

Bibliography

- [1] Abubakar, M., Adegbola, T. A. and Abubakar, M. M. (2005). Effects of varying levels of groundnut haulms and cowpea shell on the performance of weaner red sokoto goats. *Nigeria Journal of Animal Production*, 32 (2): 274 - 279.
- [2] Abu, K. (2010). Organic and Conventional Farming among Livestock Owners in Mubi North Local Government Area of Adamawa State, Nigeria. Student Project Submitted to the Department of Animal Health and Production Technology, School of Agricultural Technology, Federal Polytechnic, Mubi in Partial Fulfilment of a Requirement for the Award of Diploma Certificate in Animal Health and Production Technology.
- [3] Adamu, S. M., Kubkomawa, H. I., Duduwa, A., Midau, A., Abdu, M. and Neils, S. J. (2010). Efficacy of Aduwa (*Balanites aegyptica*) Seed Cake on Gastro Intestinal Worm Burden in Growing Chicken. International Journal of Animal Science, 2 (1): 20 - 23. Published by Blackwell Educational Books, No. 63 Itiam Street, P. O. Box 790, Uyo, Akwa Ibom State, Nigeria.
- [4] Adamu, M. S., Nafarnda, W. D., Iliya, D. S., and Kubkomawa, H. I. (2006). Replacement Value of Yellow Sorghum (*Sorghum bicola*), Variety for Maize in Broiler Diets. Global Journal of Agricultural Science, 5 (2): 151 - 154. Printed in Nigeria by Bachudo Science Printing Press, Water Works Road, Ikot Effanga, Calabar, Cross River State, Nigeria.
- [5] Addass, P.A., Midau, A. and Butswat, I. S. R. (2010). Variation pattern of season, age and body condition score on epididymal sperm reserve of selected bull cattle in Mubi Adamawa state, Nigeria. *Agric. Biol. J. N. Am.*, 1 (4): 620 – 624.
- [6] Addass, P. A. (2011). Effect of age and body condition score on sperm production potential among some indigenous bull cattle in Mubi Adamawa state, Nigeria. *Agriculture and Biology Journal North America*, 2 (2): 203 - 206.
- [7] Adebayo, A. A and Tukur, A. L. (1997). *Adamawa state in maps*, Pp: 8 - 45.
- [8] Adebayo, A. A. (1999): Application of agro-climatology to agricultural planning in Adamawa State. *Journal of Applied Science and Management*, 1: 69 - 75.

- [9] Adedgba, Y. A. (1996). Paper Delivered at the Workshop on Problem-Oriented Agricultural Research Methodology Held at the University of Agriculture, Abeokuta, 14th–28th October, 1996.
- [10] Adegbola, T. A. (1998). Chemical composition and in vitro digestibility of some cultivated forages in dry season. *Journal of Animal Production Research*, 10 (1): 21 - 29.
- [11] Adeloye, T. A. (1994). The influence of varying ratio of cowpea husk and maize milling waste on the feed intake, protein and energy utilization by goats. *Nigerian Journal of Animal Production.*, 21: 108 - 112.
- [12] Adugna, T. (2006). Determinants of market prices of cattle in eastern Ethiopia. paper presented at the international association of agricultural economists conference, gold coast, Australia, August, 2006, Pp: 12 - 18.
- [13] Agenas, S., Heath, M. F., Nixon, R. M., Wilkinson, J. M. and Phillips, C. J. C. (2006). Indicators of under-nutrition in cattle. *Anim. Wild Life Journal*, 15 (2): 149 - 160.
- [14] Angassa, A. and Oba, G. (2007). Relating long-term rainfall variability to cattle population dynamics in communal rangelands and a government ranch in southern Ethiopia. *Agric. Syst.*, 94: 715 - 725.
- [15] Akpa, G. N., Alphonsus, C. and Abdulkareem, A. (2012). Evaluation of herd structure of white Fulani cattle holdings in Zaria-Nigeria. *Africa Journal of Animal and Biomedical Sciences*, 7 (1): 128 - 131.
- [16] Anosike, J. C., Opara, M. N., Okoli, C. G., Kyakya, A. and Okoli, I. C. (2003). Bovine trypansomiasis in sedentary cattle at the previously assumed trypanosoma- free, Jos Plateau, Nigeria. *Nigerian Veterinary Journal*, 24 (1): 33 - 36.
- [17] Assan N. (2012). Estimation of variance components by sex, theoretical expectation and selection implication for weaning weight in indigenous tuli cattle of Zimbabwe. *J. Anim Sci Adv.*, 2 (1): 141 - 150.
- [18] Asuquo, A. A., Kubkomawa, H. I., Tizhe, A. M., and Igwebuike, J. U. (2010). Effect of Feeding Graded Levels of Decorticated and Un- Decorticated Neem (*Azadirachta indica*) Seed Meal on Laying Japanese Quail (*Coturnix coturnix japonica*). *International Journal of Bioscience*, 5 (3): 40 - 45. Published by Duncan Science Company, No. 63 Itiam Street, P. O. Box 790, Uyo, Akwa Ibom State, Nigeria.
- [19] Asuquo, A. A., Kubkomawa, H. I., Tizhe, A. M., and Igwebuike, J. U. (2011). Growth Performance of Japanese Quail (*Coturnix coturnix japonica*) Fed Graded Levels of Decorticated and Un- Decorticated Neem (*Azadirachta*

- indica)* Seed Meal. African Journal of Agricultural Research and Development 4(1):60-66. Published by Duncan Science Company, No. 63 Itiam Street, P. O. Box 790, Uyo, Akwa Ibom State, Nigeria.
- [20] Barje, P. P., Adebayo, J. H. and Lamidi, O. S. (2011). Comparative evaluation of groundnut haulms and lablab (*lablab purpureus*) as dry season supplements for lactating cows and their calves under smallholder peri-urban dairy production in Nigeria. Sav. J. Agric., 6 (2): 1 – 5.
- [21] Bernsten, R. H. (1982). Analytical Approaches to Farming Systems Research with an Emphasis in Animal Production'. In: Fine. J. C., Lattimore, R. G. *Livestock in Asia: Issues and Policies* Ottawa, IDRC.
- [22] Bernsten, R. H. Fitzhugh, H. A. Knipsheer, H. C. (1984). 'Livestock Farming Systems Research'. In: Butler Flora. C. (Ed) *Proceedings of Kansas State University's 1983 Farming Systems Research. Symposium: Animals in the Farming System* Paper No.6 Manhattan, Kansas State University, Pp. 64 -109.
- [23] Biggs, S. D. (1989). Resource-Poor Farmer Participation in Research: A Synthesis of Experiences from One Agricultural Research System. OFCOR Comparative Study Paper No.3. The Hague, JSNAR.
- [24] Blench, R. (2010). *Conflict between Pastoralists and cultivators in Nigeria*, Kay Williamson educational foundation Cambridge.
- [25] Butler Flora, C. (1984). Putting Farming Research Data Collection in Perspective Practicalities and Realities. In: Butler Flora, C. (ed.) Proceedings of Kansas state university's 1983 Farming systems Research Symposium, Animals in the Farming System. Paper no.6 Manhattan, Kansas state University, pp. 525-555.
- [26] Byerlee, D. Triomphe, B. Sebillotte, M. (1991). 'Integrating Agronomic and Economic Perspectives into the Diagnostic Stage of On-Farm Research, Experimental Agriculture, vol. 27, Pp. 95-114.
- [27] Chah, J. M., Igbokwe, E. M. Chah, K. F. (2009). Ethnoveterinary medicine used in small ruminant health in the eastern guinea savanna, Nigeria. *livest. res. rural dev.*, 21 (12): 1 – 45.
- [28] CBN, Central Bank of Nigeria (1999). CBN annual report of 1998, Lagos Nigeria, 10: 41.
- [29] Chimonyo, M., Kusina, N. T., Hamudikuwanda, H. and Nyoni, O. (2000). Effect of work stress and supplementary feeding on body conformation, ovary activity and blood parameters in a smallholder farming system. *Asian-Aust J. Anim. Sci.*, 13 (8): 1054 - 1058.

- [30] Clay P. M., Jason E. S. and Ron, K. (2002). Managing and feeding beef cows using body condition scores. Published by Parker1New Mexico State University is an affirmative action/equal opportunity employer and educator. NMSU and the U.S. department of agriculture cooperating.
- [31] Collins-Luswet, E. (2000). Performance of Nguni, Afrikander and Bonsmara cattle under drought conditions in North West province of southern Africa. *S. Afr. J. Anim. Sci.* 30 (1): 33 - 41.
- [32] Conway, G. R. (1986). Agroecosystem for Research and Development, Bangkok. Winrock International.
- [33] Defoer, T., Erenstein, O. Sajidin Hussain, S. (1995). From Consultative to Collaborative On-Farm Experimentation: Experiences from Northern Pakistan'. In Penninkhoff, P (ed.), Design Implementation and Analysis of on-Farm Trials. An Assessment of Field Experiences June 28-July 2. 1993. Arusha, Tanzania Workshop Proceedings. Amsterdam. Royal Tropical Institute, Pp. 241-261.
- [34] DEFRA (2001). Condition scoring of beef suckler cows and heifers. published by department for environment, food and rural affairs (DEFRA): 1 – 16.
- [35] DelCurto, T., Hess, B. W., Huston, J. E. and Olson, K. C. (2000). Optimum supplementation strategies for beef cattle consuming low-quality roughages. *J. Anim. Sci.*, 77: 1 - 16.
- [36] Delgado, C., Rosegrant, M., Steinfeld, H., Ehui, S. and Courbois, C. (1999). Livestock to 2020: The next food revolution 2020. Food, agriculture, and the environment discussion paper 28. IFPRI/FAO/ILRI.
- [37] Devendra, C. and Sevilla, C. C. (2002). Availability and use of feed resources in crop-animal systems in Asia. *Agric. Syst.*, 71 (1-2): 59 - 73.
- [38] Dolle, V. (1984). Les outils et Methods du sur les Systemes d'elevage' cahiers de la Recherche-Development, No.3-4, Pp. 89 - 96.
- [39] Drennan, M. J. and Berry, D. P. (2006). Factors affecting body condition score, live weight and reproductive performance in spring-calving suckler cows. *Irish Journal of Agricultural and Food Research*, 45: 25 – 38.
- [40] du Plessis, I., and Hoffman, L. C. (2004). Effect of chronological age of beef steers of different maturity types on their growth and carcass characteristics when finished on natural pastures in the arid sub-tropics of South Africa. *S. Afr. J. Anim. Sci.*, 34 (1): 1 - 12.
- [41] Ellery, W. N., Scholesand, R. J. and Scholes, M. C. (1995). The distribution of sweet-veld and sour-veld in South Africa's grassland biome in relation to environmental factors. *Afr. J. Range Forage Sci.*, 12: 38 - 45.

- [42] Emokaro, C. O. and Amadasun, O. J. (2012). Analysis of beef marketing in Benin City, Nigeria, *Nigerian Journal of Agriculture, Food and Environment*, 8 (3): 26 - 31.
- [43] Ezeomah, C. (1987). *The settlement patterns of nomadic Fulbe in Nigeria: Implications for educational development*. Dean house Ltd. United Kingdom.
- [44] FAO (1999). Global strategy for the management of farm animal genetic resources. executive briefing. Food and Agricultural Organization, Rome, Italy.
- [45] FAO (1995). Science Blog. Food and Agricultural Organization, Rome, Italy.
- [46] Forsberg, C. W., Cheng, K. J. and White, B. A. (1997). Polysaccharide Degradation in the Rumen and Large Intestine. In: (Ed R. I. Mackie and B. A. White).*Gastrointestinal Microbiology*, 1: 319 - 379. International Thomson Publishing, New York.
- [47] Fricke, N. (1993). In cattle production in Northern Nigeria national and social movement. Weiha, Tossup, Pp. 104.
- [48] Gatenby, R. M. (2002). *Sheep. The tropical Agricultulist 2nd Edn.* MacMillan publishers CTA. A. J. Wageningen, the Netherlands, Pp 10 – 45.
- [49] Ghirotti, M. (1993). Rapid Appraisal Benefiting from the Experiences and Perspectives of Livestock Breeders'. World Annual Review, No.11, Pp. 26-37.
- [50] *Global Journal of Agricultural Sciences* (2005). Guide to All Contributors/ Authors. Published by Bachudo Science Printing Press, Water Works Road, Ikot Effanga, Calabar, Nigeria, 4 (2).
- [51] Gryseels, G. (1988). Role of Livestock on Mixed Smallholder Farms in the Ethiopian Highlands. A Case Study from the Baso and Worena Wereda Near Debre Berhan'. (Ph.D Thesis. Agricultural University, Wageningen, the Netherlands.
- [52] Hansen, E. L. (1992). In situ conservation of livestock and poultry. Food and Agricultural Organization, Rome, Italy. Animal health and production Paper, 99: 1 - 112.
- [53] Hart, R. D. and Sands, M. W. (1991a). The Role of Livestock in the Design of Sustainable Land Use Systems Research and Development'. AFSRE newsletter, Vol.2 No. 1, Pp.1- 6.
- [54] Hart, R. D. and Sands, M.W. (1991b). The Role of Livestock in Design of Sustainable Land Use Systems. Paper Draft for the IDRC/CIID, Animal Production Systems Global Workshop. Costa Rica September, 15 - 21.

- [55] Hesse, C. and MacGregor, J. (2006). Pastoralism: Dry lands' Invisible Asset? In: developing a framework for assessing the value of pastoralism in East Africa, 142:3-4. Published by international institute for environment and development, 3 Endsleigh Street, London WC1H 0DD UK.
- [56] Hoareau, L. and DaSilva, E. J. (1999). Medicinal Plants: A re-emerging health aid. *EJB electronic J. Biotechnol.* 2 (2): 23 -48.
- [57] Hughes, M. P., Jennings, P. G. A., Mlambo, V. and Lallo, C. H. O. (2011). Exploring seasonal variations in sward characteristics and nutritive value of tropical pastures grazed by beef and dairy cattle on commercial farms in Jamaica *J Anim Sci Adv.*, 1 (1): 47 - 60.
- [58] Huijsman, B. and Meindertsma, J. D. (1994). Getting Results: An Overview and Future Agenda'. In: Meindertsma, J. D. (E.D). Setting Research Priorities, Towards Effective Farmer-Oriented Research. Development Oriented Research in Agriculture, No.5 Amsterdam, Royal Tropical Institute, Pp. 244 - 260.
- [59] Ibrahim, M. A., Uwude, N., Aliu, Y. O. and Ogunsui, R. A. (1983). *Traditional concepts of animal diseases and treatment among Fulani herdsmen in Kaduna State of Nigeria*. Pastoral development network paper No. 16c. ODI; London.
- [60] Ibrahim, M. A. (1984). *Veterinary traditional practice in Nigeria, livestock systems research in Nigeria's subhumid zone*. Proceedings of the second ILCA/NAPRI symposium held at Kaduna, Nigeria. ILCA, Addis Ababa, Ethiopia.
- [61] Ifeanyi, A. O. and Olayode, G. O. (2008). Analysis of trends in livestock production in Nigeria from 1970-2005. *Journal of Agriculture and Social Research (Jasr)*, 8 (1): 114 - 120.
- [62] Ikede, B. O. and Taiwo, Y. O. (1985). A survey of trypanosomiasis in the sedentary zebu and trypanotolerant cattle breeds in South -Western and North-Western Nigeria. Paper presented at the 18th Meeting of ISCTRC, Harare, Zimbabwe.
- [63] ILCA (International Livestock center for Africa) 1990. Livestock research manual. Working Paper 1.Vol.1 Addis Adaba ILCA.
- [64] ILEIA (1989). Operational Approaches for Participative Technology Development in Sustainable Agriculture, Proceedings of a Workshop ILEIA, Leusden.
- [65] Iliya, D. S., Nafarnda, W. D., Sudi, I. Y., Kalla, D. J. U., Kubkomawa, H. I., Alahira, C.C. and Nesati Y.I. (2006). Performance and Nutrient Digestibility of Rabbits Fed Urea Treated Cowpea Husk. *Journal of Animal Production Research Advances*, 2 (4): 213 - 216. Published by Tapas Institute of scientific

- Research and Development. Ezeogidi Estate, Umunwanlo Irete, Owerri West L. G. A, P. O. Box 2143, Owerri, Imo State, Nigeria.
- [66] *International Journal of Agriculture and Food Systems* (2007). Guide lines to All Authors and Contributors. Published by Tapas Institute of Scientific Research and Development, Ezeogidi Estate, Umunwanlo Irete, Owerri West LGA, P. O. Box 2143, Owerri, Imo State, Nigeria, 1 (3): 302 - 303.
- [67] *International Journal of Sustainable Agriculture* (2010). Guide to All Contributors/ Authors. IDOSI World Wide Publications, 2 (3): 51- 54.
- [68] Jefferies, B. C. (1961). Body condition scoring and its use in management. *Tasmanian Journal of Agriculture*, 32: 216 – 222.
- [69] Joe C. P. (2010). Using body condition scores in beef cattle TSCRA school for successful ranching livestock specialist Texas Agrilife Extension, 1- 4.
- [70] *Journal of Sustainable Agriculture*. (2010). Editorial Note for Authors and Contributors. Department of Environmental Studies, University of California. Santa Cruz, CA 95064.
- [71] *Journal of Animal Production Research Advances* (2006). Guide lines to All Authors and Contributors. Tapas Institute of Scientific Research and Development, Ezeogidi Estate, Umunwanlo Irete, Owerri West L. G. A, P. O. Box 2143, Owerri, Imo State, Nigeria, 2 (4).
- [72] *Journal of Agricultural Science and Natural Resources* (2009). Authors' Guide lines. Published by International Institute for Research and Advanced Studies (IIRIS), University of Port Harcourt, Choba, Port Harcourt, Rivers State, Nigeria, 2 (1): 121-122.
- [73] Kirsopp-Reed, B. (1994). ‘A review of PRA Methods for Livestock Research and Development’ In: IEED. Oxfam, VETAID and ITDG, Special Issue on Livestock RRA Notes London, Pp. 11-36.
- [74] Klein, J. A., Harte, J. and Zhao, X. Q. (2007). Experimental warming, not grazing, decreases rangeland quality on the Tibetan Plateau. *Ecological Applications*, 17: 541 - 557.
- [75] Kobayashi, Y. (2003). Recombinant rumen bacteria: Problems and opportunities. *Nutr. Abst. Rev. (Series B)*, 73: 51 - 59.
- [76] Koudokpor, V. (1992). (ed) Pour Une Recherche Participative Strategic Et Development D'une Aproche De Recherche Avec Les Paysans Au Beaur, Amsterdam, KIT/Cotonou. Direction De La Recherche Agronomique.
- [77] Kubkomawa, H. I., Nafarnda, W. D., Obudu, C. E., Helen, O. U., Alahira, C. C., Iliya, D. S., Mshellia, A. A. and Nesati, Y. I. (2007). Highlights on the Use

- of Donkey for Land Cultivation in Adamawa State, Nigeria. *International Journal of Tropical Agriculture and food systems*, 1 (3): 247 - 249. Published by Tapas Institute of Scientific Research and Development. Ezeogidi Estate, Umunwanlo Irete, Owerri West L. G. A, P. O. Box 2143 Owerri, Imo State, Nigeria.
- [78] Kubkomawa, H. I., Gwandi, O., Nafarnda ,W. D., Midau, A. and Neils, J. S. (2009). Foetal Wastage in Goats and the Associated Economic Implications. *Journal of Agricultural Science and Natural Resources*, 2 (1): 13 - 19. Published by International Institute for Research and Advanced Studies, University of Port Harcourt, Rivers State, Nigeria.
- [79] Kubkomawa, H. I., Nafarnda, W. D., Bobbo, G. A. and Neils, J. S. (2010). Incidence of Repeat Breeding Syndrome in Cattle from Four Local Government Areas of Adamawa State, Nigeria. *Journal of Animal Production Research Advances*, 6 (1): 63 - 67. Published by Tapas Institute of Scientific Research and Development, Ezeogidi Estate, Umunwanlo Irete, Owerri West L. G. A., P. O. Box 2143, Owerri, Imo State, Nigeria.
- [80] Kubkomawa, H. I., Midiga, R., Helen, U. O., Williams, B. and Timon, F. (2010). Comparative Evaluation of Animal with Plant Protein Intake in Northern Adamawa State of Nigeria. *International Journal of Tropical Agriculture and Food Systems*, 4 (2):135 -138. Published by Tapas Institute of Scientific Research and Development, Ezeogidi Estate, Umunwanlo Irete, Owerri West L. G. A., P. O. Box 2143, Owerri, Imo State, Nigeria.
- [81] Kubkomawa, H. I., Nafarnda, D. W. and Neils, S. J. (2010). Characteristics of Reproductive Tracts of Repeat Breeders in Cattle. *Nigerian Journal of Animal Production*, 38 (1): 23 - 27. Published by Nigerian Society for Animal Production. Lynson Prints, No. 31 Sokenu Rd., Oke-Ijeun, Abeokuta, Nigeria.
- [82] Kubkomawa, H. I. (2010). Seasonal Performance and Feeding Characteristics of Sokoto Red Goats. *Journal of Biological Sciences and Bioconservation, Volume*, 2:14 - 21. Published by Center for Research and Innovations, Babaya Plaza, Western Bypass, P. O. Box 2601, G. P. O. Minna, Niger State, Nigeria.
- [83] Kubkomawa, H. I. and Williams, B. (2010). Physicochemical Characteristics of Water Available for Livestock and Human Use in Lala District, Gombi Local Government Area, Adamawa State, Nigeria. *International Journal of Tropical Agriculture and Food Systems*, 4 (4): 354 - 357. Published by Tapas Institute of Scientific Research and Development, Ezeogidi Estate, Umunwanlo Irete, Owerri West L. G. A., P. O. Box 2143, Owerri, Imo State, Nigeria.
- [84] Kubkomawa, I. H. and Williams, B. (2010). Analyses of Water Supply Characteristics for Domestic and Livestock Uses in Lala District, Gombi Local Government Area, Adamawa State, Nigeria. *Journal of Animal Production Research Advances*, 6 (4): 278 -282. Published by Tapas Institute of Scientific

- Research and Development, Ezeogidi Estate, Umunwanlo Irete, Owerri West L. G. A., P. O. Box 2143, Owerri, Imo State, Nigeria.
- [85] Kubkomawa, H. I. and Salihu, J. M. (2010). Role of Information and Communication Technology in Nigerian Livestock Industry. *International Journal of Sustainable Agriculture*, 2 (3): 51 - 54. Published by IDOSI World Wide.
- [86] Kubkomawa, H. I., Tizhe, A. M., Neils, S. J., Igwebuike, J. U., Nafarnda, W. D. and Uberu, P. N. (2011). Trailing and Preservation of Local Breeds of Livestock for Sustainable Agriculture in Nigeria. *Journal of Agricultural Research and Policies*, 6 (1): 81 - 87. Published by Duncan Science Company, No. 63 Itiam Street, P. O. Box 790, Uyo, Akwa Ibom State, Nigeria.
- [87] Kubkomawa, H. I. and Adamu, M. S. (2011). Comparative Evaluation of Liveweight with Market Prices of Rams in Mubi, Adamawa State. *Journal of Scientific and Industrial Studies*, 9 (1): 98 - 102. Published by Duncan Science Company, No. 63 Itiam Street, P. O. Box 790, Uyo, Akwa Ibom State, Nigeria.
- [88] Kubkomawa, H. I., Helen, U. O., Timon, F., Kabir, A. M. and Neils, S. J. (2011). The Use of Camels, Donkeys and Oxen for Post Emergence Weeding of Farm Lands in North-Eastern Nigeria. *Journal of Agriculture and Social Sciences*, JASS, 7 (4): 136 - 138. Published by Friends Science Publishers, Agriculture University Faisalabad, Pakistan.
- [89] Kubkomawa, H. I. (2011). Incidence of Repeat Breeding Syndrome in Cattle Herds in Four Selected Local Government Areas of Adamawa State, Nigeria. A thesis Submitted to the Postgraduate School, Federal University of Technology, Yola, Adamawa State, in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Technology in Animal Production and Range Management, Department of Animal Science and Range Management, School of Agriculture and Agricultural Technology, Federal University of Technology Yola, Adamawa State, Nigeria.
- [90] Kubkomawa, H. I., Gwandi, O. and Olawoye, U. H. (2013). Physico-Chemical Characteristics and Economic Involvement of Feeding Dried Cassava Alabo Meal (DCAM) to Guinea Fowl Keets in Northern Guinea Savanna of Nigeria. *World Journal of Agricultural Sciences*, 1 (2): 036 - 043. Published by World Science Research Journals.
- [91] Kubkomawa, H. I. (2013). The Troubles of Research, Journal Article Writing and Authorship of Publications in the Academia. The Peacock Magazine, 2:17-23. Published by the Department of Electrical and Electronic Engineering Federal University of Technology, P. M. B. 1526 Owerri, Imo State, Nigeria.
- [92] Landais, E. (1986). Introduction A L'approche Systemique De La Production Agricole. In: Landais, E. Faye. J(Eds). Methods Pour La Recherch é Sur Les

- Systemes D'elevage En Afrique Intertropicale. Actes De L'atelier. Mbour (Senegal), ISRA. 2-8 Fevrier Etudes Syntheses De L'i.E.M.V.T., No. 20, Pp. 25-38, 1986.
- [93] Landais, E. and Sissokho, M. M. (1986). Bases Methodologiques Du Controle Des Performances Animals Pour L'analyse Zoutecnique: Ollecte Des Donnees Et Choix Dex Variables'. In: Landais, E. Faye, J. (Eds). Methods Pour La Recherché Sur Les Systemes D'elvage En Afrique Intertropicale. Actes De L'atelier. Mbour (Senegal), ISRA, 2-8 Fevrier 1986. Etudes Et Syntheses De L'i.E.M.V.T No. 20, Pp. 433-487.
- [94] Lang, M. G. and Cantrell, R. P. (1984) Accenting the Farmer's Role: Purdue Farming Systems Unit. In Matlon, P. Cantrell. R., and Benoit-Cattin, M., Coming Full Circle: Farmers Participation in The Development Of Technology. Ottawa. Ont. IDRC.
- [95] Lawman, B. G., Scott, N. H. and Somerville, S. H. (1976). Condition scoring of cattle. *The East of Scotland College of Agriculture Bulletin*, No. 6, Edinburgh.
- [96] Lhoste. P. (1986b). 'Le Diagnostic Sur Les Systemes D'elevage. Evolution Da Systeme Agropatorale Au Sine-Saloun (Senegal) Maisons-Alfon, IEMVT-CIRAD. Etudes Et Syntheses De L'i.E.M.V.T., No. 21.
- [97] Lhoste, P. (1986b). L'association Agriculture-Elevage: Evolution Du Systeme Agropastrale Au Sine-Saloun (Senegal). Maisons-Alfon, IEMVT-CIRAD Etudes Et Syntheses De L'i.E.M.V.T., No. 21.
- [98] Mapiye, C., Chimonyo, M. and Dzama, K. (2009). Seasonal dynamics, production potential and efficiency of cattle in the sweet and sour communal rangelands in South Africa. *J. Arid Environ.*, 73 (4-5): 529 - 536.
- [99] Mapiye, C., Chimonyo, M., Dzama, K. and Marufu, M. C. (2010). Seasonal changes in energy-related blood metabolites and mineral profiles of Nguni and crossbred cattle on communal rangelands in the Eastern Cape, South Africa. *Asian-Aust. J. Anim. Sci.*, 23 (6): 708 – 718.
- [100] Marufu, M. C., Chimonyo, M., Dzama, K. and Mapiye, C. (2009). Sero-prevalence of tick-borne diseases in communal cattle reared on sweet and sour rangelands in a semi -arid area of South Africa. *Vet. J.* In Press.
- [101] Mathias-Mundy, E. and McCorkle, C.M. (1989). *Ethnoveterinary Medicine: An Annotated Bibliography*. Technology and Social Change Program. Iowa State University, AMES. U.S.A.
- [102] Mbanasor, J.A. (2000). The future of livestock in Nigeria In: Ukachukwu, S.N., Ibeawuchi, J.A., Ibe, S.N, Ezekwe, A.G. and Abasiekong S.F. (Ed.). Animal

- production in the new millennium challenges and options, proceedings of the 25th animal conference held at the Michael Okpara University of Agriculture Umudike, Nigeria, March 2000, Pp 8 - 16.
- [103] McGraw, L. J. and Eloff, J. N. (2008). Ethno-veterinary use of Southern African plants and scientific evaluation of their medicinal properties. *J. Ethnopharmacol.*, 119 (3): 559 – 574.
- [104] McIntire, J. (1986). On the Alleged Difficulties of On-Farm Research with Livestock in Mixed Farming System. Research Methods and Priorities FSSP Network Report, No. 2 Proceedings of the ILCA/FSSP Workshop Held at ILCA. 24 - 27 June 1985.
- [105] Moutari, M. (2008). Securing Pastoralism in East and West Africa: Protecting and promoting livestock mobility Niger/Nigeria Desk Review.
- [106] Moran, E. F. (2006). *People and Nature: An introduction to human ecological relations*: Blackwell Publishing, Malden, MA., Pp: 52.
- [107] Moreki, J. C., Tshireletso, K. and Okoli, I. C. (2012). Potential use of ethno - veterinary medicine for retained placenta in cattle in Mogonono, Botswana *Journal of Anim. Prod. Adv.*, 2 (6): 303 - 309.
- [108] Muchenje, V., Dzama, K., Chimonyo, M., Raats, J. G. and Strydom, P. E. (2008). Tick susceptibility and its effects on growth performance and carcass characteristics of Nguni, bonsmara and angus steers raised on natural pasture. *J. of Anim. Sci.*, 2: 298 - 304.
- [109] Muhammad, D. N. and Ardo, U. A. (2010). Enhancing livestock development and means of existence for the vulnerable populations through education and training: A case of nomadic education programme (Nep) in Nigeria animal husbandry and extension education services. national commission for nomadic education Kaduna, Nigeria. A paper presented at the CILSS, RPCA and OCDE forum on livestock breeding and food security held in Accra, Ghana. December, 14 – 16 December, 2010.
- [110] Mukasa, C., Ojo, A.O., Adepoju S.O. and Dabo, A. (2012). Market analysis of cattle in Southern Kaduna, Kaduna State, Nigeria. *Science Journal of Agricultural Research and Management*: Pp: 1-6.
- [111] Nafarnda, W. D., Kubkomawa, H. I., Mshellia, A., and Nesati, Y. I. (2005). Evaluation of Fertility Rate in Friesian and White Fulani (Bunaji) Breeds of Cattle Following Artificial Insemination. *Global Journal of Agricultural Science*, 14 (2): 155-157. Published by Bachudo Science Printing Press, Water Works Road, Ikot Effanga, Calabar, Cross River State, Nigeria.

- [112] Nafarnda, W. D., Yaji, A. and Kubkomawa, H. I. (2006). Impact of Abattoir Waste on Aquatic Life: A Case Study of Yola Modern Abattoir. Global Journal of Pure and Applied Science, 12 (1): 31 - 33. Published by Bachudo Science Printing Press, Water Works Road, Ikot Effanga, Calabar, Cross River State, Nigeria.
- [113] Ndi, C. Vabi, M.B. Djoumssi, M. and Sali-Django. (1992). *Ethno-botanical survey of plants of veterinary importance in the Northwest Province of Cameroon*. Staff working document. Institute of animal and veterinary research; Bambui Research Centre.
- [114] Ndlovu, T., Chimonyo, M. and Muchenje, V. (2009a). Monthly changes in body condition scores and internal parasite prevalence in Nguni, bonsmara and Angus steers raised on sweet veld. *Trop. Anim. Health Prod.*, 41 (7): 1169 - 1177.
- [115] Ndlovu, T., Chimonyo, M., Okoh, A. I., Muchenje, V., Dzama, K., Dube, S. and Raats, J. G. (2009). A comparison of nutritionally related blood metabolites among Nguni, Bonsmara and Angus steers raised on sweet-veld. *Vet. J.*, 179: 273 - 281.
- [116] Niamir, M. (1991). Traditional African range management. Pastoral development network, OODI, London.
- [117] *Nigerian Journal of Animal Production* (1997). Summary of Guide to Contributors/ Authors. Published by the Nigerian Society for Animal Production. Department of Animal Nutrition, University of Agriculture, P. M. B. 2240, Abeokuta, Ogun State, Nigeria, 24 (1): 197.
- [118] *Nigeria Journal of Animal Production Research Advances*, 7 (3): 175 - 185. Published By Tapas Institute of Scientific Research and Development, 2011, Ezeogidi Estate, Umunwanlo Irete, Owerri West L. G. A, P. O. Box 2143, Owerri, Imo State, Nigeria.
- [119] Nonaka, I., Takusari, N., Tajima, K., Suzuki, T., Higuchi, K. and Kurihara, M. (2008). Effects of high environmental temperatures on physiological and nutritional status of pre-pubertal Holstein heifers. *Liv. Sci.*, 113 (1): 14 - 23.
- [120] Nqeno, N., Chimonyo, M., Mapiye, C. and Marufu, M. C. (2009). Ovarian activity, conception and pregnancy patterns of cows in the semi-arid communal rangelands in the Eastern Cape Province of South Africa. *Anim. Reprod. Sci.*
- [121] Nuwanyakpa, M., De vries, J. Ndi, C. and Salli-Django (1990). *Traditional veterinary medicine in Cameroon. A renaissance in ancient indigenous technology*. Heifer project international. Bamenda, Cameroon.

- [122] Nweze, B. O., Otuma, M. O., Ekwu, L. G. and Oga, G. (2003). Agro Pastoral system in humid tropics. A case of Rice Muturu integrated farming practice in Ebonyi State 8th Ann. Conf. Anim. Sci. Assoc. Nig. Sept 17-19, 2003, Maiduguri Nigeria: Pp: 139 - 49.
- [123] Nweze, B. O., Ekwe, O. O., Alaku, S. O. and Omeje S. I. (2012). Productivity of two indigenous Nigerian cattle breeds and their crossbred under range grazing management. *World J. Life Sci. and Medical Research*, 2 (1): 1 – 8.
- [124] Nyong, A. (2010). Climate related conflicts in West Africa, In: *Report from Africa population, health, environment and conflict*, ESCP report issue 12.
- [125] Ofuoku, A. U. and Isife, B. I. (2009). Causes, effects and resolution of farmers-nomadic cattle herders conflict in Delta State, Nigeria. *International Journal of Sociology and Anthropology*, 1 (2): 047 - 054.
- [126] Okoli, I. C., Aladi, N. O., Etuk, E. B., Opara, M. N., Anyanwu, G. A. and Okudo, N. J. (2005). Current facts about the animal food products safety situation in Nigeria. *Ecology of food and nutrition*, 44: 359 - 373.
- [127] Okoli, I. C. and Kalla, D. J. U. (2008). Regional response is key to mitigating the impact of environmental change on livestock production in West Africa. In: Food security and environmental change-linking science, development and policy for adaptation. An international conference, 2nd to 4th April, 2008. University of Oxford, UK., No. 010.02.
- [128] Okoli, I. C., Tamboura, H. H. and Hounranghe-Adote (2010). Ethno-veterinary medicine and sustainable livestock management in West Africa. In: D. R. Katerere and P. Luseba (eds); Ethno - veterinary botanical medicine: Herbal medicine for animal health. CRC Press, Frans Toylor Group, Boca Raton, London, New York. Pp: 321 - 352.
- [129] Okoli I. C., Enyinnia N. C., Elijah A. G., Omede A. A. and Unamba-Opara C. I. (2012). Animal reproductive management practices of Fulani pastoralists in the humid rain forest of Imo State, Nigeria. *Journal of Animal Science Advances*, 2: (2): 221 - 225.
- [130] Okali, C. Sumberg, J. Farrington, J. (1994). Farmer Participatory Research Rhetoric and Reality, London Overseas Development Institute.
- [131] Okpi, A. (2010). Climate change as threat to Nigerian's corporate existence, Pp: 564.
- [132] Olaloku, E.A And Debre, S. (1992). Research priorities for the development of appropriate feeding systems for dairy production in sub-saharan Africa. In: Stares, J.E.S., Said, A.N and Kategile, J.A (Eds). *The complementarity of feed resources for animal production in Africa*. Proceedings of the joint feed

- resources networks workshop held in Gaborone, Botswana, 4th to 8th March 1991. African feed research network. ILCA, Addis Ababa, Ethiopia, Pp. 399.
- [133] Oyenuga, V. A. (1999). *Energy and protein requirement of West African dwarf sheep* 1. Effect of feeding four levels of dietary energy to sheep. *East African Agric. Forestry J.*, 42: 89 – 97.
- [134] Parton, W. J., Morgan, J. A., Wang, G. M. and Gross, S. D. (2007). Projected ecosystem impact of the prairie heating and Co₂ enrichment experiment. *New Phytology's*, 174: 823 - 834.
- [135] Payne, W. J. A. and Wilson, R. T. (1999). Animal husbandry in the tropics. (5th ed.). Oxford, UK: Blackwell Science.
- [136] Peacock, C. (1996). Improving goat production in the tropics. A manual for development workers. An Oxfam/FARM African publication (U.K. and Ireland), Pp: 1 - 20.
- [137] Pullan, N. B. (1978). Condition score of white Fulani cattle. *Tropical Animal Health and Production*, 10: 118 - 120.
- [138] Reijntjes, C. Haverkort, B. and Waters-Bayer, A. (1992). Farming for the Future, an Introduction to Low-External Input and Sustainable Agriculture, Lesuden. ILEIA/Macmillan.
- [139] Rhoades, R. E. (1994). Farmer Participation in Priority Setting In: Meindertsma, J.D. (Ed) Setting Research Priorities towards Effective Farmer-Oriented Development Oriented Research in Agriculture. No.5, Amsterdam Royal Tropical Institute, Pp. 65-76.
- [140] RIM, (1992). *Nigerian national livestock resource survey* (IV). Report by resource inventory and management limited (RIM) to FDL and PCS, Abuja, Nigeria.
- [141] Roche J. R., Friggins N. C., Kay J. K., Fisher M. W., Stafford K. J., and Berry D. P. (2009). Body condition score and its association with dairy cow productivity, health, and welfare. *J. Dairy Sci.*, 92: 5769 - 5801.
- [142] Roger, B. (1999). Traditional livestock breeds: Geographical distribution and dynamics in relation to the ecology of West Africa, working paper 122.
- [143] Seegers, S., Meindertsma, J. D. and Stoop, W. (1994). Setting Priorities in FSR and D Programmes in Agriculture No.5, Amsterdam Royal Tropical Institute, Pp. 65-76.
- [144] Seegers, S., Meindertsma, J. D. and Stoop W. (1994). Setting Priorities In FSR&D Programmes In: Meindertsma, J. D. (Ed) Setting Research Priorities

- towards Effective Farmer Oriented Research Development Oriented Research in Agriculture No.5 Amsterdam Royal Tropical Institute, Pp. 15-31.
- [145] Sere, C. (1991). Notes Discussion Working Groups/General Conclusions of the Animal Production Steps Global Workshop, IRC/CIID Costa Rica, 16 - 21 September 1991.
- [146] Shabi, Z., Arieli, A., Bruckental, I., Aharoni, Y., Zamwel, S., Bor, A. and Tagari, H. (1998). Effect of the synchronization of the degradation of dietary crude protein and organic matter and feeding frequency on ruminal fermentation and flow of digesta in the abomasum of dairy cows. *J. Dairy Sci.*, 81: 1991 - 2000.
- [147] Shaib N., Aliyu A. and Bacski J. S. (1997). Nigerian national agricultural research strategy plan, 1996-2010: Department of agricultural science, federal ministry of agriculture and national resources, Abuja.
- [148] Shiawoya, E. L. and Tsado D. N. (2011). Forage and fodder crop production in Nigeria: Problems and prospects. *World Journal of Life Sci. and Medical Research*, 1 (4): 88.
- [149] Shua, J. N., Kubkomawa, H. I., Tizhe, M. A. and Adegbola, T. A. (2011). Effects of Nitrogenous Feed Supplements Utilization on the Performance of Red Sokoto Bucks Grazing Natural Vegetation in Bauchi, North-Eastern Nigeria. International Journal of Tropical Agriculture and Food Systems, 5 (3): 162 - 166. Tapas Institute of Scientific Research and Development, Ezeogidi Estate, Umunwanlo Irete, Owerri West L. G. A, P. O. Box 2143, Owerri, Imo State, Nigeria.
- [150] Spore (2005). Livestock genetic erosion. CTA spore magazine 117 Issue, Pp: 25 - 27.
- [151] Stapleton, P., Youdeowei, A., Mukanyange, J. and van Houten, H. (1995). Scientific Writing for Agricultural Research Scientists: A Training Reference Manual. Published by the West Africa Rice Development Association (WARDA) in collaboration with the Technical Centre for Agricultural and Rural Cooperation (CTA), Pp. 1 – 132.
- [152] Stroud, C. (1995). An Evaluation of On-Farm Research Methodologies Presently Used in the Ministry of Agriculture Tanzania, In: Penninkhoff, P. (Ed). Design Implementation and Analysis of On-Farm Proceedings Amsterdam Royal Tropical Institute, Pp. 5 - 26.
- [153] Tainton, N. M. (1999). 'Veld management in South Africa'. University of Natal Press, Pietermaritzburg, South Africa.

- [154] Tenuche, M. and Ifatimehin, O. (2009). Resource conflict among farmers and Fulani herds men: Implications for resource sustainability: *African Journal of Political Science and International Relations*, 3 (9): 360 - 364.
- [155] Tewe, O. O. (1997). Sustainability and development: Paradigms from Nigeria's livestock industry. Inaugural lecture series, University of Ibadan Press, Ibadan.
- [156] Tibi, K. N. and Aphunu, A. (2010). Analysis of the cattle market in Delta state - The supply determinants. *African Journal of General Agriculture*, 6 (4): 199 - 203.
- [157] Tizhe, M. A., Kubkomawa, I. H., Waba, Y. E., and Addass, A. P. (2010). Foetal Wastage in Ruminants and Sustainable Livestock Industry in Nigeria. Published by Journal of Agriculture and Veterinary Sciences, Volume 2: 72 - 80. Published by Center for Research and Innovations, babaya Plaza, Western Bypass P. O. Box 2601, G. P. O. Minna, Niger State, Nigeria.
- [158] Tizhe, M. A. (2011). Effects of Breed, Year, Season, and Age on Some Reproductive, Fecal Egg Worm Count and Haemato-Biochemical Parameters of Sahel and Sokoto Red Goats in Mubi, Adamawa State. A Thesis Submitted to the Postgraduate School, Abubakar Tafawa Balewa University, Bauchi, in Partial Fulfillment of the Requirements for the Award of Doctor of Philosophy in Animal Science, Animal Production Programme, School of Agricultural Technology, Abubakar Tafawa Balewa University, Bauchi, Nigeria.
- [159] Tizhe, M. A., Daniel, K. T., Kubkomawa, H. I., Dass, D. and Butswat, I. S. R. (2011). Seasonal Abattoir Foetal Wastage, Food Security and the National Economy. *Nigerian Journal of Animal Production*, 38 (11): 159 - 164. Published by Nigerian Society for Animal Production. Lynson Prints, No. 31 Sokenu Rd. Oke-Ijeun, Abeokuta, Nigeria.
- [160] Tizhe, M. A., Kubkomawa, H. I., Shua, J. N. and Butswat, I. S. R. (2011). Aspects of the Hematology and Serum Biochemistry of Sahel and Sokoto Red Bucks at Mubi, Adamawa State, Nigeria. *Journal of Animal Production Research Advances*, 7 (2): 149 - 154. Published by Tapas Institute of Scientific Research and Development, 2011, Ezeogidi Estate, Umunwanlo Irete, Owerri West L. G. A, P. O. Box 2143, Owerri, Imo State, Nigeria.
- [161] Tizhe, M. A., Kubkomawa, H. I. and Asuquo, A. A. (2011). Testicular Sperm Reserve of Sokoto Red and Sahel Bucks from Mubi Main Slaughter House, Adamawa State,
- [162] Tripp, R. and Wooley, J. (1989). The planning of On-Farm Research: Identifying Factors for Experimentation, Mexico, CIMMYT/Cali, CIAT.
- [163] Todd, R. B. (2008). Getting those repeat breeders bred. Western dairy news, Agrilife extention and research, University of Texas, 8 : 7.

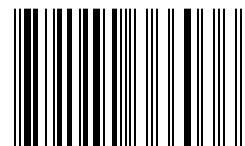
- [164] Tonah, S. (2006). Managing farmer-herder conflicts in Ghana's Volta Basin. *Ibadan Journal of Social Sciences*, 4 (1): 33 – 45.
- [165] Tukur, H. M. and Maigandi, S. A. (1999). Studies on animal traction in North-eastern Nigeria. Characterization and management of animals used for draught. *Trop. J. Anim. Sci.*, 1 (1): 10 - 27.
- [166] Umar, A. S. S., Alamu, J. F. and Adeniji, O. B. (2008). Economic analysis of small scale cow fattening enterprise in bama local government area of Borno state, Nigeria. *Production Agricultural Technology*, 4 (1): 1 - 10.
- [167] Umar, A. S. S. (2007). Financial analysis of small scale beef fattening enterprise in bama local government area of Borno state. An unpublished M.sc. thesis, Ahamadu Bello University, Zaria, Nigeria.
- [168] Usman, I., Umar, A., Tizhe, J. and Saleh, M. (2009). Comparative Evaluation of Animal with Plant Protein Intake in Mubi North Local Government Area of Adamawa State. Being a Project Submitted to the Department of Animal Health and Production Technology, Federal Polytechnic, Mubi in Partial Fulfilment of the Requirements for the Award of Diploma Certificate in Animal Health and Production Technology.
- [169] Usman. H and Nasil. M. (2005). Commodity chain analysis of cattle marketing in Nigeria; A case study of K.R.I.P area Kano state. A report submitted to ADENI project/NAERLS Zaria April, 2005.
- [170] Vabi, M.B. and Ndi, C. (1991). Fulani indigenous veterinary practices: Situation report from the Northwest Province of Cameroon and Southwest Nigeria. *Journal of Rural Life*, (2): 23 – 92.
- [171] Walker, B. and Salt, D. (2006). *Resilience thinking: Sustaining ecosystems and people in a changing world*. Island Press, Washington, D.C., USA.
- [172] Waltner, S. S., McNamara, J. P., and Hillers, J. K. (1993). Relationships of body condition score to production variables in high production Holstein dairy cattle. *J. Dairy Sci.*, 76: 3410 - 3419.
- [173] Walters-Bayer, A. Bayer, W. (1994). Planning with Pastoralists: PRA and More-a Review of Methods Focused on Africa, Eschborn, GTZ.
- [174] West, D. (1985). Government activities in beef production. In National Conference of beef production. July, 1985, Kaduna Nigeria, Pp: 75.
- [175] Worman, F., Normain, D. and Ware-Synder, J. (1990). (eds), Farming Systems Research Handbook for Botswana. ATIP Research Paper No. 3 Botswana, Agricultural Technology Improvement Project.

- [176] Yokus, B. and Cakir, U. D. (2006). Seasonal and physiological variations in serum chemistry and mineral concentrations in cattle. *Biol. Trace Elem. Res.*, 109: 255 - 266.

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