

# Using Waterfall Model Sugarcane Transportation System Example

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**Abstract - Base On Software Development waterfall model. The waterfall model is a development system. It gives an example of a comprehensive Sugarcane Transportation System by using its development in descending order.**

**The hardest thing today is to transport it. Transportation is very important in agribusiness. This is a major problem in sugarcane farming as it is not easy to transport sugarcane as it is a more expensive and difficult task. We have developed a system for this transport called Sub Rolling Station. The system you use to transport sugarcane is simple, efficient and low cost. This system is very simple. In this way we can reduce the accident rate by 90%.**

## SPECIFICATION AND DESCRIPTION

One alternative we can do for the transportation of sugarcane is the roller method used for extracting sugarcane juice. Sub-Rolling Station is an alternative and efficient system as it carries sugarcane juice to the factory by road. This method is not used anywhere today and it is very important to be aware of it today. Sub Rolling Station is a machine used for extracting sugarcane juice in the area where sugarcane is grown in large quantities. Therefore, the sugarcane in that area should be kept in the same place, the sugarcane juice should be taken out, filled in the trankar and taken to the sugar factory for processing. This system saves costs and accidents. The key is to save time.

If he is carrying 3000 kg of sugarcane, then it takes 2-3 hours for 20 km if the roads are good. But because of the Sub Rolling Station system, the math is different.

The same 3000 kg of sugarcane juice can be extracted and delivered to the factory in 30 minutes to 1 hour. Time, cost, accident can be reduced by 90%.

## METHODOLOGY

This system is very easy to use, that is,

1. Starting a Sub Rolling Station in a village or taluka means that the roller for extracting sugarcane juice or the method you use for extracting juice should be started in a short form.
2. The juice should be delivered to the factory through tanker. This is done through tanker so that it can be delivered immediately as it is in liquid form.
3. The liquid juice coming from the Sub Rolling Station in the factory should be used for making sugar.
4. The rest of the cane is very light in weight and can be easily carried.

This saves heavy traffic and also makes the transportation of sugarcane easier. In this system the residue of sugarcane does not reach the factory premises, as in some areas it is used for burning in the factory so we can bring it from the Sub Rolling Station at any time as it is light in weight.

## CLAIMS

Benefit of Sugar Factory:-

1. If 1000 kg of sugar is produced per day in the sugar factory, it will increase to 3000 kg as the quantity of sugarcane coming to the factory will increase. The time taken to extract sugarcane juice will disappear.
2. The yield of sugar mills will increase and the harvesting of sugarcane in that area will be faster.
3. Sugarcane harvesting area will increase significantly. It will not be limited to that part.
4. The rest of the sugarcane will be available in large quantities for burning as it will be available from the Sub Rolling Station. Earlier, it was available only after extracting sugarcane juice from the factory.

5. As the sugarcane juice comes from the factory, it will only be used to make sugar.

**BENEFIT OF FORMER**

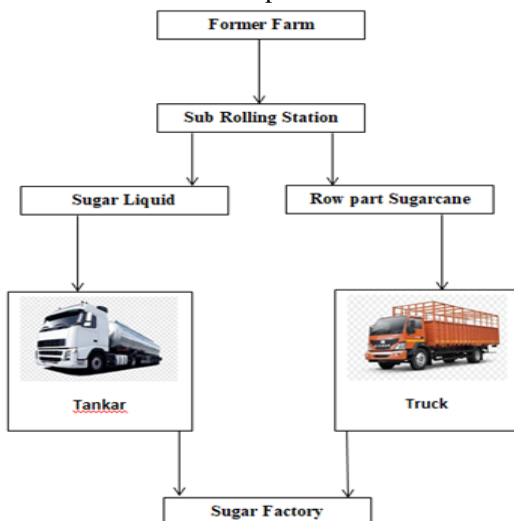
1. The farmer does not have to wait for the cane harvest as he can pick it himself and take it to the nearest Sub Rolling Station.
2. Sugarcane theft while transporting sugarcane will be stopped.
3. Planting area will increase.

**OBJECTIVE OF THE STUDY**

There is a great need for study in agriculture as Indian farmers cannot cultivate on the basis of technology but it is possible to focus on income using new methods because it is easier to cultivate with technology if income increases. Farmers who cultivate and harvest sugarcane are in a very poor position, so we can definitely increase the yield by using this method. Sugarcane harvesters live in the fields to harvest sugarcane and this is very difficult. The farmer cannot see his crop being destroyed or stolen. Theft of sugarcane is rampant during transportation, so the farmer reduces the planting of sugarcane as the yield is not met, which reduces the area under cultivation and closes the factories. At the Sub Rolling Station, the farmer can also transport his own sugarcane and can see the date while weighing the sugarcane.

**BLOCK DIAGRAM AND ABSTRACT**

Base On Software Development waterfall model



The cane was brought from the farmers' fields to the sub-rolling station, the rollers extracted the juice, delivered it to the factories by tanker, and transported the sugarcane manure by truck, thus saving time and expense.

**CONCLUSION**

We can increase the yield of agriculture through this process, at the same time greatly facilitating the transportation of sugarcane growers. Factory income increased and their daily sugar production more than doubled. Accidents, time and cost saved a lot. Sugarcane theft stopped. Factories started getting sugarcane juice in liquid form for making sugar. Sugarcane manure was also available in abundance. There is no need to wait for the cane cart to be unloaded as it is a sub rolling station.