent launch by modi govt)
- Irrigation problems
- Over dependence on the traditional crops

IV. PROPOSED SYSTEM

- Farmers guide tool is developed and that tool uses surface temperature, average rainfall& humidity to predict the weather.
- Numerical Weather Prediction(NWP) is used to predict the weather.
- Past 100 years weather report and rainfall reports are used to predict the rainfall.
- Farmers Trade Point is developed
- Common awareness to farmers

V. BLOCK DIAGRAM

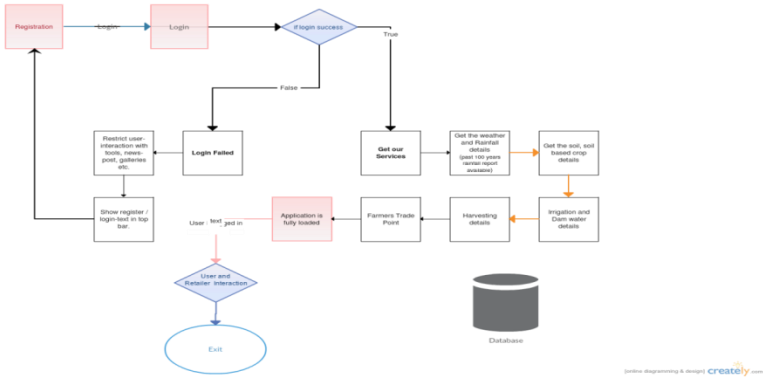

Figure 5.1

VI. MODULE DESCRIPTION

A. Farmers Trade Point
B. Weather Report
C. Vegetation Guide

A. Farmers Trade Point:

Farmers Trade Point is one of the module of Farmers Guide. It provides the platform for trading by helping the farmers to find a wide retailer communication. So that the trading occurs soon and this gives an economical support.

It is similar to mandipoint website. Provides services and information for Traders, Agents, Brokers, Merchants, Manufacturers, Importers/Exporters, whole-sellers, Industries, Service Providers, Members and Transporters. It also provides information all farm related

products. We are providing search of the farm traders and their products just on easy search. We have provided State wise, City wise, Area wise, Category wise, products wise searching only just easy search.

B. Weather Report:

Weather is essential for all agricultural activities. Some intelligent prediction/expectation of the local weather is essential for all agricultural activities. Mostly the farmers do it based on their understanding and observation on nature. An intelligent support system can be attempted with modern analytical tools and using database on the local weather information available. Predictive models can be made in support of farmers for each localities and make it available on line whenever they are in need.

In order to help them, by increasing the accuracy and the amount of data in predicting the weather, a tool called Farmer's Guide is developed. Numerical Weather Prediction methodology is used to predict the rainfall. It uses surface temperature, 100 years of average rainfall report & humidity as its prediction parameters.

C. Vegetation Guide:

Farmers Guide predicts the success percentage of the vegetation and the details of the vegetation that can be made during certain period with the help of weather. Farmers Guide gives the detail about the vegetation based on the weather condition.

Native Vegetation is valuable because plant diversity sustains biodiversity and ecological processes. Native Vegetation also maintains soil integrity and improves the visual amenity of an area. Native Vegetation has evolved and adapted environmental conditions of a particular area. It is the highest valued type of vegetation suited to the soil types and climate and most resilient to adverse conditions.

VII. GRAPH

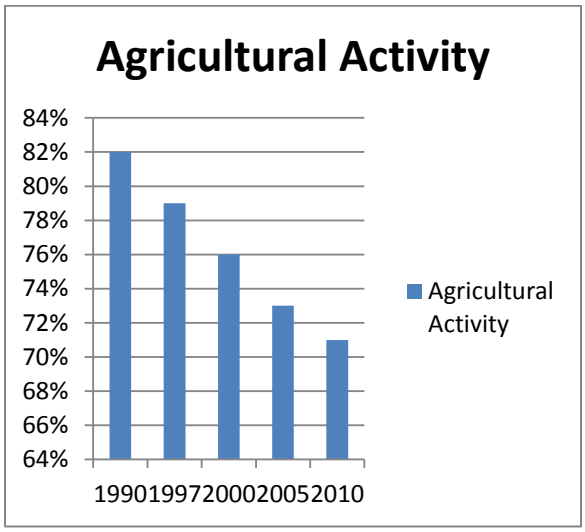

Figure 7.1

Agricultural Activity Year by Year:

Year	Agri_land (acres)	Activity Percentage
1990	193,870	82
1997	185,792	79
2000	180,306	76
2005	171,325	73
2010	166,683	71

Table 7.1

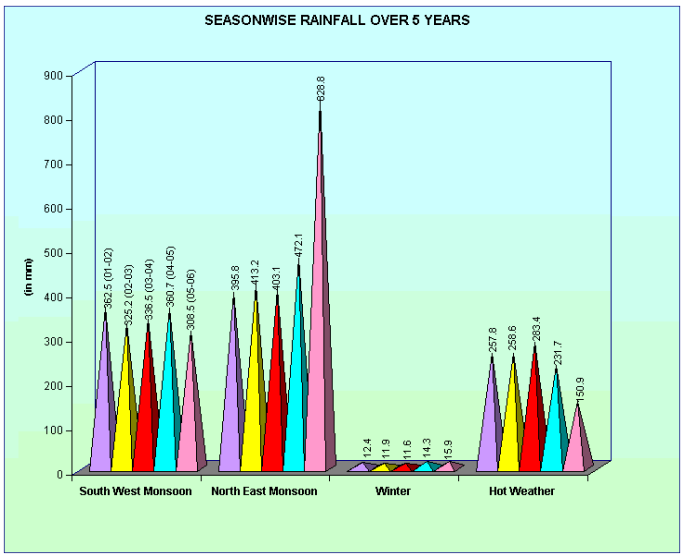

Figure 7.2

Details of Storage Capacity and Opening of Major Reservoirs of Tamil Nadu				
Reservoir	**Area**	**Date of Opening**	**Capacity at FRL in MCFT**	**FRL in Feet**
Mettur Dam	1.Cauvery Delta & Mettur Project 2. Pullambadi Canal, New Kattalai High Canal & Mettur Canal	Jun 12 Aug 1	93470	120
Bhavani-Sagar	1. Arakkankottai and Tandapatti Channel 2. Lower Bhavani Project	April 15 Aug 15	32800	105
Amaravathi	1. Main Channel 2. Old Channel	Aug.t 1 June 1	4047	110
Krishnagiri	Main Canal	Aug 1	1666	52
Sattanur	Second crop under Thirukoilur Ayacut	Oct 1	7321	119

VIII. TABULATION

Percentage of variance explained by factors

Factors	2004	2005	2006
1	30.734	27.235	30.194
2	22.359	23.128	23.477
3	17.806	13.725	16.552
4	8.822	9.361	0.000
TOTAL	79.72	75.49	70.22

Table 8.1

Factors	2007	2008	2009	2010
1	30.409	33.480	33.962	33.260
2	22.359	26.369	28.351	22.195
3	16.650	17.792	13.725	16.213
4	0.000	0.000	0.000	9.859
TOTAL	74.26	77.64	75.21	81.52

Table 8.2

DAM WATER DETAIL IN TAMILNADU:

Table 8.3

Table 8.3.1

Reservoir	Area	Date of Opening	Capacity at FRL in MCFT	FRL in Feet
Periyar Dam	1. Cumbum Valley & Main canal double crop 2. Main canal single crop 3. Periyar New Extension Area(World Bank Aid)	June 1 Aug 15 Sep 15	10570	152
Vaigai Dam	Thirumangalam Main	June	6091	71
ManiMuthar	Main canal	Nov 1	5511	118
Papanasam	1. Advance Kar 2. Regular Kar 3. Pishnam	April 1 June 1 Oct 1	5500	148
Pechiparai	Perunchani Reservoir Radhapuram canal	June 1 June 16	4450	48
Parambikulam	Aliyar Project 1. Thirumuthy Dam – Main canal 2. Aliyar Basin 3. Parambikulam Main canal II Zone	July 1 May 15 Nov 17	13408 1744 3864 13408	72 60 120 72

IX. CONCLUSION

Weather is essential for all agricultural activities In order to help them, by increasing the accuracy and the amount of data in predicting the weather, a tool called Farmer's Guide is developed. Numerical Weather Prediction methodology is used to predict the rainfall. It uses surface temperature, 100 years of average rainfall report & humidity as its prediction parameters. The tool also predicts the success percentage of the vegetation and the details of the vegetation that can be made during certain period with the help of weather.

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