A formative grading scale for project deliverables

According to a formative approach, each deliverable was appraised, commented, and scored by the tutors on a three-point scale (i.e., excellent, average, poor) at the end of each phase. Groups then used this feedback to improve their work.

Deliverable #1: What's the problem?

Write a problem statement to identify the behaviour under study and describe how it has changed over a period of time.

Rubric	Evaluation	Comments
1. The sustainable development goal		
- A Sustainable Development Goal (SDG) is identified	© ⇔ ⊗	
- The article was found and corresponds to the instructions	© ⇔ ⊗	
2. The main source		
- There is a screenshot of the article	© ⇔ ⊗	
- There is a link to the main source	$\odot \odot \otimes$	
3. The problem		
- The main variable is correctly identified	© ⇔ ⊗	
- The behavior is correctly described	© ⇔ ⊗	
- The problem is correctly worded	$\odot \odot \odot$	

Deliverable #2: Tell the story.

Write two or three paragraphs to tell the story of the problem.

Rubric	Evaluation	Comments
1. The problem's story		
- All variables vary over the period	$\odot \cong \mathfrak{S}$	
- All variables contribute to the story	© ⇔ ⊗	
2. Variable names		
- Nouns or noun phrases are used, not verbs	© ⇔ ⊗	
- Neutral or positive words are used	☺ ☺ ⊗	
3. Variable definitions		
- All the variables in the story are defined	☺ ☺ ⊗	
- Definitions are clear and understandable	$\odot \boxdot \mathfrak{S}$	

Deliverable #3: Draw the systemic structure.

Draw the causal loop diagram that explains the problem being studied.

Rubric	Evaluation	Comments
1. The causal loop diagram		
- All variables are correctly named	$\odot \odot \mathfrak{S}$	
- All cause-and-effect relationships are correct	© ⇔ ⊗	
- As few variables as possible explain the observed behavior	© ⇔ ⊗	
- Polarities correctly describe cause and effect relationships	© ⇔ ⊗	
- There are at least two feedback loops	© ⊕ ⊗	
- The loops are identified (A or R)	© ⊕ ⊗	
- The loops are named	© ⊕ ⊗	
- The diagram helps explain the observed behavior	© ⇔ ⊗	
2. Sources		
- The main sources used are cited	© ⇔ ⊗	

Deliverable #4: Looking for levers.

Identify leverage points and suggest interventions.

Rubric	Evaluation	Comments
1. Identification of intervention points		
- Actions address events and trends	© ⊕ ⊗	
- Actions address the systemic structure	© ⊕ ⊗	
- Actions concern mental models	© ⊕ ⊗	
- Actions concern the vision for the system	© ⊕ ⊗	
2. Sources		
- The main sources are cited.	© ⇔ ⊗	
- An expert validated the action strategy.	$\odot \oplus \otimes$	

Deliverable #5: the final report.

Write a final report that describes the problem situation, explains the behaviour of key variables using a causal loop diagram, and suggests concrete actions to combat the issue. The report summarizes deliverables 1 to 4.

Rubric	Evaluation	Comments
1. What's the problem		
- The reasons for the choice of problem are given	$\odot \oplus \otimes$	
- The need for a systemic approach is explained	$\odot \oplus \otimes$	
2. Tell the story		
- All variables used in the model are defined	$\odot \cong \mathfrak{S}$	
3. Draw the systemic structure		
- The systemic structure is used to explain the behavior described in the problem statement. A good explanation refers to the role of the different structures in the model (e.g., loops, delays).	© © 8	
4. Looking for levers		
- The strategy to address the problem is coherent	$\odot \oplus \otimes$	
- The social innovation matrix has been correctly used	$\odot \oplus \otimes$	
- The intervention strategy is clearly described	© ⇔ ⊗	
- An expert has been identified and contacted to advise on the model and intervention strategy	098	
- A summary of an interview with an expert is provided	$\odot \cong \mathfrak{S}$	
5. Sources		
- All sources (e.g., books, press articles, videos, podcasts, blogs) are listed and correctly formatted	098	
6. Overall assessment		
- The report is of professional quality (format, writing)	☺ ≌ ⊗	