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# The Limitations and implications of Training and Visit (T&V) Extension System in Nigeria

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**Abstract.** The paper reviews the limitations of the Training and Visit (T&V) system, which was vigorously promoted by the World Bank in the years 1975-1998 in over fifty (50) third world countries. The significant challenges facing the T&V system as discussed in this paper includes; poor linkages between research and extension, reduced frequency of regular training of extension staff and/or failure to hold such training(s), higher ratio of farmers -to- extension agent, increased use of mass media as a complimentary channel for technology diffusion along with the T&V effort and, high cost of implementing the system among other challenges. From the challenges highlighted, the paper deduced some implications for extension service delivery in Nigeria and concludes that development practitioners in Nigeria should always evaluate new approaches critically and, properly guide the nation has what it takes to fully implement and sustain the new approach. **Key words:** Extension approach, farmers, research, challenges, Nigeria

## Introduction

Agricultural extension is defined as the entire set of organizations that support and facilitate people engaged in agricultural production to solve problems and to obtain information, skills and technologies to improve their livelihoods and well-being. They are provided by a variety of agencies in the public, commercial and voluntary sectors (1; 7). Akinnagbe and Ajayi (7) viewed extension as a service to "extend" research-based knowledge to the rural sector to improve the lives of farmers. It thus included components of technology transfer, broader rural development goals, management skills and non-formal education. The traditional view of extension in Africa was very much focused on increasing production, improving yields, training farmers and transferring technology. Today's understanding of extension goes beyond technology transfer to facilitation; beyond training to learning and includes assisting farmers to form groups, dealing with marketing issues and partnering with a broad range of service providers and other agencies (12; 7).

Nigeria probably has the most elaborate extension system in Sub-Saharan Africa (SSA), with a population of over 140 million and 71 million hectares of arable land (20). Akinnagbe and Ajayi (7) revealed that agricultural research system in Nigeria comprises of 17 commodity-based research institutes, national extension institute, over 45 faculties of agriculture in conventional federal, state and private universities. three universities of agriculture, and several colleges of agriculture/polytechnics. It also includes three international agricultural research centers viz: International Institute of Tropical Agriculture (IITA), a sub-station of International Crop Research Institute for Semi-Arid Tropics (ICRISAT) and a substation of International Livestock Research Institute (ILRI). (17; 7). They further stated that these institutions collectively or individually serve as the fountain of agricultural innovations for both public and private agricultural extension service providers.

Over the years several agricultural extension approaches of agricultural extension have evolved and one of such approaches is the Training and Visit (T & V) system. Although the T & V system was aimed at overcoming some of the limitations that characterized the conventional extension approach, the system has come under serious criticism by numerous writers in recent time. This paper therefore was aimed to:

- i. Review the limitations of the T&V extension system
- Analyze its implications for agricultural extension service delivery in Nigeria.

### Training and Visit (T&V) Approach to Agricultural Extension

One of the innovations in Nigerian agricultural extension is the Training and Visit (T&V) system of extension. The system was propounded by Daniel Benor and was first developed in the early 1970s. In 1974 the World Bank formally introduced the T & V extension components in the Chambal Irrigation Command, India and the Seyhan Irrigation Project, Turkey. As observed by Anderson, Feder, and Ganguly, (8) the success stories of these two irrigation sites, as perceived by World Bank management and staff led to the rapid spread of the model in different countries of the world and by the years 1975-1982 the model had already been introduced in ten countries especially, Asia through self-standing extension projects, and in nine additional countries as components of larger agricultural projects in Asia and Africa. It should be emphasized however that all the new projects were backed and funded by the World Bank.

The Training and Visit (T&V) extension system was vigorously introduced to Nigeria in 1986 by the World Bank (21), as a new approach to agricultural extension. The system was subsequently adopted with unprecedented enthusiasm and practiced by the Agricultural Development Programmes (ADPs) as a replacement for the earlier conventional approach to extension which has become weak and inefficient. The system was also to strengthen research- extensionlinkages by making research findings more relevant to the needs of Nigerian farmers especially, those practicing subsistence agriculture. The system was designed to facilitate regular training of extension workers in order to enable them deliver recommended technologies on crops, livestock, forestry, etc. to farmers on a fortnightly basis. According to Fadiji and Adeniji, (13) the T &V system was used initially for crops but later was adopted for other sub-sectors like live-stock, fisheries and forestry. Ilevbaoje (15) observed that the main feature of the T & V extension system includes a single line of command and a well-defined geographical boundary of operation for each extension work. Other features of T & V system of extension includes; regular training of extension staff; usually by research institutes, arranged visits by extension agents to contact farmers, provision of feedback to research institutes on farmers' problems, and a continuous supervision, monitoring and evaluation of extension activities. According to Benor and Baxter (1984) in Oladele et al (18) the T & V system emphasizes simplicity in organization, objective and operations. It has a well-defined organization and mode of operation, provides continuous adjustment to farmers' need. Furthermore, the authors asserted that extension system should be adapted to suit the agricultural and administrative structure of a country adopting it. They maintained that the basic features of the T & V system, which are the guidelines for its effective operation, should be maintained.

Bindlish and Evenson, (10) showed that the T & V management system has made extension more effective, led to agricultural growth and high rates of return. In Kenya, (14) asserted that T & V had some benefits in terms of staff training, increase in geographical coverage and improved linkages with research.

#### Limitations of the T & V system of extension

Like most approaches to agricultural and rural development, the T & V system of extension has its limitations. Such limitations have been well documented by different agricultural and rural development scholars over the years. For instance, Adegbehin *et al* (3) reported that although the T&V system recorded some remarkable levels of technology adoption for crops like maize and cassava in Nigeria, the system had the following shortcomings; (1) It was difficult to measure with accuracy the farmer's yield/productivity effects vis-à-vis extension efforts exerted (2) The T & V system was practiced haphazardly in various states of the federation (3) There was too much concentration on crop sub-sector at the expense of live-stock, fisheries, forestry and natural resources management sub-sectors (4) Contact farmers' approach was not effective in extension delivery to farmers, and (5) Adoption level of live-stock sub-sector was glaringly low. In the same vein, Adeola (4) in a study on the Impact of T & V system on professionalization of extension agents in Oyo State Agricultural Development Programme observed some problemss with the system and opined that extension practitioners particularly, those at the top management level should recognize the constraints facing the T&V system and adjust accordingly to enhance sustainability. A similar study conducted in Anambra state, South-eastern Nigeria by Ajayi in 1999 indicated that the following deficiencies were noted in the T & V System of extension despite some modifications introduced in the state; (1) Lack of transportation, (2) Increase in cost of transportation, (3) Failure of farmers to make themselves available for contact with extension agents, (4) Failure of farmers to attend meeting, (5) Lack of cooperation among cooperative members, (6) Local politicking, and (7) Lack of farm inputs. In the same vein, the World Bank in 1985 reviewed the T & V system of extension in Nigeria and nine other countries and the following constraints were identified:

- lack of clarity in the country's objectives for agriculture and in the priorities among them;
- limited input by the country on the design of research and extension components and projects, along with unclear links between research and extension activities supported by the Bank and other development activities in the sector;
- 3. limited sector-wide or economy-wide work on issues affecting research and extension;
- 4. .institutional separation of research and extension; and
- 5. Lack of clarity in, or agreement on, the definition of various stages in the process of technology development and transfer.

Some of the problems related to aspects of T&V that could not be fully implemented as recounted by Moore, (1984) in Anderson et al, (8) include; cases where the regular training sessions were not being held, or lacked real content; officers appointed as subject matter specialists without having adequate qualifications; linkages with research not quite enhanced; village agents not following the regular visit schedule, or contact farmers not attending visits, with some of them not being aware that they were designated as contact farmers; preference of agents to interact with larger scale and richer farmers; insufficient attention to the supply conditions of inputs hampered the relevance of the information conveyed to farmers, the supervisory staff did not have incentives to use the strict visit schedule as a device to enforce work delivery by village workers; and at a more senior level, the interest in the T&V programme was not genuine, reflecting merely the desire to obtain the enhanced resources (e.g., vehicles, offices) associated with the projects. However, the high cost of the system was Moore's key critical point. Also, Bagchee (1994) in Anderson et al (8) highlighted some limitations of the T&V system to include; reduction in the frequency of staff training sessions in Kenya, Tanzania and Zaire, higher ratios of farmers to agents in many countries compared to the standard 1 per 800 favored by T&V designers, increased use of mass media as a complementary channel of technology diffusion, along with the T&V effort, took place in Cote d'Ivoire, Kenya, Nigeria, Senegal and other countries. According to Bagchee the original T&V concept underplayed the reliance on mass media. Similar limitations of the T&V system were reported in Asia. In Bangladesh for instance, the following limitations of the system were identified by the Department for Agricultural Extension (DAE) (11): (1) Poor linkages between research and extension, (2) the extension of new technologies that are not suited to farmers' conditions, (3) recommended technologies not being demonstrated, (4) block supervisors' competency as information providers being limited, (5) contact farmers failing to disseminate information to other farmers, (6) the emphasis on individual farmer leading to poor contact with women and small landless farmers and (7) poor administrative organization and lack of coordination between related organizations hence, DAE reported that the T&V system has not been particularly successful. Nagal (16) also found that the T&V system implementation proved to be difficult. First, the contact farmer concept - implying a two-step flow of information from the extension worker to the contact, farmer and from there to other farmers - has frequently failed. According to the author, extension workers have been blamed for "wrong selection," but the root of the

problem lies within the purely technical philosophy of T&V, and that other aspects such as communication skills, leadership, and organizational capacities are neglected. He maintained that in practice, T&V has been a top-down approach leaving little possibility for participation and initiative, both for farmers and village extension workers, stressing that too little emphasis has been put on critical feedback based on self-evaluation. As a result, rigidity rather than flexibility characterizes local fieldwork. He further observed that the standardized messages passed on to farmers are often of little relevance to local conditions.

#### Implications on Nigeria's extension system

The limitations of the T&V system as already highlighted hold some implications for the Nigerian extension system as shall be seen in the following analysis. Firstly, reduction in the frequency of the regular training for extension staff and/or failure to hold such trainings implies that the staff may lack the required knowledge and skills to teach the farmers. Consequently, this could potentially affect the attainment of the objectives of the National Agricultural Research System (NARS), the Agricultural Knowledge and Information System (AKIS) and the Agricultural Information System (AIS) in an adverse manner since, as observed by Agwu, et al., (5) both the three are interlinked and cumulative: NARS focusing on the generation of knowledge, AKIS on the generation and diffusion of knowledge and AIS on the generation, diffusion and application of knowledge. Furthermore, higher ratio of farmers-to- extension agent may simply translate to poor extension service delivery in the country. Empirical evidence has shown that in Nigeria, the standard 1:800 ratio favored by the designers of the T&V system has been greatly exceeded in most states of the federation. For instance, Oneyeanuforo (19) reported a ratio of 1:5947 in Imo state, Nigeria. In the same vein, Auta and Dafwang, (9) reported that in most of the ADPs, the number of extension workers had been reduced drastically due to various reasons, notable among which is poor funding.

Also, increased use of mass media as a complementary channel of technology diffusion portends the danger of depriving Nigerian farmers the manifold benefits of the face-to-face contact method of agricultural information dissemination. In like manner, a situation whereby linkages with research are not quite enhanced; village agents are not following the regular visit schedules, or contact farmers are not attending visits suggests that the goals of implementing Research-Extension-Farmer-Input System (REFILS) as a management mechanism in Nigeria is likely to be defeated. Moreover, relating farmers' problems back to research by extension staff may apparently remain a herculean task to accomplish (6).

On the other hand, the high cost of implementing the T&V system holds serious implications for Nigerian extension system as well. This is more so because over the years, Nigeria has exhibited a marked dependence on donor agencies to finance some of her agricultural and rural development programmes. The nation's overdependence on donor agencies for funding of such agricultural and rural development programmes has been remarked (2). Consequently, the reluctance of most African countries, Nigeria inclusive, to adequately fund their agricultural Subsectors and an undue reliance on foreign donor agencies to finance agriculture could adversely affected agricultural production at large and the effectiveness of extension service in particular. As at today, the withdrawal of funding by the World Bank has rendered most, if not all the ADPs in Nigeria comatose as exemplified by serious management problems across the ADPs. This position has been corroborated by Auta and Dafwang (9) who reported that today the ADPs in majority of the states stand just as symbols of past glory.

#### Conclusion

From the foregoing analysis it is evident that the limitations of the T&V system hold serious implications for the Nigerian extension system. Therefore, as observed by Anderson et al (8) "as in most fields of human endeavor, fads are a fact of life'. The asserted that development practitioners need to be aware that they are

not immune from this aspect of the human condition and thus need to guard against falling ready victims to what may appear as a new and relevant approach to an old problem. They posited that a usually good starting point to assessing the new ideas is to check back: on the principles underlying them; on the experience in implementation; and on the lessons learned, from the past fads that were followed. It is therefore instructive that development practitioners in Nigeria should always evaluate new approaches critically and, properly guide the Nigerian government to adopt only when such evaluation studies provide sufficient evidence that the nation has what it takes to fully implement and sustain the new approach. Thus, development approaches should not be swallowed hook, line and sinker.

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