

## **I. Key Performance Indicator**

<b>S/N</b>	<b>Key Activity</b>	<b>Indicator</b>
1	Literature review on the use of agricultural waste ashes (Rice Husk Ash and Palm Oil Fuel Ash) as replacement of Quartz, Clay or Feldspar for production of wall, floor and interlock tile.	Finding the research gap and detailed understanding of the novelty of the research, improved understanding of the study area and finding proper methods for treatment of RHA and POFA for optimum and compatibility of the materials.
2	Preparation and treatment of RHA and POFA	This gives way for the next stage of the research. This stage is necessary to find the best treatment method for enhanced silica production.
3	Wall, floor and interlock tile production with RHA and POFA as partial and total replacements of existing compositions.	improved final product (Wall, floor and interlock tile) with enhanced technological properties, such as: Compressive strength, bulk density and vicker micro hardness.
4	Characterization of the new product.	XRD, SEM, XRD and TGA to confirm the physic-mechanical properties of the new product compared to ASTM standard.
5	Analysis of the Result	Comprehensive report on the Wall, floor and interlock tile with RHA and POFA as partial and total replacement for industrial and commercial use.
6	Writing final report	Research team including Msc and PhD students.

## **II. Monitoring and Evaluation Mechanism**

### **Monitoring**

The monitoring procedures of the research project are as follows:

1. The principal researcher will intensively supervised all the project activities and sections to ensure compliance and due process.
2. Retirement of all the expenses will be done at the end of each major activity and must be verified of the principal researcher.

### **Evaluation Mechanism**

The evaluation mechanisms to be adopted for proper achievement of the objectives are as follows:

1. Meeting of the research team will be organized regularly especially after achieving a major objective before going to another step to ensure the objectives of the research project are achieved.
2. The findings of the research project will be presented in workshops, seminars and conferences and journal publication for better scrutiny of the results and other inputs.

### **III. Dissemination Strategies**

The dissemination of the findings of this research project are as follows:

1. Presentation of the research results in workshops, seminars and conferences.
2. Presentation of research finding in indexed journals locally and internationally.
3. Through presentations of the results in conferences and workshops, possible collaborations will be made on the ways to use our local content for industrial and commercial purpose.
4. Findings of this research (especially treatment of RHA and POFA for silica production) will provide an avenue for collaboration with industries that used silica in their production.