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Communication for Strengthening Agricultural Extension and Rural Development in Malawi

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Abstract

Smallholder farmers in Malawi account for over 80 percent of the population and if the country is to achieve food security, poverty reduction and sustainable development attention to agricultural extension is a sine qua non. Since 2000, Malawi introduced extension reforms to better serve the needs of smallholder farmers. Some of the agricultural and rural development programs are quite complex, but as this study found, training to cope with their sophistication is lacking. Further, though extension workers are asked to facilitate entire development interventions, their training remains primarily in agriculture. This paper argues that extension workers need training in Communication for Development (C4D), an emerging body of knowledge for addressing problems, such as participation, integration and capacity building for them to relate more effectively with development partners. Thus, this paper proposes a C4D framework for strengthening extension in Malawi and encourages the Government of Malawi to trial this concept.

Key words: *Extension education, pluralistic and demand-driven extension, poverty reduction, sustainable development, extension theory and policy, communication for development, world bank*

Introduction

Unlike Botswana, which is rich with minerals, or Nigeria, blessed with oil deposits, Malawi's best chance of promoting national development lies in the agricultural sector. Chirwa *et al.* (2008) and Tchale (2009) note that up to the mid 1990s agriculture accounted for 39% of Gross Domestic Product (GDP), engaged 85% of the labor force, and generated about 83% of foreign exchange earnings. However, according to the second edition of the Malawi Growth and Development Strategy (MGDS II), the contribution of agriculture to Malawi's Gross Product dropped from 38%

in 1994 in about 27% in 2010 (Malawi Government, 2011) due, in part, to the diversification of the economy to harness the potential provided by the tourism, mining and service sectors. Nonetheless, national surveys still estimate that crop production accounts for 74% of all rural incomes (National Statistical Office, 2007). Chirwa *et al.* (2008) divide the agricultural sector into two main sub-sectors—the smallholder subsector, which contributes more than 70% of total production; and the estate sub-sector, which accounts for less than 30% of gross domestic product. The smallholder agricultural sector in Malawi cultivates mainly maize, the main staple grain, to meet subsistence requirements.

However, because of population pressure, the landholding sizes among smallholder farmers are generally small and getting increasingly smaller each year. For example, the national mean landholding size fell from 1.53 hectares per household in 1968 to 0.96 hectare per household in 2004 (MEJN, 2004) with a per capita parcel size of 0.4 hectare (National Statistical Office, 2007). Given the small land size, the high illiteracy rate of the farmers and their little means of livelihood, the need for agricultural extension services in Malawi becomes highly important. Although the land sizes of smallholder farmers are small, these farmers are not maximizing production due, partly, to dwindling agricultural extension and advisory services. In 2005, the Malawi National Statistical Office, estimated that only 13% of Malawi's agricultural households accessed extension services and advice (see Malawi Government, 2010). Tchale (2009) has argued that due to lack of technical capacity, smallholder farmers experience low yields, which would almost double “if technical efficiency in smallholder farming systems could be increased by up to 40% on average, using the current production technology” (Tchale, 2009: 113). Therefore, the potential exists for smallholder farmers to double or even triple productivity. However, for this to happen, access to technological innovations, in terms of farming equipment, inputs, such as improved seed and chemical fertilizers, and information on proper spacing and insect and pest control, and prevention of post harvest losses is crucial. Agricultural extension and communication are also critical to helping these farmers gain access to resources and markets. In this paper, based on a field study of extension workers, we examine critical issues facing extension the elimination of which is essential for improving smallholder farming productivity.

Background to the Study

Since Bakili Muluzi's ascendancy to power in 1994, the Malawi government has recognized the need to invest heavily in promoting smallholder agriculture as the springboard to national development. The Muluzi and Bingu wa Mutharika administrations made significant investments in poverty reduction programs, designed specifically to improve productivity in the agricultural sector where over 80 percent of Malawians earn a living (Ministry of Agriculture & Food Security, 2010). In 2000, the government introduced two major policies to guide the way development was practiced in the country. One was the decentralization policy whereby decision-making power was delegated to the districts (Mkandawire and Yassin, 2004). Although the policy was slow in unfolding on the ground, the intent was clear. It was based on the conviction that “development interventions are more effective when the decision-making process is at the lowest level of action” (Ministry of Agriculture & Irrigation, 2000: 12). Thus, the aim of the policy was to create an environment where rural people could participate in their own development.

Closely allied to the decentralization was extension reform. The government introduced a new extension policy called “pluralistic and demand-driven” (Ministry of Agriculture & Irrigation, 2000). Pluralistic meant that private extension providers were allowed to complement, and even compete with, the public sector in providing services and inputs to smallholder farmers. Demand-

driven, on the other hand, implied that the traditional “top-down” approach to extension whereby the Government, backed by external funding agencies, dictated the kinds of innovations farmers must adopt or crops they must grow, was to give way to a bottom-up approach whereby extension workers first listened to the needs of smallholder farmers and then “responded” to these needs.

A third element of the Malawi agricultural extension reform of 2000 was an attempt to transform the structure and function of extension. Traditionally, the extension function has been promoting the diffusion of agricultural innovations, that is, teaching farmers how to adopt new crop varieties and livestock breeds, a process called agricultural education or technology transfer model (see Miller and Cox, 2006). Towards this end, extension workers studied agricultural subjects, such as crop and livestock production, at agricultural colleges, such as Bunda College of Agriculture, now Lilongwe University of Agriculture and Natural Resources (LUANAR), and the Natural Resources College (NRC). However, the government, over the years, noted that smallholder farmers are unable to adopt farming innovations if the necessary resources, such as credit, seeds and other inputs are not readily available to them.

Thus, under the new policy, extension workers were charged with facilitating Integrated Rural Development (IRD) with the goal of ensuring that material inputs, such as fertilizer, seed, credit and technological information are delivered to farmers in a timely and simultaneous manner so that they can take advantage of the increasingly unreliable rains caused by climate change (Schipper & Pelling, 2006). Essentially, extension workers were to facilitate collaboration among various sectors of government, non-governmental agencies and even the private sector (Ministry of Agriculture and Irrigation, 2000). It was further noted that farmers’ ability to produce was affected by other factors, such as markets, the health and nutrition status of the farm family, such as the impact of HIV&AIDS, and so on. Thus, integration became the key word for extension. Apropos, the Ministry of Agriculture & Irrigation (2000) policy stated:

Lack of coordination means that donors tend to introduce approaches of their choice. It has been a challenge to maintain coherence and quality in the delivery of extension in Malawi. In order to improve coordination among the many stakeholders in extension there is a need to have clear policy guidelines to orient all stakeholders towards complementary and synergy in the roles they play in the provision and delivery of extension services (p. 14).... *The Department for Agricultural Extension Services (DAES) intends to initiate and strengthen co-ordination among national stakeholders involved in agricultural extension, while enabling districts to develop well coordinated, demand-driven agricultural extension services* (emphasis ours, pp. 18-19).

In adopting the new policies, especially the extension reform policy, the Malawi government was well aware of the difficulties:

This vision of pluralistic, decentralized and demand-driven extension in Malawi is a bold statement of intent and the enormity of the task must not be underestimated. For it to become a reality, a broad coalition of stakeholders is necessary, each making an important and distinctive contribution. Both the farming communities and the service providers need to be transformed to realize this vision (again, emphasis ours, p. 18).

All in all, the decentralization and extension reform policies were in the right direction. Furthermore, these were backed by substantial investments in successive poverty reduction programs. The World Bank and allied donors funded successive poverty reduction programs. First, was the Malawi Poverty Reduction Strategy (MPRS) program, from 2002 to 2004/05, which aimed at achieving

sustainable poverty reduction through empowerment of the poor. The program was credited for lowering poverty by nearly two percentage points, from 54.1 percent to 52.4 percent (Dorward and Kydd, 2004; MPRS, 2007). This spurred the government to introduce an even bigger program, the Farm Input Subsidy Program (FISP), a \$52 million program from 2006/07 to 2010/2011 (Chirwa *et al.*, 2008). Even before this program ended, another World Bank funded poverty reduction program was introduced, the Malawi Agriculture Sector Wide Approach (ASWAp), a four-year program estimated at US\$1.4 billion or about US\$333 million a year, from 2012 to 2016 (GoA, 2010). For a small country with a 14 million population, this is certainly a substantial financial investment, especially in the agricultural sector. Yet, these have not brought much socioeconomic improvement to Malawi. For example, the country fell from its 161th ranking on the United Nations Development Program Human Development Index (HDI) in 2005 to 171th poorest nation out of 177 nations in 2011 (UNDP, 2005, 2011). The 2010/2011 Integrated Household Survey (National Statistical Office, 2012) indicates that nationally, 50.1 percent of Malawians (17.3% urban; 56.6% rural) still lived below the national poverty level of K37,002 (US\$244.21 at the 2010/2011 exchange rate) with 24.5% (4.3% urban; 28.1% rural) being described as ultra poor (MK22, 956= US\$151.50). In short, decades of development investments in Malawi has yielded far less than expected returns.

Thus, our purpose in this paper is to sound a clarion call that the problem of national development in Malawi, agricultural development in particular, is a problem of how to strengthen the agricultural extension service in such a way that it is able to address human dimension concerns, such as local participation, interagency collaboration and building the capacities of extension workers at the grassroots so that they are able to effectively mobilize and empower the grassroots for self-sustaining development. We argue that government and donor commitment to poverty reduction is sincere; funding for poverty reduction programs is reasonable; and technological innovations in the agricultural, health, and environmental sciences are plentiful. The challenge, we contend, lies in addressing social science concerns, such as participation, integration and capacity building. In short, extension is pivotal to Malawi's development. However, over the years, the extension service has suffered numerous setbacks such as staff attrition resulting from lives lost through HIV&AIDS and others departing for greener pastures in the private and NGO sector, and a seven to eight year freeze, from the mid 1990s, in the recruitment and training of new agricultural extension officers (IFPRI, 2010; Masangano and Mthinda, 2012). Suarez *et al.* (2008) found that while they recommend extension officer to farmer ratio was 500, the average ratio obtaining during their study was 1,603 farmers per extension officer. As a result, over 70 percent of farmers contacted by MEJN's Service Delivery Satisfaction Survey II reported having had no contact with extension staff (MEJN, 2004) for the entire 2003/4 farming year.

Thus, our position is that any meaningful effort at transforming extension for food security, poverty reduction and national development must begin with a capacity analysis of extension workers training needs, and at all levels of the extension hierarchy. In particular, we contend that whereas the extension reform policy of 2000 expanded the role of extension workers from agricultural educators to include development facilitation, it does not appear that this was backed by corresponding training in development and communication, otherwise known as "Communication for Development" (C4D), to help them deal with the complexity of integrated rural development programming. Yet, Rondinelli (1993) has warned that whereas the process of agricultural and rural development, as characterized by the IRDPs and more recently, National Poverty reduction Strategy Programs (PRSPs) are becoming increasingly complex, extension workers charged with the implementation lack the sophistication to cope with the growing complexities of these programs. We believe that herein lies the problem of development stagnation in Malawi. Therefore, using our own limited resources, we embarked on this survey with the conviction that understanding the

training needs of extension workers would help us to propose an extension communication model to address these concerns. The need for an alternative extension model is compelling, given the failure of the Training and Visit or Block Extension systems (Purchell and Anderson, 1994).

Purpose and objectives

The main purpose of the study was to enhance extension effectiveness in Malawi by identifying the training needs of extension workers and introducing strategies to address them. The specific objectives of the study were:

1. To describe the demographic characteristics of extension workers;
2. To examine extension workers' sources of job satisfaction;
3. To assess the training needs of extension workers, particularly in development and communication;
4. To examine implications of the decentralization policy on extension; and
5. To assess extension workers' access to and competencies in the use of Information and Communication Technologies.

Methodology

This study was conducted in 2008/9 in Malawi's central region districts of Ntchisi, Mchinji and Salima. The three districts had 152 extension staff and all of them were served with the questionnaire. However, only 89 responded, yielding a response rate of 58 percent. Thus, while the sample is not representative of the national extension population and, therefore, the findings cannot be generalized to all Extension Planning Areas (EPAs) and districts in the country, the study does provide a bird's eye-view of critical issues facing extension in the country (Schiffman & Kanuk, 1997). Instrument reliability was determined using Chronbach's Coefficient Alpha with the reliability scores for two sets of continuous variables being .85 and .91, which far exceeds the .50 established for reliability (Nunnally, 1972). Data analysis was done in Malawi using SPSS 16.0 for the Macintosh. Descriptive statistics, such as frequencies, means, and other measures of central tendencies, were used to summarize the data.

Findings

The relevant findings of the study are reported based on the research objectives which are as follows: a) demographic characteristics of extension workers; b) extension workers' sources of job satisfaction; c) training needs of extension workers, particularly in development and communication; d) extension agents' views on the decentralization process; and e) assess extension workers' access to and competencies in the use of Information and Communication Technologies (ICTs).

Demographic characteristics

Understanding the demographic characteristics of extension workers, such as age, level of education and length of service in agricultural extension is critical to extension performance because it provides detailed information about individuals in the study and, therefore, helps us make judgments, draw conclusions, and make recommendations. The main demographic findings focused on the following topics:

Age

The vast majority (74%) of field extension workers were aged 31 years or older. Only 26% of respondents were 30 years old or younger (N=89).

Level of education

Of the 89 respondents, 61 (68%) had middle school certificate level education (Junior Certificate of Education-JCE), that is, 10 years of formal education, 15(17%) had MSCE or 12 years of formal education. 26 (29%) reported to hold a professional diploma level education. None of the 89 respondents had a bachelor’s degree.

Area of specialization

The results showed that: a) 26 (or 29%) of respondents had training in agriculture and natural resources management; b) 19 (21%) had general agriculture training; c) 15 (17%) had Malawi School Certificate of Education (M.S.C.E.) or 12 years of formal education. Only 14 (16%) mentioned agricultural extension and an even a smaller number (8%) of respondents mentioned junior certificate of education or two years after primary school. In essence, many of them had agricultural training, but hardly any training in the social sciences, especially, in development and communication.

When completed formal education

In rural Malawi such as the case study districts, where there are limited opportunities for those out-of-school to refresh their education from time to time, such as well-equipped libraries, how long ago extension workers completed formal education may be a good indicator of one’s knowledge of agricultural subject matter. **Table 1** shows that the majority of respondents completed formal education more than 10 years before the year of the study (2008 or 2009). More than 60 respondents (or 67%) completed formal education 11 or more years earlier.

Table 1: How long ago extension workers completed formal education (from 2008 or 2009)

ITEM	FREQUENCY	PERCENT
1. 26 yrs or more	20	22.5%
2. 16 - 20 yrs	30	33.7%
3. 11 - 15 yrs	10	11.2%
4. 6 - 10 yrs	6	6.7%
5. 3 - 5 years	9	10.1%
6. 2 years or less	12	13.5%
Total	87	97.8%

Fifty six percent (56%) indicated that they had completed school 16 or more years earlier. Another 34 respondents (38%) completed formal education 6 to 10 years earlier; and only 22 (24%) completed formal education five years or less before the year of the interview. In short, many of these workers completed formal education a decade or more prior to this study and the new development jargon, such as decentralization, participatory communication and pluralistic and demand-driven extension may not be in their purview. Clearly, there is a need for training for these extension workers, especially on how to implement innovative programs, such as decentralization and pluralistic, demand-driven, participatory, and holistic extension (Khaila, 2009).

Length of service

Length of service refers to how long extension workers have been employed by the extension service. It can translate to a measure of how experienced and proficient extension workers are with new communication and information technologies and their uses in extension.

Since formal and regular jobs are hard to come by, those in paid employment, such as extension workers, try to protect their jobs even if these are not high paying positions. In rural settings, extension workers double as farmers to supplement their income while farmers double as liquor store operators, grocery shop owners, and night guards (Kafundu & Milanzi, 2006). **Table 2** shows that more than 50 percent of respondents have been in extension for six or more years and nearly 15 percent, for 11 years or more. Only 43% have been on the job for five years or less. This finding suggests a need for short-term training to upgrade the knowledge and skills of extension workers in Malawi. In summary, the demographic data point to an aging extension population in dire need of refresher training.

Table 2: Length of Service of Extension Workers

ITEM	FREQUENCY	PERCENT
1. 11 yrs or more	13	14.7%
2. 6 – 10 yrs	34	38.2%
3. 3 - 5 yrs	21	23.6%
4. 2 years or less	17	19.1%
Total	87	96.6%

Extension workers' level of job satisfaction

Public service extension workers earn about \$150 per month whereas their counterparts in non-governmental agencies make as much as \$700 a month, which can be demoralizing for those in public extension, whence the tendency of these to concentrate on their own farm fields and other livelihood pathways. Many respondents were motivated more by how well smallholder farmers appreciated their work than by salaries. In Table 3, extension workers noted that salary was the least motivator (N=89, X=2.72, SD=1.41).

Table 3: Factors Motivating Extension Workers in Malawi

ITEM	N	<u>X</u>	SD
1. My enthusiasm toward my work.	85	4.80	1.32
2. My achievement as an extension officer.	86	4.71	1.25
3. The opportunity to work in an area I am trained in.	88	4.60	1.55
4. The demand small farmers put on me.	88	4.51	1.35
5. The flexibility I have with my time as an extension worker.	89	4.45	1.59
6. My ability to meet the needs of the local people.	88	4.40	1.28
7. The cooperation I get from nongovernmental organizations.	87	3.63	1.47
8. My level of education.	86	3.06	1.64
9. Opportunities I have for higher education.	88	2.89	1.60
10. My salary and other incentives related to the job.	89	2.72	1.67
11. The resources I have to work with as an extension officer.	89	2.28	1.41

1 = Very Dissatisfied, 2 = Moderately Dissatisfied, 3 = Slightly Dissatisfied, 4 = Slightly Satisfied, 5 = Moderately Satisfied, 6 = Very Satisfied

The highest item that gave them job satisfaction was the enthusiasm they had for their work (N=85, X =4.80, SD=1.32); followed by their sense of accomplishment as extension workers (N=86, X=4.71, SD=1.25); the opportunity to work in an area they were trained (N=88, X=4.60, SD=1.55); and the demand small farmers placed on them (N=88, X=4.51, SD=1.35). Items that gave extension workers least motivation were: a) the resources they had to work with (N=89, X=2.28, SD=1.41); b) salaries and incentives (N=89, X =2.72, SD=1.67); c) lack of opportunities for further education (N=88, X=2.89, SD=1.60); d) their low level of education (N=86, X=3.06, SD=1.64); and lack of cooperation from NGOs N=87, X=3.63,SD=1.47).

Extension workers' training needs

An attempt was made to get at the training needs of extension workers by asking them as in **Table 4**, and a training needs gap was established by asking extension workers to indicate, to the left, if the skills were important to their work; and, to the right, to indicate how proficient they were in performing them. A significant finding was that extension workers felt the skills were important, indeed, critical for their work. However, they lacked the competence or ability to perform the activities, thus, revealing a needs gap. The strong standard deviations, close to or at 1.0, indicate consistency or unanimity of agreement that the gap is real and needs to be closed. From the table, respondents felt that involving local people was an “important to critical” skill for extension workers (N=86, X=3.50, SD= .63). However, they felt that their ability to perform that function was only satisfactory (N=86,X=3.02,SD=.78).

Table 4: Communication for Development Training Needs of Extension Workers in Malawi

Level of Importance				Level of proficiency		
#	N	<u>X</u>	SD	N	<u>X</u>	SD
1.	86	3.50	.625	86	3.02	.782
2.	89	3.48	.659	88	2.94	.701

3.	86	3.38	.706	Communication for development.	86	2.40	.924
4.	88	3.38	.778	Assessing extension impact.	88	2.53	.909
5.	86	3.37	.720	Community driven-development.	86	2.70	.783
6.	89	3.37	.659	Leadership skills.	87	2.99	.755
7.	89	3.37	.681	Public relations skills.	87	2.69	.919
8.	88	3.34	.815	Research methods.	86	2.35	.979
9.	85	3.31	.817	Integrated rural development.	86	2.45	.941
10.	87	3.31	.720	Coordination and linkage skills.	86	2.72	.714
11.	89	3.30	.714	Communication planning.	87	2.62	.852
12.	87	3.26	1.03	Computer literacy skills.	86	1.73	.926

Left: 1 = No need, 2 = Somewhat important, 3 = Important, 4 = Critical need;

Right: 1 = Severely deficient, 2 = Deficient, 3 = Satisfactory, 4 = Highly proficient

To take “writing skills” as another example, extension workers felt it was important and critical (N=89, X=3.48,SD=.66). However, they felt that their abilities to write well were deficient (N=88,X=2.94, SD= .70). Perhaps the area that extension workers felt most deficient or need training most in was computer literacy and ICT applications. The majority of respondents (N=87, X=3.26, SD=1.0) felt they had an “important to critical” need for computer literacy skills. However, they felt “severely deficient to deficient” in their ability to perform computer tasks (N=86, X=1.73, SD= .93). What this illustrates is that the skills extension workers need to be effective in transforming agriculture and rural development are those related to development and communication theories, methods, technologies and strategies. Yet they feel inadequately trained in these areas.

Extension workers’ views on decentralization

The government’s policies on decentralization and pluralistic and demand-driven extension were introduced in 2000. This study was conducted almost a decade later to determine if the concepts had spread among extension workers, whether they were practicing the new extension approach, and their views about the decentralization policy. The vast majority of extension workers (80 respondents or 89.8%) had heard about demand-driven and pluralistic extension. Fifty-six of them (62.9%) heard about it three years or less earlier and 31 (34.9%) heard about it four or more years before this study was undertaken. In other words, many of them heard about the policy five years into implementation, an indication that it was slow to spread. Nearly 10 years into the policy, only 59 respondents or roughly 66% were practicing the new policy while 21 respondents (24%) were not. Another four respondents (4.5%) were not sure. In essence, even though the new extension policy was nearly 10 years old, close to 40% of respondents were either not practicing it or were not sure they were practicing it.

Table 5: Extension Workers’ Assessment of Government Support for Decentralization

ITEM	N	PERCENT
1. Government was giving strong policy support.	28	31.5
2. Government support was mixed with political interest.	27	30.3
3. Government was giving strong financial support.	14	15.7

4. Government was giving only lip-service to the policy.	11	12.4
5. Government was giving administrative support.	7	7.9
Total	87	97.8

Regarding decentralization policy, about 30 respondents (34%) said it was accepted with excitement at the grassroots; 34 respondents (38%) said it was accepted half-heartedly; and 24 respondents (27.0%) said people were reluctant to express their views for fear of political reprisal. Respondents were also asked to describe the nature of government support for the decentralization policy. Table 5 shows that slightly more than one-third of respondents felt the government was giving the policy “strong support” (N=28 (31.5%). Another third felt “government support was mixed with politics” (N=27(30.3%); 14 (15.7%) felt government was giving “strong financial support;” 11 (12.4%) felt it was giving “only lip-service;” and 7 respondents (7.9%) felt government was only providing administrative support to the policy.

Respondents were also asked to describe the speed at which the decentralization process was taking place. Forty (44.9%) of respondents felt it was happening at a slow speed while an almost equal number 39 (43.8%) felt it was happening at a moderate speed; five respondents (5.6%) felt people were impatient to see it take off; one (2.2%) respondent thought it was happening at a fast speed; and two (2.2%) respondents felt nothing was happening.

In summary of this section, the decentralization and extension reform were very slow to start and almost 10 years later were still not fully operational. Extension workers are impatient about this slowness and blame government for mixing sound development policies with politics. The extension reform is not going on well either as almost a third of extension workers are still following the old extension approach. Perhaps all these can be explained by lack of capacity.

Discussion

With smallholder farmers accounting for over 80 percent of the population, many of them uneducated, agricultural extension holds the key to food security and poverty reduction in Malawi. Successive governments recognize this and have reorganized extension numerous times. Kabuye & Mhango (2006) reported that extension in Malawi has been plagued with frequent efforts at restructuring dating back to independence in 1964. From independence to 1980 the extension service department was called the Department of Agricultural Extension and Training (DAET). It was changed to the National Rural Development Program (NRDP) from 1981 to 1993; became the Agricultural Services Project (ASP) from 1994 to 2000; and since then labeled Department of Agricultural Extension and Advisory Service (DAES). These changes in name reflect changes in policy and emphasis.

The structure of extension presents one problem, and the training of extension workers is another issue. The structural problem is that whereas the new policy calls on extension workers to facilitate collaboration across ministries and non-governmental organizations, the location of extension under one ministry - agriculture - does not make extension readily accessible to other ministries. In particular, these sectors see extension as belonging to agriculture and, therefore, attempt to create their own extension structures. For example, the departments of Fisheries and Forestry have each an extension structure and budget when, in reality, agriculture, forestry and fisheries, nutrition and health need to be approached integrally. Thus, locating extension on a neutral ground outside agriculture makes coordination more doable and cheaper to operationalize as

the models (Figure 1 and Figure) indicate. The budget allocations for health, forestry, fisheries, and nutrition extension should be pooled into an extension fund, much like the UN has done in its approach to humanitarian assistance and emergence responses (see UN OCHA, n.d).

In addition to structural transformation, there is an urgent need for retraining and upgrading extension workers, particularly in development and communication theories and methodologies. The study of three districts reported in this paper shows that none of them has a bachelor's degree. This must be disturbing given the increasing complexity of the development process. It would seem that extension workers lack the skill to cope effectively with the increasing complexity of the development process. Development approaches, such as IRDPs and Poverty Reduction Strategy Programs (PRSPs) thrust extension workers at the forefront. Indeed, they are central to the success of these programs as the mobilization and participation of farmers rests with the effectiveness of extension. Even the qualifications of those with bachelor's degrees need to be assessed since the content of these degree programs is often agricultural training rather than a social science and communication orientation (Ascroft & Masilela, 1994; Awa, 1990).

Thus, while the Malawi government and aid organizations may be frustrated that so much funding is being pumped into poverty reduction programs with little increase in smallholder farmer productivity, the question to ask is whether field workers have the training needed to make change happen. Also, many of them were out of formal education for an average of 11 years, meaning that new extension approaches, such as demand and pluralistic extension; integrated rural development; action research; participatory communication and extension; and so on are concepts they did not study in a formal educational setting.

The quality of extension training in Malawi is exacerbated by the high rate of attrition of extension workers in the public sector. The Ministry of Agriculture & Food Security (2010) reported losing 2,275 educators due to illness and death, mainly from HIV&AIDS, a 9% attrition, from 1990 to 2006. An estimated 25% to 50% of extension positions were vacant as a result (Phiri, 2003; *Future Agricultures*, 2010). For example, in 2010 Thyolo district had only 56 out of 142 Extension Planning Areas (EPA) Sections staffed; in Rumphi it was only 37 out of 67; and in Dedza district only 82 positions out of 169 EPA Sections were filled (*Future Agricultures*, 2010). The result of all this staff shortage is a high extension agent to farmer ratio, in the range of 1:2,500 or 3,000 when the expected ratio is 1: 250, 500, 750 or even 800 (Phiri, 2003; *Future Agricultures*, 2010). When the problem of transportation is factored in, there is hardly any farmers to agent contact, which could explain why in 2004, MEJN (2004) found that only 71.1% of farmers reported to have had contact with an extension worker. The use of Information and Communication Technologies (ICTs), such as community radio, can expand extension's reach to deep into the rural hinterland as the African Farm Radio Initiative (AFRRI) project demonstrated (FRI, 2011), but the use of these technologies in Malawi is in its infancy (Annor-Frempong, Kwarteng, Agunga & Zinnah, 2006), rather short-run and donor dependent.

In a nutshell, it can be said that effective coordination of rural development programming is key to effective poverty reduction programming and this responsibility is the challenge of extension. Extension is expected to establish and bring together farmer associations, smallholder farmers special interest groups, NGOs, traditional leaders and agribusinesses, credit providers, nutrition and health, education, environment, gender and allied agencies for decentralized decision-making but this is not happening (*Future Agricultures*, 2010; Mapila, Makwenda & Chitete, 2010). Extension must take a creative approach or think outside the box, so to speak. It must not wait to be told what to do, but rather initiate action and demand that donor agencies and government agencies respond to its demands. When farmers are organized and demand credit, donor agencies will have to respond or else explain their presence in the country. Only in this way can extension break the cycle of

repeated problems. Tladi-Sekgwama & Tselaesele (2010:9) observed that Botswana's extension system faces "recurring problems from 1935"; Kabuye & Mhango (2006); and Chowa (2010), reported that extension services face a problem of harmonization of activities across sectors. Davis (2008:6) concluded that many African extension models have failed to "meet their goals effectively" and Oyaro (2010: 2) added that Sub-Saharan Africa (SSA) is characterized by an "extension work sector that is failing to make the grade."

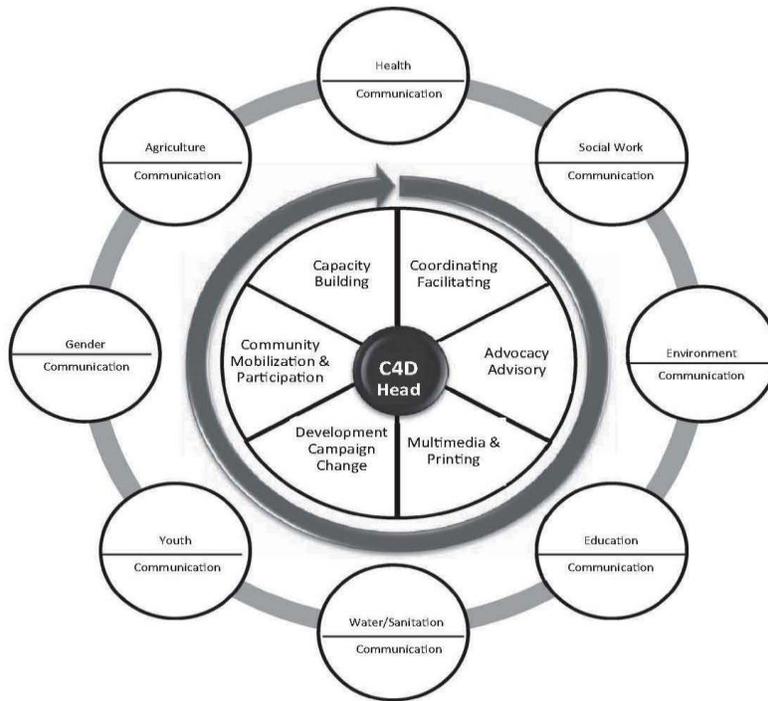
Recommendations

There is a general contention that the problems facing extension are communication in nature, such as mobilizing and organizing farmers for participation; promoting coordination and linkage and designing and managing the development campaign, and, therefore requires attention to communication professionalism in development under the rubric of "Communication for Development" (C4D). In October 2006, the World Bank and the Food and Agriculture Organization of the United Nations (FAO) organized the first World Congress on Communication for Development (WCCD) in Rome, Italy, to promote awareness and adoption of communication for development by the major development agencies, especially, in the effort to achieve the Millennium Development Goals (MDGs). In what became known as the "Rome Consensus," over 700 delegates in attendance agreed that communication is central to poverty reduction, improved health and the democratization of society and should be mainstreamed into poverty reduction programs.

The joint World Bank/FAO Congress Report, published in 2007 as the *World Congress on Communication for Development: Lessons, Challenges, and the Way Forward* concluded that, "communication is integral to development and to achieving the Millennium Development Goals. For this reason, it must be built into development planning and embedded in strategies for poverty reduction, health planning, and governance" (p. xxvii). To date, however, the policy has received little implementation for four main reasons (Lennie & Tacchi, 2011; Inagaki, 2007; McCall, 2009). These are: a) top government and donor officials lacking awareness of what C4D is; b) there are very few C4D experts available to make it work; c) the need for a framework or model on how C4D can be operationalized in the field; and d) the need for empirical evidence that C4D works.

We have advanced research in this area by presenting a C4D framework (Figure 1), which a developing country like Malawi can experiment with. The strategy is simple and largely inexpensive (Figure 1). It requires recruiting a C4D consultant to work with the extension service for two to three years. During this period, he or she will assist in training field extension workers in community mobilization and participation; promote coordination across sectors and NGOs; solicit and mobilize funds to operationalize the strategy; and develop and disseminate educational materials required by development organizations. The Ministry of Agriculture and Food Security should lead the effort by requesting financial support through the World Bank or the United Nations Development Program (UNDP) or any other source of funding the Government can secure.

Figure 1: C4D Strategy



Source: Agunga, 2012

In conclusion, we feel that the government of Malawi is making the right policy decisions and its investments in poverty reduction programs are the best way to go (Agunga, 2012). However, we are convinced that a lack of human resource capacity, especially at the field level, is thwarting the government's efforts. We believe that strengthening agricultural extension through a C4D strategy is the key to solving Malawi's development puzzle.

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