

POLICIES AND SOCIO-ECONOMICS CONSTRAINTS TO DISTRIBUTION AND CONSUMPTION OF TRADITIONAL MEDICINE IN CROSS RIVER STATE, NIGERIA: IMPLICATION FOR SUSTAINABILITY IN TRADITIONAL MEDICINE

I. B. ADINYA, M. U. AWOKE, D. A. IDIEGE, S. AJAYI, L. O. OGBONNAYA, I. E. ELE, AND K. I. OGBONNA

(Received 23, May 2007; Revision Accepted 12, July 2007)

ABSTRACT

In rural areas in Nigeria, access to modern health care is often unaffordable by resource – poor farmers due to high cost of Western medicine so farmers have resorted (resolved) to use traditional medicine that are cheaper and readily available. However, there are several factors that constitute impediments to traditional medicine development in Cross River State, Nigeria and the world at large. This paper identified some socio-economic constraints to distribution and consumption of traditional medicine in Cross River State, Nigeria. Data were obtained from a random sample of 120 respondents (Users of traditional medicine) in Cross River State, Nigeria. Result from the study revealed that 16.67% of the respondents disclosed that in -correct diagnosis militate against the distribution and consumption of traditional medicine in Cross River State. However about 10%, 9.17% and 8.33% of the respondents respectively revealed that lack of written document, imprecise dosage and low hygiene standards are constraints against the distribution and consumption of traditional medicine in the study area. From the findings of the study and conclusion the following recommendations and policy implication are made; traditional medicine promotion workshop and enlightenment campaign have to be intensified to enhance the efficient usage of traditional medicine. Besides, that, there is need to improve the production of traditional medicine through collaborative scientific research and NAFDAC should control abuse of traditional medicine. Extension agents should train traditional healers on the method of packaging under good sanitary environment in order to ensure consumers safety and product quality.

KEY WORDS: Traditional Medicine, research and development, constraints, collaborative research, extension service , policy implication.

INTRODUCTION

Plants and herbs have been used as primary sources of medicine for thousands of years and were our very first medicine (Asaah, *et al*, 2003). They are God's natural gift to men (Genesis 1:29). Asaah, *et al*, (2003) reported that over 4,000 years ago the Red Emperor of China published a list of 4,000 medicine plants. The ancient Egyptians placed medicinal plants in the pyramids to treat their pharaohs after death, who were mummified using plants, herbs, spices and minerals. Today, traditional healers are still the main provider of primary health care in many regions of the world, identifying, experimenting and using natural substances to treat humans and animals. Traditional systems of health care include the highly developed and well – documented classical systems of China, Tibet and India as well as the less studied systems in Africa and Latin America and the omni-present folk systems that are passed on orally. According to the cause, there are also different options for treatment, common disease often fall within the domain for humans and animals, who may use herbal preparations and / or Western (Asaah, *et al*, 2003). Since the 1950's, traditional Chinese health practices have been institutionalized into formal education system. About 1,000 medicinal plant species are used by Chinese doctors. Traditional medicine which is based on the Social, cultural and religious background of the people has proved to ameliorate health problems in many places throughout the globe.

A round the globe, especially in Kenya, Mozambique, Zimbabwe, Zambia, Lesotho, Eastern Ghats, Kan cheepuran districts of India, Sri Lanka, China, Mayan, Nepals, Cochabamba and Guatemala to mentioned but a few, experiences by different farmers showed that plant like neerh, aloe vera, ginger, garlic etc have been successfully used to cure malaria, high blood pressure, diabetes, stroke etc (Kuye *et al*, 2007).

Okoh (2004) observed that in recent times there has been an increased awareness of the importance of traditional medicine in health care of human and animal populations in developing countries, efforts have been made in different countries to carry out researches into traditional medicines. It is an indisputable fact that farmers utilized traditional medicine in treatment of their problems before the birth of modern medicine.

FAO (1984), observed that before the advent of Western Sciences, medicinal practices as applied to human beings, animal and plants, farmers used traditional medicine in treatment of their problems.

In rural areas in Nigeria access to modern health care is often very limited and unaffordable by resource poor farmers due to increasing costs of Western Medicine and services, so farmers in rural areas have resorted to use traditional medicine because it is cost saving and easily appreciated, applied and enjoys a wider acceptability among farmers and rural dwellers than modern medicine. The major contributory factor, however,

I. B. Adinya, Department of Agricultural Economics and Extension Cross River University of Technology, Obubra, Cross River State, Nigeria

M. U. Awoke, Department of Agricultural Economics Extension and Management, Ebonyi State University Abakaliki, Nigeria

D. A. Idiege, Department of Forestry and Wildlife Cross River University of Technology, Obubra, Cross River State, Nigeria

S. Ajayi, Department of Forestry and Wildlife Cross River University of Technology, Obubra, Cross River State, Nigeria

L. O. Ogbonnaya, Department of Forestry and Wildlife Cross River University of Technology, Obubra, Cross River State, Nigeria

I. E. Ele, Department of Agricultural Economics and Extension, University Of Calabar, Calabar, Cross River State, Nigeria

K. I. Ogbonna, Department of Agricultural Economics and Extension, University Of Calabar, Calabar, Cross River State, Nigeria

is the fact that traditional medicine blends readily with the socio – cultural life of the people in whose culture it is deeply rooted (Makinde, 2000).

In Nigeria, the materials used among farmers include medicinal plant parts (Leaves, barks, fruits, roots and products (Sugar, oil e.g groundnut, palm Kernels oil, cotton seed oil, castor oil, Shea butter etc). Plants which for centuries have been in solitude and obscure in the forest, are becoming popular as their extracts are used for preparing traditional medicine.

However, this paper identifies some socio-economic constraints to distribution and consumption of traditional medicine in Nigeria.

METHODOLOGY

THE STUDY AREA

The research study was carried out in Cross River State. The state occupies an area of about 22, 342. 176 square kilometers (quarterly Newsletter of the Ministry of Local Government Affairs, Cross River State 2006 pp 4-8). It is located at latitude 5° 25'N and longitude 5° 00'E. The soil is ultisol and alifisol but predominantly ultisol (USDA) or (FAO/UNESCO, 1974). Cross River State has the largest rainforest covering about 7,290 square kilometers described as one of Africa's largest remaining virgin forest harbouring as many as five million species of animals, insects and plants (MOFINEWS, 2004). It is located within the evergreen rainforest zone. There are two distinct climatic seasons in the area rainy season from March to October and dry season from November to February. The annual rainfall varies from 2, 942mm to 3,424mm. The average temperature is around 28 degree Centigrade (CRADP, 1992). About 2,888,966 people inhabit the area, of which the Efiks, Ejaghams and Bekwarras are the major ethnic groups (Population Census 2006 In: Agbor, 2007 In: MOFINEWS2007). The study area is situated in the rainforest belt, which promotes the growth of crops such as Oil Palm, Oranges, Plantain, banana and guava. Food crops commonly grown by the inhabitant include rice, yam, cassava, potato, cocoyam, maize and vegetables. Finishing and keeping of animals like goats, sheep and poultry birds are among the area of interest of the people. Farming and other agro-based activities dominate the economic life of the people in Cross River State. However, a good number are involved in civil service, marketing of agricultural products (trading) and other forms of non-farming activities or business.

STUDY POPULATION AND SAMPLE SIZE

A sample of 120 traditional medicine users were randomly selected for the study. This served as the sample for the study. The first stage involves selection of four local government areas (Bekwarra, Ikom, Obubra and Odukpani) in Cross River State. This was followed by a random selection of four villages (Ibiaragidi in Bekwarra Local Government Area, Ofutop in Ikom Local Government Area, Ofodua in Obubra Local Government Area, Okuri kang in Odukpani Local Government Area) in the local government areas. The respondents were randomly selected from each of the villages. 30 respondents were selected each from four villages, making a total number of 120 respondents all together.

DATA COLLECTION AND ANALYSIS

The instrument used for data collection was modified enterprise level interview guide that contained structured and semi-structured questions. The researchers interviewed each respondent personally. Data obtained from the study were analyzed using descriptive statistic. The descriptive statistics include tables, means and frequencies analysis.

FINDINGS AND DISCUSSION

In the course of this study, some problems were identified to be militating against the distribution and

consumption of traditional medicine in Cross River State. These problems are discussed to include the following:-

(a) Constraints:

From Table 1, 16.67 % of the respondents disclosed that incorrect diagnosis militate against the distribution and consumption of traditional medicine in Cross River State. This is closely followed by the problem of ill – trained healers, militate against the distribution and consumption of traditional medicine in Cross River State. However, about 10 %, 9.17 % and 8.33 % of the respondents respectively revealed that lack of written document, imprecise dosage and low hygiene standards are constraints against the distribution and consumption of traditional medicine in the study area.

Furthermore, analysis of table 1 showed that 7.5 % of the respondents are faced with the problem of lack of extension agents. 6.67 percent of the respondents however, believed that secrecy of healing methods discourage them from using traditional medicine. While 5 % of them disclosed that lack of scientific research is constraint against distribution and consumption of traditional medicine.

Table 1 also showed that 5 % of the respondents accepted that bitter taste and bad odour of traditional medicine deter patience from taking it. Equally, 5 % of the respondents sampled disclosed that traditional medicine (roots, and bark) are heavy and cumbersome to transport this agrees with the findings of (Kuye et al, 2006).

Finally, lack of dependable market and poor rural transportation among other constraints pose a problem to distribution and consumption of traditional medicine. These constraints constitute 5.8 % and 5.8 % respectively.

From table 2, 5% of the respondents disclosed that when they suffered from chicken pox, and did not have enough money for Western medicine they used traditional herbal remedies using fresh palm wine juice. (*Elaeis guinensis*) on the affected area, and they were cured after 2 months.

Table 2 also reveals that 8.33% of them suffered from malaria, and were treated with traditional herbal remedies using *Azadirachta indica* (Dogoyaro leave/ neem tree leaves), the delocation of some of the leaves of lemon (citrus), mango leaves (*mangifera indica*) and guava leaves (*psidium*) were used as a remedy for malaria or fever in recommended dose of one glass two times daily for three days.

Further analysis of table 2 disclose that 16.67% of the respondents suffered from diarrhoea, they were treated with traditional herbal remedies using garlic powder with half teaspoonful crest powder with a cup of tomato juice (*Lycopersicum esculentum*).

Finally, 5% of the respondents accepted that they suffered from constipation, they were treated with traditional herbal remedies using scent leaf (*Osimum gratissimum*) with water in recommended dose of one glass two times daily for three days.

SOCIO ECONOMIC CONSTRAINTS TO DISTRIBUTION AND CONSUMPTION OF TRADITIONAL MEDICINE IN NIGERIA.

There are a number of socio-economic constraints which prevent the effective distribution and consumption of traditional medicine in Nigeria.

There are several factors that constitute impediments to traditional medicine development in Nigeria. These constraints must be removed to allow proper development of traditional medicine. The impediments include; Lack of scientific studies on traditional medicine. There is a great and compelling need for improve scientific studies on traditional medicine.

Lack of adequate funds has resulted in poorly developed infra-structural facilities, non-availability of books and journals needed for meaningful research work, and the institutes to other sectors of the economy.

The government should encourage collaborative regional research work. One area of collaboration regionally

research work could be investigations into the correct diagnosis and correct dosage of traditional medicine. The government should establish standard research station for tradition medicine. The government should employ specialist and local herbalist to conduct research. The theme of their research should include correct diagnosis of diseases. The research infrastructure should be well developed and maintained so that records of research carried out in the past can be obtained.

Mushala (1995) revealed that there are fewer constraints to research given the established infrastructure and support from government and donor agencies. The training programme ensures sustainability of research programs. Although recently there is a tendency for scientists to seek green pastures else where and, in some cases, there is sufficient funding to cover all the necessary research.

POOR RURAL MARKET

A lot of attention has been focused by Nigeria government on improving the productivity of the oil sector. However, less than adequate attention have been paid to a mechanism for the efficient marketing of tradition medicine.

The markets are not usually well planned they lack good drainage systems, have no stalls/ stores, no cooling facilities for traditional medicine products (leaves, fruits, roots and barks). The result is that the condition of retail markets poses health hazards to users. The lack of a dependable market for the traditional medicine, a part from the problems identified above, this may be due, to poor presentation and delivery of the traditional medicine. There is thus, need for proper studies on the processing, packages and storage of traditional medicine to raise their social appeal and acceptance (NAFDAC standard). The value added should off set the additional costs of processing and packing of traditional medicine. There is therefore a need to establish improve

markets with appropriate facilities to sustain traditional medicine.

POOR RURAL TRANSPORTATION

Traditional healers are scattered over a wide area without a good rural road network. This condition have given rise to high transport costs.

INADEQUATE EXTENSION WORK IN ENCOURAGING FARMERS TO USE TRADITIONAL MEDICINE

The introduction of the unified extension service in Nigeria is designed to address this problem. However, the under funding of the extension service by state government, and frequent changes in key extension management staff has prevented the full realization of the benefits of the unified extension system (Mijindadi et al, 1995).

THE ROLE OF EXTENSION COMMUNICATION IN TRANSFER/ DISSEMINATION OF NEW IMPROVE INFORMATION ON TRADITIONAL MEDICINE

The agricultural extension agent still remains a very important source of disseminating information for the purpose of agro-development. Extension communication is aimed at providing technical assistance or technology transfer to clientele, in order to provide solutions to identified or envisaged problems. Extension communication methods used in disseminating information include :-

- (i) Individual contact method: here the extension worker interact on a one to one basis with the clientele.
- (ii) Group contacts: these are better use when time and number of extension agents are limited they help in persuading the farmer/clientele to try new idea.
- (iii) Mass contact method: these are used to reach large number of people quickly in order to get them aware of new ideas or practices or in alerting them.

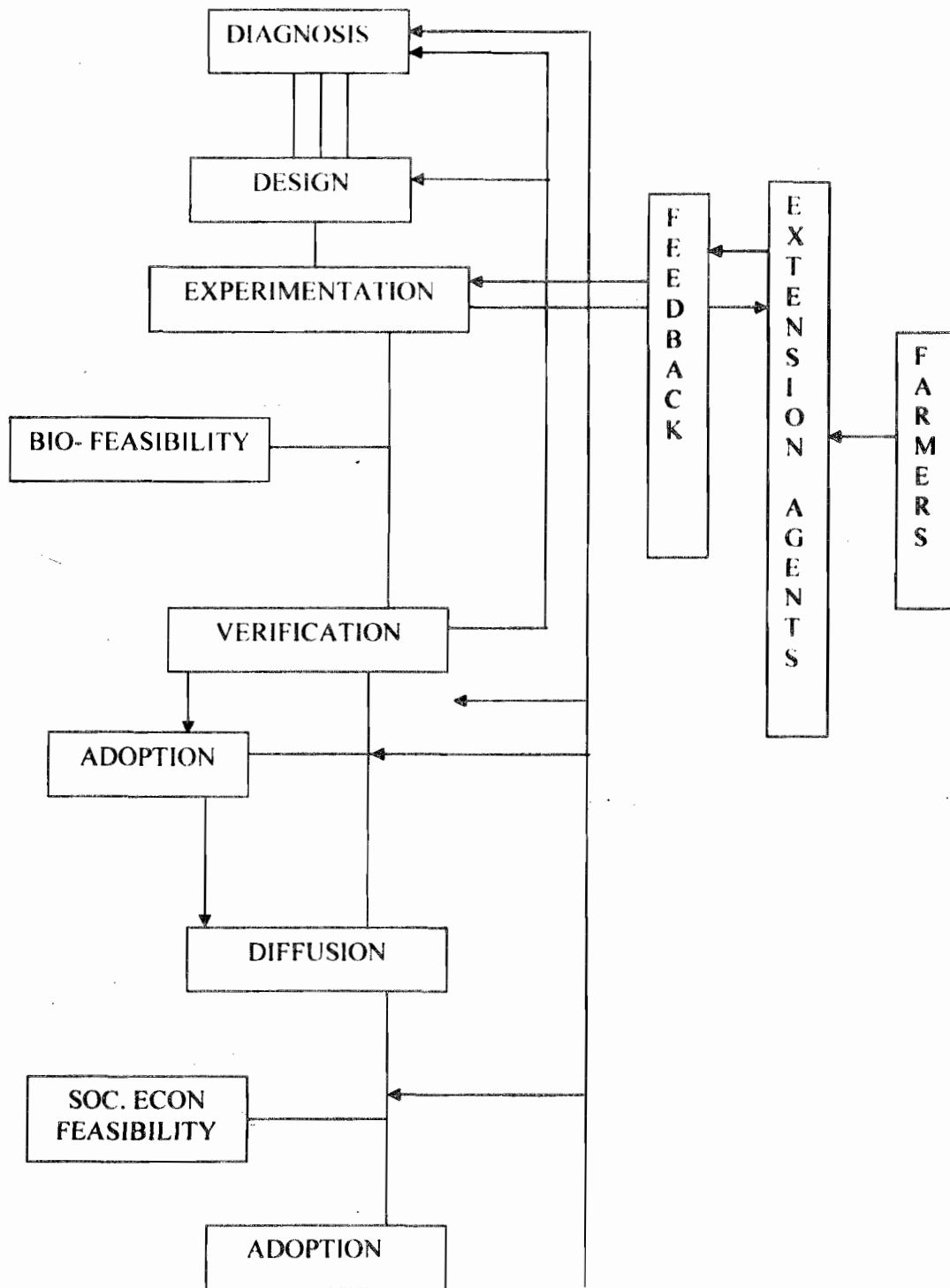


Figure 1: Stages in the generation and transfer of new technology in traditional medicine

Extension agents are involved in technology transfer to farmers / clientele. The four major functions of extension agents are (Akpabio,1997). The objective of extension communication include;

- i. To develop knowledge and competence related to the alternative solution to be applied;
- ii. To assist or guide small scale test in order to acquire information and skills to facilitate the introduction of new methods on a large scale.

- iii. To provide bases for judgment in order to interpret the results of the tests
- iv. To give guidance or training for adoption of an innovation as a new form of behaviour in production or in the way of life of the farmer / clientele or family (Akpabio, 1997).

In spite of laudable efforts to ensure the flow of funds to the agricultural extension, it has been faced with a lot of problems.

Majidadi (1995) identified the problems of extension agents as lack of fund.

Table 1: The Socio-economic Constraints to distribution and Consumption of traditional Medicine

Socio-economic Constraints to Traditional medicine distribution & Consumption	Ibaragidi in Bekwarra L.G.A of C.R.S	Ofutop in Ikom L.G.A of C.R.S	Ofodua in Obubra L.G.A of C.R.S	Okuri-kang in Odukpani L.G.A of C.R.S	Total frequency	Percentage (%)
Lack of Scientific research	1	2	1	2	6	5.00
Lack of dependable market	2	1	3	1	7	5.80
Poor rural transportation	1	1	4	1	7	5.80
Lack of extension agents	2	3	2	2	9	7.50
Incorrect diagnosis	5	4	6	5	20	16.67
Imprecise dosage	4	2	3	2	11	9.17
Low hygiene standards	2	3	2	3	10	8.33
Ill – trained healers	5	6	3	4	18	15.00
Lack of written records	2	3	2	5	12	10.00
Secrecy of healing methods	3	2	1	2	8	6.67
Bitter taste and bad odour	1	2	2	1	6	5.00
Its products are heavy & cumbersome	2	1	1	2	6	5.00
Total	30	30	30	30	120	100

Source: Computed from field survey, 2007.

Table 2: Distribution of respondents according to plants used in traditional medicine in Cross River State Nigeria and their mode of preparation and dosage common.

Type of Human disease	Scientific Name of Plant	Plant part use for treatment	Method of preparation of herb	Dosage	Natural neutralizer if dosage is exceeded	Ibaragidi in Bekwarra LGA of CRS	Ofutop in Ikom LGA of CRS	Ofodua in Obubra LGA of CRS	Okuri-kang in Odukpani LGA of CRS	Total Frequency	Percentage %
Chicken pox	Palm tree <i>Elaeis guineensis</i>	Palm wine	Rub palm wine on affected	Rub 25 litres per day	Wash from body	2	1	1	2	6	5.00
Whooping cough	Mango (<i>Manifera indica</i>)	Fruit	Roast ripe mango in hot clean sand and allow to cool	Suck the roasted mango for 3 days	1 glass palm oil	1	2	2	1	6	5.00
Filariasis	Garlic onion (<i>Allium sativum</i>)	Garlic fruit	Boil garlic, ginger with scent leaves	1 shot 3 times daily until symptom various	1 glass of palm oil	3	2	1	2	8	6.67
Hypertension	Mistletoe plant (<i>viscum album</i>)	Leaves	Make an infusion of dried mistletoe herb using one tablespoon to cup of boiling water	1 glass daily until symptom various	1 glass of cocoanut juice water)	2	3	2	5	12	10.00
Internal heat	Use for treatment of disease centro sema (centro sema pubescence)		Squeeze centrisema pubescence leaves and pumpkin leaves with nature eggs and golden seal leaves	1 glass 2 time daily for 3 days	2 glass of colornut juice	5	6	3	4	18	15.00
Malaria or fever	Dogoyaro plant (neem <i>Azadirachta Indica</i>)	Leaves	Get some quantity of do go yaro leaves mix with lemon grass, and grape and lime & boil with water.	Take half glass 2 times daily for 3 days	1 glass of palm oil	2	3	2	3	10	8.33
Diabetes	Bitter leaves (<i>Veronomia mygdalina</i>)	Leaves	Bitter scent cences extract juice therein			4	2	3	2	11	9.17
Diarrhoea	Tomato <i>Lycopersium esculentum</i>	Fruit juice	Mix the spoon of garlic powder with half tea spoon full crest powder with a cup of tomato juice	1 glass 2 times daily till symptoms vanish	1 glass of palm oil	5	4	6	5	20	16.67
Dysentery	Mango (<i>magnifera Indica</i>)	Fruit	Grind outer cover of mango fruit and mix one tea spoon full of water	1 tea spoon full every morning for 3 days	1 glass of cocoanut juice	2	3	2	2	9	7.50

Continuation of Table 2

Cancer disease	Mistletoe(vi scum album)	Leaves	Grind leaves and infuse into tea	1 glass daily	1 glass of palm oil	1	1	4	1	7	5.80
Ear problem	Tobacco leaves (Nicotiana tobaccum)	Leaves	Grind tobacco leaves (snuff) add palm kernel, wash your ear with it then wash the effected ear with warm water.	1 drop of liquid 2 times daily until symptom varnish	Use ear cleaner to remove the excess liquid	2	1	3	1	7	5.80
Constipation	Scent leaf Oziminn gratium	Leaves	Squ eeze scet leaf with water	1 glass 2 times daily for 3 days	1 glass of palm oil	1	2	1	2	6	5.00
						30	30	30	30	120	100

Source: Field survey, 2007

CONCLUSION AND POLICY IMPLICATION

The facts that generally affect the distribution and consumption of traditional medicine in Cross River State, Nigeria are lack of Scientific research, lack of a dependable market, poor rural transportation/bad roads, inadequate extension work, incorrect diagnosis of disease, imprecise dosage, low hygiene standard, ill – trained healers, lack of medical records, and the secrecy of some healing method etc.

RECOMMENDATION

In Nigeria, local farmers / rural people prefers traditional medicine over the western health care under certain circumstances, more researches have to be carried out making treatment through trado-medicine more explicit and less cumbersome. Much research still has to be carried out in this direction. More fund need to be allocated for researches in trado-medicine.

Medical practitioners, need to be trained in both traditional and modern medicine. There is a need for a union or association including modern and traditional health practitioners for attaining an integrated system of medicine. Such an association may lead to better approach in traditional medicine, and the production of improved traditional drugs. A similar initiative called the Health Missionaries International was established in Cameroon. It works in partnership with three other associations, which promotes the use of medicinal plants, especially those used to treat cardiovascular diseases. From the findings of the study and conclusion, the following recommendations and policy implication are made:-

Tradition medicine promotion workshop and enlightenment campaign have to be intensified to enhance the efficient consumption of traditional medicine to check their abuses and malpractices. National Agency for Food and Drug Administration and Control (NAFDAC) should control abuse of traditional medicine. Besides that, there is need to improve the production of traditional medicine through collaborative scientific research and transfer of improve technology to farmers using extension organization (technology transfer agency) should cooperate and collaborate with government agencies such as Universities, National Agency for Food and Drug Administration and Control (NAFDAC), Raw Materials Research Council (RMRC) and non-governmental organizations and financial institutions in Nigeria so as to improve the production capabilities of tradition medicine enterprise in areas of packaging, quality control and assurance.

Extension agents should train traditional healers on the method of packaging under good sanitary environment in order to ensure consumers safety and products quality.

REFERENCES

Agbor, G., 2007. The Economics of Population Growth and changes in Demographic Structure In: MOFINEWS

(2007) Cross River State Privatization exercise, journey sofar Jan – Feb, 2007 6, (3): Pg. 7

Akpabio I. A., 1997. Extension Communication methods as a strategy for Agricultural Development in Akwa Ibom State, ADP. In: Fabiyi Y. L. and M.G. Nyienakuna (1997) issues in sustainable Agricultural Development

Akubue, P. I., 1986, "Nigerian Medical Plants, Pharmacology and Toxicology". In the State of Medical Plants research in Nigeria. Sofowora, A. (ed) University of Ibadan Press, Nigeria.

Asaah, N. O., Manu, I. and Ombaku, N. N., 2003. Integrating Different healing Practices Campus Magazine for Endogenous Development. Nertherlands (6): Sept. 2003.

Cross River Agricultural Development Project, 1992. Report on Wetlands of Cross River State, Nigeria p115.

FAO/UNESCO, 1974. Soil Map of the World, FAO (1974) Paris.

FAO, 1984. Traditional /Indigenous System of veterinary Medicine for small Farmers in India, Bangkok.

Gills, L. S., 1999. Enthnomedical uses of plant in Nigeria University of Benin press.

Holy Bible (king James version, 100m\9\98 Cambridge University Press Published by the Krinitarian Bible Society Tyndale House London England.

Kuye O. O., Adinya I. B and Solomon J. F., 2006. Developments in Traditional Health –Care System among Nigeria small Farmers. *Nigerian Journal of Indigenous Knowledge and Development* 1, (1):

Makinde, A. A., 2000. Ethnoveterinary Medicine Research and Development. The vom Experience and Future Directions. In: Ethnoveterinary practices, Research and Development. Edited by J. O., Gefu, p. A. Abdu and C. B. Alawa pp 138 – 153.

Mijindadi, N. B., Olaniyan G. O., Eyo . I. Cheema, Oyebanyi, S. S., 1995. Socio- Economic Constraints to Sustainable Agriculture in the Moist Savannas of Sub-Saharan Africa. In: Kang, B. T; Akobundu, V. M. Manyong, R. J. Carsky, N. Sang Mga and E. A. Kueneman (1995). Moist Savannas of Africa Potentials and Constraints for Crop production. Published by International Institute of Topical Agriculture United Nations, Rome 5 Italy. pp213 – 223.

- Mushala, H. M., 1995. The Moist Savannas of East and Southern Africa: Potentials for and constraints to Researcher and Development. In Kang, B. T.; Akobundu, V. M., Monyong; R.J. Carsky, N. Sanginga and E. A. Kueneman (1995). Moist Savannas of Africa Potential and Constraints for crop production published by international institute of Agriculture United Nations, Rome Italy. Pp 69.
- MOFINEWS, 2004. Why Agriculture? Cross River State: Producing Milk and Honey for the Nation . A Bi-monthly Journal of Finance Incorporated, Calabar, Cross River State, Nigeria. July – August,2004 3, (6): pp4-5.
- MOFINEWS, 2007. Population Growth and Economic Development. Jan –Feb,2007
- Okoh, A. E. J., 2004. Ethnoveterinary Medicine and small-scale livestock farming in Nigeria. A Pepper presented at the 1st National Conference on Indigenous Knowledge and Development Anyan Publisher limited 37, Benue crescent Markurdi pp 74-92.