Journal of Biology, Agriculture and Healthcare
ISSN 2224-3208 (Paper) ISSN 2225-093X (Online)
Vol.4, No.26, 2014

Comparative Study of Training Needs of Forestry Workers in Oyo and Osun States, Nigeria

Ayandiji, A.[1*] and Adekunle O.A.[2]
1.Department of Agricultural Economics and Extension, Bowen University, P.M.B 284,Iwo Nigeria.
2. Department of Agricultural Extension and Rural Development, University of Ilorin, Ilorin. Nigeria.
* E-mail of the corresponding author: aadebamiji@gmail.com

Abstract
The forest industry in the study area is in the verge of collapse due to the increasing scarcity of the major wood forest products. Rural societies in the states also depend on varied non timber forest products and services that are currently being jeopardised due to diminishing forest. Therefore, forestry workers in the study area need to possess the skills, knowledge, and adequate resources to help farmers within the forest area. The specific objectives are to:(a) ascertain the personal characteristics (sex, age, marital status, number of children) of respondents involved in forestry activities in the study area.(b) examine training needs of forestry workers involved in forestry activities in the study area. The hypotheses to be tested is There is no significant relationship between the selected personal characteristics (sex, age, marital status, number of children) of respondents and their training needs in the study area. 50% of forestry workers were randomly selected from each state selected for the study. Major findings from the study revealed that: forestry workers were generally male across the states and categories. 50.0%, and 66.7% had spent 6-10 years in the service of Osun and Oyo States respectively; medium level ($\bar{x}$ = 3.0 – 3.99) in Osun and Oyo States, Vocational staff perceived they need training in most area. Professional needs training in problem solving approach (WMDS= 10) in Oyo State, and Tree/Shrub establishment (WMDS= 9.0) in Osun State. The implication of this study is that professionals and vocational staff need to improve their knowledge, skills and attitude in forestry activities. It is therefore recommended that Staffs should be given constant retraining to improve their performance and sustain forest benefits coordinated and funded by the governments.

Introduction
Forest resources management is the use of forests and forest lands in a way and at a rate that maintain forest biodiversity, productivity, regeneration capacity, vitality and potential to fulfil relevant ecological, economic and social functions at the local, national, and global levels (FAO, 2001). This does not cause damage to other ecosystems**.** It includes a range of human interventions that affect forest ecosystems. These activities include both conservation and economic activities such as extraction of timber, planting and replanting of various species, cutting roads and pathways through forests, and techniques for preventing outbreak of fire. Forest management is an effort to develop existing natural forests as managed ecosystems that maintain the rights of their owner to the benefits of commodity production, while ensuring biodiversity conservation and environmental benefit (Clark 2004). Good management also upgrades the forest resources in both quantitative and qualitative terms. Through, culling and selection harvest, forest management addresses several rural development needs and offers the following opportunities:
1. Viable and productive land use alternative
2. Significant economic advantages
3. Large scale forest protection and management
4. The best chance to engage total people in the stewardship and conservation.

Forest management provides a promising alternative to depletion of forest resources within primary and secondary topical moist forests. It controls and regulates harvesting, combined with silvcaltural and protective measures, to sustain or increase the commercial value of subsequent spends: It also relies on natural regeneration of nature species (NRC 1993). Forest management systems seek to protect forest cover, ensure the reproduction of commercially important species and deride continuing economic, social and environmental benefits from the forests. Forest Resources management is also important in Nigeria because of the role forestry plays in foreign exchange earning. Forestry is a source of revenue to government and the private sector. This is through the harvesting, processing and sale of forest produce- ranging from wood to non-wood forest produce. For example, between 1990 and 1994, Edo State government generated more than N62 million from Okomu forest reserve (Famuyide and Oguntala, 2000). Furthermore, forestry revenue in Akwa Ibom State accounted for about 30 percent of the state's total internally generated revenue between 1988 and 1996 (Udo, 2002).

Nigeria and Sudan were the two largest losers of natural forest between 2000 - 2005, largely due to subsistence activities. Forestry development in Nigeria was dated back to 1889 with emphases on forest reservation and repletion of timber exploration (FAO 1999). However in 1980's, demand for forest products especially timber became insatiably high as a result of increasing human population, pressure and economic

growth. Moreover, problems including environmental degradation, the erosion of rural communities (migration of rural youths to seek jobs in urban areas), the elimination of small family farms from agriculture, and the inadequate conservation of fragile lands have made agricultural sustainability a significant concern (Chizari et al., 2006). The forest industry in the study area is in the verge of collapse due to the increasing scarcity of the major wood forest products. Rural societies in the state also depend on varied non timber forest products and services that are currently being jeopardised due to diminishing forest.

Therefore, forestry workers in the study area need to possess the skills, knowledge, and adequate resources to help farmers within the forest area. The specific objectives are to: (a) ascertain the personal characteristics (sex, age, marital status, number of children) of respondents involved in forestry activities in the study area.(b) examine training needs of forestry workers involved in forestry activities in the study area. The hypotheses to be tested is There is no significant relationship between the selected personal characteristics (sex, age, marital status, number of children) of respondents and their training needs in the study area.

Methodology

Selected State (s)	OSUN TOTAL	50%	OYO TOTAL	50%	Total of 50% of the Selected States
Professional	04	02	06	03	05
Vocational Staff	75	37	94	47	84
TOTAL	85	42	104	52	94

50% of forestry workers were randomly selected from each state selected.

Questionnaires were used to elicit information from the respondents (forestry workers from each state selected), with the aid of trained enumerators who administered the questionnaires. The research instrument was developed in line with specific objectives of the study. Hypotheses will be tested as stated below: Dependent variable:- The dependent variable for this study is training needs of forestry workers which shall be forestry workers' self evaluation. The weighted mean discrepancy score of measurements were used for training needs.

$$Tn = (In - Kn)\, Ig$$

Where: Tn = calculated training need,

In = level of importance of each competency perceived by each respondent
Kn = the perceived amount of knowledge possessed by a respondent in a competency
and Ig = the average mean score of the perceived importance of a competency by the whole sample of respondents.

Independents variables: These are made up of the personal characteristics of the respondents. These include sex, age, educational level, marital status, and years in service e.t.c.

Data collected were summarized and analyzed through the Statistical Package for the Social Sciences (SPSS) through the computer. Descriptive statistics such as tables, percentages, frequencies, and means in analyzing the data. However, inferential statistical tools were used to test various hypotheses of the study. Spearman rho correlation test and t test was used to test all the hypotheses. Myers, et al (2003) noted that Spearman correlation coefficient is defined as the Pearson correlation coefficient between the ranked variables. For a sample of size *n*, the *n* raw scores X*i*, Y*i* are converted to ranks *xi*, *yi* and ρ is computed from these:

$$\rho = \frac{\sum_i (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_i (x_i - \bar{x})^2 \sum_i (y_i - \bar{y})^2}}.$$

In testing the null hypothesis that the population mean is equal to a specified value μ_0, one uses the statistic

$$t = \frac{\overline{x} - \mu_0}{s/\sqrt{n}}$$

where $\overline{x}$ is the sample mean, *s* is the sample standard deviation of the sample and *n* is the sample size. The degrees of freedom used in this test is $n - 1$. Raju (2005).

Results and Discussion

Majority of the professionals across the states were male (70%) and married (95%) with an age range of 31-40years (50%). It also indicates that about 40% had an average of 2 children per family across the states and 35.5% had spent 6-10 years in service. This result implies that is male dominated sector, and were married and still active in service. This agrees with results of a similar study by Ali et al (2008) on personal characteristics affecting Agricultural Education Worker's job satisfaction level. They found out that majority of their respondents were 10-15 years in service. It was found that the minimum qualification of professional officers is Bachelor's degree although a lower level officer could rise to a professional cadre after long years of service.

Majority of professionals (60%) had their bachelor's degree with specialization in forestry. This indicates that the governments across the states employed the right individuals with minimum requirements into the public service. Although there were a few professionals whose specialization is different from forestry, but these were found out to be those with long years of experience they might have learnt well on the job. Ali et al (2008) noted that majority of the respondents (50.9%) hold a bachelor's degree in their study on personal characteristics affecting Agricultural extension workers job satisfaction level. Only a few respondents (26.7%) had attended in-service training on forest law and policy, silvicultural practices and forest industries. This implies that in-service training should be encouraged among forestry workers.

Osun and Oyo states forestry service were placed under the Ministry of Environment and Ministry of Agriculture respectively. However, 50% of sampled professionals in Osun State were married; adult and having an average of between 2 and 3 children. Respondents had spent more than 5 years in service; had Master of Science degree and specialized in forestry. These findings indicate that professionals in the services of Osun state were experienced and qualified for the job. They also, had attended in-service training making them adequately prepared for the task of sustaining forestry in the State.

Professional respondents in Osun State were adult, married and 66.7% of them were males. This indicates that they were active and experienced with 6-10 years in service. The two respondents had Master of Science degree, specialize in forestry and had attended in-service training. This implies that they made use of the opportunity they had which qualifies them for better service. Jason et al (2007) also found out that74.5% of the teachers were male. Twenty-eight percent of the teachers were 25-34 years; 27% were 45-54; and 24% were 35-44 years of age. Nearly 35% of the teachers reported having less than five years teaching experience. Approximately 42% had a bachelor's degree; 36% had master's degree; 15% had a specialist degree; and 5% had earned a doctorate degree.

Table 3 shows that Osun State, majority (94.59%) of the Vocational staff were male and 54.06% of the respondents were within the age range of 31 to 40 years. In Oyo State, majority (80.85%) of the respondents were male and 44.67% were within the range of 31-40 years. This implies that forestry workers were relatively young which give them the ability to perform much better on the field.

In Osun State, 91.89% of the respondents were married while in Oyo State 68.09% were married. This implies that in the study area Vocational staff have the responsibility to care for their families in addition to their duties as forestry worker. Also majority (45.98%) were having 2-3 children to cater for in Osun state. Only 20.70% of the respondents have to cater for between 6-7 children and 53.19% were having no child or one in Oyo State. This is due to the fact that some of the respondents were single and were just joining the service because 65.96% of the respondents had just spent less than 5 years in service.

Furthermore, 65.96% of the respondents in Oyo State have been on the job for 1-5years, while in Osun State, majority (35.14%) of the respondents had spent 6 to 10years in service. This gives an indication that most of the respondents were employed recently and may be facing the challenges on the field if compared to older individuals.

Majority (63.83%) of the Vocational staff were working with GCE or SSCE certificates. Most of this category of staff graduated from secondary school and they could not further their study for one reason or the other but they were given the benefit of basic training needed to work as a Vocational staff believing that they can develop on the job. Data on vocational staff in Osun State shows that majority (54.05%) have OND certificate and majority claimed not to have attended any training on the job. This may be due to the management's belief that co-workers could be giving instruction to their peers while awaiting formal training and sponsorship for skill acquisition. Majority (71.33%) of the respondents were not having any area of specialization due to the fact that they were not having a major training in forestry. However, in Osun State majority (81.08%) claimed that they specialized in forestry. This is however, attributed to the fact that the challenges reportedly met on the job have forced them to acquire more certificates in order to equip with better qualifications for promotion to the next level or move from junior staff to senior staff cadres. Vocational staff statistics in Oyo State shows that majority (48.94%) of them have their area of specialization as forestry. They may have acquired more certificates in that field.

Majority (70.27%) of them in Osun State were exposed to beat procedure. |In Oyo State, Vocational staff were adequately exposed to refresher course. This may be due to their level of understanding, qualification and duties. Also, they were given the most needed instructions for effective job performance after which others will follow as the need arises

Table 2: Socio Economic Characteristics of Professional Respondents across the States

SOCIO ECONOMIC CHARACTERISTICS		OSUN		OYO	
		Frequency	Percentage	Frequency	Percentage
Sex	Male	14	50	2	66.7
	Female	6	50	1	33.3
	Total	20	100	3	100
Age	20-30	1	-	-	-
	31-40	10	-	-	-
	41-50	8	50	3	100
	Above 50	1	50	-	-
	Total	20	100	3	100
Marital Status	Single	1	-	-	-
	Married	19	100	3	100
	Divorced	-	-	-	-
	Widowed	-	-	-	-
	Total	20	100	3	100
Number of children	0	4	-	-	-
	1	2	-	-	-
	2	8	50	1	33.3
	3	3	50	1	33.3
	4	2	-	-	-
	5	1	-	1	33.3
	Total	20	100	3	100
Years in Service	1-5 years	8	-	-	-
	6-10years	7	50	2	66.7
	11-15 years	2	-	1	33.3
	Above 15years	1	50	-	-
	Total	20	100	3	100
Educational qualification	B. Sc	12	-	3	100
	PGD	1	-	-	-
	M. Sc	5	100	-	-
	Ph D	2	-	-	-
	Others	--	-	-	-
	Total	20	100	3	100
Specialization	General agricultural	-	-	-	-
	Fisheries	-	-	-	-
	Horticulture	-	-	-	-
	Crop science	-	-	-	-
	Soil Science	-	-	-	-
	Forestry	2	100	3	100
	Agric extension	-	-	-	-
	Agric economics	-	-	-	-
	Others	-	-	-	-
	Total	2	100	3	100
Inservice Training	Forest law and policy	-	-	-	-
	Hammering types	-	-	-	-
	Nursery tree management	-	-	-	-
	Silviculral Practices	-	-	-	-
	Taxonomy	-	-	1	33.3
	Tree Identification	-	-	-	-
	Forest industries	1	50	1	33.3
	Refresher courses	1	50	-	-
	Beekeeping	-	-	1	33.3
	Total	2	100	3	100

Table 3 : Socio economic characteristics of Vocational staff in Osun and Oyo States

Personal and Socio Economic Characteristics	OSUN STATE		OYO STATE	
	Frequency	Percentage	Frequency	Percentage
Sex				
Male	35	94.59	38	80.85
Female	2	5.41	9	19.85
Total	37	100	47	100
Age				
20 – 30	5	13.51	19	40.43
31 – 40	20	54.06	21	44.67
41 – 50	9	24.32	6	12.76
51 – 60	3	8.11	1	2.13
Total	37	100	47	100
Marital Status				
Single	3	8.11	15	31.91
Married	34	91.89	32	68.69
Divorced	0	0.00	0	0.00
Total	37	100	47	100.00
Number of children				
0 – 1	6	16.22	25	53.19
2 – 3	17	45.94	10	21.28
4 – 5	13	35.14	9	19.15
6 – 7	1	2.70	1	2.13
8 – 9	0	0	2	4.26
Total	37	100	47	100.00
Year in Service				
1 – 5 years	8	21.62	31	65.96
6 – 10 years	13	35.14	8	17.02
11 – 15 years	8	21.62	4	8.51
16 – 20 years	2	5.4	1	2.13
21 – 25 years	0	0	0	0
26 – 30 years	4	10.81	1	2.13
31 - 35years	2	5.41	2	4.26
Total	37	100	47	100
Educational Qualification				
GCE/ SSCE	10	27.03	30	63.83
Certificate	2	5.41	2	4.26
OND	20	54.51	8	17.02
NCE	4	10.81	3	6.38
HND	1	2.70	4	8.51
Total	37	100.00	47	100.00
In service Training				
Beat procedure	26	70.27	7	14.89
Budding and grafting	1	2.70	2	4.26
Forest law and policy	3	8.11	4	8.51
Hammer procedure	2	5.41	2	4.26
Log checking	5	13.51	4	8.51
Monitoring patrol	4	10.81	1	2.13
Nursery establishment	0	0	0	0
Plantation establishment	1	2.70	4	8.51
Plot demarcation	0	0	3	6.38
Seed and Seedling tech	1	2.70	1	2.13
Silvicultural Operation	30	81.08	2	4.26
Survey	1	2.70	0	0
Taxonomy	0	0	0	0
Refresher course	0	0	20	42.55
Tree identification	0	0	4	8.51
Total	37	100	47	100
Area of Specialization				
General Agriculture	4	10.81	8	17.02
Fisheries	0	0	2	4.26
Horticulture	1	2.70	4	8.51
Crop Science	0	0	2	4.26
Soil Science	1	2.70	0	0
Forestry	30	81.08	23	48.94
Agric Extension	1	2.70	3	6.38
Agric Economic	0	0	1	2.13
Others	0	0	4	8.51
Total	37	100	47	100

Table 4 shows that Osun State professionals were having a need in marketing of forest products, fire control management practices, train the trainer communication skill and tree/shrub establishment. This result indicates that they were having needs in area mentioned above but with negative scores or close to zero in needs areas, orientation should be given on the need for training. In Oyo State, the areas of need include managing record practices, problem solving approach, filling and documentation of records, tree/shrub establishment. These findings reveal that there is need for train the trainers, programme. Marvin and Owen (2008) also noted that most professions will require continuous instruction and retraining. They concluded that rapid changes in the job market and work-related technologies will necessitate job education for almost every worker and that at any given moment, a substantial portion of the labour force will be in job retraining programs.

Table 4:WMDS distribution of professional training needs across the states

	OSUN		**OYO**	
Training Needs	**WMDS**	**Level of training needs**	**WMDS**	**Level of training needs**
Nursery tree crop production practices	4.0	Less need	1.3	Less need
Fire control management practices	6.0	High Need	-1.78	inappropriate
Public issues management practices	2.0	Less need	1.2	Less need
Train the trainer communication skill,	6.75	High need	8.6	Less need
Forest management Practices	0.00	Less need	2.88	Less need
Methods of handling manure	3.5	Less need	0.0	inappropriate
Bee Keeping technology	4.0	Less need	3.6	Less need
Fertilizer management practices	2.0	Less need	-2.66	inappropriate
Soil amendment practices	-1.0	inappropriate	3.3	Less need
Pesticide control approaches	-1.0	inappropriate	-1.0	inappropriate
Problems solving approach	1.76	Less need	10.11	High need
Supervision orientation	1.75	Less need	4.6	Less need
Personnel procedure	-1.5	inappropriate	5.78	Less need
Professional etiquette	0.06	inappropriate	2.89	Less need
Job orientation	0.0	inappropriate	4.67	Less need
Filling and documentation practices	1.75	Less need	7.78	High Need
Tree/ shrub establishment	9.0	High Need	7.28	High Need
Using internet	3.5	Less need	2.67	Less need
Presentation of seminar	0.0	inappropriate	4.89	Less need
Demonstrate a good sense of humour	0.0	inappropriate	1.44	Less need
Provide leadership for programme, planning and execution	0.0	inappropriate	0.00	inappropriate

Across the states in the study area vocational staff training needs is less need because they were having negative scores or scores close to zero as seen in table 20. This indicates that inappropriateness of the topic for training which is as a result of a combination of a very low importance score, a very high knowledge score, or a very low opportunity score or the opportunity to use new knowledge is equal to the respondents' perceived importance of the topic. The respondents' existing knowledge is equal to the current opportunity to use information related to the topic. Therefore, it is important that perceived new areas were explained to workers before embarking on training.

Table 5: Training needs of vocational staff across the states.

	Oyo		Osun	
Training Need	**WMDS**	**Level of training needs**	**WMDS**	**Level of training needs**
Reporting Forest offences and other development activities	-1.73	inappropriate	-0.33	Inappropriate
Techniques of plantation establishment and management	-1.44	inappropriate	0.78	Inappropriate
Construct, maintain and operate a forest Nursery	1.1	Less need	-1.54	Inappropriate
Basic measuration techniques mean	0.58	inappropriate	-0.32	Inappropriate
Prevention of encroachment	-2.08	inappropriate	0.23	Inappropriate
Prevention of accident	-3.05	inappropriate	-0.55	Inappropriate
Public Awareness	0.77	inappropriate	1.05	Inappropriate
Enforcement of environment Law	-1.91	inappropriate	0.66	Inappropriate
Biodiversity monitoring and management.	-1.7	inappropriate	2.16	Less need

Hypothesis

Ho 1: There is no significant relationship between the training needs of Forestry staff and selected

Personal characteristics such as; age, sex, marital status, etc.

Ha 3: There is no significant relationship between the training needs of Forestry staff and selected Personal characteristics such as; age, sex, marital status, etc.

Table 6 shows the relationship between the selected personal characteristics of the respondents across the three states sampled in the study area and the training need in each area. Age is significant to training needs on reporting forest offences and other development in Osun State ($r = -0.4232$), and marital status ($r = -0.3597$) Years of service is significant to reporting forest offences in Osun State ($r = -0.3417$).This gives an indication that experience is essential for reporting forests offences and Sex is significant to training need on technique of plantation establishment and management in Oyo State ($r = -0.2982$). Basic measuration techniques is significant to sex at $P < 0.05$ in Oyo State, years of service ($r = -0.3913$) in Oyo State and none is significant at $P < 0.05$. Sex ($r = 0.35112$) is significant to training needs in public awareness in Osun State. This implies that sex, number of children and marital status is important in public awareness training. Enforcement of environmental law is significant to Age in Osun State ($r = -0.4273$) and marital status ($r = 0.3456$) and number of children ($r = 0.3930$) in Oyo state. This gives an indication that most young respondents tend to migrate from this type of assignment considering the danger attached to it to urban centre to seek more comfortable and quick rewarding job. The staff to be considered for training in these aspects should be interested, intelligent and ready to study because of the technicality involved.

Table 6: Spear Man Rho Correlation Analysis between Respondent's Personal Characteristic and the Major Areas of Needs in Forestry.

S/N	Training needs	State	Sex	Age	Marital Status	No. of Children	Years in Service	Education Level	Area of Speciali.	Job Distance
1	Reporting forest offences and other development activities	Osun	0.3226	-0.4232*	-0.3597*	-0.2539	-0.3417*	-0.0768	0.1509	-0.3265*
		Oyo	-0.0719	-0.0979	-0.0620	0.0526	0.1850	-0.0184	0.0743	0.0400
2	Techniques of plantation establishment and management	Osun	0.0000	-0.0225	-0.1435	0.0560	0.0613	0.0061	-0.0256	-0.1556
		Oyo	-0.2982*	0.0492	0.0973	0.2750	-0.0391	0.0396	0.0669	-0.1666
3	Construct, maintain and operate a forest nursery	Osun	-0.2559	-0.0081	-0.0096	0.0017	0.0881	0.0957	-0.1603	0.1066
		Oyo	0.0574	-0.0362	-0.0916	-0.0063	-0.0520	0.0617	0.0553	-0.0904
4	Basic Meanstruation techniques	Osun	-0.0119	0.0286	-0.1283	-0.1360	-0.0933	-0.3104	0.0644	-0.0273
		Oyo	-0.3316*	-0.0932	0.0346	-0.1365	-0.3913*	-0.1661	0.0357	0.0500
5	Prevention of encroachment	Osun	-0.1221	0.2562	0.0289	0.0979	0.0808	-0.0223	-0.0005	-0.1301
		Oyo	-0.0402	-0.0298	0.1661	-0.1370	-0.0086	0.0739	-0.1961	-0.0315
6	Prevention of accident	Osun	-0.0576	-0.0370	-0.2051	0.0587	-0.0013	-0.2162	0.1059	0.0398
		Oyo	-0.1815	0.0106	0.0873	0.1346	0.1578	0.1087	0.0454	0.1685
7	Use of forest aid	Osun	-0.2037	-0.1287	0.0579	0.0554	-0.1908	-0.0299	-0.1135	-0.2776
		Oyo	0.0107	0.0109	0.1882	0.0843	0.2051	0.1052	0.1474	0.1468
8	Public awareness	Osun	0.3512*	-0.0610	0.0429	-0.0995	-0.1993	0.1135	-0.0332	0.1610
		Oyo	0.0126	-0.0104	0.2082	0.1093	-0.0266	-0.2046	0.0690	0.1335
9	Enforcement of environmental law	Osun	0.0530	-0.4273*	-0.2486	-0.2132	-0.3115	-0.2164	-0.1283	-0.1194
		Oyo	-0.1889	0.1349	0.3456*	0.3930*	0.1598	0.1054	-0.2082	0.2241
10	Public relation	Osun	0.1627	0.0954	0.0289	0.0333	0.0056	-0.1696	0.0592	-0.0595
		Oyo	-0.0795	-0.0955	-0.1056	-0.1456	-0.1156	-0.1207	-0.0200	0.0237
11	Biodiversity, monitoring and management	Osun	-0.1555	-0.1351	-0.2719	-0.2142	-0.0759	-0.0530	0.0255	-0.6682
		Oyo	-0.0800	-0.0906	0.1398	-0.0176	-0.0323	-0.2008	0.1279	0.1039

NOTE=*Significant at P=0.05, figure in bracket () shows the P value

In conclusion, Forestry workers were male and relatively young which will give them the ability to improve on their performance in forestry activities. Also, most of the forestry staff needs training in forestry activities to be able to meet the global challenges in the world especially the effects of the global warming. Farmers within the forest zones will also benefits from their wealth of knowledge when trained.

REFERENCES

Ali A., Fedeshteh F., Zahia K., Seyyed M. H. and Gholamhossein H. (2008): Personal Characteristic affecting Agricultural Extension workers job satisfaction level *Journal of Social Science* 4 (4): 246 – 250.

Chizari ,M., Alibaygi, A.H. and Breazeale, D. (2006): Analysis of the Training Needs of Multi-Functional Extension Agents Associated with Sustainability. *Journal of International Agricultural Extension and Education* 13 (1): 51-58.

Clark, Larie E., ed (2004) The key Non-Timber Forest Products of central Africa Office of Sustainable Development. Technical Paper Washington D. C. 22:11-14

FAO 1999: state of the world's forests, 1999 third edition. Food and Agriculture Organisation of the United Nations, Rome. http://fao.org/forestry/fo/sofo/sofo99/sofo99-e.sfm.

FAO 2001 FAO Stat Forestry Data [Internet] Available from: http://www.mpforestchief.com/ [Accessed September 3rd, 2011]

Marvin J. C. and Davies,O. (2008) Trends Shaping Tomorrow's World, Part Two, May-June 2008, p 41″ *http://www.questia.com/library/1G1-175204605/trends-shaping-tomorrow-s-world-forecasts-and-implications*

Myers, J. L.; and Well, A. D. (2003), *Research Design and Statistical Analysis* (2nd ed.), Lawrence Erlbaum, pp. 508, ISBN 0-8058-4037-0

Raju, T.N. (2005) William Sealy Gosset and William A. Silverman: two "students" of science". *Pediatrics* 116 (3): 732–5.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
http://www.iiste.org

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: http://www.iiste.org/journals/ All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library , NewJour, Google Scholar