



To facilitate the presentation of the results and to make them more understandable, the weighting of the variables has been adjusted to a 100-point scale. This weighting is detailed in Table 4.



Table 4. Weighting of the selected variables classified in the Socio-economic, environmental and diversification categories

Variables	Method1				Method2			
	Global SSI	Socio-economic Index	Environmental Index	Diversification Index	Global SSI	Socio-economic Index	Environmental Index	Diversification Index
Salina Effectiveness	7.50	7.50			9.57	13.00		
2019 salina profitability	7.50	7.50			7.86	11.86		
Annual total main productivity	7.50	7.50			8.00	10.86		
Number of secondary products	6.00			6.00	7.14	8.71		23.86
Number of actions for biodiversity (implies some cost)	5.40		5.40					
Biodiversity monitoring	5.10		5.10		4.57		15.29	
Special areas within the Salina	5.10		5.10		5.71		19.00	
Economic Tourism activity (Profit)	4.50	4.50			4.43	6.71		
Fleur de sel production	4.50	4.50			6.14	8.14		
Innovation activities	4.40			4.40	5.43	7.71		17.86
Commercial supply chain	4.00	4.00			4.43	5.43		13.21
Innovative Tourism activity (number)	4.00			4.00				17.86
Productive area (hectare)	4.00	4.00			4.00	5.43		
Customer type	4.00	4.00			4.14	5.00		12.21
Waste, pollution, noise control measures & energy plan	3.60		3.60		4.71		20.71	
What type of Natural Protected Area?	3.60		3.60		3.43		12.00	



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Salina Sustainability Index (SSI)

January 4th 2021-FINAL





Table 4 (Cont.). Weighting of the selected variables classified in the SOCIOECONOMIC, ENVIRONMENTAL AND DIVERSIFICATION categories

Variables	Method1				Method2			
	Global SSI	Socio-economic Index	Environmental Index	Diversification Index	Global SSI	Socio-economic Index	Environmental Index	Diversification Index
Conservation action plan	3.60		3.60		6.57		25.00	
Salina environmental educational program	3.60		3.60		1.86		8.00	8.57
Commercial areas in the Salina	2.50	2.50			3.29	4.86		
Sales strategy	2.00	2.00			3.43	5.29		
Innovation Customer type	2.00			2.00				
Innovation Commercial supply chain	2.00			2.00				
Are you included in any European Salina Networking	1.60			1.60	1.14	2.29		6.43
Number of employees per total main productivity	1.00	1.00			1.57	2.00		
Gender ratio employment	0.50	0.50			1.29	1.29		
Risk prevention at work	0.50	0.50			1.29	1.43		



4 Index construction

Once the valuations of each variable have been agreed upon and their weight established, the sustainability index for the Mediterranean Salinas can be constructed by adding each variable according to its weighting factor through the following formula:

$$\text{Salina Sustainability Index (SSI)} = \sum_{1}^{n} \text{Var}_n * \text{Weight}_n$$

Using this formula, the sustainability index for each Salina can be calculated in a standardized way and compared with that for other Mediterranean Salinas which provided information through the surveys. To better understand the index, the different scores for the Salinas can be extrapolated to a scale of 0 to 10, where 0 indicates low sustainability and 10 indicates high sustainability.

4.1 Construction of sub-indices

As stated above, according to the nature of the selected SSI variables they are classified as socioeconomic, environmental or diversification. This allows us to construct independent sub-indices, each corresponding to a specific character or sector/theme, i.e. Socio-economic index, Environmental Index, Diversification index. Thus, the calculation of these sub-indices will provide an indication of the weakest sector/theme of the Salina compared to the others, allowing this weakness to be taken into account in the design of future strategies to improve the sustainability of the Salina.

$$\text{Socio – Economic index (SEI)} = \sum_{1}^{n} \text{VarSE}_n$$

$$\text{Environmental index (EI)} = \sum_{1}^{n} \text{VarE}_n$$

$$\text{Diversification Index (DI)} = \sum_{1}^{n} \text{VarD}_n$$



5 Preliminary results and assessment of the MedArtSal Salinas

In previous sections, we have defined sustainability as activity that does not compromise the future of the Salina. However, given the impossibility of establishing a fixed, immovable criterion of sustainability in the Salinas, according to which a Salina is either sustainable or unsustainable, we consider that the index developed here to measure the present and future activity could serve as a means to compare the Mediterranean Salinas to each other in terms of sustainability. In other words, a more sustainable Salina will present a higher sustainability percentage in accordance with the index, although we cannot currently establish a specific percentage below which the Salina would not be considered sustainable.

As previously mentioned, a total of 34 potential artisanal Salinas were identified in the Mediterranean that fell within the study area. Information about the project was sent to all of these Salinas together with the aforementioned survey (<https://d138.uca.es/encuesta-medartsal-english>) translated into all the languages of the participating countries. In the first stage, the expected responses were not received. Finally, a total of 27 completed surveys were received, of which 17 were from artisanal Salinas. Seven extensive Salinas and one salt mine also responded. Therefore, the index constructed in this document is based on the 17 artisanal Salinas that participated by completing the survey.

The countries represented in these surveys and the number of Salinas which responded are shown in Figure 2.

Surveys received **by country and Salina type** in the Mediterranean

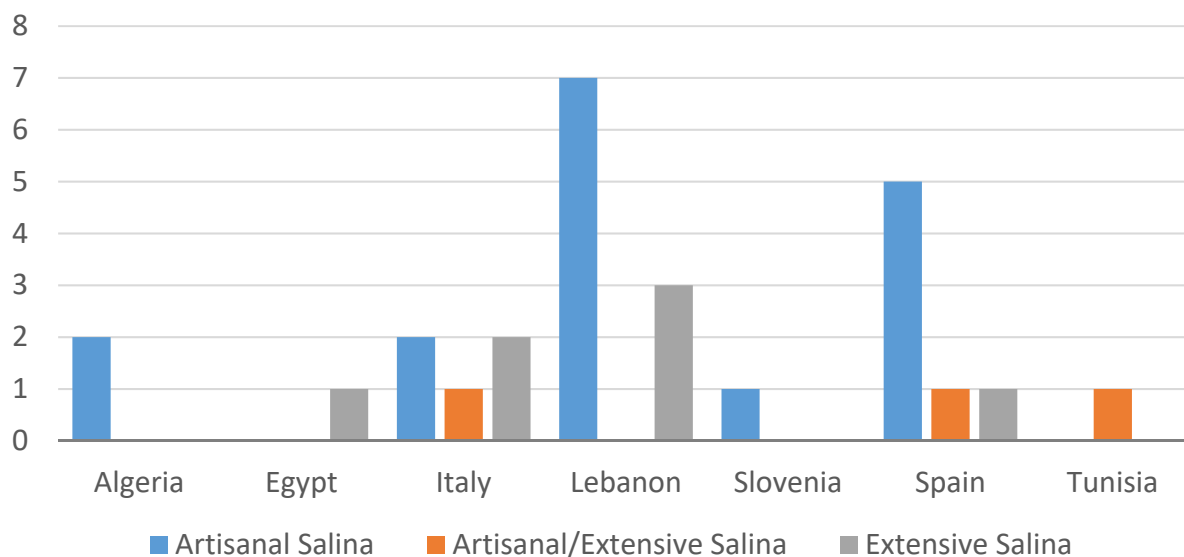




Figure 2. Total number of surveys received per collaborating country and type of production.

After applying the two different methodologies to evaluate the degree of sustainability of the artisanal Salinas that responded to the survey, we can state that there are no major differences between these methodologies, and that each of the Salinas obtained similar results under each approach. When ordering the Salinas according their SSI values under both methodologies, the first four positions are occupied by the same salinas, and in the same order. The last two positions also corresponde to the same Salinas under both methodologies (Table 5).

Hence, despite minor differences, both methodologies can be useful and appropriate for evaluating the sustainability of artisanal Salinas in the Mediterranean.

Table 5. Comparison of the order of the Salinas from most to least sustainable under the two methodologies evaluated.

SSI- Method 1		SSI- Method 2	
Salina #16	188.50	Salina #16	183.71
Salina #2	163.60	Salina #2	154.57
Salina #3	141.30	Salina #3	146.43
Salina #1	137.90	Salina #1	127.86
Salina #8	118.50	Salina #17	114.14
Salina #11	113.30	Salina #8	114.14
Salina #6	113.00	Salina #11	105.57
Salina #17	111.50	Salina #12	103.71
Salina #12	111.10	Salina #6	103.14
Salina #13	87.90	Salina #10	87.86
Salina #9	85.00	Salina #13	87.71
Salina #4	82.90	Salina #9	85.71
Salina #10	81.80	Salina #5	77.00
Salina #14	78.30	Salina #14	71.86
Salina #5	68.70	Salina #4	63.43
Salina #7	43.20	Salina #7	32.86
Salina #15	30.10	Salina #15	28.00

5.1 Salinas Self-evaluation- SSI TOOLKIT

Based on the 4 independent indices and on the evaluation table for the considered variables (Table 2), a self-evaluation tool (SSI Toolkit) for artisanal Salinas has been developed. The toolkit can be used by any worker in the salt sector. By entering the required information (i.e. values for the 22 SSI variables) in relation to the Salina, an SSI score can be obtained and therefore an assessment of the sustainability status of the Salina. A preliminary draft of this toolkit can be found at this [link](#).



MedArtSal Toolkit Test

Dear salt producer, with the following self-assessment questionnaire you will be able to know the sustainability status of your Salina. After completing the question, press 'View score'.

- 0-25 Not very sustainable
- 26-50 Something sustainable
- 51-75 Fairly sustainable
- 76-99 Very sustainable

Here we need to set the hyperlink with instruction and guidelines in national language.
shorturl.at/zWX56 (empty example)

Thank you very much!

***Obligatorio**

Note, however, that this toolkit is under construction and further improvements may be necessary.

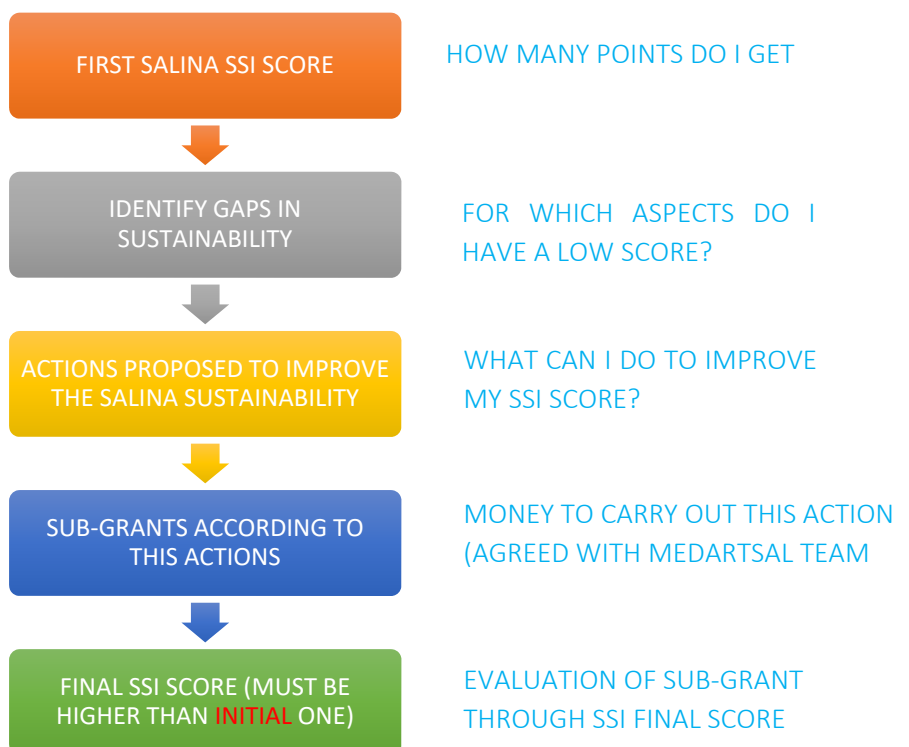


6 NEXT STEPS

The Salinas Sustainability Index, as previously stated, is conceived as a quantitative tool to perform an initial assessment of Salina sustainability. It has been developed as a quantitative tool that could provide a reliable measurement of sustainability of the Salinas. The next step of the SSI is to help evaluate the “before and after” score for sub-granted Salinas in the context of WP4.

The Salina owners will be able to determine a score for their Salina, identify gaps in sustainability and take measures to improve this score by carrying out some of the actions proposed in the toolkit. Sub-grants will be offered according to this SSI improvement and the planned actions

SSI: A TOOL FOR SUB-GRANTS



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