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**EXCELLENCE IN AGRICULTURAL EDUCATION:
A CHALLENGE FOR AFRICA.
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**TOPIC:
IMPLICATIONS FOR AGRICULTURAL
EDUCATION IN AFRICA**

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1. INTRODUCTION

The essence and spirit of vocational education and teaching are captured in the following words in a report on the Conference of Ministers of Education of African States, held in Lagos, Nigeria, between 27 January and 4 February 1976, under the auspices of UNESCO with the co-operation of the Organisation of African Unity (OAU) and the Economic Commission for Africa (ECA).

"The meeting discussed a concept of basic education, linking formal and non-formal education in the framework of lifelong education and therefore calling for new types of relationships between the education system and the environment, called for educational approaches which would both develop the potential of each individual and promote advancement of economic and material levels by putting into practice learning procedures that are directly linked to the environment in which the population lives and by incorporating suitable productive work related to study subjects. It also suggested radical reforms in teacher training to enable teachers to serve a wider range of clientele, including adults, to teach practical tasks as well as theoretical subjects, including some manual and vocational work linked with the world of work and the economy."

In terms of the Lagos Declaration, the aim was "to provide a new form of education so as to establish close ties between the school and work; such an education, based on work and with work in mind, should breakdown the barriers of prejudice which exist between manual and intellectual work, between theory and practice, and between town and countryside."

Thus, a generation 'ago, African Ministers of Education recommended a paradigm shift in terms of which practical work was to be incorporated in general education, with a view to improving the quality of life of the continent's inhabitants. For various reasons, mainly political, not much has been achieved by successive African governments in line with the Lagos Declaration. Hence the current call by a new breed of politicians and some academics for a new way of thinking and doing things differently, in order to lift the continent out of its socio-economic morass. This new paradigm shift is at the heart of the newly established African Union (AU) and its development arm, the New Partnership for Africa's Development (**NEPAD**).

This is not the time or place to elaborate on the contribution of agriculture to national economics, which, in any case, varies from one country to another. Suffice it to say that, through

the value chain, agriculture is both a source and consumer of resources. While large-scale commercial farming could rightly be described as business, small-scale farming is a way of life - a supportive base for rural communities, with wide political, economic and socio-cultural ramifications.

Through appropriate structures, systems and procedures, it is the task of vocational agricultural education to underpin both sub-sectors of agriculture, with a view of increasing productivity and production.. In the current African situation, with extreme social and economic disparities and high levels of poverty, the enormity of the task cannot be over-emphasised. The ultimate goal should be the development of human capital at all levels so that Africans may become self-reliant and assume responsibility for their own socio-economic advancement with less external assistance, which has hitherto created dependence. This is the challenge! Are we equal to it?

2. PROFILE OF AFRICAN PRODUCERS AND DIFFERENCES BETWEEN RESOURCE-POOR AND WELL-RESOURCED AGRICULTURE.

Smallholder agriculture in Africa has characteristics that distinguish it from large - scale (commercial) agriculture. In contrast with large-scale farming, small-scale farming is a low input/low output system with wide social dimensions impinging positively or negatively on productivity. Whereas large-scale producers usually work under leasehold or freehold conditions, small-scale producers, who are not homogeneous, mostly operate on small allotments of land under communal tenure. In most African countries, small-scale farming is the linchpin of rural development.

2.1 PRODUCER PROFILE (Annex AI)

Using South Africa as an example, and taking income as the main determinant, producers fall under the following categories:

2.1.1 Well-resourced commercial producers with farming as the sole or substantial means of livelihood. Mainly full-time, leasehold, or freehold tenure.

2.1.2 Resource-poor producers in three sub-categories:

2.1.2.1 Pre-commercial (step-up) with a reasonable income from farming. Resource-limited; communal, leasehold, freehold tenure. Progressive.

2.1.2.2 Semi-commercial (step-in) with insufficient income from farming. Severely resource-limited; communal and other tenure arrangements, including sharecropping.

2.1.2.3 Sub-commercial (subsistence) with an erratic income; negligible or no surplus; communal tenure and share-cropping; lack of resources; restricted upward mobility. For convenience, vegetable gardens (household, school, group) are placed under this sub-category.

2.2 RESOURCE-POOR VIS-A-VIS WELL-RESOURCED PRODUCERS (Annex All)

As shown below, there are significant differences between resource-poor and well resourced producers.

RESOURCE-POOR		WELL-RESOURCE	
2.2.1	Communal land tenure with restricted security and non-negotiability	2.2.1	Freehold or leasehold tenure with permanent or restricted security and negotiability
2.2.2	Low production capacity	2.2.2	High production capacity
2.2.3	Low input costs with little or no capital formation	2.2.3	High input costs with reasonable capital formation
2.2.4	Procurement, distribution and marketing problems	2.2.4	Satisfactory procurement, distribution and marketing systems
2.2.5	Weak extension services and low technological awareness	2.2.5	Strong extension services and high technological awareness
2.2.6	Low management and technical skills	2.2.6	High management and technical skills
2.2.7	Weak physical infrastructure	2.2.7	Satisfactory physical infrastructure
2.2.8	Production for consumption or local market only	2.2.8	Production for local and external markets
2.2.9	Inadequate or no credit facilities	2.2.9	Access to credit facilities

How to modernise the resource-poor sub-sector and integrate it with the main-stream of commercial agriculture is the challenge to all stakeholders in the agricultural industry. It is important, in this regard, that farmers in each category, irrespective of size, be assisted to improve their upward mobility, with emphasis on productivity, sustainability and self-reliance.

3. THINKING AND DOING THINGS DIFFERENTLY

Speaking about the Millennium Africa Recovery Programme (now NEPAD), President Thabo Mbeki underscored the need for "a critical examination of Africa's post-independence experience and accept that things have to be done differently." This is the new paradigm shift that seeks to translate ideas into positive action - implementation not talk.

The situation in Africa, with reference to vocational agricultural education, requires new thinking and radical action. With a view to improving the effectiveness of our work, we need to review the total environment in which we operate - physical, political, economic and social. We need to focus afresh on the primary purpose of our profession, that is, to educate and train people, young and old, who are both the initiators and beneficiaries of development. We need to re-emphasise the organic relationship between agricultural education and rural development, whose linchpin is agriculture. It is time to implement the good and progressive ideas embodied in the Lagos Declaration of 1976.

Let us now critically examine the main issues and factors which positively or negatively affect or influence agricultural education.

3.1 GOVERNMENT

Good governance is a sine qua non for development. It is the responsibility of government to maintain stability and provide security for all citizens, who, within the law, have the right to ply their trades without interference from the authorities. Furthermore, it behoves government to formulate sound policies based on knowledge and experience and to protect the natural resource base, which determines the scope and nature of farming activities.

3.2 GENERAL EDUCATION

Development is accelerated or retarded by the quality of education. High levels of literacy and numeracy enable people to cope better with the issues and problems of socioeconomic change. Low standards of education affect entry into tertiary education.

Primary school children should be initiated into the values and practices of vocational agriculture through school gardens and participation in appropriate and relevant farming activities.

Educational guidance should be given at secondary level and there should be integration of general and vocational education.

3.3 TARGET GROUPS (CLIENTBASE)

The education and training needs of resource-poor producers are:

- 3.3.1 Basic literacy and numeracy to increase comprehension and improve efficiency
- 3.3.2 Technical and practical skills to improve productivity.
- 3.3.3 Business and management skills to cope with the commercialisation of small holder agriculture.
- 3.3.4 Formation of Farmers Organisations - associations, commodity groups and co-operatives.

Well-resourced producers, who are generally better educated, require short courses on special topics like liberalisation and globalisation. Otherwise they rely on their own knowledge and ingenuity to deal with problems relating to their business. Induction courses are suggested for new entrants to farming - graduates, businessmen and professionals.

3.4 AGRICULTURAL EDUCATION INSTITUTIONS

Agricultural universities and colleges produce high-level manpower - teachers, scientists, extension workers and policy-makers. Some producers have received training in these institutions, especially at college level, where the bias is towards practical work

Under the new paradigm, thinking and doing things differently in tertiary agricultural institutions means the following, inter alia:

- 3.4.1 Designing agricultural teaching programmes that are in tune with the environment, both natural and socio-economic. This implies less rigid curricula and syllabi.
- 3.4.2 Reviewing teacher training and examination systems. As is the case in other professions, teachers should have proper professional qualifications or, at least, some exposure to teaching approaches and techniques.
- 3.4.3 Establishing more flexible entry requirements, including the recognition of prior experience in agriculture. Consideration, in this regard, should be given to compulsory pre-entry training or appropriate community service.

- 3.4.4 Interacting with stakeholders and target groups, with special attention to the research and training needs of resource-poor producers.
- 3.4.5 Encouraging mutually beneficial co-operation among universities, on the one hand, and between them and agricultural colleges, on the other.
- 3.4.6 Adopting a more developmental approach, with special emphasis on rural development.

4. CONCLUSION

In Africa, there are four main reasons for the shortage of trained manpower at all levels.

- 4.1 Insufficient funds for facilities, equipment, staff salaries and teaching materials. This is a matter of policy and priorities.
- 4.2 Insufficient supply of suitably qualified applicants to tertiary institutions. This is an educational issue.
- 4.3 Poor remuneration of agricultural scientists and technicians in relation to other professions. This is a policy issue.
- 4.4 Poor image of agriculture as an occupation. This is a social and educational issue.

Appropriate resolutions on these issues, emanating from this august, conference, might have a solutary effect on African governments and their well-wishers.

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TENURE/ TIME

CATEGORY/ INCOME

Leasehold/ Freehold
Full-time

1

Commercial
Substantial

Various
Full-time

2

Pre-commercial
Reasonable
(step-up)

Various
Part-time

3

Semi-commercial
Insufficient
(step-in)

Communal
(pto)
Variable

4

Sub-
commercial
erratic

(sub
sistence)

PRODUCER PROFILE BASED ON INCOME

1 = COMMERCIAL

2-4 = RESOURCE-POOR