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Farm Labour Management System

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Abstract:
Labour is one of the most important inputs in agricultural production. How it is measured and valued is critical for establishing the cost of producing agricultural commodities and accurately portraying labor's relative share of the total cost of production. The farm labour is an agent of production and on the other hand, a member of the consuming society. In this way, farm labour is both means as well as end of production. In economics , any work whether manual or mental for acquiring income is called labour. But we are concerned with physical labour expressed in terms of toil and exertion involved in farm production. Labour efficiency in agriculture refers to the amount of productive work accomplished per man on the farm per unit of time. In general , the higher the labour efficiency, the greater are the returns from farming. The farmer who dose not introduce new methods and techniques to increase productivity can soon go out of the business because of increasing labour costs. Inefficient labour also results in low production which in turn means low wages for the labour. In our propose system, Farmer and labour can interact with each other. Farmer can find the labour and send request to individual labour or a group of labour. Labour can respond to the request and after that farmer will receive notification about labours response on his registered mobile number. If Labour doesnt response to request then it will automatically gets declined and message will send on farmers registered mobile number. The resource availability on the farms is thus imbalanced leading to a low production which result in low returns to the farm business and low farm family labour earning.

Keywords - *Labour Management Practices, Management, Farm Information System, Database*

I. INTRODUCTION

An agricultural labourer is one who is basically unskilled and unorganised and has little for its livelihood, other than personal labour. All those persons who derive a major part of their income as payment for work performed on the farms of others can be designated as agricultural workers. For a major part of the year they should work on the land of the others on wages. Labour efficiency in agriculture refers to the amount of productive work accomplished per man on the farm per unit of time. In general , the higher the labour efficiency, the greater are the returns from farming. The farmer who dose not introduce new methods and techniques to increase productivity can soon go out of the business because of increasing labour costs. Inefficient labour also results in low production which in turn means low wages for the labour. In our propose system, Farmer and labour can interact with each other. Farmer can find the labour and send request to individual labour or group of labour. Labour can respond to the request and after that farmer will receive notification about labours response on his registered mobile number. If Labour doesnt response to request then it will automatically gets declined and message will send on farmers registered mobile number. The resource availability on the farms is thus imbalanced leading to a low production which result in low returns to the farm business and low farm family labour earning. The farm labour is an agent of production and on the other hand, a member of the consuming society. In this way, farm labour is both means as well as end of production.

II. LITERATURE SURVEY

1. Paper Name: Current Practices on Labour Management in Building Construction Projects

This paper describes the current labour management practices in building construction projects in Myanmar. In this study, construction labour management practices can be viewed as four categories which are labour management practices affect on project, manpower problems by shortcoming of labour management practices, factors on increasing labour productivity by good labour management practices and factors on reducing labour productivity by poor labour management practices. The principal tool used for collection of data is quantitative survey (numerical values); questionnaires for field survey. Data for the survey are obtained through a structured questionnaire administered to respondents in number of 80. The respondents involve 20 project engineers, 45 site engineers and 15 contractors.

2. Paper Name: Advances in labour and machinery management for a profitable agriculture and forestry Livestock and Farm Management Improvement using RFID Technologies

Aim of this paper is to evaluate the effective benefits and the reliability of the RFID based identification system and to determine the best practice to apply these devices in livestock management. The procedures that can be implemented with this novel technology and their possible outcome on the overall farm management are evaluated. To this extent, a system including automated data collection based on RFID devices was implemented in a swine and in two cattle breeding farms. The workability and the reliability of the system have been accurately monitored during any operation carried on in the breeding farms

3. Paper Name: LABOUR IN INDIAN AGRICULTURE: A GROWING CHALLENGE. The agricultural division in FICCI has been undertaking several field level studies and surveys to analyze the ground level concerns plaguing Indian agriculture. During interaction with the farmers the challenge of shortage in availability of agricultural labour came to the fore. Although several anecdotal evidences were available, we from FICCI decided to analyze the magnitude of the challenge and subsequently commissioned a research study to KPMG. We have now come up with a comprehensive report based on published secondary data.

4. Paper Name: A New System of Labour Management in African Large-Scale This paper concerns systems for managing labour in large-scale agriculture (LSA) in Africa. Reference is made to new research on cut flowers in Kenya, but the analysis is framed in relation to labour-intensive production of high-value crops generally in Africa. Beyond cut flowers, this encompasses fresh vegetables, citrus and deciduous fruit, and table grapes and wine – production of which is found across a large number of countries across East and Southern Africa, as well as more patchily in West Africa.

The main concerns have been low wages, dangerous working conditions, forced overtime, insecure employment and types of labour control that combine paternalism and despotism. Interestingly, while some central features of this discourse have hardly changed over two decades, its implicit and sometimes explicit target has narrowed. Particularly in cut flowers in East Africa but also in respect of other crops elsewhere, it is often no longer sectors as a whole that are targeted, but 'only' (large numbers of) enterprises within them.

III. PURPOSED SYSTEM:

Labours or workers are defined as the number or inventory of persons at a point in time. Workers are generally heterogenous because of differences in productive skills, location, and availability for work. Labor is a service (person-years per year) and includes all human time-using activities, including what is sometimes labeled separately as labor and management. Labor services are perishable and hence cannot be moved to another period in time for use; workers, on the other hand, are durable, potentially working for many years as well as being geographically mobile.in proposed system labour and farmer relationship application work as labour registered on our application individually or in labour group view notification replied or accept the request on farmer side admin(farmer) can send the notification on group as will as individually if the labour accept the request from admin system sends notification on farmer acceptance.

- **Architecture Diagram**

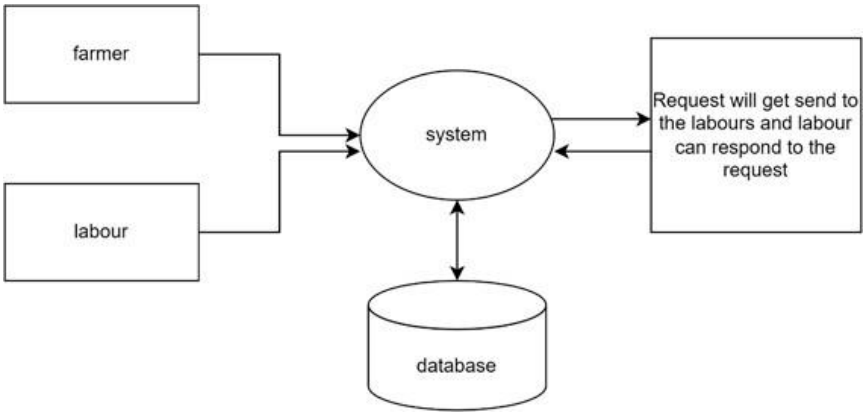

Fig No. 1

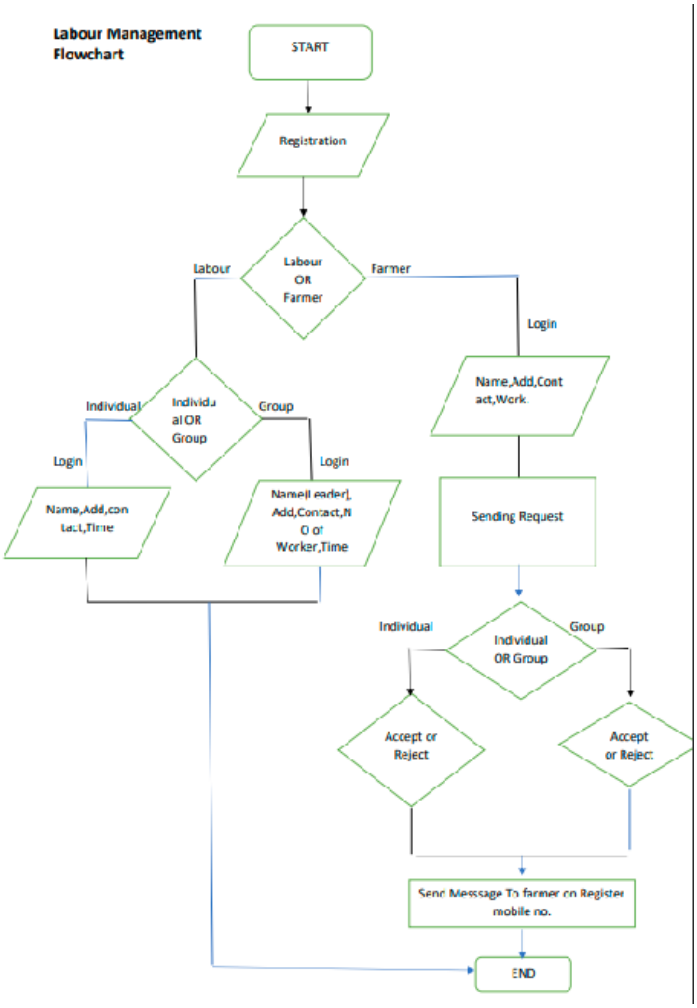

Fig No.2

UML Diagram

- **Use Case Diagram**

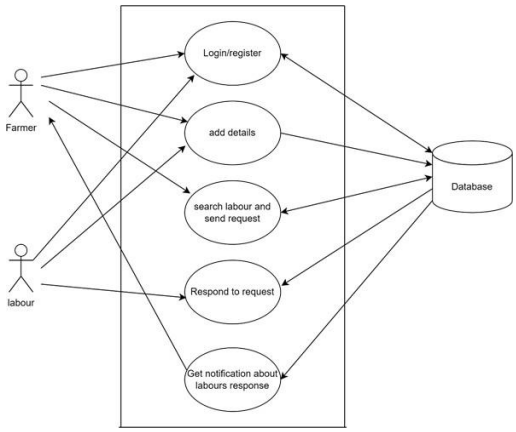

Fig No. 3

- **Class Diagram**

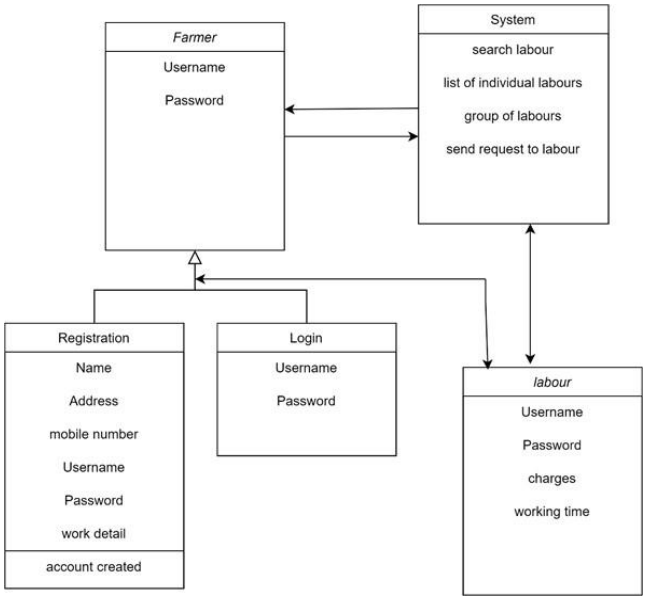

Fig No. 4

PROBLEM MODELLING AND DESIGN USING SET THEORY

Let S be the system and it consist of following:

S=*{*I, P, O*}*

where,

I= Input

I=User, Farmer

P= Process

P={sr, dr}

Sr=Farmer can send request to labour.

Dr= Labour can delete request.

O= Output

O={O1,O2,. On }

Labour can view details about farmer.

Su=Success cases

In success case labour will get request from farmer and labour can accept or decline that request. After responding, farmer will get notification about labours response

.Fc= Failure Condition Fail to send request to labour.

Problem is solvable, it is NP-Complete.

Advantages:

- Digital Platform: It provides Digital Platform to Farmers And Labours to interact with each other.
- Better Manpower Planning:It consist of putting right number of people,right kind of people at right place
- Time saving: farmer can find labour easily and need not to go out for searching labours.

Disadvantages:

- Need to provide proper training for using app.

IV. Result and Discusion:

Labour efficiency in agriculture refers to the amount of productive work accomplished per man on the farm per unit of time. Famer has to go out for searching labours and it waste so much time .

In this project we will create digital platform for farmers and labours so that farmer can Search labours easily and need not to go out for searching. It will save time.

V. Conclusion

Labor is one of the most important inputs in agricultural production. Farm labor was defined as labor and related services.Farmers should be surveyed for their estimate of the annual amount of labor used on their farm. As needed, they should be asked to allocate the time among the commodities that they produce. In the long term, it would be desirable for cost of production estimates to move away from such subjective methods for allocating labor to particular commodities. This could possibly be achieved by using econometric estimates of cost or profit functions for multicommodity technology.

In our propose system, Farmer and labour can interact with each other. Farmer can find the labour and send request to individual labour or group of labour. Labour can respond to the request and after that farmer will receive notification about labours response on his registered mobile number. If Labour doesnt response to request then it will automatically gets declined and message will send on farmers registered mobile number.

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