

3.0 Career Opportunities in Agricultural Engineering

The numerous roles that Agricultural Engineers has to play in National Development brings to the for employment opportunities. Jobs are available for graduates of the profession in the following areas.

3.1 Government Ministries

Nigeria operate three tiers of government, namely federal, State, and local government. Each of these tiers of government operates ministries where agricultural engineers are employed. At the federal level, these include ministries of Agricultural, water Resource, Environment, Science and Technology. Each of the ministries has department under which many agricultural engineers are contributing their quota towards nation development. For example, the ministries of water Resources has department of irrigation and Drainage, Flood and Erosion Control etc. under this ministry also there are 11 River Basin Development Authorities where Agricultural Engineer work. At the State and local government level, similar ministries exist and each of them has an engineering division where and tractor hiring company agricultural engineers work.

3.2 Government Parastatal

There are many government agencies, which are either supervised by some ministries or are directly supervised by the Chief Executives of the State or at the federal level by the presidency. Some of these have been phased out but many of them are still operational and since their services are agricultural based, they employ agricultural engineers. These include Tractor and Equipment Hiring companies, Environmental Protection Agencies in the State and at the federal level, Nation Centre for Agricultural Mechanization; Agricultural Mechanics and Operators Training Centre, Rural Agro-Industrial Development Scheme, Poverty Alleviation Programmes, Agricultural Mechanization Authority, River Basin Development Authority, Erosion and Flood Control Programmes etc.

3.3 Private Companies and Industries

In the private sector, there are many opportunities for Agricultural Engineers in the service and production industry. In this sector, there are companies who provide agricultural service with engineering content. There include companies involved in marketing and maintenance of agricultural machinery, agrochemicals and provision of agricultural service of different forms. Companies in this category include Tractor and Equipment (Division of UAC); SCOATRAC (Division of SCOA), Diezengof, Levantis Technical, Addis Engineering, Protect Nig Ltd and a host of other smaller indigenous companies. In the production sector, there are food processing

companies and equipment manufacturing companies, flourmills, rice mills. Starch mills, tractor assembly plant milk processing companies, beverage manufacturers confectioneries manufacturers (eg. Steyr, west African milk company (WAMCO), Nigeria flour mill plc; pokobros Ltd; Life vegetable oils, Anambra vegetable oil Manufacturing company (AVOP); Olympic Maize milling industry; Bacita Sugar company Ltd; National fertilizer company (NAFCON); Ad palm Ltd, Rison palm Nucleus Estate, etc).

3.4 Educational Institutions

Educational institutions in Nigeria include colleges of Agricultural, Education, and Technology. There are also polytechnics and University. Some of the institutions are listed in section 5.3 of this book. Each of the institution has a department of Agricultural Engineering as well as a farm operations Centre where Agricultural Engineers are employed. In some of the institutions, some Agricultural Engineers work in the faculty of Agricultural either in crop science, Agronomy or soil science.

3.5 Research and Development Institutions

There are many research and development (R&D) institutions in Nigeria. Under the federal ministry of Agriculture, there are over 18 Agricultural Research institutes. Each of the institutes has an Agricultural Engineering Department as well as field Demonstration farm and industrial Development units where Agricultural Engineers work. There are some research institutes under the federal ministry of science and Technology where Agricultural Engineers work

3.6 International Organizations

There are a number of international organizations resident in Nigeria who are involved in agricultural and rural development and so employ Agricultural Engineers. These include the United Nations Development Programme (UNDP), Food and Agricultural Organization (FAO), World Bank, International Labour Organization (ILO), United Nations Educational and Scientific Organization (UNESCO), American Agency for International Development (USAID). In addition to these, there are some Non-Government Organizations (NGOs) who are involved in Agricultural and rural Development. These include Ford Foundation, Warnock International, United Nations Fund for Women (UNIFEM), International Fund for Agricultural and Development (IFAD) etc

3.7 Self Employment

Self employment is an area that has not been fully explored or exploited by Agricultural Engineers. Opportunities exist in consultancy field in almost all government parastatals and the

NGOs as well as companies in the private sector. These include all areas of project feasibility, implementation, monitoring and evaluation. Many food processing industries need agricultural raw materials, which can be supplied by Agricultural Engineers, especially those interested in post harvest systems. There are also wide- ranges of opportunities in storage. Young Agricultural Engineers can also get into operation and maintenance of equipment and logistics business (Haulages)