Social impact assessment using the grey clustering method: A case study on a mining project

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| **Study ID** | **indicators** | **methods** | **scale** | **practices** |
| ID81 | 7 criteria (see the table below) were used to assess social impact. | Grey clustering method based on center-point triangular whitenization weight functions (CTWF) method, due to the fact that the CTWF method enables to classify observed objects into definable classes, called grey classes.  A structured questionnaire, which had five  grey classes, was applied: S1= Decrease noticeably, S2= Decrease, S3= No  effect, S4= Increase, and S5= Increase noticeably; which S1=[0;2>, S2=[2;4>, S3=[4;6>, S4=[6;8>, and S5=[8;10]. | 5 grey classess | The CTWF method would have as main advantage to be  more effective than other classical multi-criteria methods, as it  considers uncertainty within its analysis; in addition, the  CTWF method would have a lower cost than other statistical  approaches during its application, as it needs small sample  size. |

Table

Description automatically generated