

Cut to Crush Delay in Sugarcane Supply Chain



STUDENT COMPETITION The HUMLOG Challenge

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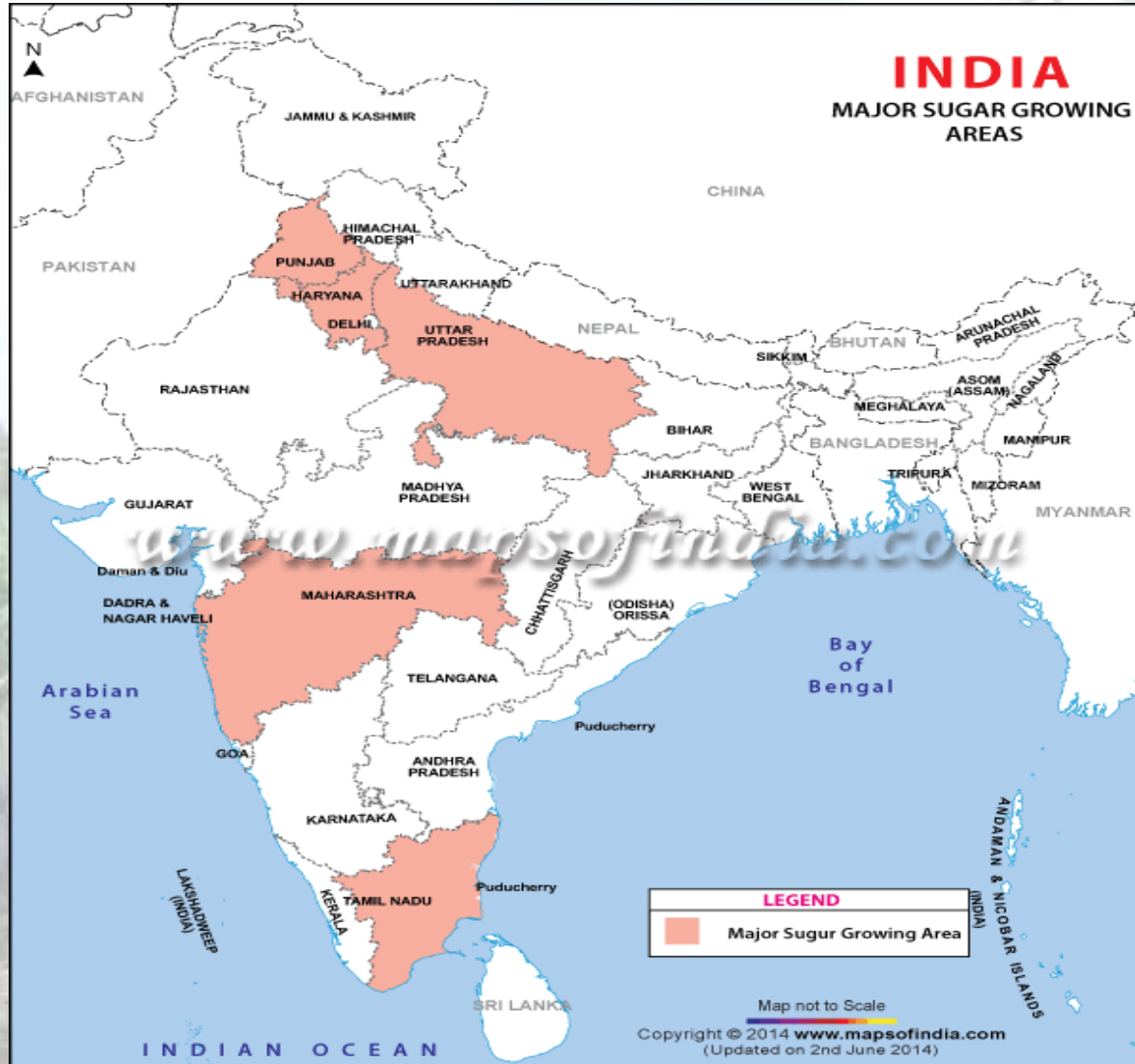


Region Represented:

Uttar Pradesh

Maharashtra

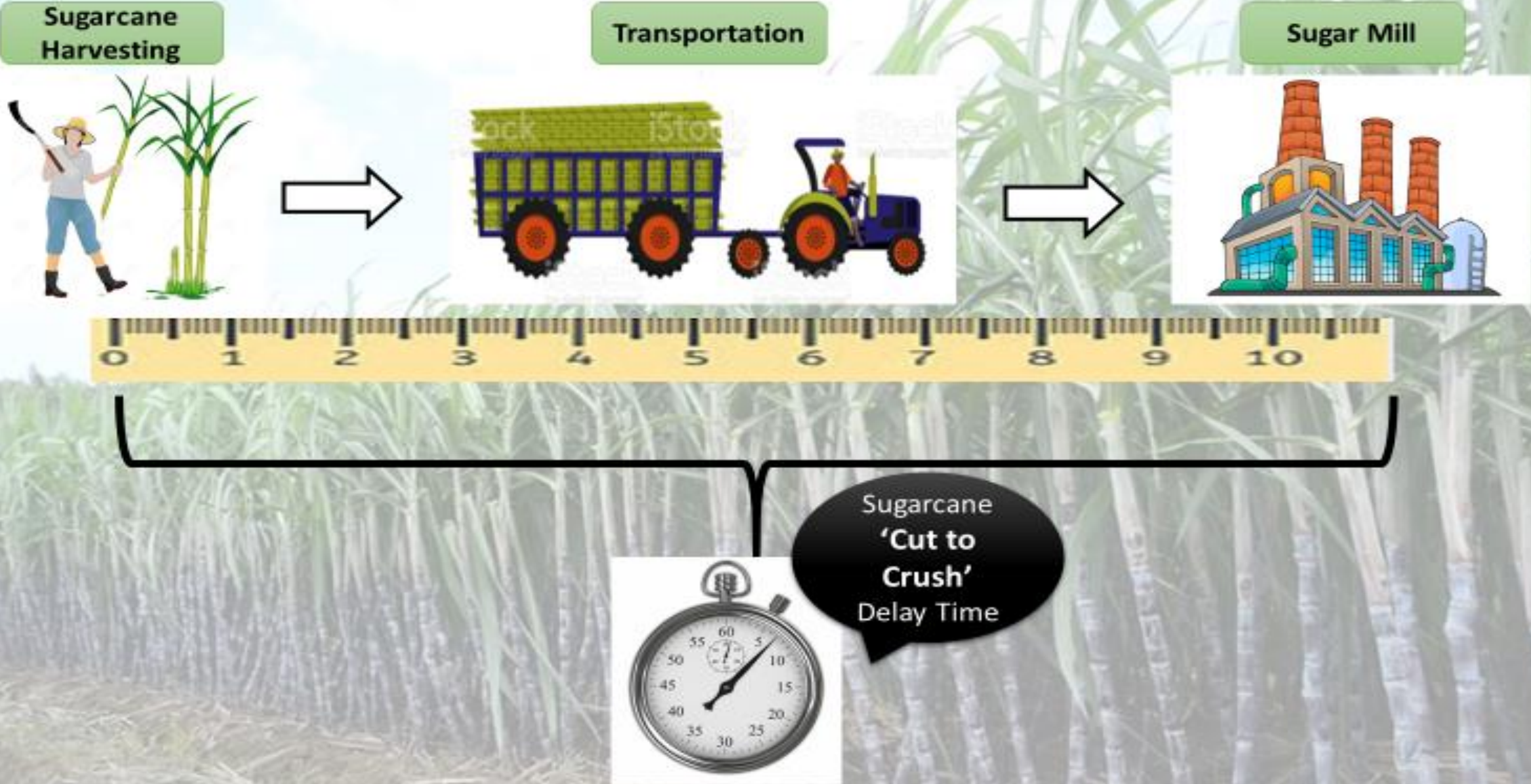
Tamil Nadu



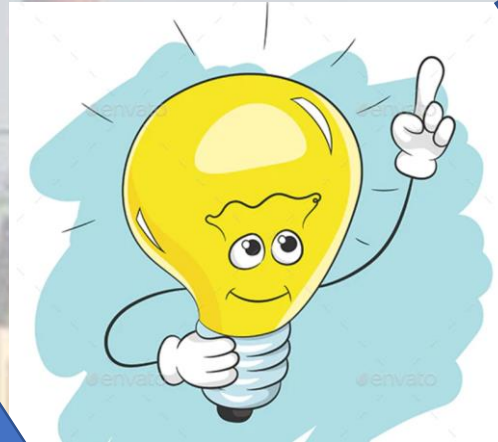
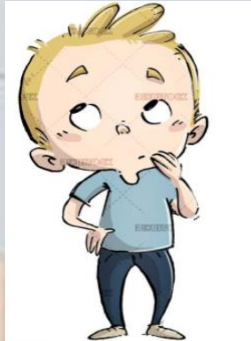
- India is the 2nd largest producer of sugar in the world next to Brazil
- In the year 2017-18 the sugar quantity produced was 32.32 Mn tonnes
- Sugarcane farmers and their families, numbering over 35 million, constitute about 7 percent of the rural population

- Farmer's suicide account 7.4% of total suicide in India and growth rate is 5-6 %
- 12000 Maharashtra farmers have committed suicide in last 3 years , Uttar Pradesh sugarcane farmers due approx. 100 billion from mill's side

Problem Identified : Cut to Crush Delay in Sugarcane Supply Chain

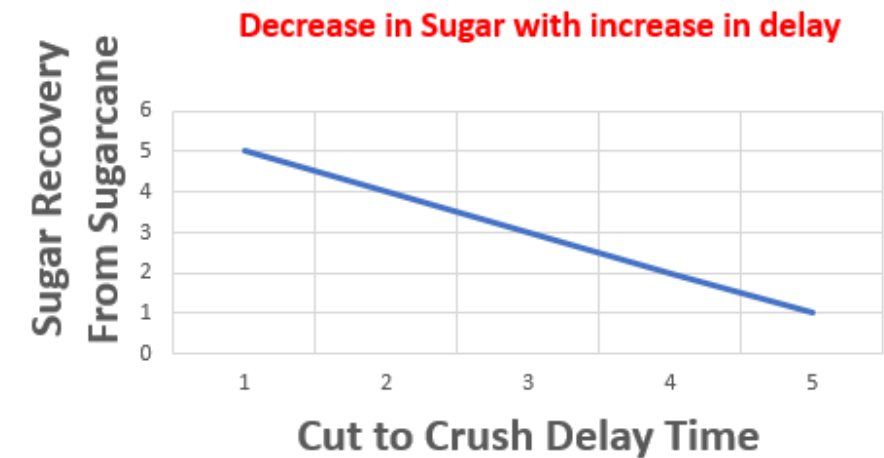


Why to bother
about **'Cut to
Crush' delay
time ?**



Sugar content in sugarcane
starts decreasing after
harvest. Hence, sugarcane
must be crushed in Mill
quickly!

Indian sugar mills
lose around 5-10
kgs of sugar for
each 110kgs of
sugar produced



Proof Of Research

Primary Research



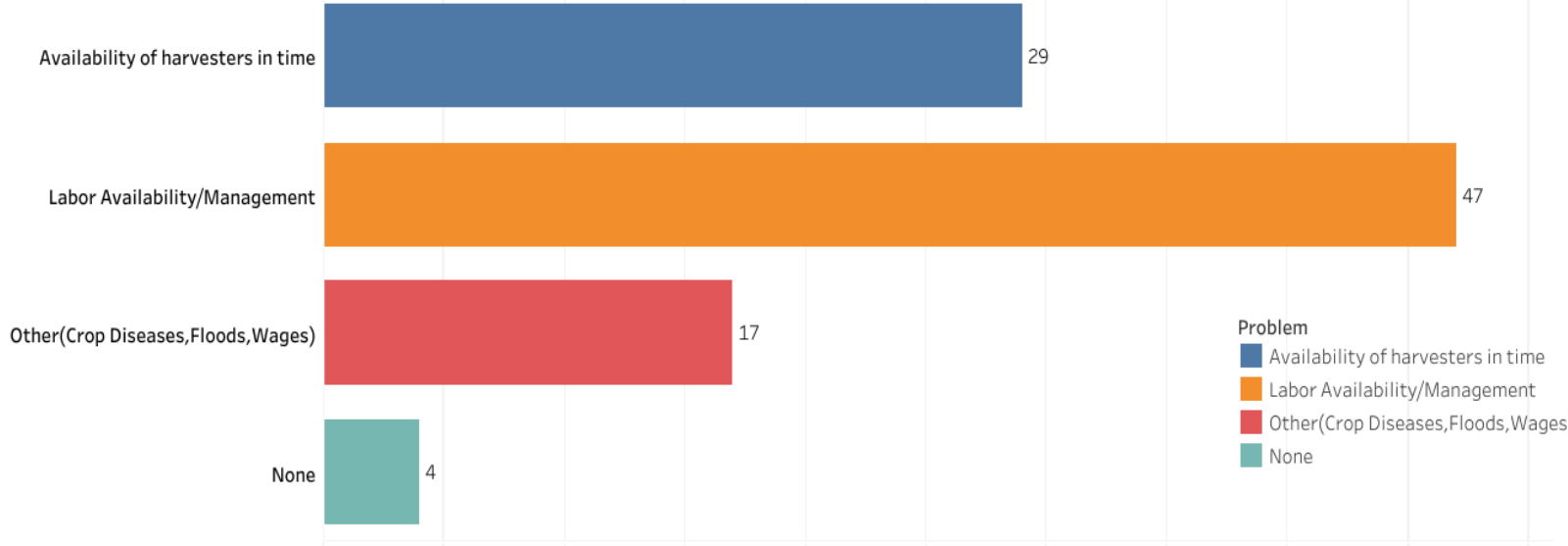
- 107 responses received from farmers through google forms and telephonic conversation
- Telephonic interviews with industry experts

Secondary Research

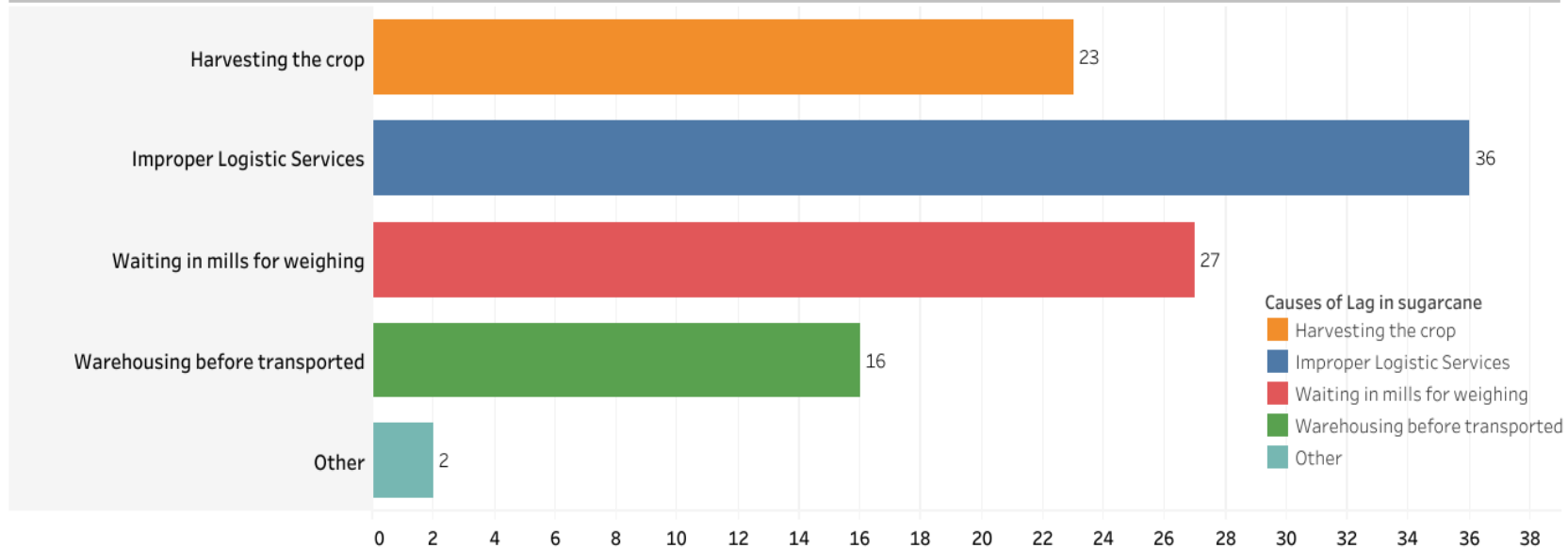
- Articles
- Newsletter
- Research paper
- Report

Proof Of Research

Harvesting Problems



Causes of Lag in sugarcane transport



Supply Chain Stages and corresponding issues

Harvesting

- Labour management and lack of machinery results in longer harvest time
- Non-adherence to pre-booked crushing time slot

Transportation

- Non-availability of timely logistic services from mill or third party service providers

Weighing in Mill

- Huge queue of vehicles outside mill to weigh the sugarcane
- Poor scheduling and communication between farmers and mills

Crushing in Mill

- Poor maintenance and operations management by mill
- Unexpected Shutdowns and delay in cane procurement
- Mills do not operate with optimum capacity

Solution

Industry Resource Planning
Software Application
(IRP)



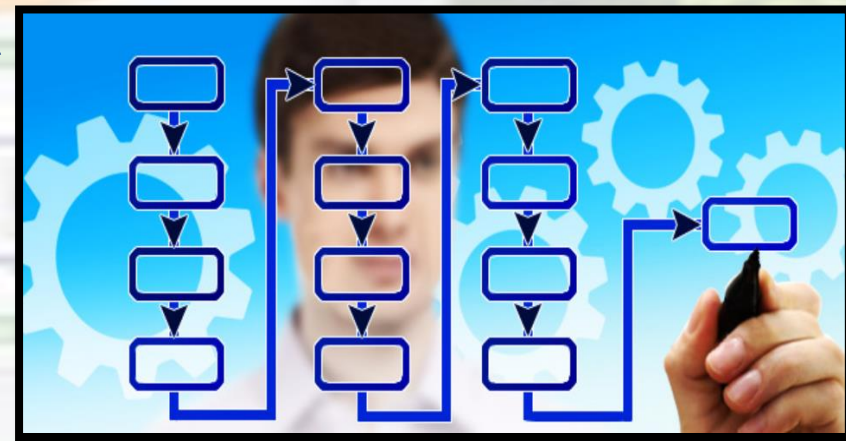
Why IRP?

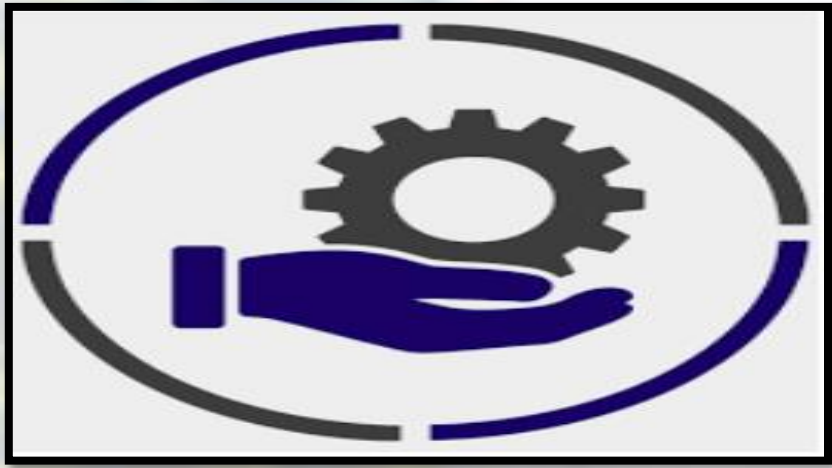
1. Integrated Digital Platform

2. Increase Collaboration

4. Data for Decision/Policy Making

3. Systematic Functioning





1. Avail Services

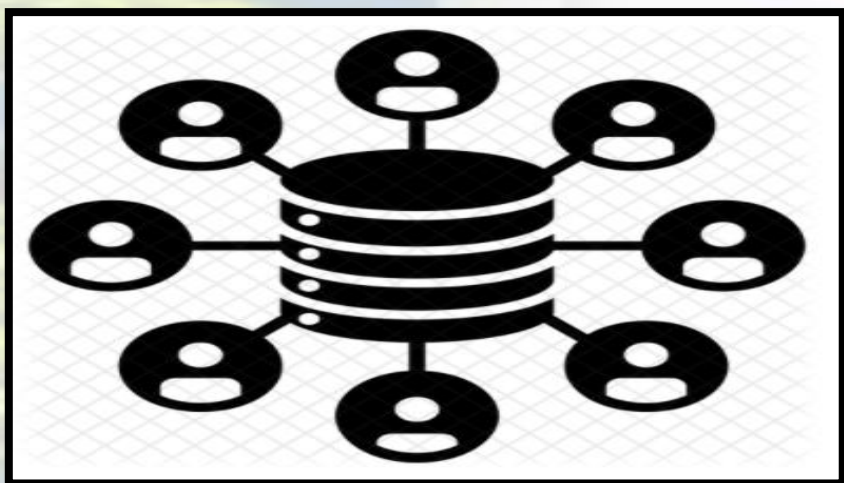
What IRP can do?



2. Register Grievances



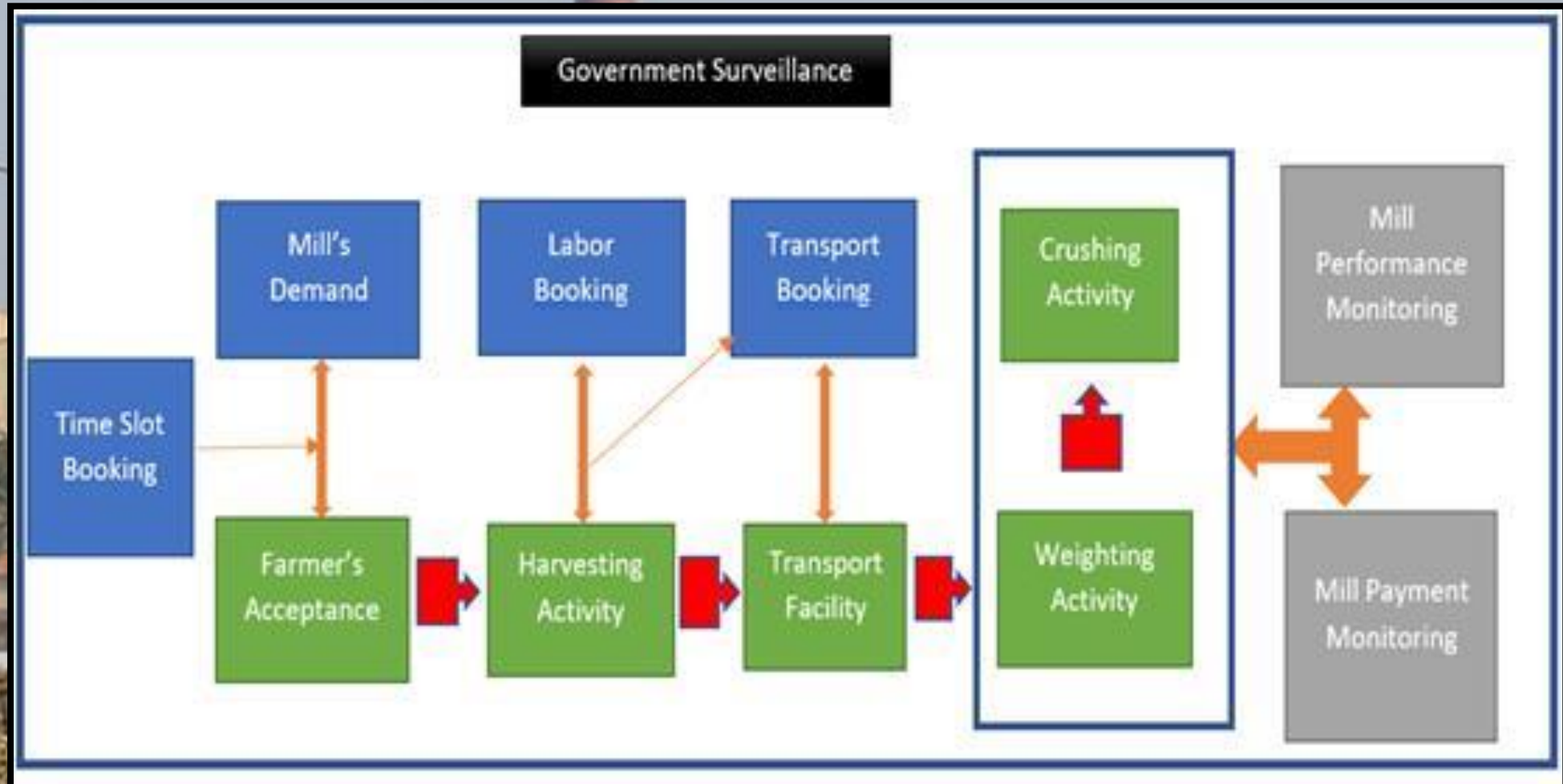
4. Collect Data for Policy Making



3. Monitor Entire Supply Chain



Solution Architecture:



Implementation Plan:

Government budget

Third party collaboration for IT infrastructure

Integration and registration of stakeholders

Awareness and digital literacy

Small scale to large scale implementation and improvements

Thank you

