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Predicting potential environmental impacts of project activities using the Rapid Impact Assessment Matrix (RIAM) method

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C everal qualitative and quantitative impact evaluation tools exist in predicting potential and associated impacts of projects. This tools aids in making informed decisions on significant impacts arising from proposed projects or project activities and proffering mitigation measures using the Best Practicable Environmental Option (BPEO) and Best Available Technology (BAT) within the ambit of the law. There is no single universal method for assessing the significance of an impact due to the project types and environmental settings. Among Environmental Impact Assessment practitioners in Nigeria, a combination of predictive tools is used to evaluate potential and associated impacts arising from a project. These tools include but not limited to the following: Interaction matrix (Leopold matrix), Checklists and the classical ISO 14001 methods for identifying, evaluating, predicting and quantifying significant negative environmental impacts of project activities. These impact prediction tools are generally subjective and introduce some level of bias in evaluating the impacts. The Rapid Impact Assessment Matrix (RIAM) is less subjective when compared to these techniques as a result of the wide scaling range and options used in evaluating the impact. The RIAM strategy is based on the knowledge that certain specific criteria are common to all impact assessments and by scaling these criteria it becomes possible to record the values of the assessments made. Rapid Impact Assessment Matrix (RIAM) works with both negative and positive impacts. Critical assessment criteria used in evaluating an impact in RIAM include: Importance of the condition, Magnitude of change/effects, temporary or permanent impacts, impact reversibility and cumulative effects. As a way of improving impact assessment process in Nigeria and making better informed decision from the outcome of environmental studies, the RIAM technique has great potentials in meeting the aforementioned objectives.

References

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Biography

Adesola Stephen Ojesanmi is an Environmental Practitioner with expertise in environmental and pollution studies, statistical analysis, remediation designs and its application in various ecosystems, water management, waste management, quality management systems, environmental management systems, audits, laboratory analysis, biodeterioration costings and control techniques and process dynamics of pollutants in the ecosystem.

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