



**COUNCIL FOR SCIENTIFIC AND INDUSTRIAL
RESEARCH
CSIR-BUILDING AND ROAD RESEARCH
INSTITUTE
GHANA**

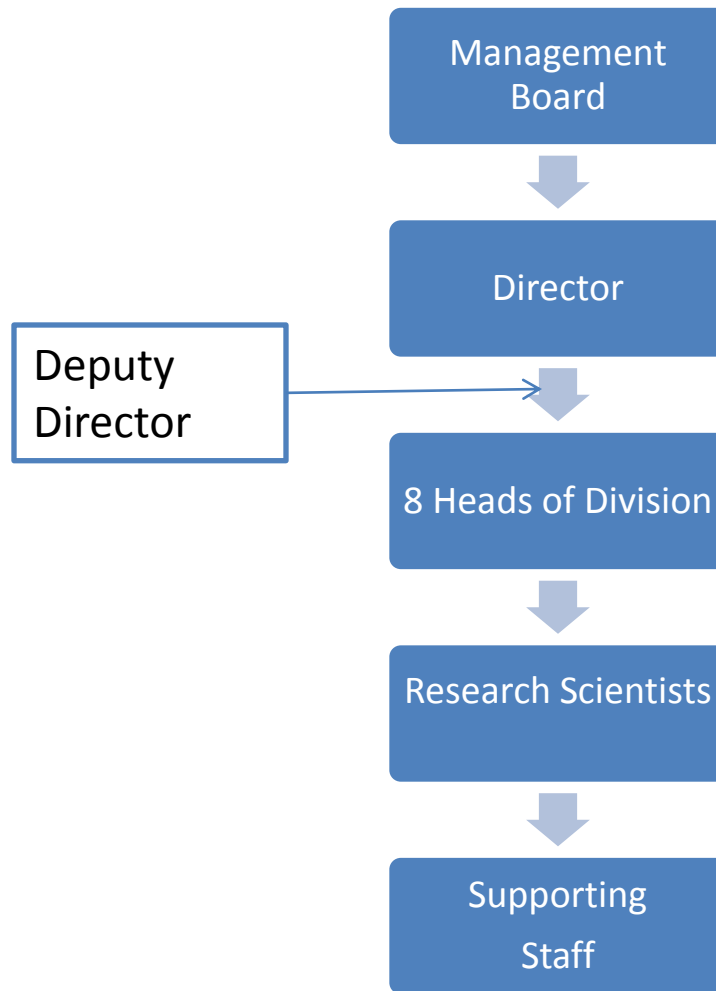
**18th COMSATS COORDINATING COUNCIL MEETING
COLOMBO, SRI LANKA**

12 – 13 MAY 2015

13 INSTITUTES

- **Animal Research Institute**
- **Building and Road Research Institute**
- **Crops Research Institute**
- **Food Research Institute**
- **Institute of Industrial Research**
- **Oil Palm Research Institute**
- **Plant Genetic Resources Research Institute**
- **Water Research Institute**
- **Soil Research Institute**
- **Forestry Research Institute of Ghana**
- **Savannah Agricultural Research Institute**
- **Institute of Scientific and Information research
Science and Technology Research institute**

INSTITUTES ORGANISATIONAL STRUCTURE



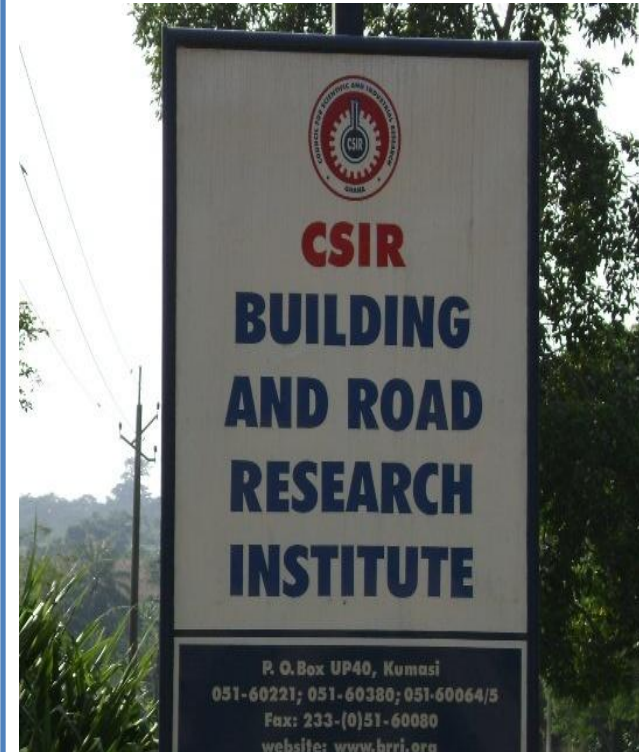
CSIR-BRRI VISION AND MISSION

- **VISION**

A centre of excellence that offers a one stop service in research, training and technology transfer in the construction and transportation sectors.

- **MISSION STATEMENT**

To promote the conduct of demand-driven and problem-based research, provide training and technology transfer that links effectively to the socio-economic development of Ghana particularly, the building, road and transport industry



OBJECTIVES

- To undertake research into all aspects of building and road planning, design, construction and maintenance
- To develop local construction materials for increased utilization in construction

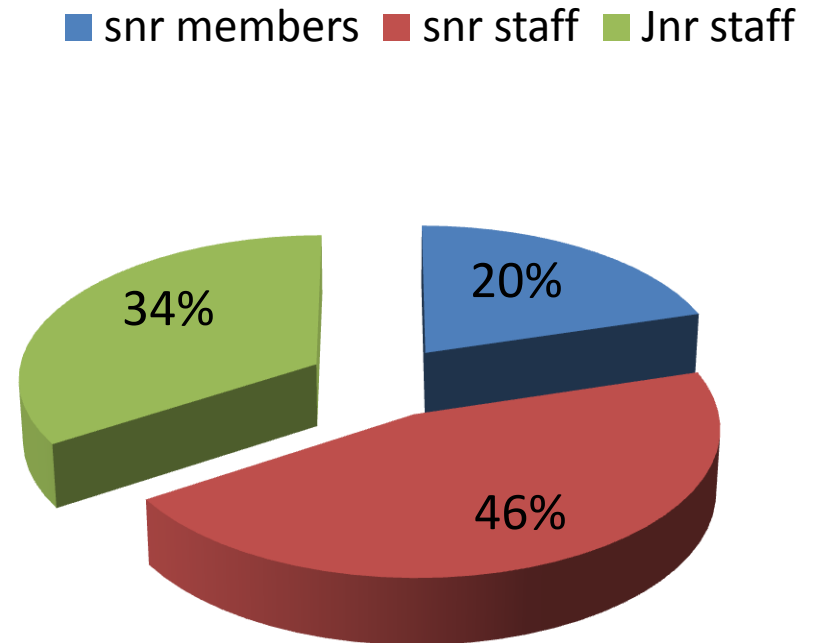


DIVISIONS

- **Construction**
- **Geotechnical Engineering**
- **Materials Development**
- **Structures, Design and Planning**
- **Traffic and Transportation**
- **Commercialisation & Information**
- **Administration**
- **Finance**

STAFF - CATEGORIES

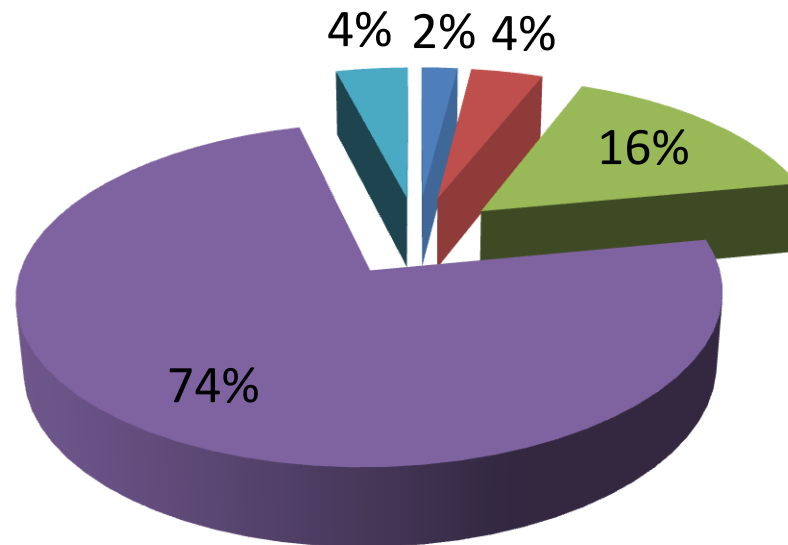
- **SENIOR MEMBERS** - **50**
- **SENIOR STAFF** - **112**
- **JUNIOR STAFF** - **84**
- **TOTAL** - **246**



Senior Members Grade

Research Grade	No.
Chief Research Scientist	1
Principal Research Scientist	2
Senior Research Scientist	8
Research Scientist	37
Assistant Research Scientist	2
Total	50

- Chief Research scientist
- Principal Research scientist
- Senior Research scientist
- Research scientist
- Assistant Research scientist



Staff

Qualification	No	Under Training
PhD	8	6
MPhil/MSc	36	
MBA	6	
BSc	20	
HND	35	

Annual Budget

NO	PARTICULARS	AMOUNT, \$
1	Compensation	492,117.89
2	Goods & Services	400,000.00
3	Research	550,000.00
4	Assets	300,000.00
-	Grand Total, \$	1,742,117.89
		1132117.87

Research programmes

- **Development of supplementary cementitious materials:**
 - Dolomitic limestone, Granite dust, Steel slag cement
- **Development of mosquito repellent paint**
- **Development of construction cost indices**
- **Construction Artisan productivity studies**
- **The prevalence of cell phone use while driving**
- **Assessment of pedestrian safety**
- **Development of geotechnical and geophysical database management system of Ghana**
- **Effects of design and construction defects on the maintenance of public housing**
- **Study of urban waste management systems**

Research Publications

Type	2014
Refereed Journal	20
Edited Conference Papers	15
Edited Research Paper	6
Monograph/Manual	7
Technical Reports	20
Total	68

COMMERCIALISATION ACTIVITIES

- **CONSULTANCY SERVICES - 62%**
- **PRODUCTS SALES - 20%**
- **TRAINING - 10%**
- **CONTRACT RESEARCH - 8%**

Commercialisation

- Production of Pozzolana and pozzolana cement
- Production of salt resistant burnt bricks



Ultra Modern Digital Soil Laboratory



New programmes

- Establishing a bitumen and Asphalt Technology Centre worth \$1.5m



Objective

- The main objective of the project is to set up a **Bitumen and Asphalt Technology Centre (BATC)** that will provide services in testing, performance review and analysis, utilisation, standard-setting of bitumen and asphalt for stakeholders in the road construction



TRAINING

- National Artisan Training Centre set up to train
 - Contractors
 - Engineers
 - Foremen
 - Artisans
 - Carpenters
 - Steel benders



International cooperation

- **DFID - The Africa Community Access Partnership (AFCAP)**
- **Johns Hopkins/Bloomberg - Road safety**
- **DANIDA - Road safety**
- **TRL - Transport research**
- **SBAS - Satellite imagery in Africa**
- **Habitat for Humanity – Training in construction**



Relationship with International Organisations

- **WAITRO -**
- **WORLD BANK**
- **DANIDA**
- **EU**
- **COMSATS**

Future plans

- **Set up International Research Centre in Material Science**
 - **Construction materials**
 - **Plastics**
 - **paints**
 - **Green technologies**
- **Potential partners are CIF, CSIR-South Africa and University of Manchester**

Thank you