

# **FARM STRUCTURES AND ENVIRONMENT: THE BEDROCK OF FOOD SECURITY**

**BY**

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## **ABSTRACT**

Food Security is a situation where food is produced in sufficient quantity, there is an effective method of its storage to be available at all seasons of the year and a mechanism exist for its even distribution across the country such that it can easily be accessible and affordable by all.

This is only achievable if there are good farm access routes to facilitate the movement of farm inputs such as machinery, human labour, planting materials and agro-chemicals to the farms, adequate structures to keep the bumper harvest and easy movement of the harvest to the non-producing areas where the demand is often more required. These farm routes, storage structures and other facilities which ensure effective agricultural practice constitute farm structures as facilities and the acquisition of the knowledge required in effectively providing them constitute the discipline of farm structures and environment.

The Professorial Inaugural Lecturer explains the meaning of farm structures both as a facility and discipline, their functions in the provision of accommodation and protection; conditioning or modification of the environment and accessibility. Their evolution from the early time when they existed naturally, through the intervention of man dating back to 9,500BC to their present advanced form is discussed.

Their classification into farm houses, buildings for crop production, buildings for crop processing, crop storage structures, livestock structures and miscellaneous structures are discussed while reasons are advanced for the appropriateness in the choice of title for the lecture

The lecturer discusses his contributions to the advancement of the discipline in the areas of Road Map for the Unit development, Establishment of a Laboratory; Development of the Mijinyawa Agricultural Engineering Series as teaching materials for the discipline and the formation of a Network to promote the discipline.

In contributing to making the farm environment conducive, the Lecturer discusses his efforts in the use of wood products and termite mound clay as construction materials for grain silos, making the structure available within the reach of the Nigerian peasant farmer; reduction in the cruelty with which animals are handled during transportation and reducing the danger to which the handlers are exposed through the development of stationery and mobile loading ramps; established that farmers are exposed to excessive noise and made a number of recommendations to reduce the negative effects; promotion of the greenhouse for increase food production through developing a portable Hand Held Glasshouse Roof Cleaner and experiment the possibility of greenhouse usage in Irish potatoes production under the tropical climate of Ilorin, kwara State , Nigeria; Development of Windrosettees for a number of locations to aid effective farmstead planning and reduce the effect of wind damage on farm structures; and partial replacement of gravel with palm kernel shell in concrete for the construction of a number of farm structures.

The Lecturer recommends the need for manpower development for effective training of students to handle farms structures projects, seriousness on the part of government to implement food security programme and attitudinal change on the part of present –day Nigerian peasant farmers.