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IMPACT ASSESSMENT OF THE UNIFIED AGRICULTURAL EXTENSION SYSTEM ON AGROFORESTRY DEVELOPMENT, IN OYO STATE

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ABSTRACT

The study assessed the impact of the unified agricultural extension system (UAES) on the adoption of agroforestry (AF) technologies in Oyo state, Nigeria. Modified stratified multistage random sampling technique was used, employing two sets of open-ended and structured questionnaires as the study tool. Study populations were the farmers and extension agents (EAs) under Oyo State Agricultural Development Program (OYSADEP). One Hundred and Twenty-Five (125) and Ninety (90) questionnaires respectively were administered on the Farmers and Extension Agents, randomly selected from thirty(30) percent of the total number of cells in each block under OYSADEP's administrative zones. Descriptive and chi-square statistics were used to analyse the data generated. The analyses revealed that seventy (70) percent of the extension personnel interviewed who had spent between five and ten years in service knew little or nothing about agroforestry. Also, less than half of the respondents (47.8%) were introduced to farm forestry by OYSADEP extension agents. Apart from this, more than ninety-six percent of the farmers were found to be male, with most of them (71.5%) having only primary school education. Chi-square statistics at 0.01 probability level showed that tree husbandry is not strange to farmers and that farm forestry farmers were convinced on the importance of trees on farms. The analyses further revealed that OYSADEP extension agents were not providing incentives to encourage private participation in agroforestry practice; that OYSADEP extension personnel had no formal training in forestry and that OYSADEP was not favorably disposed to agroforestry extension. All these showed that rural farmers were aware of the importance of trees on farm, although not through OYSADEP extension network.

INTRODUCTION

The importance of Forestry to the socio-economic and ecological environment of Oyo state cannot be over emphasized. Forestry as a land use activity is however disadvantaged in view of:

- The long gestation period of most tree crops;
- The dispersed distribution of forest benefits; and
- Tree being assumed to make less intensive use of land compared to other land use activities (agriculture, infrastructure, industrialization, etc) – Adeyoju, 1975.

In spite of the disadvantages, adverse impact of tree-less environment is better imagined. Generally, there fore the balance between ecological considerations and economic development must be maintained because none of the other land use activities can perform the "environment amelioration" functions of the forests. This balance could be achieved by the adoption of a land use system, which will maintain environmental quality without hindering the cultivation of arable crops. Farming with trees has been identified as a multiple land use approach, which is environment friendly, and economically and socially suitable.

Multiple land use is a conscious or deliberate use of land for the concurrent production of more than one land-based product (Popoola, 1990). In agriculture and forestry, it is the conscious or deliberate use of land for more than one product. The overall goal is to optimize the use of land per unit area while at the same time applying the principle of sustained yield. However, this land use system has some technical intricacies, which may not be easily understood by farmers unless an effective and technically efficient extension network is available. This may adversely impact adoption as observed for some agro forestry models such as alley farming (Popoola, 1990).

Before 1991, parallel extension services existed in the various departments of the Oyo State Ministry Of Agriculture And Natural Resources (MANR); the State's Agricultural Development Program (OYSADEP); and the Federal Ministry Of Agriculture And Natural Resources (FMANR). This was replaced in 1991 by, the Unified Agricultural Extension System (UAES) in most state's Agricultural Development Programmes (ADPs) in Nigeria. The UAES has full administrative control over the entire extension services covering Crop, Livestock, Fisheries, Forestry, and Women In Agriculture (WIA). It is a simple professional service capable of providing farmers with sound technical advice on their farming operations (Benor, Harrison and Baxter, 1984). All technologies, which relate to each farming system, be it production or marketing of crops, fishery or forestry under the system, are channeled through a single facet. The facet is the village extension workers (VEWs) or extension agents (EAs) who is supported by the subject matter specialists (SMSs), who advice on more complex problems. The system aim at taking cognizance of the hitherto neglected aspects of land use practices e.g. forestry, agro forestry and fisheries, and making multiple land use system it's major focus.

As a rural development strategy, multiple land use requires an effective constant flow of information within and between rural communities to ensure it's success. The requirement is borne out the large gaps existing between development initiatives and it's adoption by rural dwellers (Azeez, 1997). Agro forestry- a development innovation is an integral part of multiple land use system aimed at afforestation and reforestation. In agro forestry, trees and woody shrubs grow together with agricultural crops and or pasture and livestock. An economic and ecological interaction exists between the trees and the non-tree components of the system (Kang, 1996). In view of the administrative roll in the entire extension services, OYSADEP is assumed to have control over diffusion of agro forestry innovations in the state. The UAES is supposed to have addressed the limitations of past efforts at rural development (Azeez, 1997). This paper thus aims at assessing the extent to which UAES has been able to address forestry (including agro forestry) extension objectives which is the provision of problem-oriented education that helps in meeting the priority needs of forest resources management and utilization. The multiple-use aspects of land management as well as the environmental constrain to forest resources management and utilization was also considered.

MATERIALS AND METHODS

THE STUDY AREA

The entire study area - Oyo state, Nigeria, is made up of 33 local government areas and covers a land area of about 27,160Km^2. It is located between latitude 7° and 9° north and longitude 3° and 5°east (Fig. 1). The study area is bordered by Osun state in the east, Kwara State in the north,

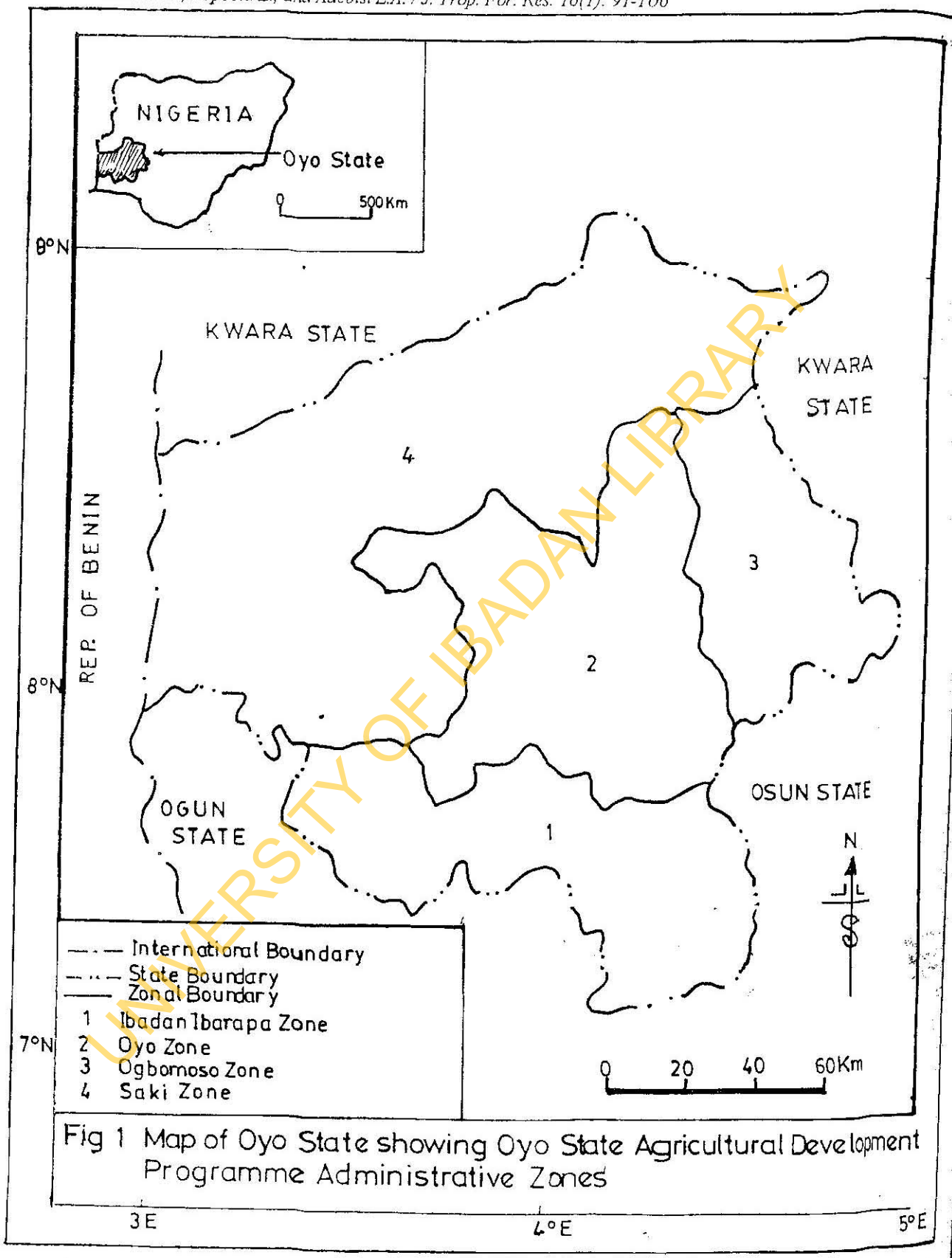

Fig 1 Map of Oyo State showing Oyo State Agricultural Development Programme Administrative Zones

Ogun State in the south and the republic of Benin, in the west. By the 1991 population census figures, Oyo State is projected to have 4,504,363 people by the year 2000.

POPULATION AND SAMPLING

The population is made up of farmers in Oyo State and the EAs of OYSADEP. Modified stratified multistage random sampling technique was used to ensure equal chance of selecting each member of the population. This reduced bias due to sampling.

The entire area was stratified into four, based on OYSADEP's administrative zones viz Ibadan/Ibarapa, Shaki, Ogbomosho and Oyo zones (Fig. 1). Three of these zones were first randomly selected using a simple scientific calculator. At the second stage, fifty percent of the total number of blocks in each sampled zones were also selected to make for adequate representation of the blocks. This was also achieved using the scientific calculator. Hence six, four and five blocks each for Ibadan/Ibarapa, Shaki, and Oyo zones were selected. In the third and final stage, thirty percent of the total number of cells in each block earlier selected was finally sampled using the probability function of a scientific calculator. A total of one hundred and twenty questionnaires were administered on farmers while ninety questionnaires were administered on extension personnel throughout the study area.

STATISTICAL ANALYSIS

Descriptive and inferential statistics were used to analyze the data generated. Relevant demographic data such as age, educational qualification and gender were obtained and analyzed using simple tables. Further, two null (Ho) hypotheses were tested using chi-square (X^2) statistical test. The null hypotheses were:

Ho_1 "there is no awareness of the importance of agro forestry among rural farmers" and

Ho_2 "awareness of agro forestry, where present, is not due to the unification of agricultural Extension services".

The first hypothesis relied on the "goodness of fit test" in analyzing the importance of forestry among the rural farmers based on the responses to the variables in the questionnaires e.g. How good is tree husbandry? The second hypothesis employed the "Test of independent" to find out if awareness of the importance of forestry, where it exist, is UAES dependent. Both tests were based on the chi-square formula:

$$X^2 = \frac{[\ \Sigma\Sigma\ (\ Oij\ -\ Eij\ )^2\ ]}{Eij}$$

where Oij = observed response; and
Eij = expected response.

RESULTS AND DISCUSSION

From the study, it is evident that institutional, socio-economic, and ecological factors had a significant effect on the adoption of agro forestry practices in the study area. For example, women

were not involved in active farming as shown by the data generated. More than ninety-six percent (96%) of the farmers were males while more than eighty-five percent (85.7%) of the extension personnel were also males (Table 1). However, while none of the farmers were single, at least twenty-four percent (24.68%) of the EAs were unmarried (Table 1). Furthermore, majority of the farmers did not have more than primary school certificate (Table 2) and they are of the opinion that the trees were a gift of nature and therefore had less fair attitude towards forestry. The study also revealed that most of the farmers were producing both for domestic consumption and commercial purposes (Table 3). They were constrained by smallholdings from which they maintained their extended families. Invariably, every square meter of their farm was devoted to producing food crops to meet subsistence needs. Expectedly, this put tree planting at a disadvantage.

Forestry being a long-term venture could however be enhanced by the pattern of land ownership. Land owned permanently, will favor forestry practices. This includes land acquired by inheritance or purchased lands as opposed to land squatted on or assessed through lease. The latter may affect tree tenure in the study area. Majority of the farmers interviewed (76.5%)however, got their land by inheritance (Table 4). Again, the issue of fragmentation of land in this land tenure system places some limits on forest tree husbandry.

Importance and use of trees on farms

Agro forestry protects crops, reconstitutes and enriches soil. Similarly, agriculture assumes a stable and balance character when combined with trees bearing edible fruits, fodder or fuel wood. According to Talat and Bensalam (1982), trees and forestry activities have preponderant role to play in supporting both agriculture and livestock production. Trees, they stressed, also protect crops against wind erosion and desiccation. Farmers supported these assertions. Majority of them believe that planting any fruit tree at all, on their farms was important. However, their reason for choice of preffered trees differs. While the soil amelioration benefits of trees and the influence of trees on the environment was lost on most of the farmers, some of them agree that deforestation leads to erosion (Table 5). On farmer's choice of land use practice to arrest deforestation, various agricultural practices that ensure perennial availability of arable crops were more favored than agro forestry practices (Table 7). This invariably implies that erosion in the study area may result from soil nutrient depletion owing to over exploitation of the land solely for agricultural benefits.

Extension And Services Rendered

According to the survey, more than seventy percent (70%) of the extension personnel (under UAES) that had put in between five and ten years of service, agreed to knowing nothing about forestry (Table 8). This calls for re-examination of UAES as an operational strategy under OYSADEP after five years, more so when the contribution of forestry to the state's internally generated revenue (IGR-Table 9) is considered.

Bearing in mind that the scope of extension services should embrace the total life of the people (Williams *et al*, 1984); and that rural people are dependent upon the forest resources for ensuring household, food and economic security (Olawoye, 1996), the OYSADEP's UAES is not addressing forestry with the seriousness it deserves. Apart from technical services, the extension unit of OYSADEP needs to encourage farmers to practice farm forestry through the provision of

Table 1: Sex And Marital Status Of Respondents

	SEX		TOTAL	MARITAL STATUS		TOTAL
	MALE	FEMALE		SINGLE	MARRIED	
Farmers	98.00	04.00	102	00	102	102
%	96.08	03.92	100	00	100	100
Extension personnel	66.00	11.00	77	19	58	77
%	85.71	14.29	100	24.68	75.32	100

Source : Field Survey, 1996

Table 2 : Educational Status Of Respondents

	Farmers		Extension personnel	
Educational level	Frequency of response	%	Frequency of response	%
No formal education	34	33.20	00	00
Primary education	39	38.20	08	00
Secondary education	17	16.70	00	10.30
Tech. / Vocational	05	04.92	00	00
Teacher training	01	00.98	00	00
N.C.E / O.N.D	00	00.00	43	55.12
HND / Bachelors	06	05.90	23	29.48
Higher Qualifications	00	00.00	04	5.10
Total	102	100.00	78	100

Source : Field survey, 1996

Table 3: Mode Of Farming Of Respondents

Mode	Frequency of response	%
Mainly Subsistence	13	12.7
Subsistence / Commercial	79	77.5
Commercial	10	9.8
Total	102	100.0

Source : Field Survey, 1996.

Table 4 : Modus Of Land Acquisition Among Farmers

Modus	Frequency of response	%
A. Inheritance	78	76.47
B. Purchase	01	0.98
C. Squatting	03	2.94
D. Lease	09	8.82
E. Inheritance and Purchase	02	1.96
F. Inheritance and Lease	08	7.84
G. No Response	01	0.98
TOTAL	102	99.99

Source : Field Survey, 1996

Table 5:Uses Of Trees On Cultivated Lands Of Farmers

Uses of trees	Frequency of response	%
A. Shelter	15	14.7
B. Source of fuel	10	9.8
C. Soil improvement	20	19.6
D. Amelioration of the environment	00	00.00
E. Source of fruits	35	34.31
F. Source of fresh air	00	00.00
G. Source of fuel and fruits	04	03.92
H. Soil improvement & source of fruits	03	02.94
I. No Response	15	14.71
Total	102	100.00

Source : field Survey, 1996.

Table 6: Respondents' Perception Of Causes Of Erosion

Uses of trees	Frequency of Response	%
A. Deforestation	21	20.59
B. Overgrazing	02	01.96
C. Slopes	17	16.67
D. Farming Method	07	06.86
E. Annual Fires	02	01 96
F. Others	00	00.00
G. No Response	53	51.96
TOTAL	102	100

Source: Field Survey,1996

Table 7: Soil Improvement Methods Adapted By Farmers

Methods	Frequency of response	%
A. Agroforestry	13	12.75
B. Fertilizer Application	66	64.71
C. Use of Refuse and Manure	01	00.98
D. Natural Fallow	18	17.65
E. Fertilizer Application & Use of Refuse and Manure	01	0.98
F. Fertilizer Application & Natural Fallow	03	2.94
TOTAL	102	100.00

Source: Field Survey, 1996

Table 8: Years Of Experience Of Extension Agents

Year	Frequency of response	%
A. < 5 years	13	16.7
B. 5 – 10 years	59	75.6
C. > 10 years	06	07.7
TOTAL	78	100.0

Source : Field Survey, 1996

seeds/seedlings and other technical inputs. This is however not so as most farmers procured seeds/seedlings through individual efforts (Table 20). Procuring tree seeds/seedlings should be the least of farmers' problems when considering venturing into farm forestry. Generally, motivation towards farm forestry in terms of input and loan provision is very low as could be seen from this study (Table 10).

Similarly, with the contact method employed by UAES in mind, the number of farmers, which the extension workers are supposed to contact every month, was too much for a thorough assistance and qualitative extension service (Table 11a). It is therefore not surprising that although almost sixty percent (59%) of the farmers claimed they were involved in farm forestry, only about forty percent (40%)of them were introduced to the practice by EAs from OYSADEP (Table 11b). When the opinion of the extension agents were sought on farm forestry practices among their clientele, only thirty-nine percent rated it as good, while sixteen percent were not satisfied with it. Comparing UAES with past extension strategies however, only about six percent of the EAs were not satisfied with UAES. Invariably, nothing is wrong with UAES, but its disposition to agro forestry practices; which is near nil. Report from the crop area and yield surveys (CAYS) summary files of OYSADEP

(1995) also supported this assertion (Table 14). The reason for this is however not far fetched; none of the EAs or SMSs had any formal training in forestry (Table 13). It is therefore expected (with the near-nil awareness of the EAs themselves) that effective diffusion of innovation in forestry and agroforestry cannot be assured.

Farmers Awareness Of And Involvement In Farm Forestry (Ho_1)

A null hypothesis- Ho_1, was tested using:
(a) farmers' view on the value they attached to tree husbandry;
(b) observation of extension workers on farmers' awareness of farm forestry; and
(c) the proposition that respondent farmers' can advice others to adopt farm forestry.

The tests show that even at 0.01confidence limit, the data generated is statistically significant and hence the null hypothesis is rejected. This implies that respondents' view of tree husbandry is good (Table 15). According to the extension workers, there is awareness among rural farmers of the importance of forestry (Table 16). Similarly, farmers who are into farm forestry said that they can advice their colleagues to adopt the practice. This was supported by the data generated on the issue, which was also statistically significant (at 0.01 confidence limit) when used to test Ho_1 (Table 17). From these results; it is evident that awareness of farm forestry surely exists among the farmers in Oyo State and that the benefits derived from the practice is an impetus to encouraging participants.

Dependence Of Awareness On UAES (Ho_2)

This hypothesis was also tested using the chi-square statistics, based on the data generated on the following:

(a) the experience of the extension personnel on farm forestry;
(b) the extension personnel's view on the importance of farm forestry under OYSADEP's UAES; and
(c) the sourcing of seeds/seedlings by the practitioners of farm forestry in the study area.

The tests show that:

A. either the data generated on (a) above is not statistically valid or the test is not significant at 0.05 confidence limit. However, since the data used for the test was valid, then the test was not significant and hence the Ho_2 was accepted (Table18). This implied that most of the extension personnel did not possess the relevant knowledge in forestry;
B. the predisposition of OYSADEP's UAES towards forestry is not encouraging to agroforestry development (Table 19); and
C. most of the farmers practicing farm forestry were not getting their seeds/seedlings from OYSADEP extension agents (Table 20).

It is therefore apparent that if there was an awareness of forestry and agroforestry among the farmers in the study area, it cannot be attributed to the extension network of OYSADEP.

Table 9: Percentage Contribution Of Forestry To The Revenue Of Oyo State

Year	Contribution (%)
1992	08.90
1993	04.30
1994	39.30
1996	25.40
1997	40.60

Source: MANR, Oyo State (1997)

Table 10: Input Supply By Extension Personnel To Farmers

	Farm implement		Loan	
Reaction	Frequency	%	Frequency	%
A. Yes	14	17.95	02	02.56
B. No	63	80.77	75	96.15
C. No Response	01	01.28	01	01.28
TOTAL	78	100.00	78	99.99

Source: Field Survey, 1996.

Table 11a: Introduction Of Farm Forestry To Farmers

Introducer	Frequency of response	%
A. Forestry Extension Official	00	00.00
B. OYSADEP's VEWs.	32	40.51
C. Friends	07	08.86
D. Personal Interest	28	35.44
E. No Response	12	15.19
TOTAL	79	100.00

Source: Field Survey, 1996.

Table 11b: The Numbers Of Farmers The Extension Personnel Contact Monthly

Numbers	Frequency of response	%
< 100 Farmers	32	41.6
100 – 400 Farmers	15	19.5
401 – 800 Farmers	08	10.4
801 – 1000 Farmers	07	09.1
> 1000 Farmers	15	19.5
TOTAL	77	100.1

Source: Field Survey, 1996.

Table 12: Extension Personnel Rating Of UAES

Rating	Frequency of response	%
A. Very effective	28	35.90
B. Effective	15	19.23
C. Satisfactory	12	15.38
D. Can't Say	17	21.79
E. Not Satisfactory	05	06.41
F. No Response	01	01.28
TOTAL	78	99.99

Source: Field Survey, 1996

Table 13: Forestry Training Of Extension Personnel Under UAES

Zone	Ibadan		Oyo		Shaki	
Training	Frequency of response	%	Frequency of response	%	Frequency of response	%
A.ND Forestry	00	00.00	00	00.00	00	00.00
B. Seminars / symposium (SS)	01	03.23	01	03.13	02	05.13
C. Degree	00	00.00	00	00.00	00	00.00
D. Fort Nightly Trainings(FNT)	12	38.71	13	40.63	18	46.15
E. SS & FNT	01	3.23	00	00.00	00	00.00
F. No Response	17	54.84	18	56.25	19	48.72
TOTAL	31	100.00	32	100.01	39	100.00

Source: Field Survey, 1996.

Table 14: Crop Production Estimates Of The Study Area (In Tones)

S/n	Crops	1990	1991	1992	1993	1994
01	Maize	290,000	199,245	390,028	231,074	185,401
02	Rice	-	-	824	2,625	2,883
03	Millet	-	-	308	55	1,454
04	Sorghum	38,000	22,758	16,249	27,295	29,136
05	Cassava	2,752,744	1,554,916	1,325,349	1,362,772	1,154,315
06	Cocoyam	51,904	25,589	20,118	22,678	5,417
07	Sweet Potato	-	2,649	8,317	37,200	NA
08	Yam	1,075,929	1,237,498	1,165,312	1,011,177	845,069
09	Melon	5,065	2,150	14,130	1,290	2,744
10	Okro	19,437	7,884	15,799	7,280	7,715
11	Pepper	9,755	1,203	33,207	26,005	27,136
12	Tomato	9,378	946	36,189	12,323	36,204
13	Vegetable	392	-	1,449	838	457
14	Beans	3,448	-	313	134	NA
15	Cowpea	446	6,442	9,690	7,970	10,279
16	Groundnut	2,900	616	3,725	4,568	4,784
17	Pigeon Peas	-	524	3,645	3,102	1,584
18	Soy beans	-	-	25	-	NA
19	Tobacco	-	-	351	-	NA
20	Cocoa	38,100	-	2,733	871	NA
21	Citrus	-	-	-	2,016,279	NA
22	Plantain	-	16	-	-	NA
23	Kolanut	108,100	-	-	-	NA

Source: Crops Area Yield Summary Files: Oyo State Agricultural Devt. Programme, Shaki (1995)

CONTINGENCY TABLES FOR CHI – SQUARE ANALYSIS OF HYPOTHESIS OF THE STUDY

Ho_1: There is no awareness of The Importance Of Forestry Among Rural Farmers

Table 15: Respondents' View On The Value Of Tree Husbandry

	Ibadan zone		Oyo zone		Shaki zone	
Awareness	Farmers	Others	Farmers	Others	Farmers	Others
Very Good	04	00	07	00	15	00
Good	19	00	11	00	12	09
Can't Say	02	04	04	00	00	02
TOTAL	25	04	22	00	27	11

Pearson's chi-square value/degree of freedom : 26.238 / 4
Significance value : 0.0003
Decision : Tree husbandry is not valueless.

Source: Field Survey, 1996

Table 16: Observation Of The Extension Workers On Farmers' Awareness Of Farm Forestry

	Ibadan zone			Oyo zone			Shaki zone		
parameters	VEW	BES	Others	VEW	BES	Others	VEW	BES	Others
Very good	07	00	00	03	00	00	07	00	00
Good	08	00	00	14	01	00	11	00	00
Can't say	09	00	00	05	00	00	03	00	00
No response	02	00	00	01	00	00	02	03	02
TOTAL	26	00	00	23	01	00	23	03	02

Pearson's chi-square value/degree of freedom :18.26087 / 6
Significance value : 0.00561
Decision : Farmers are aware of farm forestry.

Source: Field survey, 1996

Table 17: Whether Respondents can advise other Farmers to Adopt Farm Forestry

	Ibadan zone		Oyo zone		Shaki zone	
	Farmers	Others	Farmers	Others	Farmers	Others
Yes	24	01	20	03	27	00
No	00	01	00	00	04	07
TOTAL	24	02	20	03	31	07

Pearson's chi-square value/degree of freedom : 12.48 / 1
Significance value : 0.00041
Decision : Farmers are favorably disposed to advising their colleagues to adopt farm forestry.

Source: Field survey, 1996

Ho_2: Awareness Of The Importance Of Forestry Is Not Dependent On The Unification Of Extension Services.

Table 18: Extension Personnel's Response to Vastness in Forestry

Is respondent vast in forestry?	Ibadan zone	Oyo zone	Shaki zone	Σ
Yes	11	05	09	25
No	15	19	09	43
Σ	26	24	18	68

Pearson's chi-square value/degree of freedom : 0.2746 / 1
Significance value : 0.60026
Decision: OYSADEP's Extension Personnel are not knowledgeable in forestry.

Source: Field survey, 1996

Table 19: Extension Personnel's View On The Esteem At Which Forestry Is Held Under UAES

	Ibadan Zone		Oyo Zone		Shaki Zone	
Respondents	Yes	No	Yes	No	Yes	No
VEWs	10	15	08	23	06	17
BESs	00	00	00	00	00	03
Others	00	00	00	00	00	02
TOTAL	10	15	08	23	06	22

Pearson's chi-square value/degree of freedom : 1.6608 / 2
Significance value : 1.6608
Decision : OYSADEP is not favorably disposed to agroforestry extension.

Source: Field Survey, 1996.

Table 20: Source Of Seedlings To Practitioners Of Farm Forestry In Oyo State

	Ibadan zone		Oyo zone		Shaki zone	
Sources	farmers	others	farmers	others	farmers	Others
Govt. Nursery	08	00	10	00	00	00
Community Nursery	00	00	01	00	00	00
Individual effort	17	01	14	00	27	07
TOTAL	25	01	25	00	27	07

Pearson's chi-square value/degree of freedom : 0.4622 / 1
Significance value : 0.49659
Decision : OYSADEP's EAs are not providing incentives to encourage farm forestry.

Source: Field Survey, 1996

CONCLUSION AND RECOMMENDATIONS

The need for trees on farms cannot be sidelined, irrespective of the pressure on land. This is because there is no other alternative to the environmental amelioration benefits offered by a good mix of biodiversity source. So also, the social, cultural and economic benefits derived from forestry practices is immeasurable. Apart from the state forest reserves, which the state forestry department is ill-equipped to manage sustain ably due to several limitations, the other land areas belong to the rural people most of whom are farmers. The culture of planting trees on farms need to be encouraged and this should be done in such a way that will not affect the peasants' means of life sustenance – farming (Azeez, 1997). The only land use management strategy that can satisfy these requirements to a large extent is agroforestry.

The traditional farming system in Oyo state has some semblance of agroforestry, but amidst the present population pressure and dwindling land-man ratio, the need to adopt a dynamic system that will improve the traditional farming systems to meet present realities has become necessary. This in essence was why OYSADEP was established in 1989. The programme is supposed to be operating a UAE system and one of the advantages of UAES lies in the quality of the advisory services to the farmers by its extension staff. These services are enhanced by a better understanding of the inter-relatedness of various farm activities e.g. fishery, forestry, crop production and animal husbandry. How ever, this study shows that while there existed awareness among the rural farmers in Oyo State of multiple land use management, such awareness was not due to the UAES. This is because most of the EAs understand agricultural practices more than forestry; a defect reflected in the fact that there is no single forestry graduate among the subject matter specialists (SMSs) who are supposed to be passing information on improved technologies to the EAs at fortnightly trainings (FNTs).

The following recommendations are made:

1. Increase in government's budgetary allocation to the forestry sub sector in general to enhance forestry extension services to the needing clientele;
2. Improvement in efforts geared towards generation of fund from other non-governmental sources towards forestry development;
3. Encouragement of private forestry practices and non-governmental organizations (NGOs) in agroforestry development;
4. Provision of economic incentives by the forestry departments to farmers participating in farm forestry to attract other farmers. Such incentives may include viable tree seeds/seedlings, tools, nursery equipment, propagules and other silvicultural implements. It should also include soft loans to back up investments in private forestry; and
5. Re-appraisal of the unified agricultural extension system towards acceptance of the forestry sub sector as a unifying link in agricultural development.

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