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DISCOVERY

About the Cover



The study examined the determinants of degree of adoption of pro vitamin A cassava by farmers in Delta State, Nigeria. Using a multistage sampling procedure, 120 pro vitamin A cassava farmers were selected from Delta state. Data were obtained using interview schedule with well-structured questionnaire and were analyzed by means of descriptive statistics like 3 rating scale, standard deviation and inferential statistics (Tobit regression model). Results showed that the coefficients of education, household size and farming experience had a direct relationship with the degree of adoption of pro vitamin A cassava varieties at 1% and 5% level of probability. The coefficients of farm income and access to extension visit had an indirect relationship with the degree of adoption of pro vitamin A cassava at 10% level of probability respectively. The adoption mean score implies that there were moderate degrees of adoption of pro vitamin A cassava in the study area. The respondents identified inadequate funding and high cost/unavailability of pro-vitamin cassava A stem as major factors affecting the degree of adoption. The study concluded that the level of education, household size and farming experience positively determined farmers' degree of adoption of pro vitamin A cassava varieties while farm income and access to extension services negatively determined their degree of adoption of pro vitamin A cassava varieties. It is therefore recommended that more efforts of the extension workers in corroboration with the technology developers are highly needed to carry out nutritional information campaigns and agriculture shows with regards to pro vitamin A cassava to boost the degree of adoption in the study area (Uwandu QC, Amadi PE, Igwe COK. Determinants of degree of adoption of Pro Vitamin A Cassava varieties among farmers in Delta State, Nigeria. *Discovery*, 2019, 55(287), 578-582); (Image: EikoOjala).

AGRICULTURE

Determinants of degree of adoption of Pro Vitamin A Cassava varieties among farmers in Delta State, Nigeria

Uwandu QC, Amadi PE, Igwe COK

The study examined the determinants of degree of adoption of pro vitamin A cassava by farmers in Delta State, Nigeria. Using a multistage sampling procedure, 120 pro vitamin A cassava farmers were selected from Delta state. Data were obtained using interview schedule with well-structured questionnaire and were analyzed by means of descriptive statistics like 3 rating scale, standard deviation and inferential statistics (Tobit regression model). Results showed that the coefficients of education, household size and farming experience had a direct relationship with the degree of adoption of pro vitamin A cassava varieties at 1% and 5% level of probability. The coefficients of farm income and access to extension visit had an indirect relationship with the degree of adoption of pro vitamin A cassava at 10% level of probability respectively. The adoption mean score implies that there were moderate degrees of adoption of pro vitamin A cassava in the study area. The respondents identified inadequate funding and high cost/unavailability of pro-vitamin cassava A stem as major factors affecting the degree of adoption. The study concluded that the level of education, household size and farming experience positively determined farmers' degree of adoption of pro vitamin A cassava varieties while farm income and access to extension services negatively determined their degree of adoption of pro vitamin A cassava varieties. It is therefore recommended that more efforts of the extension workers in corroboration with the technology developers are highly needed to carry out nutritional information campaigns and agriculture shows with regards to pro vitamin A cassava to boost the degree of adoption in the study area.

Discovery, 2019, 55(287), 578-582

Impact of credit on income of cassava-based crop farmers under the national special programme on food security in Enugu state, Nigeria

Mazza Mary-Ann

The study examined the impact of credit on income of cassava-based crop farmers under the National Special Programme on Food Security (NSPFS) in Enugu State, Nigeria. Purposive and multi-stage random sampling techniques were utilized in selecting three hundred and sixty respondents (comprised 180 NSPFS participants and 180 non-participants) used for the study. Data were obtained with the aid of structured interview schedule and Focus Group Discussion, and analyzed using descriptive and inferential statistics such as means, percentages, Z-test, ordinary least squares regression and chow's test. Results show that, for participants, farming experience (5%), farm size (1%) and household size (5%) were positive and significant determinants of income. For non-participants farming experience, farm size and household size were all significant determinants of income at 1% level. From the result, access to market significantly and positively influenced the income of NSPFS participants at 5% but significantly and negatively influenced the income of non- participants at 1%. Hired labour was significantly and negatively related to the income of participants and non- participants at 1%. Participants of NSPFS credit scheme, on average, earned higher incomes than non-participants. The income difference between participants and non- participants was due to access to credit under the programme. The NSPFS credit scheme positively influenced farmers' income. It was recommended that the programme should be sustained and extended to other areas of the state to economically empower more farmers.

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MANAGEMENT

An assessment of passengers' satisfaction of commercial transport in the Federal University of Technology, Akure, Ondo State, Nigeria

Olorunfemi Samuel Oluwaseyi, Adeniran Adetayo Olaniyi, Adepoju Oluwagbemiga Joshua

This study was conducted to understand users' satisfaction of FUTA commercial transport. To achieve the purpose of this study, literature review was employed to reveal various challenges associated with commercial transport. In most cases, the passengers are mostly affected from inadequacies of public transport services. The nature of the commercial transport in FUTA needs to be investigated to ensure that passenger derive the best from the commercial transport service. To achieve this, a survey was conducted. Questionnaires, as well as direct observation were administered to passengers of FUTA shuttle buses. A convenient sampling technique was employed to assess the passenger satisfaction of commercial transport in FUTA, Nigeria. Primary data (questionnaires and personal observation) was used to achieve descriptive statistics. From the non probability sampling, one hundred and ten (110) questionnaires were administered to commuters of the public passenger transport in FUTA. Findings revealed that there is inadequacy of vehicle usage; also the satisfaction derived from the commercial bus operation in FUTA is quite lesser. Recommendations were suggested to mitigate the impediments, some of the recommendations include; provision of adequate and road-worthy vehicles in FUTA, improvement of existing transport infrastructures in FUTA, re-orientation of drivers to correct bad attitude, employment of trained personnel in the management of the operations, and the involvement of school management especially Transport Management Department in the collection of relevant data for simulation, forecasting, planning, and policy towards the improvement of transport infrastructures, equipment, and management.

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Effect of short term water deprivation on the pharmacokinetics of Sulphadimidine in West African Dwarf (WAD) goats (*Capra hircus*)

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Sulphadimidine, a synthetic antimicrobial drug is widely used in veterinary medicine in the treatment of animal diseases. The pharmacokinetics of sulphadimidine could be altered by water deprivation. The present study was carried out to determine the effect of short term water deprivation on the pharmacokinetics of sulphadimidine in West African Dwarf (WAD) goats following intramuscular route of administration. In a randomized parallel study, eight (8) WAD goats comprising 4 males and 4 females were separated into 2 groups of 4 each. Sulphadimidine was administered at a dose of 100 mg/kg body weight to goats in group one, while the goats in group two were deprived of water for 3 days prior to sulphadimidine administration on the right gluteal muscle. The volume of distribution (Vd) (12.51±0.85 L/kg) and total body clearance (Cl) (2.11±0.15 L/kg/h) of the non-water deprived WAD goats were significantly higher ($p<0.05$) in comparison with the Vd (5.27±0.47 L/kg) and Cl (0.83±0.20 L/kg/h) of the water deprived WAD goats. The mean residence time (MRT) (5.38±0.52 h), area under the plasma concentration versus time curve from 0 to 48 h (AUC_{0-48}) (734.92±88.32 µg/ml.h) and area under the moment curve (AUMC) (4075.43±778.53 µg/ml/h^2) were significantly ($p<0.05$) lower in the non-water deprived WAD goats in comparison to the MRT (7.67±1.11 h), AUC_{0-48} (1101.96±183.08 µg/ml.h) and AUMC (8987.01±2577.86 µg/ml/h^2) of water deprived WAD goats. The pharmacokinetic parameters were altered in the water deprived goats due to reduced distribution of sulphadimidine to tissues and slower elimination from the body due to dehydration. This should be considered during therapy to optimize therapeutic outcome.

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