

## Ideation Phase

### Define the Problem Statements

Date	16 February 2026
Team ID	LTVIP2026TMIDS48526
Project Name	Rising Waters – A Machine Learning Approach to Flood Prediction
Maximum Marks	2 Marks

#### Customer Problem Statement Template:

Creating a clear problem statement helps us understand the needs and challenges of communities, authorities, and disaster management agencies affected by floods. The Flood Prediction Problem Statement template helps our team focus on what truly matters — developing an accurate and timely early warning system that protects lives and infrastructure.

A well-defined flood prediction problem statement enables our team to design an effective machine learning solution that addresses real-world flood risks. Throughout the process, we empathize with affected communities, emergency responders, and urban planners to better understand their concerns, response limitations, and need for reliable predictive insights. This approach ensures that our solution is practical, impactful, and aligned with societal needs.

<b>I am</b>	Describe customer with 3-4 key characteristics — <i>who are they?</i>	Local authorities, emergency responders, and community leaders in flood-prone regions
<b>I'm trying to</b>	List their outcome or "job" they are about - what are they trying to achieve?	Reduce flood damage and casualties by providing timely and accurate early warnings
<b>but</b>	Describe what problems or barriers stand in the way — what bothers them	Lack of reliable flood prediction tools makes it difficult to anticipate flooding events accurately
<b>because</b>	Enter the "root cause" of why the problem or barrier exists — what needs to be solved?	Current methods rely on outdated data, limited real-time monitoring, and insufficient predictive accuracy.
<b>which makes me feel</b>	Describe the emotions from the customer's point of view — how does it impact them emotionally?	Current methods rely on outdated, data, limited real-time monitoring, and insufficient predictive accuracy.
	Describe the emotions from the customer's point of view — how does it impact them emotionally?	Frustrated, anxious, and helpless when unable to effectively plan and respond to flood risks.

**Example:**

I am

Local authorities,  
emergency  
responders, and  
community leaders  
in flood-prone  
regions

I'm trying to

Reduce flood  
damage and  
casualties  
with early and  
accurate warnings

But

Our current  
prediction tools  
are unreliable

Because

They rely on  
outdated data,  
insufficient real-  
time monitoring

Which makes me feel

**Helpless**