

Labour Information Utilization by Farmers in SW Nigeria

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Abstract

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Farmers need up to date information on efficient use and management of labour for agricultural production. Yet, they lack adequate and needed information. Hence, this study was undertaken to explore the sources and use of labour information by farmers in southwestern Nigeria. Multi-stage sampling procedure was used to select respondents for the study. Primary data were collected to elicit information from the farmers on sources and use of labour related information and data were analysed using descriptive statistics. Extension agents, input dealers, NGOs, produce marketers, private organization, radio, television, posers, acquaintances, farmers' association/cooperative and advisory leaflets were sources of information used by farmers. However, finding showed that acquaintance was the common source of labour information used by 53.8 percent food crop farmers and 44.8 percent tree crop farmers. They obtained information on labour management, availability, types and use from the above listed information sources. Very few use extension agents as source of labour information in Oyo state and 42.5 percent tree crop farmers indicated that they had no contact with the extension agents. There is need to enhance farmers' access to needed information on labour related matters and extension services should be improved to impact more technical knowledge to farmers.

Key words: Agricultural labour information, Food and tree crop farmers, southwestern Nigeria.

1. Introduction

One of the factors that have contributed significantly to growth of world agricultural output is improved technology. In its embodied form, technology consists of machines and equipment. In its non-embodied form, it consists of production process (Rzawan, 1992). Okojie (2007) declared that it is one of the crucial factors for increasing food production in Africa. Besides, technology in agriculture enables production of more output with small amount of variable input.

Information sources are information resources, knowledge and ideas in graphic material, screen of computers and machines through which technologies are communicated and disseminated. Sources of information include extension agents, input dealers, NGOs, private organization and ICTs. Agricultural information sources considered not so important are extension publication, television and newspapers while important sources are extension agent, demonstration, SPAT, neighbor/friends/acquaintances, radio, and field days. However, circumstances and demand of each technology and innovation at times determine which media farmers will utilize.

Information must be available and accessible to all, be it scientific, technical, economic or cultural in nature. Information is only useful if it is available,

if users have access to it in appropriate form and language, if it is communicated and if it circulates among various users with appropriate facilities (CTA, 2003). Aina (1995) posited that those who possess appropriate and timely information would make a more rational decision than those without it. Ukatu (2000) similarly opined that the chief goal of technology transfer is the successful use of a specific technology by local people under their prevailing conditions.

Given an effective approach to technology transfer, national extension services need to disseminate improved practices to small-scale farmers quite efficiently. Okiy (2004) suggested that for information to be used, it must be provided with individual user in mind and not on the basis of what is convenient for the information provider. Research should be based on actual farmers' activities so that findings can be relevant, easily adoptable and focuses on real problems of farmers. Technology transfer group should also be aware of technology available to farmers and as well disseminate needed ones to them appropriately.

However, Aboyade (1990) and Idachaba (2000) noted that most of the researches done are not relevant to the needs of individual farmer and that there is inadequate provision of information to farmers due to weakness in agricultural information

dissemination systems. And the Federal Ministry of Agriculture and Natural Resources (2009) solicited that it is important to develop interventions based on adequate understanding of complex economic, socio-cultural and physiological factors that determine pattern of traditional agriculture.

Besides, high illiteracy among information users prevents use of ICTs made available by information providers. Ocheng (2000) identified inappropriate language barrier and high illiteracy rate as two major things impeding information utilisation in Africa. But adoption of improved technology is higher when recipients are more educated (Ojo and Ajibefun, 2000). Oyemakinde (2000) therefore emphasized the potential effects of a virile extension system as a necessary tool for meeting information needs of illiterate farmers. Dowswell and Russell (2000) also suggested that extension agents must have accurate information and technical knowledge to solve farmers' problems.

Williams (1976) had defined agricultural extension service as the main vehicle for dissemination of technical and economic information. In educational process, it has its goal of communicating useful information to people and helping them to learn how to use it to build a better life for themselves, their families and community. Extension has also been described as the intermediary between research and actual development. One of the interesting aspects of extension is development communication that was intended to link agricultural research to farmers.

Agricultural extension is a tool for instituting change in agricultural system and for packaging innovation to rural people through information transfer which is the main function of extension. Okuneye and Idowu (1990) asserted that agricultural extension services was originally established to help farmers increase income and raise standard of living by bringing to them improved farming practices. Hence, the role of extension in agricultural development is evident in modernisation of agriculture. Agricultural extension still plays a pivotal role in meeting the information needs of peasant farmers. Farmers make systematic use of information gained from extension agents to effect positive changes in their production.

Although it is generally believed that different tools can be used successfully as a means of communication in rural areas, however, this can only be efficient when complemented by a field organization like an extension service. And knowing that communication strategies are of great importance to influence changes in farming practices and enhance agricultural development. Reece, Sumberg and Pominer (2004) had remarked that new

technologies generated by agricultural research have made major contribution in agricultural production. When technologies that increases labour productivity are adopted, it will lead to improvement in per capita food production.

Therefore, access to reliable information is an integral part in any farmers' ability to raise productivity. But Babalola (2002) attributed the inability of farmers to adopt improved technology as critical hurdle created by an inefficient and ineffective extension system in Nigeria. Tologbonse, Mesini and Tsado, (2006) also discovered inadequate information on adoption of new technologies for major staple crops as one of the major problems of World Bank sponsored research plan. The weak extension services in Nigeria is seriously affecting agricultural productivity of farmers. Hence, there must be provision of technical support to improve performances of extension agents.

The general objective of the study was to investigate labour information for food and tree crop in southwestern Nigeria.

The specific objectives are to:

1. Identify labour information sources of food and tree crop farmers in southwestern Nigeria.
2. Examine aspect of labour on which food and tree crop farmers seek information in southwestern Nigeria.
3. Ascertain farmers' contact with the extension agents in southwestern Nigeria

2. Materials and Methods

The study was conducted in southwestern states of Nigeria situated between latitude 5°N and 9°N and longitude 20°E. It is bounded by the Atlantic Ocean in the south, Kwara and Kogi states in the north, eastern Nigeria in the east and Republic of Benin in the west. It has a land area of about 114,271km². The zone has a population of 29.9 million and a population density of 195 persons/km (NPC, 2003). Climate in southwestern Nigeria is predominantly humid with rainfall ranging from 1500mm to 3000mm per annum. The mean monthly temperature ranges from 18° C to 24°C during the rainy season and 20° C to 35°C during the dry season. This favours arable and tree cropping system largely based on cassava, yam and cocoa. Crops are grown in mixtures of three or more that may include various legumes and vegetable. The tree cropping system is based on cocoa, oil palm, kola and rubber.

The target population for the study comprised food and tree crop farmers who are duly registered with the Agricultural Development Projects (ADPs) and participate in their activities. ADP was established and designed to improve the system of production and raise productivity of

farmers by easing the constraints on input supplies and rural infrastructure. Hence, the choice of ADP as the sampling frame was based on the premise that farmers would have frequent contact with the extension agents and have access to information on labour related matters. Food crop farmers cultivate cassava, maize and yam as either sole crop or in combination with other food crops. On the other hand, tree crop farmers cultivate cocoa, kolanut and oil palm either as sole crop or in combination with other tree crops.

Multi-stage sampling procedure was used to select respondents for the study. It involved sampling of states, zones, blocks, cells and registered food and tree crop farmers. Through simple random sampling procedure, two states; Oyo and Ondo states were selected. Three zones were selected from the selected states representing fifty percent (50%) of the zones. The second stage involved selection of ten percent (10%) of the blocks from the selected zones. Three blocks were selected and the third stage involved sampling of twenty five percent (25%) of cells from each of the selected blocks. A cell densely populated with tree crop farmers was purposively chosen from each of the selected blocks and one other cell was selected through simple random sampling for food crop farmers. Lastly, through simple random sampling, ten percent of the farmers were selected from each cell from the village extension agents' list. In all, four hundred and fifty four (454) farmers were selected for the study.

3. Results and Discussion

Table 1 presents the various sources of labour information of the food and tree crop farmers. Of the respondents, 53.8 percent food crop farmers

indicated sourcing labour information from acquaintances. Extension agents were used by 15.8 percent of the food crop farmers while 10.8 percent of them used members of farmers' association or cooperative society. Regardless of any information channel used, no one form of media is best by itself. Corroborating this, Tologbonse, Mesini and Tsado (2006) insisted that farmers always utilise multiple sources of information for adoption or rejection of new practices.

On the other hand, 44.8 percent of the tree crop farmers obtained labour related information from their acquaintances while 21.5 percent used extension agents. Supporting this finding, Yahaya and Omokhaye (2001) in their study discovered that most of the cocoa farmers depend largely on friends and relatives for information on improved cocoa seed technologies. Agbelemoge et al (2001) however found that many of their respondents used extension agents as a source of information.

In addition, Table 1 shows that 3.7 percent tree crop farmers indicated radio as their major source of labour information while 1.9 percent of them obtained information from posters. This corroborates the findings of Yahaya and Omokhaye (2001) about low patronage of print media for information by cocoa farmers. For instance, few farmers get information on use of cocoa seed technologies from newspapers, journals, posters and bulletins. But sizeable number of them were influenced by radio in their decision to use cocoa seed technologies. Similarly, Agbelemoge et al (2001) reported that few farmers used publications as source of information.

Table 1. Distribution of farmers by their sources of labour information

	Food crop Freq.	Percent	Tree crop Freq.	Percent
Extension agents	38	15.8	46	21.5
Input dealer	6	2.5	9	4.2
NGO	3	1.3	5	2.3
Produce marketers	8	3.3	8	3.7
Private organization	3	1.3	9	4.2
Radio	15	6.3	8	3.7
Television	7	2.9	4	1.9
Posters	1	0.4	4	1.9
Acquaintances	129	53.8	96	44.8
Association/ Cooperative	26	10.8	24	11.2
Advisory leaflet	4	1.7	1	0.5
Total	240	100	214	100

Table 2. Distribution of the frequency of extension contact

Contact with extension agents	Oyo				Ondo				Total			
	Food		Tree		Food		Tree		Food		Tree	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Frequent Contact	157	90.8	44	36.4	42	62.7	79	84.9	199	82.9	123	57.5
No contact	16	9.2	77	63.6	25	37.3	14	15.1	41	17.1	91	42.5
Total	173	100	121	100	67	100	93	100	240	100	214	100

Table 3. Distribution of aspects of labour on which respondents seek information in Oyo states

Sources of Labour	Labour Use		Labour Mgt		Labour cost		Labour Types		Labour Availability		Total														
	Food	Tree	Food	Tree	Food	Tree	Food	Tree	Food	Tree	Food	Tree													
	f %	f %	f %	f %	f %	f %	f %	f %	f %	f %	f %	f %													
Extension agents	3	1.7	9	7.4	17	9.8	10	8.3	2	1.2	9	7.4	11	6.4	4	3.3	4	2.3	-	-	37	21.4	32	26.4	
Input dealers	2	1.2	-	-	11	6.4	2	1.7	2	1.2	6	5.0	3	1.7	6	5.0	8	4.6	-	-	26	15.0	14	11.5	
Produce Marketer	1	0.6	-	-	6	3.5	1	0.8	2	1.2	-	-	1	0.6	2	1.2	3	1.7	2	1.7	13	7.5	5	4.1	
Private organization	-	-	-	-	3	1.7	1	0.8	4	2.3	2	1.7	-	-	-	-	1	0.6	4	3.3	8	4.6	7	5.8	
Radio	9	5.2	9	7.4	4	2.3	-	-	3	1.7	-	-	15	8.7	-	-	2	1.2	-	-	33	19.1	9	7.4	
Television	3	1.7	1	0.8	4	2.3	9	7.4	5	2.9	-	-	5	4.6	-	-	6	3.5	3	2.5	23	13.3	13	10.7	
Poster	1	0.6	1	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.6	1	0.8	
Acquaintances	20	11.6	16	13.2	12	6.9	17	14.0	22	12.7	28	23.1	16	9.2	9	7.4	53	53.8	25	20.7	123	71.1	95	78.5	
Advisory leaflet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.8	-	-	-	-	-	-	-	1	0.8
Farmers' association/ Organization	4	2.3	18	14.9	16	9.2	10	8.3	15	8.7	-	-	5	2.9	2	1.7	26	15.0	23	19.0	66	38.2	53	43.8	
NGO	3	1.7	1	0.8	8	4.6	1	0.8	2	1.2	-	-	1	0.6	2	1.2	1	0.6	-	-	15	8.7	4	3.3	
Total	46	26.6	55	45.5	81	46.8	51	42.1	57	32.9	45	37.2	57	32.9	26	21.48	104	60.1	57	47.1					

Table 4. Distribution of aspects of labour on which respondents seek information in Ondo state

Sources of Labour	Labour Use		Labour Mgt		Labour cost		Labour Types		Labour Availability		Total													
	Food	Tree	Food	Tree	Food	Tree	Food	Tree	Food	Tree	Food	Tree												
	f %	f %	f %	f %	f %	f %	f %	f %	f %	f %	f %	f %												
Extension agents	9	13.4	23	14.0	29	43.3	16	17.2	1	1.1	2	2.2	-	-	-	-	2	3.0	1	1.1	41	61.2	42	45.2
Input dealers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2.2	-	-	-	-	2	2.2
Produce Marketer	-	-	1	1.1	-	-	3	3.2	-	-	2	2.2	-	-	2	2.2	-	-	-	-	-	-	8	8.6
Private organization	-	-	-	-	-	-	-	-	1	1.5	4	4.3	-	-	-	-	-	-	3	3.2	1	1.5	7	7.5
Radio	2	3.0	14	15.1	-	-	3	3.2	2	3.0	4	4.3	-	-	1	1.1	4	5.9	2	2.2	8	11.9	24	25.8
Television	2	3.0	4	4.3	1	1.5	5	5.4	-	-	1	1.1	1	1.5	5	5.4	1	1.5	-	-	5	7.5	15	16.1
Poster	-	-	1	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1.1
Acquaintances	-	-	2	2.2	1	1.5	9	9.7	17	25.4	34	4.3	1	1.5	12	12.9	32	47.8	21	22.6	51	76.1	78	83.9
Advisory leaflet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Farmers' association/ Organization	-	-	-	-	-	-	2	2.2	10	15.0	4	4.3	-	-	1	1.1	3	4.5	10	10.8	13	19.4	17	18.3
NGO	-	-	-	-	-	-	2	2.2	1	1.5	-	-	-	-	-	-	-	-	-	-	1	1.5	2	2.2
Total	13	19.4	45	48.4	31	46.3	40	43.0	32	47.8	51	54.8	2	3.0	21	22.6	42	62.7	39	41.9				

Table 2 present aspects of labour on which respondents seek information. In Oyo state, 46.8 percent of the food crop farmers obtained information on labour management while 60.1 percent of them seek information on labour availability. Many (71.1%) seek information from their acquaintances, 38.2 percent receive information from members of farmers' association while 21.4 percent received

information from on labour related matters. Besides, 45.5 percent tree crop farmers obtain information on labour use while 47.1 percent obtain information on labour availability. Many (78.5%) receive information from acquaintances while 43.8 percent receive information from farmers' association. Only 26.4 percent of them seek labour information from extension agents.

In Ondo state, 62.7 percent food crop farmers obtain information on labour availability while 48.4 percent seek information on labour use. Many (76.1%) food crop farmers use acquaintances, 61.2 percent use extension agents while 19.4 percent use farmers' associations. Besides, 54.8 percent tree crop farmers seek information on labour cost, 43.0 percent seek information on labour management while 48.4 percent receive information on labour use. Of these respondents, 83.9 percent received information from acquaintances, 45.2 percent obtain information from extension agents while 25.8 percent of the farmers obtain information from radio.

Table 3 shows distribution of farmers' contact with the extension agents. Many (82.9) percent of the food crop farmers and 57.5 percent of the tree crop farmers had frequent extension contact and used extension agents as source of information. However, 42.5 percent tree crop farmers claimed that they had no contact with extension agents. Corroborating this finding, Nwachkwu and Nwachukwu (2000) found that 98.1 percent of the farmers have not met extension workers. Babalola (2002) opined that farmers' inability to adopt improved technology was a critical hurdle created by an inefficient extension system. Shaib et al (1997) also identified weak extension method as one of the bottlenecks to improved agricultural production.

Yet, extension contact is important for adoption of innovation. According to Arokoyo (2006), agricultural extension has always been considered as the prime vehicle for bringing innovation to farmers for sustainable development and improved quality of life. The nation's extension service has been blamed to be mostly responsible for poor agricultural performance. Despite several extension approaches and strategies that Nigeria has adopted over the years, agricultural performance remains unimpressive, resulting in continuous and massive food importation. The estimated output of major staple crops in Nigeria has not shown any substantial increase in recent years which may partly be as a result of inadequate labour and lack of appropriate machine to reduce drudgery.

4. Conclusion and Recommendations

The study affords an understanding of labour information on production activities of farmers such as land clearing, pest management, weed management, fertilizer application and harvesting. They also need to be encouraged on the use of improved agricultural technology. Increased use of labour saving devices and other management practices will make farming less labour demanding. In addition, seminar and training must be conducted frequently for farmers on use, repair and management

of newly developed farm machines and labour saving devices. However, there must be provision of technical support to improve the performances of extension agents.

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