The African Technological Development Index (ATDI) indicator is the country's ability to take advantage of the evolution of science and technology to boost economic growth and create jobs. The speed of economic progress for a modern country is linked to its ability to embrace technology and harness the opportunities that it presents effectively. The control of science and technology are the main keys that will open the doors of progress. To become prosperous, some requirements need to be fulfilled:

- **S**trong and well-equipped universities; - **P**latforms for engineers, scientists, and inventors need to be created, to enable them to demonstrate and to share their know-how; - **E**xisting industries should develop research activities to improve the quality of their products in order to become more competitive; - **R**esearch sector need to be fully supported by African governments, through various funding agencies; - **G**overnments should develop strategies that enable the implementation of the outcomes of the results of research on the ground to support their economies.

The African Technological Development Index (ADTI) indicator is a tool that will provide to each African country hints on the real situation about the state of technology control. It's a preventive guide whose aim is to help each country to better equip itself to support its economic growth by developing incentive policies that promote the conquest of scientific and technological knowledge.

Ranking indicators: The African Technological Development Index (ATDI) ranks African countries according to their capacity, into 7 groups of indicators: Higher education infrastructure, Research & Development, Technology Innovation & start-ups, Platforms of exchange & conference, Human capital, Entrepreneurial investment, vocational training.

Please take a moment to complete the survey below. Your contribution will help us to accelerate technological progress and support research activities in Africa.

GROUP 1: BACKBONES FOR INDUSTRIALIZATION 1/2							
	MECHANICAL ENGINEERING	**FOUNDRY ENGINEERING**	**CIVIL ENGINEERING**	**CHEMICAL ENGINEERING**	**ELECTRICAL ENGINEERING**	**MINING/ GEOLOGICAL ENGINEERING**	**METAL ENGINEERING**
INFRASTRUCTURE							
Do you have enough equipment which can enable the university to provide good lectures and good practical works? *Please rate on a scale of 1 to 5* ***1**: Poor; **2**: Fair; **3**: Good; **4**: Very good; **5**: Excellent*							
TEACHING STAFF							
Do you have qualified lecturers for all subjects? *Please rate on a scale of 1 to 5* ***1**: Poor; **2**: Fair; **3**: Good; **4**: Very good; **5**: Excellent*							
TECHNOLOGY TRANSFER PROGRAM							
*Number of technology transfer program designed to enable the creation of "**Spin-off**"*							
APPLIED RESEARCH PROJECTS							
Number of applied research projects which aim not only to answer a specific question which has direct applications, but also to create new products for the market in order to stimulate the economy.							
PHD STUDENTS / *Number of students doing their PhD work for the past 3 years*							
2015 - 2016							
2016 - 2017							
2017 - 2018							

GROUP 1: BACKBONES FOR INDUSTRIALIZATION 2/2							
	MECHANICAL ENGINEERING	**FOUNDRY ENGINEERING**	**CIVIL ENGINEERING**	**CHEMICAL ENGINEERING**	**ELECTRICAL ENGINEERING**	**MINING/ GEOLOGICAL ENGINEERING**	**METAL ENGINEERING**
MASTER STUDENTS / *Number of students doing their Master work for the past 3 years*							
2015 - 2016							
2016 - 2017							
2017 - 2018							
UNDERGRADUATE STUDENTS / *Number of bachelor's holders or equivalent over 3 years*							
2015 - 2016							
2016 - 2017							
2017 - 2018							

GROUP 2: INDUSTRIAL ACCELERATORS 1/2	COMPUTER SCIENCE	COMPUTER ENGINEERING	INDUSTRIAL ENGINEERING	AUTOMATIVE ENGINEERING	MECHATRONICS ENGINEERING	PETROLEUM ENGINEERING	AERONAUTICS
INFRASTRUCTURE							
Do you have enough equipment which can enable the university to provide good lectures and good practical works? *Please rate on a scale of 1 to 5* ***1**: Poor; **2**: Fair; **3**: Good; **4**: Very good; **5**: Excellent*							
TEACHING STAFF							
Do you have qualified lecturers for all subjects? *Please rate on a scale of 1 to 5* ***1**: Poor; **2**: Fair; **3**: Good; **4**: Very good; **5**: Excellent*							
TECHNOLOGY TRANSFER PROGRAM							
*Number of technology transfer program designed to enable the creation of "**Spin-off**"*							
APPLIED RESEARCH PROJECTS							
Number of applied research projects which aim not only to answer a specific question which has direct applications, but also to create new products for the market in order to stimulate the economy.							
PHD STUDENTS / *Number of students doing their PhD work for the past 3 years*							
2015 - 2016							
2016 - 2017							
2017 - 2018							

GROUP 2: INDUSTRIAL ACCELERATORS 2/2							
	COMPUTER SCIENCE	COMPUTER ENGINEERING	INDUSTRIAL ENGINEERING	AUTOMATIVE ENGINEERING	MECHATRONICS ENGINEERING	PETROLEUM ENGINEERING	AERONAUTICS
MASTER STUDENTS / *Number of students doing their Master work for the past 3 years*							
2015 - 2016							
2016 - 2017							
2017 - 2018							
UNDERGRADUATE STUDENTS / *Number of bachelor's holders or equivalent over 3 years*							
2015 - 2016							
2016 - 2017							
2017 - 2018							

GROUP 3: FUNDAMENTAL FOR INDUSTRIALIZATION PROCESS 1/2							
	MATHEMATICAL SCIENCES	**PHYSICAL SCIENCES**	**BIOPHYSICAL SCIENCES**	**APPLIED MATHEMATICS**	**APPLIED PHYSICS**	**MATERIAL SCIENCE & ENGINEERING**	**INFORMATICS**
INFRASTRUCTURE							
Do you have enough equipment which can enable the university to provide good lectures and good practical works? *Please rate on a scale of 1 to 5* ***1**: Poor; **2**: Fair; **3**: Good; **4**: Very good; **5**: Excellent*							
TEACHING STAFF							
Do you have qualified lecturers for all subjects? *Please rate on a scale of 1 to 5* ***1**: Poor; **2**: Fair; **3**: Good; **4**: Very good; **5**: Excellent*							
TECHNOLOGY TRANSFER PROGRAM							
*Number of technology transfer program designed to enable the creation of "**Spin-off**"*							
APPLIED RESEARCH PROJECTS							
Number of applied research projects which aim not only to answer a specific question which has direct applications, but also to create new products for the market in order to stimulate the economy.							
PHD STUDENTS / *Number of students doing their PhD work for the past 3 years*							
2015 - 2016							
2016 - 2017							
2017 – 2018							

GROUP 3: FUNDAMENTAL FOR INDUSTRIALIZATION PROCESS 2/2							
	MATHEMATICAL SCIENCES	**PHYSICAL SCIENCES**	**BIOPHYSICAL SCIENCES**	**APPLIED MATHEMATICS**	**APPLIED PHYSICS**	**MATERIAL SCIENCE & ENGINEERING**	**INFORMATICS**
MASTER STUDENTS / *Number of students doing their Master work for the past 3 years*							
2015 - 2016							
2016 - 2017							
2017 - 2018							
UNDERGRADUATE STUDENTS / *Number of bachelor's holders or equivalent over 3 years*							
2015 - 2016							
2016 - 2017							
2017 - 2018							

GROUP 4: BASIC REQUIRED KNOWLEDGE 1/2	ORGANIC CHEMISTRY	INORGANIC CHEMISTRY	BIOLOGICAL SCIENCES	BIOCHEMISTRY	BIOTECHNOLOGY	BIOLOGICAL ENGINEERING	BIOCHEMICAL ENGINEERING
INFRRUASTCTURE							
Do you have enough equipment which can enable the university to provide good lectures and good practical works? *Please rate on a scale of 1 to 5* ***1**: Poor; **2**: Fair; **3**: Good; **4**: Very good; **5**: Excellent*							
TEACHING STAFF							
Do you have qualified lecturers for all subjects? *Please rate on a scale of 1 to 5* ***1**: Poor; **2**: Fair; **3**: Good; **4**: Very good; **5**: Excellent*							
TECHNOLOGY TRANSFER PROGRAM							
*Number of technology transfer program designed to enable the creation of "**Spin-off**"*							
APPLIED RESEARCH PROJECTS							
Number of applied research projects which aim not only to answer a specific question which has direct applications, but also to create new products for the market in order to stimulate the economy.							
PHD STUDENTS / *Number of students doing their PhD work for the past 3 years*							
2015 - 2016							
2016 - 2017							
2017 – 2018							

GROUP 4: BASIC REQUIRED KNOWLEDGE 2/2							
	ORGANIC CHEMISTRY	**INORGANIC CHEMISTRY**	**BIOLOGICAL SCIENCES**	**BIOCHEMISTRY**	**BIOTECHNOLOGY**	**BIOLOGICAL ENGINEERING**	**BIOCHEMICAL ENGINEERING**
MASTER STUDENTS / *Number of students doing their Master work for the past 3 years*							
2015 - 2016							
2016 - 2017							
2017 - 2018							
UNDERGRADUATE STUDENTS / *Number of bachelor's holders or equivalent over 3 years*							
2015 - 2016							
2016 - 2017							
2017 - 2018							

VOCATIONAL TRAINING – 1/4								
	SCHOOL- BASED VOCATIONAL TRAINING				DUAL VOCATIONAL TRAINING			
	Theory and practice are learned at a vocational school, with extended periods of training at a company where the knowledge acquired at school is applied.				*Programmes usually comprise theoretical as well as practical elements. Maximum of two days a week for the theory and the rest of the time will be spent at a company.*			
	Number of Trainees over 3 years			*Number of people who have been trained and who are active in their area of expertise. (In companies or self-employed)*	*Number of Trainee over 3 years*			*Number of people who have been trained and who are active in their area of expertise. (In companies or self-employed)*
TOPIC	**2015**	**2016**	**2017**	**2018**	**2015**	**2016**	**2017**	**2018**
Aerospace Engineering	☐	☐	☐	☐	☐	☐	☐	☐
Biomedical Engineering	☐	☐	☐	☐	☐	☐	☐	☐
Chemical Engineering	☐	☐	☐	☐	☐	☐	☐	☐
Civil Engineering	☐	☐	☐	☐	☐	☐	☐	☐
Electrical Engineering	☐	☐	☐	☐	☐	☐	☐	☐
Electronic Engineering	☐	☐	☐	☐	☐	☐	☐	☐
Manufacturing and Production	☐	☐	☐	☐	☐	☐	☐	☐

VOCATIONAL TRAINING – 2/4								
	SCHOOL- BASED VOCATIONAL TRAINING				DUAL VOCATIONAL TRAINING			
	Theory and practice are learned at a vocational school, with extended periods of training at a company where the knowledge acquired at school is applied.				*Programmes usually comprise theoretical as well as practical elements. Maximum of two days a week for the theory and the rest of the time will be spent at a company.*			
	Number of Trainees over 3 years			*Number of people who have been trained and who are active in their area of expertise. (In companies or self-employed)*	*Number of Trainees over 3 years*			*Number of people who have been trained and who are active in their area of expertise. (In companies or self-employed)*
TOPIC	**2015**	**2016**	**2017**	**2018**	**2015**	**2016**	**2017**	**2018**
Marine Engineering								
Mechanical Engineering								
Metallurgical Engineering								
Mining, Oil & Gas Operations								
Power and Energy Engineering								
Telecommunications Engineering								
Vehicle Engineering								

VOCATIONAL TRAINING – 3/4								
	SCHOOL- BASED VOCATIONAL TRAINING				DUAL VOCATIONAL TRAINING			
	Theory and practice are learned at a vocational school, with extended periods of training at a company where the knowledge acquired at school is applied.				*Programmes usually comprise theoretical as well as practical elements. Maximum of two days a week for the theory and the rest of the time will be spent at a company.*			
	Number of Trainees over 3 years			*Number of people who have been trained and who are active in their area of expertise. (In companies or self-employed)*	*Number of Trainees over 3 years*			*Number of people who have been trained and who are active in their area of expertise. (In companies or self-employed)*
TOPIC	**2015**	**2016**	**2017**	**2018**	**2015**	**2016**	**2017**	**2018**
Material Engineering	☐	☐	☐	☐	☐	☐	☐	☐
IT	☐	☐	☐	☐	☐	☐	☐	☐
Software	☐	☐	☐	☐	☐	☐	☐	☐
Agricultural engineering	☐	☐	☐	☐	☐	☐	☐	☐
Food Science & industry	☐	☐	☐	☐	☐	☐	☐	☐
Metal works	☐	☐	☐	☐	☐	☐	☐	☐
Refrigeration & Air Conditioning	☐	☐	☐	☐	☐	☐	☐	☐

VOCATIONAL TRAINING – 4/4								
	SCHOOL- BASED VOCATIONAL TRAINING				DUAL VOCATIONAL TRAINING			
	Theory and practice are learned at a vocational school, with extended periods of training at a company where the knowledge acquired at school is applied.				*Programmes usually comprise theoretical as well as practical elements. Maximum of two days a week for the theory and the rest of the time will be spent at a company.*			
	Number of Trainees over 3 years			*Number of people who have been trained and who are active in their area of expertise. (In companies or self-employed)*	*Number of Trainees over 3 years*			*Number of people who have been trained and who are active in their area of expertise. (In companies or self-employed)*
TOPIC	**2015**	**2016**	**2017**	**2018**	**2015**	**2016**	**2017**	**2018**
Plumbing								
Motor engineering								
Wood engineering								