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The Value of Printed Sources of Information in Agricultural Extension

Case Study on "The Farmer's Voice" in Cameroon

Sygnola Tsafack and Ann Degrande, ICRAF

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THE VALUE OF PRINTED SOURCES OF INFORMATION IN AGRICULTURAL EXTENSION: CASE STUDY ON "THE FARMER'S VOICE" IN CAMEROON

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Sample of TFV journal when opened. *Photo: Tsafack*

Abbreviations

ADD	Alternative Durable pour le Développement
CBO	Community-based Organizations
FCFA	Central Africa Currency -- “Franc des Communautés Financières d'Afrique”
FO	Farmer organizations
GEW	Government extension workers
ICRAF	World Agroforestry Centre
LF	Lead farmer
MEAS	Modernizing Extension and Advisory Services
NGO	Non-governmental organization
NOWEFOR	North West Farmers Organization
SAILD	Service d’Appui aux Initiatives Locales de Développement
TFV	The Farmer’s Voice
USAID	United States Agency for International Development
USD	United States dollar

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Executive Summary

Various methods are used to provide extension workers and farmers with agricultural information. Printed materials remain a major source of information, despite digitalization of information networks, but few studies have looked at their effectiveness. The present work characterizes and assesses the effectiveness of The Farmer's Voice (TFV), an agricultural newspaper in Cameroon. Data were collected using a semi-structured questionnaire from 107 randomly sampled readers (mainly farmers, lead farmers and extension workers) in three regions.

Most respondents subscribed to TFV and paid fees themselves. The time readers took to read completely the magazine varied with gender, reader category, and education level. Respondents recalled topics such as technical tips and health/nutrition much more than others. For 94 percent of users, the motivation to read TFV was to learn appropriate practices on production, consumption, and marketing.

Though TFV was a complementary source of agricultural knowledge for most respondents, 97.2 percent were using information from this magazine on a day-to-day basis. Most respondents kept copies of TFV, mainly for future reference. More women than men and more subscribers than occasional buyers preserved copies.

All respondents agreed that TFV had significantly contributed to changes in their farming practices. For farmer trainers, TFV was very useful in their extension and advisory activities. Though more than four-fifths of readers had learned about new farming practices through TFV, 27.2 percent were not able to master some of the techniques described in TFV. The difference can be explained by their low education level. Around one-third of respondents said they were willing to share information with others through TFV; very few (11.5 percent) had written to the journal.

The majority of users found TFV easy to read and understand. The current price was just about right for 52.8 percent of readers, and 76.8 percent said the quality of the journal was good. Less than one-fourth of respondents (23.4 percent) were able to specify a journal that could substitute for or complement TFV. Most users of TFV (83.5 percent) confirmed that the content of the journal is relevant to all types of farmers. The average score of the general effectiveness of the TFV was 8 out of 10 (min = 5, max = 10, median = 8).

The majority of subscribers complained about not receiving their monthly issue on time. Distribution coverage was also low, especially in the rural areas and in towns where there is no official distributor. Some respondents criticized TFV for not sufficiently dealing with topics such as fund-raising, agroforestry and processing of agricultural products.

Keywords: Extension material, relevance, effectiveness, agricultural magazine.

Introduction and Background

Smallholder farmers and other value chain actors in developing countries, including Cameroon, continue to play a critical role in food supply chains. They require information on research findings, other farmers' experiences, innovations, markets and the policy governing their activities. Though extension services are an important element to improve farming, it is widely accepted that poor and marginalized farmers in remote villages remain beyond the reach of appropriate services (Fu and Akter, 2012). Nevertheless, various methods are used to supply them with agricultural information: extension services provided by government, farmers' field schools, and extension by training-and-visit, as well as community-based extension approaches such as rural resource centers and the farmer–to-farmer extension approach.

The promoters of these approaches themselves use many sources to acquire new knowledge to train farmers or to disseminate information. Among these are journals (such as The Farmer's Voice, Spore, "Courier du monde rural," "Grain de sel"), video trainings, community radio, television and technical books. Among these channels, journals are the oldest. Indeed, in Botswana, for instance, newspapers have long been the main channel to reach the most remote areas that cannot be reached through other modes of communication (Oladimeji and Boago, 2011). Furthermore, the media have contributed to agricultural and social growth as well as the development of the society (Aiyesimoju and Awoniyi, 2012). Other examples of magazines that are used in disseminating agricultural innovations are "Les Echos du Sahel" in Niger, "Agri-Culture" in Benin, "Ireo Tansaha Vaovao" in Madagascar and "The Farmers' Voice" in Cameroon.

The Farmer's Voice (TFV), and its French version, "La Voix du Paysan," targets a range of actors in the agricultural sector, from students from agricultural schools, non-governmental organizations (NGOs) and farmer organizations to agricultural entrepreneurs and smallholder farmers. The Farmer's Voice started in 1988 and now covers the whole of Cameroon. It is produced monthly in three languages – French and English (the two official languages of the country) and, to a lesser extent, Arabic for North Cameroon. Up to 30,000 copies are produced every month, covering 13 categories: news, practical information, focus, health, economy, discussions, file of the month, society, experiments, environment, technical slips, letters, and abroad.

Despite the emergence and use of new media in extension, TFV remains popular, and demand for it is even increasing. In a study on farmer-to-farmer extension in Cameroon, 80 percent of the organizations interviewed cited TFV as an important source of technical information used by their field staff members (Tsafack et al., 2014). Indeed, magazines do have the advantage of being more permanent, carrying more information and often being more authoritative than other media (Awojobi and Adeokun, 2012). Especially now, in the midst of Internet and cell-phone upsurges, we tend to forget that other means of communication still exist and in certain contexts are more relevant. Nonetheless, according to Vatta et al. (2010) and Archana and Sailaja (2013), effectiveness of any advisory medium depends on its ability to disseminate the message properly so that it is understood and readily accepted, thus facilitating the adoption of new practices. It is in this light that the current study was initiated. In 2012, SAILD, the NGO that is publishing TFV, carried out an evaluation to get feedback from the readers of the journal.

Though the sampling procedure was not explicitly mentioned, the fact that the investigators were from the organization that is publishing the journal could have biased the results – they might have been tempted to sample readers with whom they were familiar. Furthermore, the study did not deal with important issues such as the readers' knowledge of the journal and its usefulness in training farmers. Therefore, it is timely to assess (preferably by an external organization) the usefulness of TFV in the dissemination of agricultural information to farmers in Cameroon.

Objectives

The overall objective of the present study is to characterize and assess the effectiveness of TFV in Cameroon to understand its relevance and impact. More specifically, the study attempts to:

1. Identify the readership and the uses of TFV in Cameroon.
2. Determine users' perceptions of the effectiveness of TFV as a source of new agricultural knowledge and skills.
3. Evaluate the complementarity of TFV with other sources of agricultural information.
4. Propose strategies to improve the relevance and impact of TFV to smallholder farmers.

Methodology

To meet these objectives, after reviewing the literature, we carried out a survey of farmers and other users of TFV.

Study area

The survey was carried out with readers in the West, Northwest and Centre regions of Cameroon.

The West and Northwest regions are part of the western highlands of Cameroon. This area, which also includes part of the Southwest region, covers around 31,192 km2. Ranging from 5o to 7o N and 9o50' to 11o15' E, the western highlands make up a mountainous savannah landscape, with one dry season (mid-November to mid-March) and one rainy season (mid-March to mid-November). Its rainfall is between 1500 and 2600 mm, and average temperature is 20°C. Soils are fertile and suitable for agriculture, the main activity practiced by 80 percent of the population.

The Centre region is part of the bimodal forest zone. The area ranges from 2o to 4o N and 10o31' to 16o12' E and covers around 68,913 km2, mainly constituted of a mid-altitude plateau. There are four seasons in that zone: one short rainy season (March-June), followed by a short dry spell (July-August), one long rainy season (September-November) and a long dry season (December-February). Rainfall ranges between 1500 and 2000 mm over ten months, and temperatures are rather constant between 23o and 27o C. The zone is suitable for agriculture (dominated by shifting cultivation with fallow periods that nowadays get shorter), small livestock, and aquaculture. As in the western highlands, the agricultural population in the Centre is facing high rural exodus (MINADER, 2009 and Degrande et al., 2012). Figure 1 shows the location of the study zones.

Sampling

A stratified sampling technique was used to select readers of TFV to interview.

The first stage consisted of the selection of three regions to represent the two official languages (English and French) in which the journal is published. The Northwest region was chosen for the English version, and the West and Centre regions for the French version, "La Voix du Paysan."

The second step consisted of selecting divisions with a relatively high concentration of subscribers. To do this, we used the list of rural subscribers provided by SAILD (Service d'Appui Aux Initiatives Locales de Développement), the publisher of the journal. This list was complemented with a list of readers known to one farmer organization in the Northwest and one local NGO in the Centre.

In the 20 divisions chosen as described above, respondents were selected at random from the combined list. When the selected person did not have a telephone number or could not be contacted otherwise, he/she was replaced by the next person on the list. Our aim was to have 30 percent female users of TFV in the sample, even though the proportion of women in the combined list of readers was much lower (17.9 percent).

Data were collected from 107 users of the journal, of whom 28 percent were women. Respondents were farmers (59), lead farmers (24), NGO staff members (11), government extension workers (seven), input dealers (four), a staff member from a community radio and an agricultural school teacher. The study covered 12 divisions in three regions in Cameroon as indicated in Table 1 and Figure 1.

Data collection tools

A semi-structured questionnaire was used to cover the following topics:

- Who is using TFV, and since when? What attracts them? Does TFV have substitutes, or is it complementary to or in conflict with other advisory services?
- How did the user get in contact with that journal, and how is it supplied and used?
- What is the perceived impact of TFV in their farms and in the dissemination of innovations?
- How are the users contributing to TFV?
- How do users rate on quality, price, content, complexity (i.e., ease of understanding) and timeliness (i.e., capacity to address a need at the time of publishing)?
- What are the main strengths, weaknesses and challenges of the journal?

Table 1. Distribution of respondents.

Regions	Divisions	Identified		Sampled		Interviewed	
		Total	Women	Total	Women	Total	Women
North-west	Boyo	10	1	6	1	3	1
	Mezam	84	34	37	12	22	10
	Momo	4	1	2	0	1	0
	Ngokentunjia	27	3	12	3	10	3
West	Bamboutos	15	1	10	1	8	1
	Menoua	23	4	18	4	14	4
	Mifi	96	5	22	4	12	3
	Ndé	22	4	12	4	7	3
	Nkoung-Khi	4	0	2	0	1	0
Centre	Lékié	7	3	6	3	5	3
	Mbam et Inoubou	9	0	6	0	4	0
	Nyon et So'o	29	3	22	4	20	2
Total		**330**	**59**	**155**	**36**	**107**	30

Data analysis

Analyses were mainly descriptive. However, some comparisons were made to assess the significance of differences in responses on the basis of gender, educational level, type of reader (subscribers versus non-subscribers) and category of users[1] (farmers, lead farmers, government extension workers and NGO extension workers).

SPSS version 17 was used to generate descriptive statistics and perform comparisons. Statistical significance was analyzed at the 5 percent level. So, when comparing values of two variables, we concluded that there was a significant difference when the critical probability P(t) was less than 5 percent.

[1] The categories of community radio staff member, input suppliers and agricultural school teacher were excluded from these comparative analyses because of their small numbers.

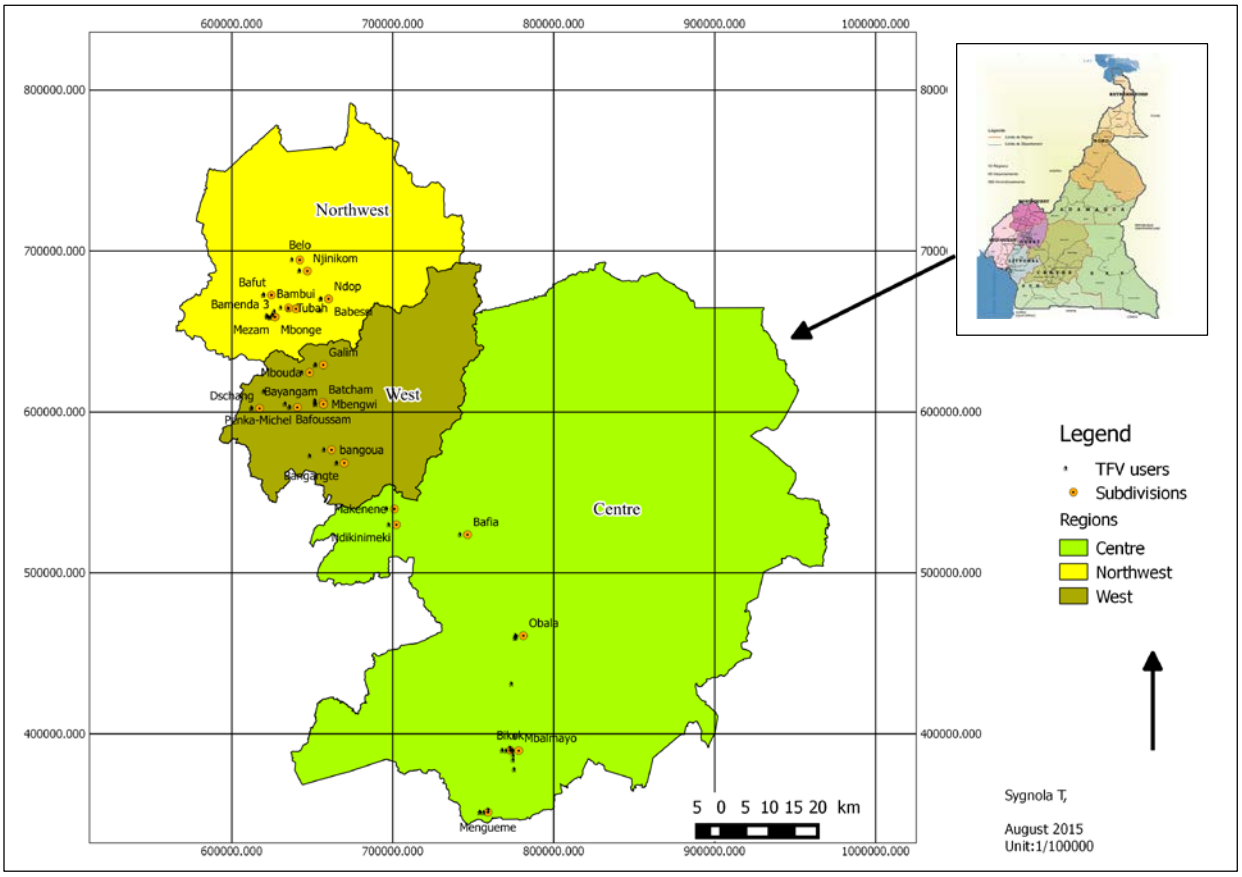

Figure 1. Location of The Farmer's Voice users interviewed in Cameroon.

Results

Characteristics of TFV users and their knowledge of The Farmer's Voice

Government extension workers

Among the seven government extension workers (GEWs) who were identified as TFV users, two were women. Only one GEW was between 36 and 50 years old; the others were above 50 years. All GEWs were married and had at least a high school education. More than half of them (57.1 percent) went to university.

NGO/CBO extensionists

Eleven staff members from NGOs or community-based organizations (CBOs) who operated as extension workers answered the questionnaire; five were women. Age range in this category varied: two were between 21 and 35 years old, three were between 36 and 50 years, and the remaining six were above 51 years, with one being more than 65 years old. The majority of these extensionists (81.8 percent) were married. Apart from two, all NGO/CBO staff members had been to university.

Farmer trainers/lead farmers

This group has various names depending on the locality, but "lead farmer" is most often used. These farmers are volunteers who receive training and thereafter train their peers via the farmer-to-farmer extension approach. Of the 24 interviewed in this study, three-fourths were men. One lead farmer (LF) was single, three were widows, and the 20 others were married. One LF from the present study had never been to school. Six (25 percent) stopped education in primary school, four did so in secondary school, and nine (37.5 percent) went to high school; the remaining four went to university. Though the majority of farmer trainers (78.3 percent) have agriculture as their main activity, one was a civil servant and four were employed in the private sector. However, even the five "non-farmers" have agriculture as their second main activity.

Farmers

This group of respondents consisted of people who have farming as their first or second activity. Among the 59 interviewed, 16 were women. Five of the farmers were between 21 and 35 years, 27 were between 36 and 50 years old, 21 were between 51 and 65 years, and six were above 65 years. Eighty-three percent of farmers surveyed were married, two were divorced and five were widowed. Only one respondent from this group had never been to school. Twenty farmers stopped their education in the primary level, and 10 in the secondary level; 13 attended high school, and 15 went to university. Four farmers had commerce as their main activity, four others were civil servants, and 12 were employees in the private sector.

Input dealers

These people supply farmers with inputs such as fertilizers, pesticides, seeds, and some farming tools, such as sprayers, machetes, rain boots, gloves, and others. They also provide farmers

with advice on why and how to use what they sell. Some also distribute extension tools such as TFV magazine in their selling locations. Among the four input sellers of this study was one woman. One was between 21 and 35 years old; others were between 36 and 50 years. One was single, and three were married. One stopped education in high school; the other three went to university.

When we looked at all groups of readers/users of The Farmer's Voice together, we found that almost half (45.8 percent) of them were between 51 and 65 years old. Youths (35 years old or younger) represented only 9.3 percent. The majority (84 percent) of readers were married. Agriculture was the main activity for 55.7 percent of respondents, followed by a job in the private sector (22.6 percent), in the public sector (14.2 percent) or in commerce (7.5 percent). Though most had at least primary-level education, two users had never been to school (Table 2) but were assisted by their relatives to read the journal.

Table 2. Educational levels of TFV users.

	Frequency	Percent
Never been to school	2	1.9
Primary	26	24.3
Secondary	15	14.0
High school	27	25.2
University	37	34.6
Total	107	100.0

Respondents mentioned various origins of their knowledge of TFV. Among them, the main ones were a kiosk, a farming group, and a non-governmental organization (NGO) or a farmer organization (FO), as indicated in Table 3.

Table 3. Places where respondent discovered TFV.

Origin	Frequency	Percent
Kiosk	24	22.9
Farmer group	22	21.0
NGO/FO	19	18.1
Colleague	14	13.3
Radio	11	10.5
During a workshop/seminar	9	8.6
Relative	3	2.9
During an agricultural show	2	1.9
School	1	1.0
Total (missing value = 2)	105	100.0

Among the main crops/livestock that generated income, maize, beans, plantain, cocoa and pigs were the ones most often cited by respondents (Figure 2).

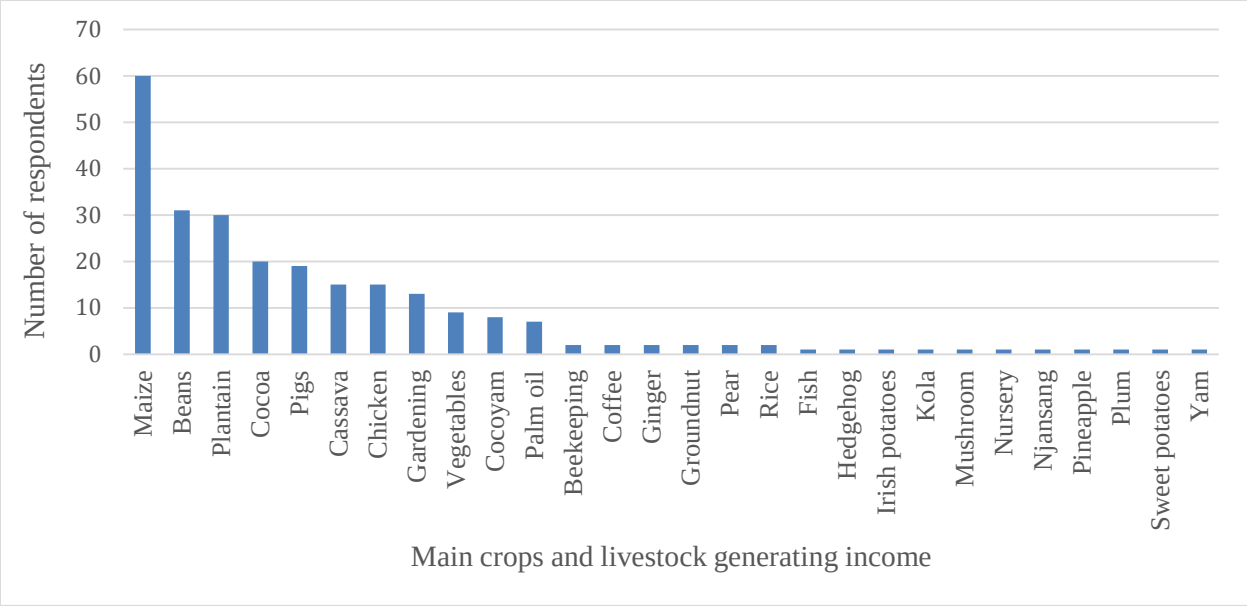

Figure 2. Crops/livestock generating most income for users of The Farmer's Voice.

Note: Total number of respondents exceeds 107 because some respondents gave multiple responses.

Many respondents had been reading TFV for several years, and two of them had been using TFV since the journal started in 1988 (Figure 3). However, more than one-quarter (28.6 percent) of respondents started to read TFV not more than five years previous to this study - that is, since 2008).

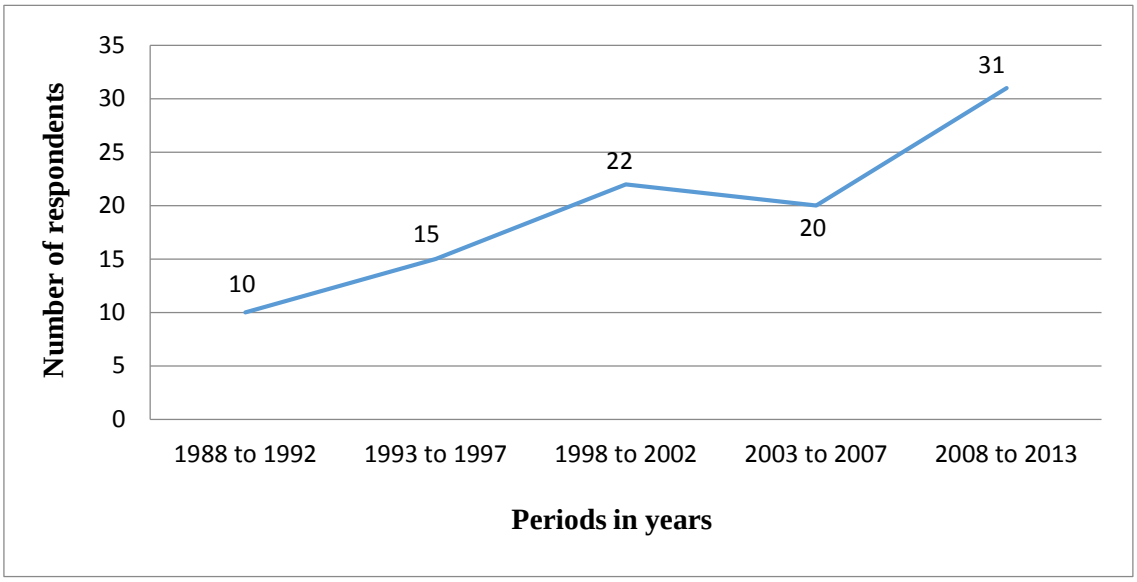

Figure 3. Period when respondents started to read TFV.

To access the journal, most respondents (63.6 percent) subscribed; 21.5 percent bought from a kiosk, 9.4 percent borrowed from a relative or a colleague, and 5.6 percent read a library copy. The majority of respondents (77.5 percent) paid for the journal themselves, but for 8.5 percent, the organizations they worked with paid. The same proportion benefited from a relative who paid for them. Only three respondents (4.2 percent) declared that their farmer group paid, and one said a rich man originating from his village paid. Around three quarters (73.6 percent) knew the price of TFV.

To read through all of TFV, 18.9 percent of users took less than one day, 34 percent took two to three days, and 22.6 percent finished reading their journal in four and seven days (Figure 4). There was a significant difference in reading time between genders (P(t) = 0.055), user groups (P(t) = 0.007) and education levels (P(t) = 0.001). Most men (80.3 percent) read TFV within one week, but only 63.3 percent of women read it in that time. The proportion of women who completed reading TFV in two weeks was 76.6 percent. All the extension workers, however, read TFV within a week, as did 90.9 percent of NGO staff members; 83.3 percent of lead farmers and 67.8 percent of farmers took at most one week to read TFV. Respondents with primary-level education (26.9 percent) took less than three days to read TFV. Sixty percent of those having attended secondary school did the same, and 70.3 percent of respondents with university-level education read the journal within the same time.

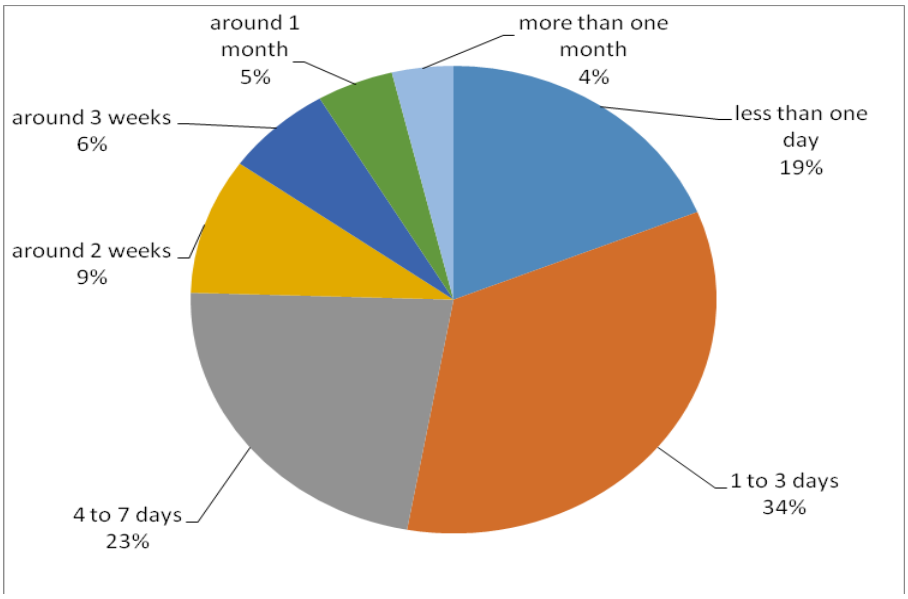

Figure 4. Time used by respondents to complete reading TFV.

Though the majority (55.1 percent) of users read everything in the journal, 44.9 percent said they selected what was of interest to them. The latter mainly focused on items related to farming practices (technical tips), letters (questions from farmers and related answers), success stories, and health and market information. There was a significant difference (P(t) = 0.04) between gender in reading everything in the journal. Around two-thirds of men (63.6 percent)

declared that they read everything in TFV, but only one-third of women (33.3 percent) declared they did so. The reason for 50 percent of respondents was that they did not have enough time, especially when the topic was of no particular interest to them. In addition, one respondent argued that he had many documents to read, and another one found that some topics/articles are repeated over time. The difference was not significant (P(t) = 0.482) between genders. There was, however, a significant difference (P(t) = 0.04) in reasons between regions. In the Northwest region, 75 percent of respondents declared that they did not have enough time to read all; in the other regions (West and Centre), only 50 percent of respondents said they did not have enough time.

From the topics covered in TFV, respondents were able to identify a few much more than others. For example, technical tips and health and nutrition were the most often cited (Figure 5). Farmers were not always able to cite the exact name of the category, but they knew the content, and this often helped to identify the related category.

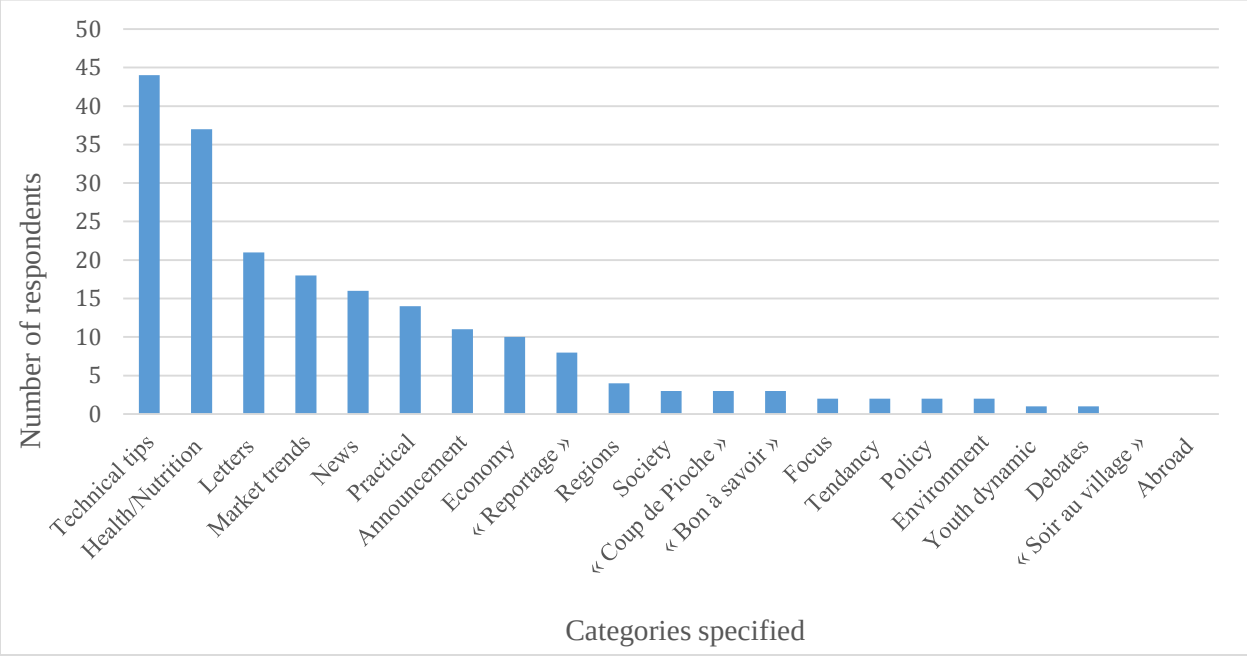

Figure 5. Content categories specified by respondents.

Note: Number of respondents adds up to more than 107 because some respondents gave multiple responses.

Users of TFV were most attracted by information aimed at improving farmers' production, income and livelihoods, especially technical tips, practical guidelines related to farming and health information for their families. Other points of attraction (Figure 6) were the ease of understanding and the fact that some farmers find that the name of the journal (The "Farmer's" Voice) gives them recognition.

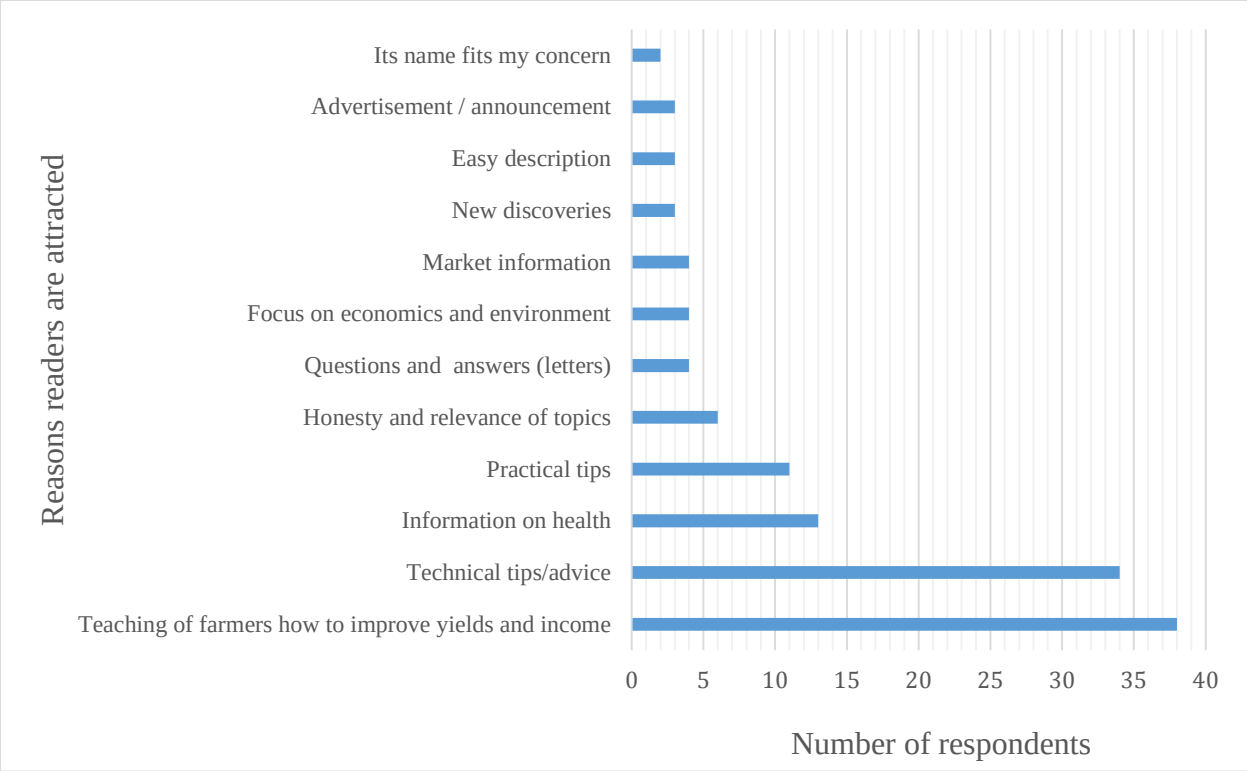

Figure 6. Reasons that readers were attracted to TFV journal.

Note: Number of respondents adds up to more than 107 because some respondents gave multiple responses.

For a few respondents (8.4 percent), TFV was the only source of information for their agricultural activities. Most respondents, however, generally exploited many other sources to obtain agricultural information, such as extension workers, NGOs or FOs, and the respondents' farming groups (Figure 7). Internet and radio/television were also cited as sources of agricultural information by 23 percent and 14 percent of respondents, respectively.

Although one respondent was not able to indicate the most important source and one other considered TFV of least importance, the majority (57.3 percent) considered TFV as complementary to other sources, and 40.8 percent mentioned TFV as their most important source of information in agriculture.

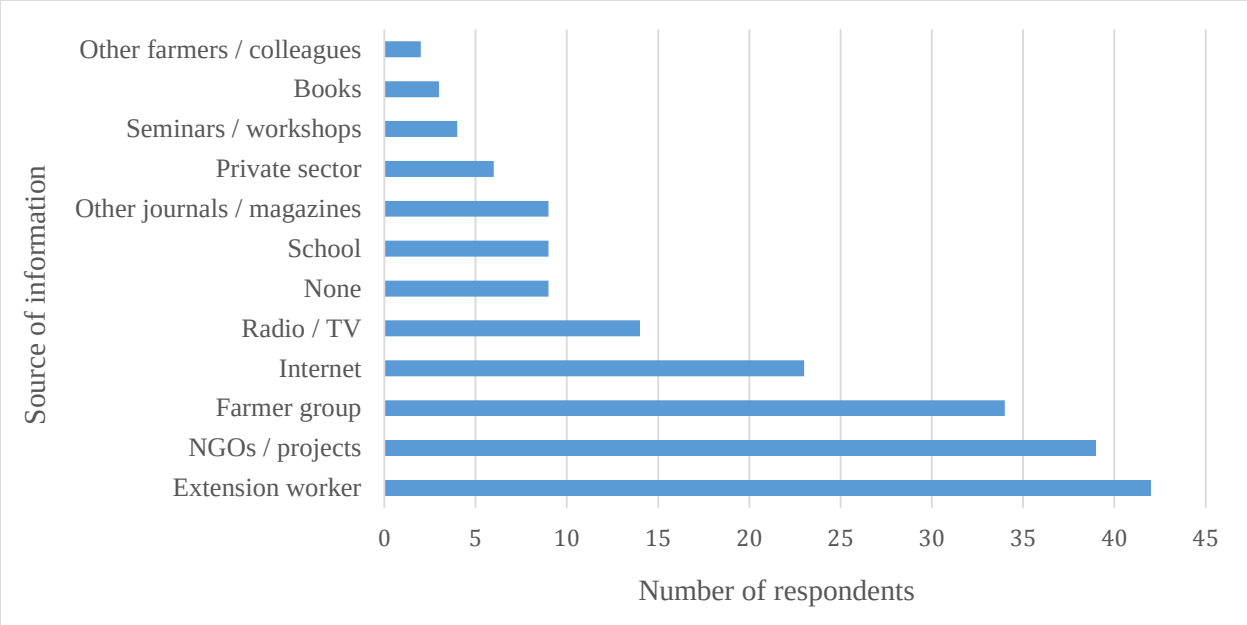

Figure 7. Sources of information other than TFV used in agriculture.

Note: Number of respondents adds up to more than 107 because some respondents gave multiple responses.

Use of The Farmer's Voice

Almost all respondents (97.2 percent) declared that they used the information from TFV in their daily activities - e.g., food cropping and animal husbandry (Table 5).

Table 5. Examples of information that respondents had used from TFV.

Information used	Frequency
Crop practices	65
Animal husbandry	31
Postharvest/processing	23
Marketing	4
Others	7

Most of this information was used in the past five years (Figure 8). The majority of respondents (80.8 percent) used the information from TFV on their farms, and 18.2 percent used it in the field for extension and advisory services. Among the three respondents who had not used TFV information, one said that TFV was pushing him to consider getting into agriculture, and another one said that he was reading the journal to prepare an agricultural project that was still to start.

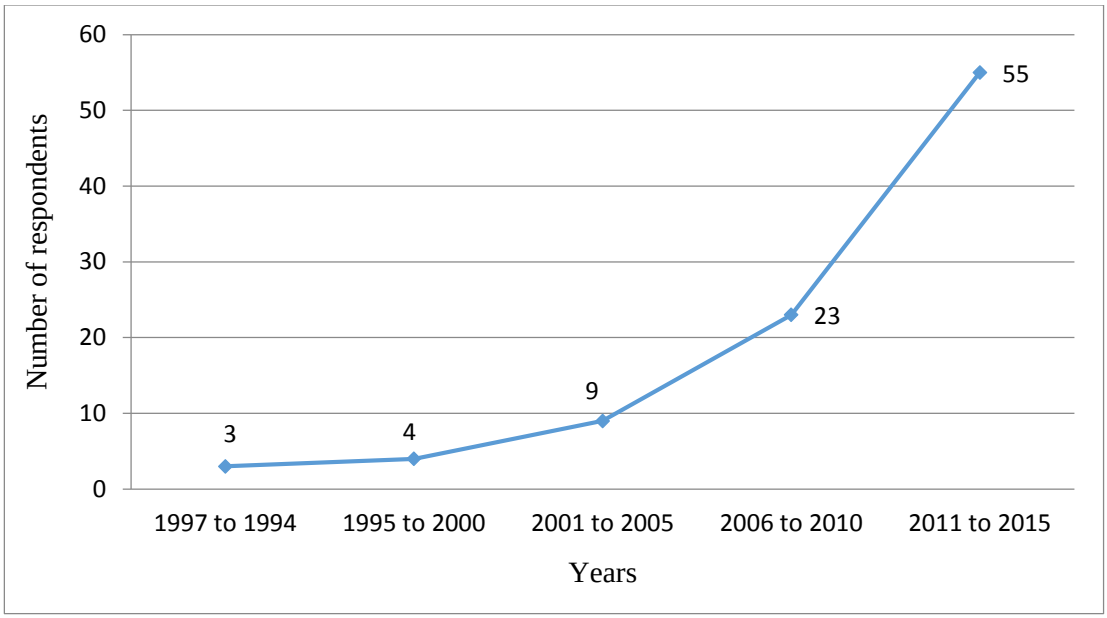

Figure 8. Respondents' use of information read from TFV over the years.

The majority of TFV users (90.7 percent) shared their journals, especially with their group members, relatives, colleagues and friends. Respondents shared their journals on average with eight persons (min = 0, max = 50, median = 5). There was no significant difference in the number of people the journal was shared with between men and women (P(t) = 0.895). However, the community radio journalist who was interviewed said he shares information from TFV with around 6,000 listeners when presenting topics from TFV.

Furthermore, 86 percent of respondents had discussed topics from the journal with other people. There was a significant difference between regions (P(t) = 0.32) in discussing topics from the journal. Nearly 95 percent of respondents in the Northwest declared that they had discussed topics from TFV with others; 85.7 percent and 75.9 percent of respondents in the West and Centre regions, respectively, did the same. Discussions took place occasionally for about half of the interviewees (51.1 percent), but 33.7 percent of respondents discussed the journal regularly, and 13 percent very often. People with whom they discussed the journal were the same with whom they shared the journal (Figure 9).

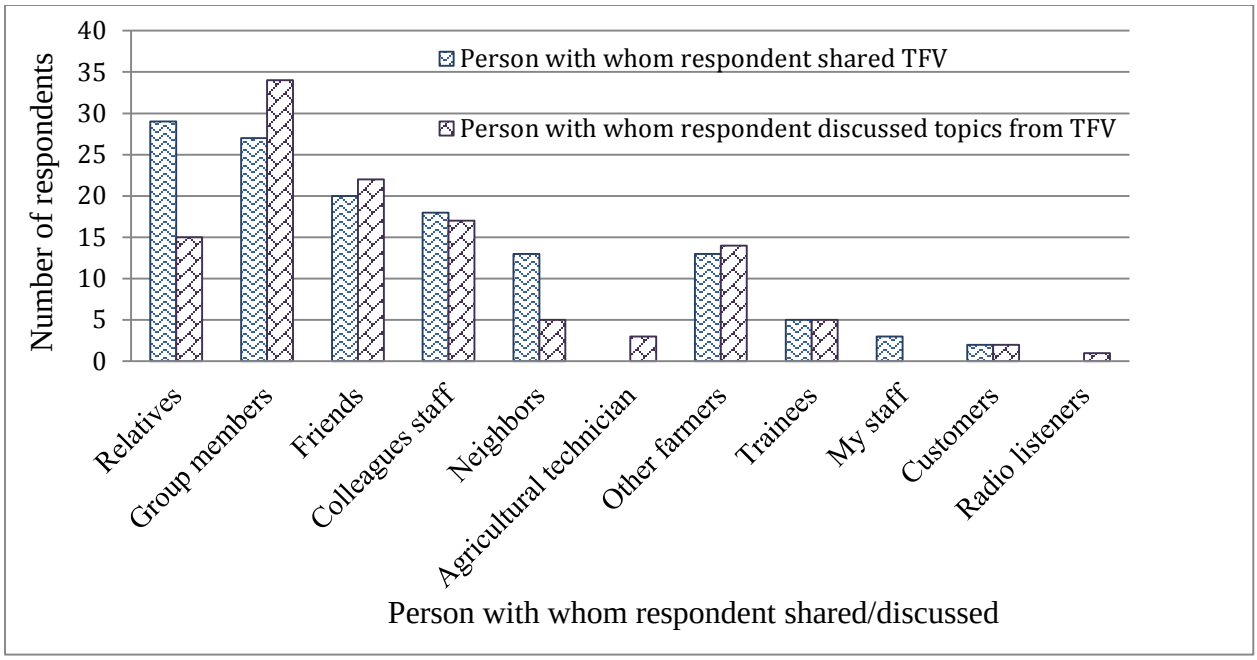

Figure 9. Persons with whom respondents shared TFV or discussed topics from TFV

Note: Number of respondents adds up to more than 107 because some respondents gave multiple responses.

Respondents gave several reasons when they were asked to tell what motivated them to read TFV. Discovering new technologies was mentioned by 94 percent of respondents. As indicated in Figure 10, many respondents (45.5 percent) wanted to learn from their peers' experiences.

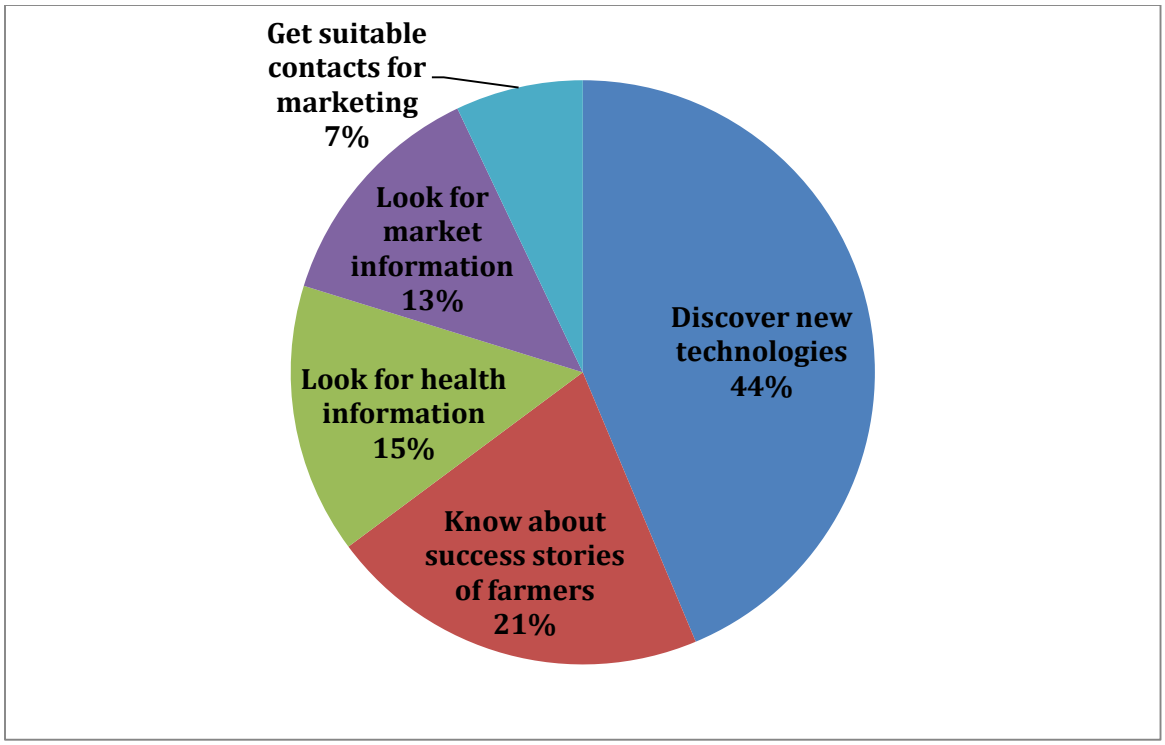

Figure 10. Motivation to read TFV

Note: Number of respondents adds up to more than 107 because some respondents gave multiple responses.

There was a correlation between user category and motivation, especially with respect to discovering new technologies, looking for health information, and looking for market information (Table 6). Respondents who were training farmers – that is, government extension workers, field staff members from NGOs/CBOs and lead farmers – all mentioned the desire to discover new technologies through TFV, compared with 92.9 percent of farmers. In addition, about half of the government extension workers (57.1 percent) also mentioned the need for market information among their motivations; NGO staff members mentioned it (44.4 percent), and 40.9 percent of lead farmers and 16.4 percent of farmers did so. Furthermore, a majority of extension workers (71.4 percent) mentioned the need for health information; among other groups of respondents, fewer than half mentioned it.

The results above coincide with the ranking of motivations. Indeed, 70.5 percent of respondents ranked "discover new technologies" as No. 1, but "learn about successes of other farmers" was mentioned as the top motivation by 14.3 percent and ranked second by 35.2 percent. The other information ranked among the top motivations was health information (Table 7).

Table 6. Correlation between motivations mentioned by category of users.

Motivation to read TFV	N	P-value
Discover new technologies	100	0.002
Get suitable contacts for marketing	99	0.377
Know about success stories of farmers	99	0.897
Looking for market information	99	0.010
Looking for health information	99	0.008

More than four-fifths of respondents (87.9 percent) had kept some copies of TFV. Eighty-eight percent of those who kept the journal did it for future reference. Nearly 9 percent of respondents said they wanted to constitute a library for their children, and 3.3 percent kept copies of the magazine to share with others. We even found one farmer who had kept almost all the copies he had received. He said this helped him whenever he had questions on farming or medicinal plants. This farmer and another one had even recorded some important titles in an exercise book so that they could easily refer to interesting topics as needed. Some extension workers also kept many issues of TFV in their offices.

There was a significant difference in keeping TFV for reference between genders and between subscribers and non-subscribers (P(t) = 0.016 and 0.014, respectively). More women (100 percent) than men (83.1 percent) kept copies. Also, more subscribers (94.1 percent) than occasional buyers from kiosks (82.6 percent) and those who borrowed from colleagues or relatives (70 percent) kept copies of TFV (see photos in Annex 2).

Though it was difficult for some users (40 percent) to remember the oldest edition of TFV they had kept, many were able to specify the oldest issue in their possession. The oldest we found during our survey was issue No. 3 of 1989; the most recent was that of July 2014 (Table 8).

Most respondents (88.9 percent) remembered well what interested them most in the oldest issue they preserved. The main reasons mentioned (Figure 11) for keeping old issues were useful information on agricultural techniques (technical tips) and health care.

Table 7. Ranking respondents' motivations to read TFV.

Motivation	N	Missing	Proportion (%) who ranked motivation as				
			First	Second	Third	Fourth	Fifth
Discover new technologies	105	2	70.5	19.0	7.6	1.0	1.9
Get suitable contacts for marketing	73	34	2.7	20.5	27.4	27.4	21.9
Learn about successes of peers	91	16	14.3	35.2	24.2	15.4	11.0
Look for market information	86	21	8.1	14.0	20.9	31.4	25.6
Look for health information	91	16	11.0	26.4	28.6	11.0	23.1

Table 8. Oldest issues of TFV kept by respondents.

Years	Frequency	Issue number(s)		Years	Frequency	Issue number(s)
1989	1	3		2006	3	176, 186 and ns
1994	3	26, 31 and 60		2007	2	June and ns
1995	2	46 and not specified (ns)		2008	4	200, November and ns
1998	2	ns		2009	4	166 of May, 223 of December, 220 and ns
1999	2	90 and ns		2010	6	174, January, September and ns
2000	1	ns		2011	3	196 of November, May and ns
2002	2	124 and ns		2012	6	253, June and ns
2003	1	ns		2013	1	255
2004	2	ns		2014	5	July and ns

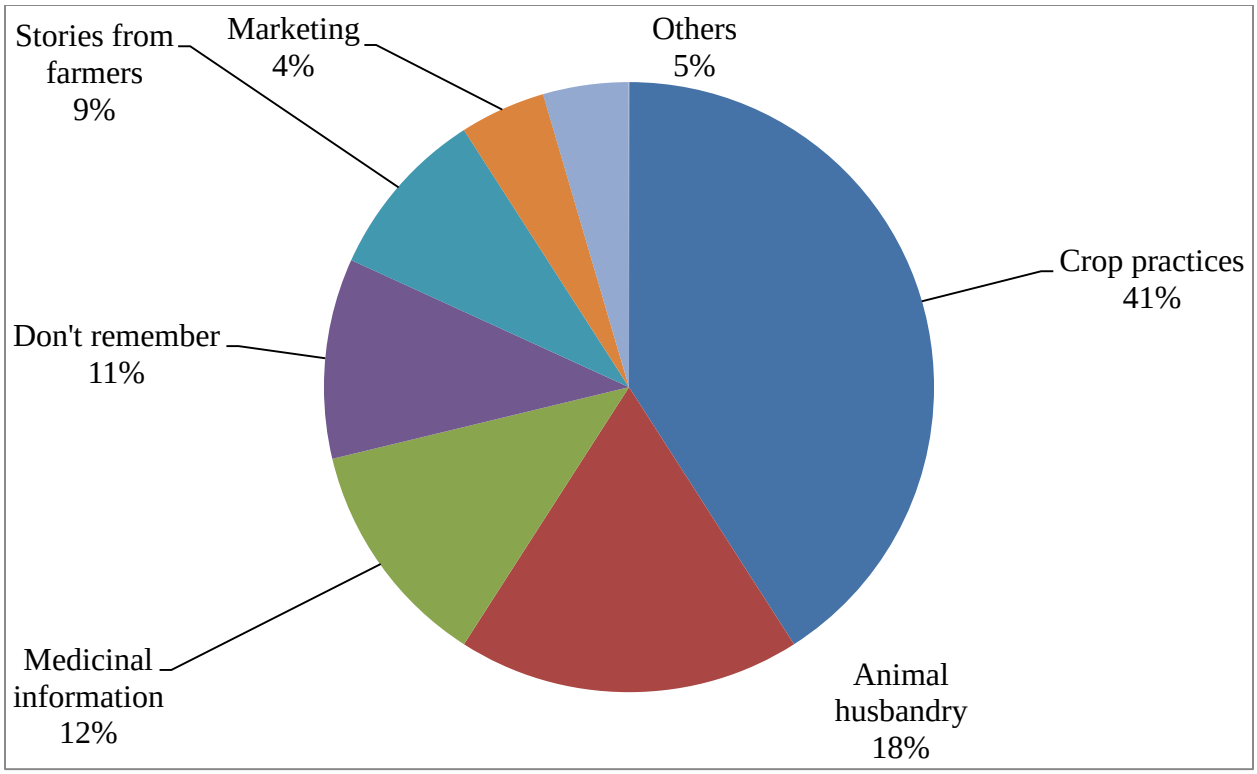

Figure 11. Reasons for keeping some issues of TFV.

Few respondents (8.5 percent) had actively contributed to the journal. Among those who had contributed, two respondents contributed to technical tips; other categories (letters, practical, health and nutrition, news, focus, reportage and announcement) were mentioned by one respondent each. Two persons were not able to remember the year of their contributions, one sent in something in 2000, another one in 2006, and the rest between 2008 and 2011.

Forty-four percent of TFV readers remembered some authors who made contributions to the journal over the years. TFV users cited 39 authors, among who most were staff members of SAILD, the organization that publishes the journal. This matched with the declaration of one respondent, who said that the journal employs professionals who suggest articles and other authors just complement what they do.

Around one-third of respondents (32.1 percent) said that they had information they would like to share through TFV. Though there was no significant difference in willingness to share through TFV between genders (P(t) = 0.889), level of education significantly influenced this (P(t) = 0.016). Indeed, the proportion of respondents who mentioned that they had topics to share via TFV was greater among those with high school or university-level education (40.7 percent and 43.2 percent, respectively) than those with primary- and secondary-level education (15.3 percent and 14.3 percent, respectively). These respondents proposed 39 topics. These topics concerned agriculture (14 mentions), animal husbandry (12), marketing (three), health and nutrition (two), environment (five) and crop storage/processing (three).

During the 12 months prior to the survey, readers were mostly interested in 58 topics (Figure 12). Topics most often mentioned were maize production, poultry and piggery. Respondents were least interested by topics related to cocoa and coffee farming. Also, only three of the topics mentioned (5 percent) targeted agroforestry.

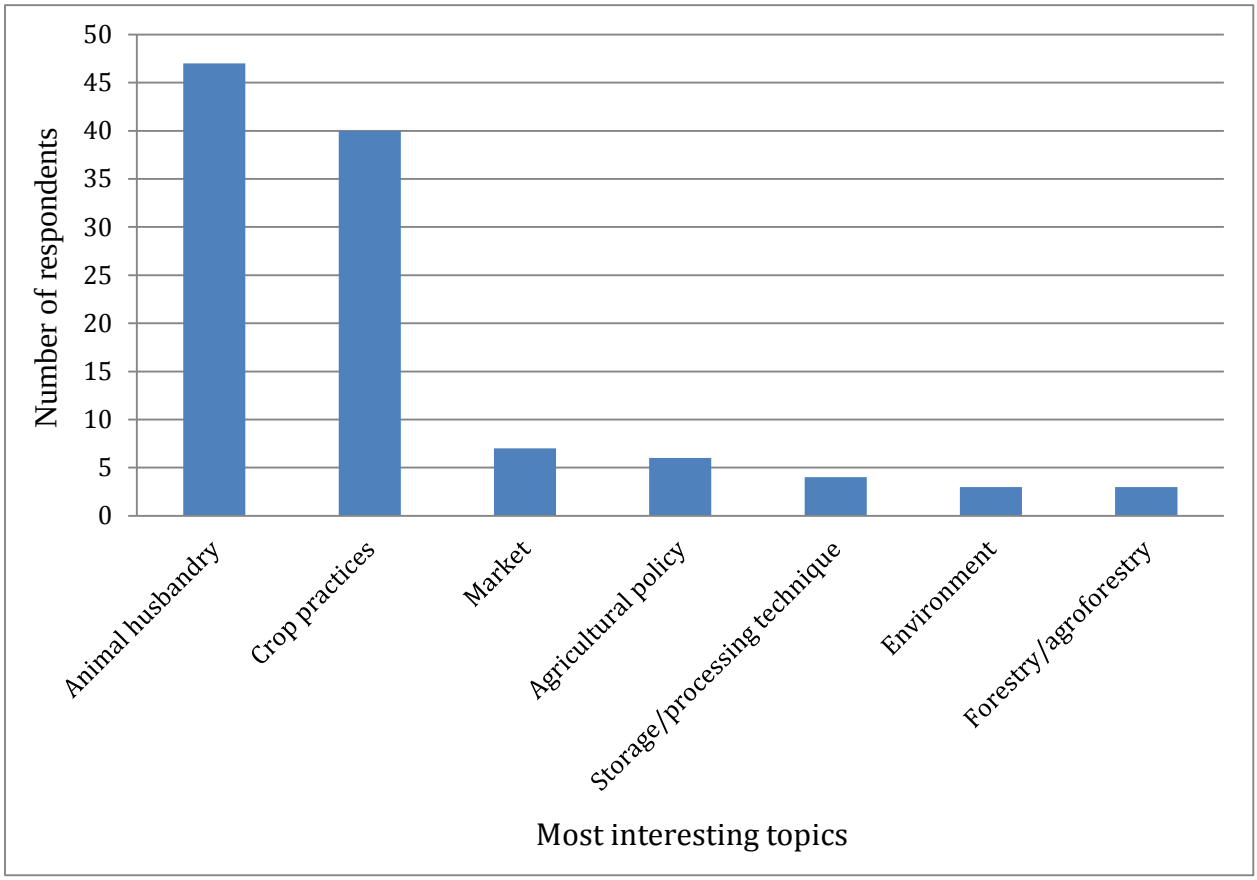

Figure 12. Most interesting topics presented during the 12 months previous to the survey.

All respondents agreed that TFV had significantly contributed to changes in farming practices (Box 1 and Annex 3). Half of the respondents said that farmers gained knowledge from TFV that helped them to improve their practices – for instance, through the technical tips and enterprise budgets for various crops.

Box 1: How TFV helped to improve farmers' practices	N
• Farmers gain knowledge from the journal (e.g., technical information and income statements) and improve their farming practices.	46
• I have improved the way of applying manure in my gardening/farm.	7
• TFV shares experiences/success stories of farmers, and this encourages other farmers to improve their agricultural production.	5
• It has changed my work style (I plant maize in straight line, I use cassava in poultry feed).	4
• I have changed my farming practices, and I think other farmers have done the same.	3

Respondents specified how TFV had been useful to them in training farmers, doing marketing, improving farming activities or enhancing social status. The only community radio broadcaster who was interviewed agreed that TFV had helped him to improve his knowledge in all these domains. For other respondents, how TFV had been useful varied according to the user category, as indicated in Figure 13. For instance, all farmers agreed that they had improved in their farming activities thanks to TFV; half of them said they had improved their social status; and less than one-quarter each had attracted more customers and improved their extension or advisory services.

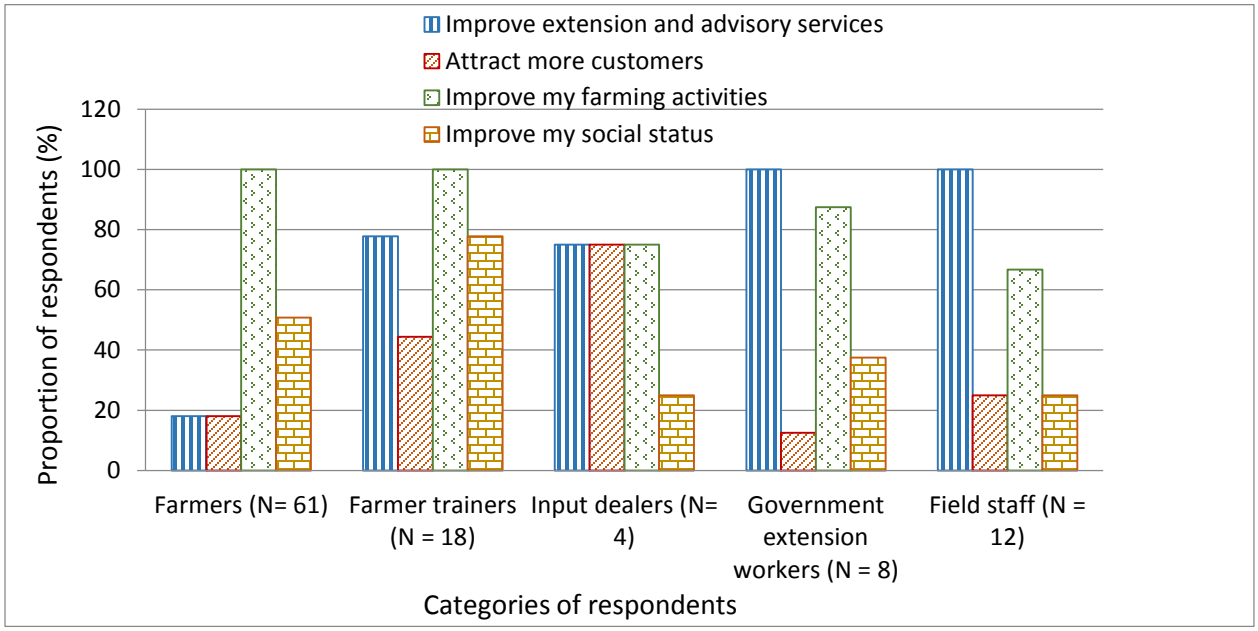

Figure 13. Usefulness of TFV in extension, marketing, farming and social status by category of respondents.

Respondents gave many testimonies on what TFV had concretely helped them to do (Box 2). For instance, the community radio broadcaster said, "After presentation of hedgehog breeding which was published by TFV, we organized a competition and around 300 [listeners]

participated just in about two hours. This has helped us not only to realize that the radio program was listened to by many…, but also gave us the idea to organize more training programs on this topic."

Box 2. Testimonies from readers about the impact of TFV

- Thanks to TFV, I have been improved my skills in vegetable cropping and my yields have increased.
- I have been promoted to be the director of a newly created agricultural school, and TFV helps me a lot in teaching and planning of our activities.
- From TFV, I have read how pistachio can treat prostate. I have advised many people to use it.
- I have acquired more knowledge in farming, and people from my community respect me. Some even consider me as a farming library.
- Thanks to TFV, I have the contacts of many buyers for gardening products, even from neighboring countries. So, I negotiate better with my customers and sell easily. Most often, I even get contracts before I start producing.
- I used to consult TFV whenever a farmer asks me questions. Most often, the answers can be found there.
- It is from TFV that I have learned everything concerning watermelon production, and this helped me to win an award worth 800,000 FCFA (≈USD 1600) during an agricultural show in Mbanga (Littoral region). In addition, I have initiated many farmers in Moungo division to this activity. When I go there, I am respected and many farmers give me presents.
- Knowledge from TFV has helped me in producing 1 ha of cabbage in 2012, I got 730 bags and sold at 2.7 million FCFA, while my total cost was 800,000 FCFA.
- Some of our customers have experimented farmers' testimonies and have produced more, they now buy more inputs from us.
- TFV has helped me to improve my training books/handouts. When I give training, I am more confident.
- TFV has oriented me to a good market where I now sell my cocoyam and get more income with little disturbance.
- TFV has provided me with more information to use in my extension activities. I am more practical on the field.
- TFV has trained me on enterprise budgeting, and this has improved my decision making in my activities.
- TFV has trained me on how to produce avocado and many other crops. Today I am happy with my activities.
- Thanks to TFV economy and technical tips categories, I have submitted a proposal for poultry production.
- TFV has published our activities, and farmers have joined our union. Today we can produce more and sell better.
- Today I can sit with my peers and easily talk about new technologies because I am always informed, thanks to TFV

Box 2. Testimonies from readers about the impact of TFV

- TFV has explained many things in health and nutrition. Today I use food or medicinal plants to treat my children.
- When farmers come to our office for meetings, we often use information extracted from TFV, like success stories of other farmers, to introduce brainstorming sessions, and this obliges farmers to discuss and share their experiences.
- I know many civil servants and other non-farmers who admit that they have engaged in agriculture thanks to TFV.
- I have a friend who wanted to go abroad (South Africa) to learn poultry farming. I advised him to read TFV and get all the information there. He did it, and through TFV he is doing well in poultry farming today without the necessity to travel far.
- I have developed more interest in agriculture thanks to TFV, and I am now gaining income from cocoa, oil palm and fish farming. I am still to try with turkey breeding, which was recently published.
- I have followed practical tips from TFV. Today I am involved in snail keeping, fish farming and cocoa nursery.
- I have really improved my farming activities (especially piggery, poultry, plantain, maize) thanks to TFV. This journal allows me to produce more compared to the past.
- I started reading TFV thanks to a driver. Success stories of farmers have pushed me to get into farming activities.
- TFV is quite relevant for extension staff and farmers. Everyone understands what is written and can try it out on his/her own easily.

Assessment of The Farmer's Voice

Slightly fewer than half of the interviewees (44.6 percent) had used information from TFV to train farmers. Though there was no significant difference in use of TFV to train others between genders (P(t) = 0.533), there was a significant difference (P(t) = 0.037) between user categories. Eighty-six percent of extension workers, 66.7 percent of lead farmers and 54.5 percent of NGO field staff members had used topics from TFV to train other farmers; only 27.1 percent of farmers who trained their peers had used such topics.

The topics that interviewees said they trained others on were close to those they mostly preferred from TFV. Piggery, poultry and maize production were mentioned, but banana and plantain production took the lead.

The majority of respondents (80.8 percent) had learned or mastered new farming practices thanks to TFV. Respondents cited 52 topics as mastered or learned. Most of these topics were similar to those in which respondents were most interested. Maize cropping and animal husbandry were again the most often cited, followed by plantain cultivation and market gardening.

Nevertheless, 27.2 percent of respondents admitted that they were not able to put into practice some of the farming techniques that were published in TFV. Thirty-one topics were mentioned as not mastered (Figure 14). There was no significant difference in techniques not mastered between genders (P(t) = 0.667), but the difference was significant (P(t) = 0.002) with respect to level of education – respondents with high levels of education faced less difficulty. The two farmers who had never been to school mentioned that they faced difficulties with some techniques, and more than half (53.8 percent) of those with primary-level education said the same. On the other hand, only 19.2 percent and 14.3 percent of respondents with high school and university-level education, respectively, had problems with some techniques published in TFV.

Respondents gave the following reasons to explain their inability to apply the techniques: insufficient skills (56 percent), poor choice of production area (16 percent) and lack of practice in the presence of an expert (12 percent) (Figure 15).

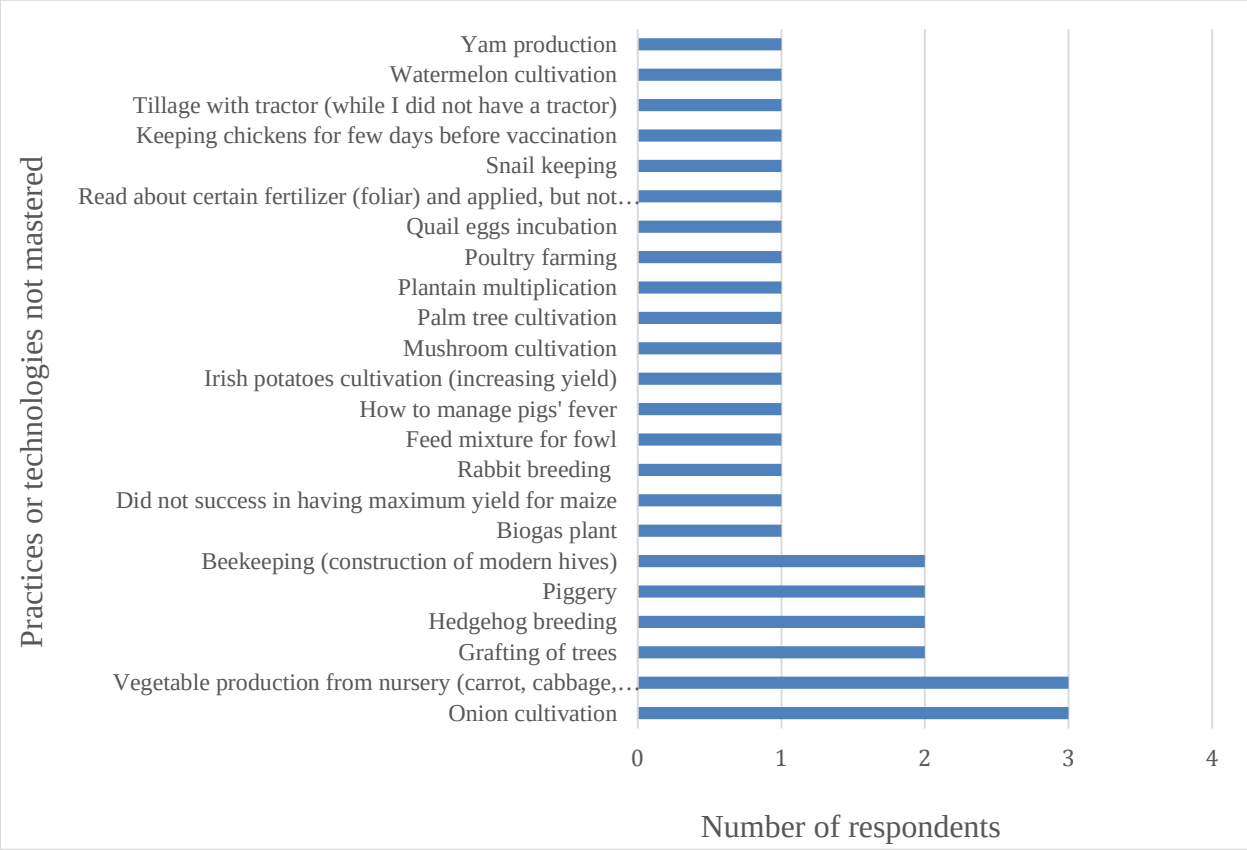

Figure 14. Practices or technologies developed in TFV that users were not able to master.

Though most respondents (92.9 percent) did not find any information or technology for which TFV was not an appropriate source for dissemination, other respondents insisted that TFV should focus on agriculture and avoid any political information. They also recommended that articles should not be too scientific so that farmers can easily understand them.

The majority of users of TFV (88.5 percent) had never written a request to the journal. For the 12 respondents who had done so, requests were related either to improving production, to selling products, or to getting access to the journal (Figure 16). The user group that respondents belonged to had a significant influence (P(t) = 0.024) on whether they sent requests to TFV. One-third of government extension workers had written a request at one point or the other, compared with only 18.2 percent of NGO field staff members, 17.4 percent of lead farmers and 6.9 percent of farmers. Among respondents who once wrote a request, 18.2 percent never received an answer, but most (63.6 percent) indicated that they got a full or partial answer, and the majority (88.9 percent) were satisfied with the answers.

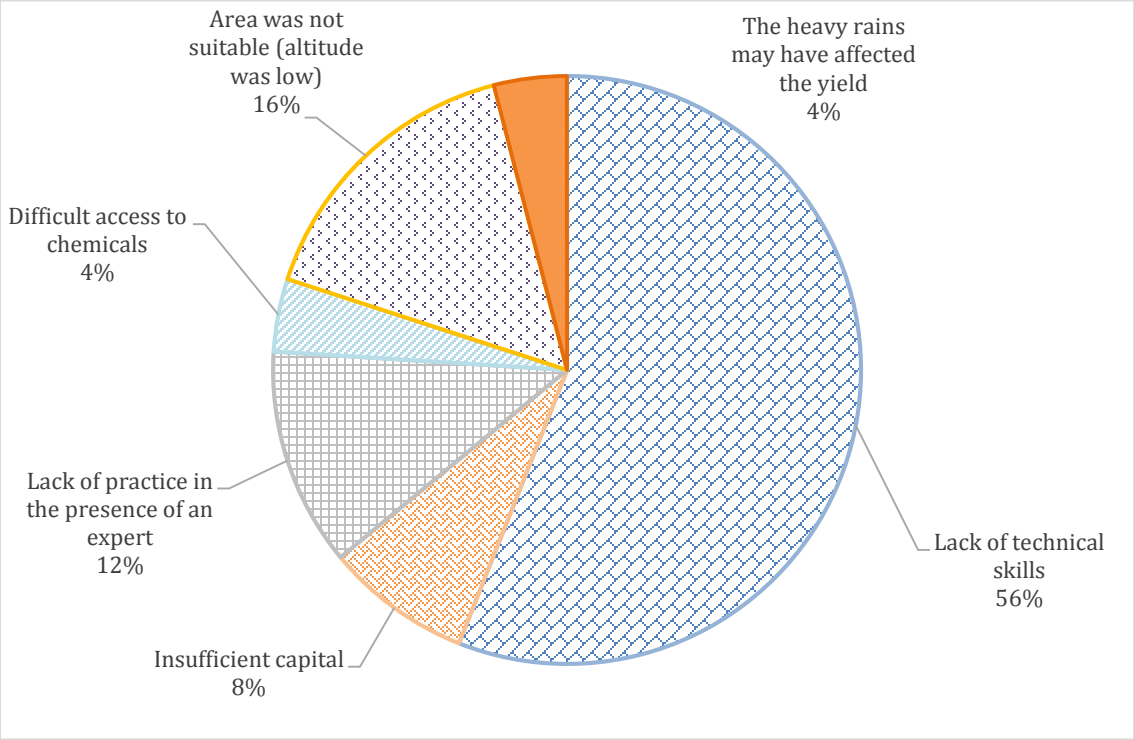

Figure 15. Reasons for inability to put some techniques into practice.

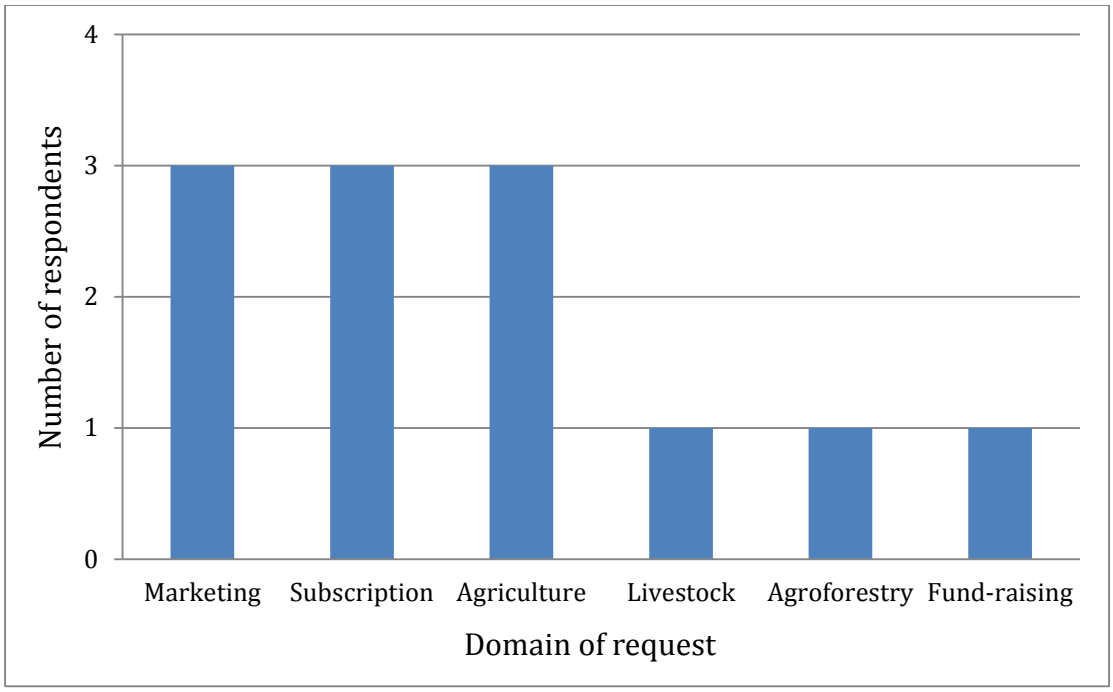

Figure 16. Requests written by readers of TFV.

Seven respondents indicated that they had given feedback to TFV by various means: meetings or information days where TFV staff members were present, sending a request to the journal and when the journal was collecting success stories from readers. One respondent wrote to the journal suggesting that readers criticize the journal so that it could improve. In the same feedback, that farmer advised TFV to improve the health and nutrition category. Respondents who were expecting a reaction from the journal to their comments confirmed that their feedback had been taken into consideration.

Users' rating of the effectiveness of The Farmer's Voice

Respondents were asked to rate the readability of TFV, the simplicity of the language used, the price, the quality of the text and the quality of illustrations (Figure 17). 64 percent of users found TFV easy to read; 21.5 percent and 14 percent, respectively, said it is readable and very easy to read. In addition, 54.2 percent of respondents found TFV easy to understand, and 28 percent found it comprehensive. Though it was also very easy to understand for 15 percent, three respondents (2.8 percent) indicated that TFV was difficult to understand.

The current price of TFV (300 FCFA (Central Africa Currency – "Franc des Communautés Financières d'Afrique") per issue) was just about right for 52.8 percent of respondents. More than one-third of the users found TFV very affordable, though 10.3 percent of respondents said it was too expensive. For the latter, the average suggested price was 175 FCFA (min = 100, max = 250, median = 175).

Most users of TFV (76.8 percent) declared that the quality of the journal was good. 15.8 percent rated it as average and 7.4 percent of respondents rated it as very good. Though one respondent said that illustrations in TFV were generally bad, especially with respect to the quality of photos, the majority of users (63.8 percent) said it was good; 27.6 percent rated the quality of illustrations as average, and 7.6 percent said they were very good.

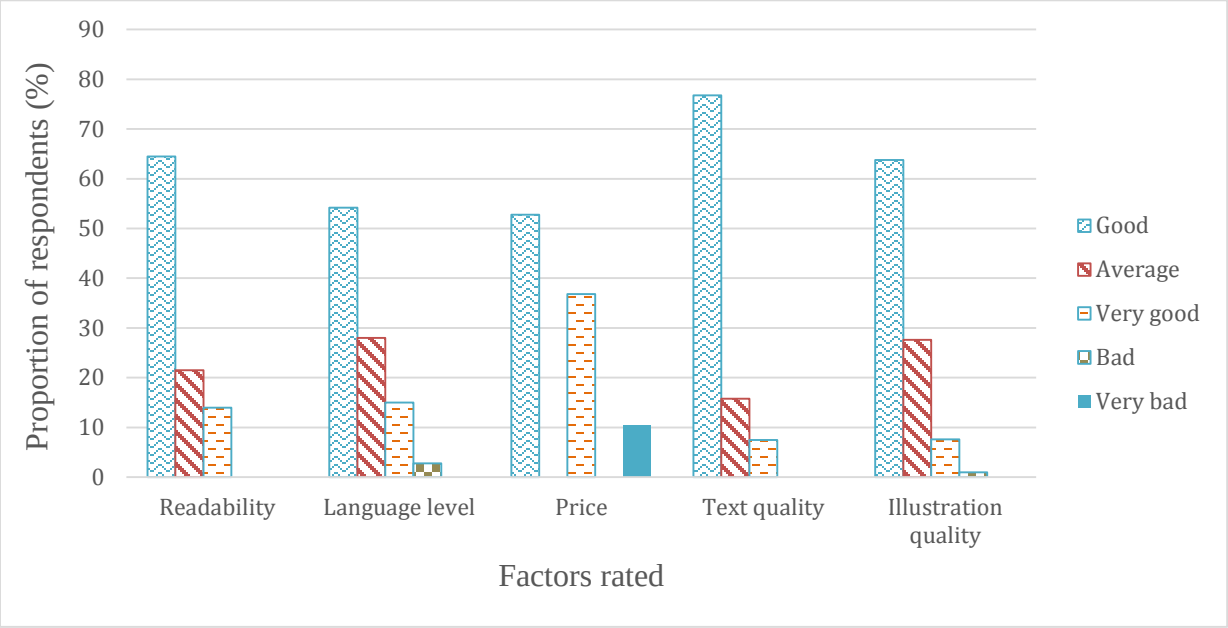

Figure 17. Respondents' ratings of some factors related to the content and price of TFV.

Just over half of TFV subscribers (53.7 percent) confirmed that they did not receive their monthly issue on time. Among them, 62.2 percent did not know the reason for late delivery. Four respondents explained the delay in delivery by the remoteness of their area (Figure 18).

More than one-third (36.1 percent) of TFV users rated the timing of the journal as "always appropriate," and 61.9 percent said the timing was "often appropriate." One user said the timing was not appropriate, and another did not know. Around three quarters (73.7 percent) of TFV users declared that the topics published in the journal were timely – matching activities during that part of the farming season; four respondents (4.2 percent) did not know.

The majority of respondents (81.6 percent) said that the topics in TFV take into account current problems and issues. However, 11.7 percent did not agree, and 6.8 percent said they did not know.

Respondents generally considered the content of the journal relevant to their needs. 35.2 percent of respondents found the content of TFV to be "most of the time relevant" and 31.4 percent of respondents found it "always relevant". However, 32.4 percent of TFV users answered "sometimes yes and sometimes no" to this question. Only one respondent declared that most often this content was not responding to his needs.

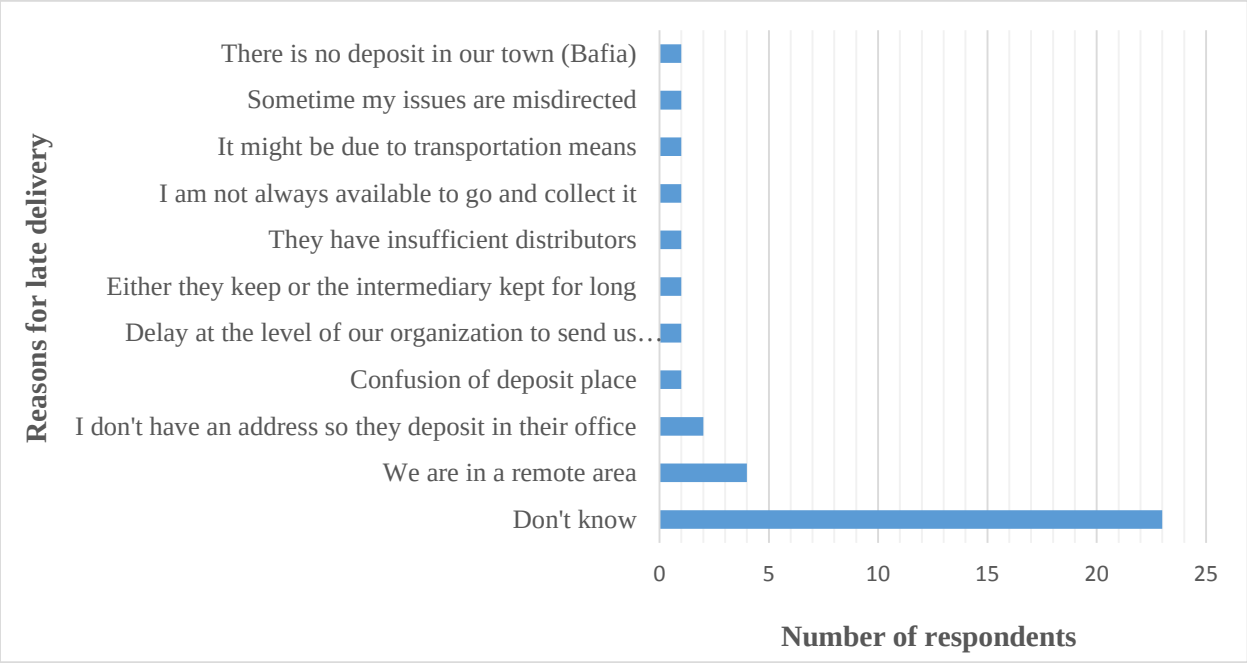

Figure 18. Reasons for TFV subscribers receiving their monthly issue late.

Most users of TFV (83.5 percent) indicated that the content of the journal is relevant to all types of farmers. However, 16.5 percent did not agree with that – they said the content of the journal is not relevant for farmers who cannot read. Almost all respondents (96.2 percent) were of the opinion that the content of TFV is applicable to the needs of women farmers. The following explanations were given:

- "I am a woman, and I find topics relevant for my activities."
- Information deals with activities of women.
- It encourages some women to start new farming activities.
- It helps women to gain basic knowledge on new farming practices.
- It presents new technologies which are suitable for women.
- Many issues focus on gender and women's Common Initiative Groups (CIGs)/activities.
- Most information is very helpful to women, like breast-feeding, manure application, etc.
- Subjects are relevant and simple to understand by women.
- TFV breaks down information to meet the needs/understanding of rural people, especially women.
- TFV has helped many women to improve their livelihoods.

- TFV has shown, for instance, how women are fighting against desertification in the Far North using modern cooking stoves.
- TFV helps with family health care which is the major responsibility of women.
- TFV highlights and values women's work.
- TFV values women. For instance, they have once published a drawing of a woman with many hands to illustrate her multiple contributions to society.
- Topics are adapted to all farmers, regardless of their gender.
- We read write-ups about women farmers regularly.
- TFV is gender-sensitive.
- TFV topics touch both female, male and youth readers.
- TFV puts much emphasis on gender issues.

Almost all respondents (98.1 percent) testified that TFV is also addressing the concerns of young farmers. Apart from presenting simple and suitable techniques for young farmers, and guiding them in their decision making in agriculture thanks to enterprise budgets, TFV provides information related to trainings that are targeted to young farmers. In addition, as mentioned below, the French version of the journal has even created a category called "dynamique jeune" ("youth dynamics") to promote initiatives for young farmers. Some examples of statements of respondents on the way that TFV addresses youth's needs are:

- A serious young farmer who reads TFV regularly can succeed in several domains.
- TFV provides basic information to address all farmers, young farmers included.
- It encourages youth to develop self-employment.
- It encourages young farmers and shows simple techniques.
- It encourages youths to get involved in agriculture and develops strategies to train them (e.g., via farmer-to-farmer approach).
- It orients youths in their decision to engage in agriculture.
- Many issues have presented young farmers as models for other youths.
- Projects and programs where youths/young farmers can apply are often presented.
- TFV has oriented many youths in the agricultural sector and they are doing well.
- TFV publishes information related to internships, trainings and many other things suitable for youths.

- The information covers needs of all farmers, regardless of age.
- There is a special category in the French version (*dynamique jeunes*) for youths.
- There is no discrimination in TFV.
- Young farmers are among contributors -- for instance, in giving testimonies.
- Thanks to TFV, young farmers can get tips on how to market their products and how to get financial aid.
- TFV introduces the advantages and disadvantages of crops so that young farmers can choose what to grow.

Less than one-fourth of the respondents (23.4 percent) were able to specify a journal that could substitute for or complement TFV. Among these journals, Spore Magazine was cited by 17 respondents, and AgricInfo, Cameroon Tribune and Communauté africaine were each cited by two respondents). Other journals mentioned were Agric Promo, APICA, Cameroon news, Courrier du monde rural, D+C, Défis du Sud, Eldis, Green Peace, Productive, Terre Fertile and Utiliterre, each mentioned once.

Respondents highlighted the international focus as one of the main strengths of these journals, saying that it helped them to be informed of what is happening abroad. However, the same issue was cited as a weakness by some respondents, who found that information from elsewhere does not generally fit with their local realities. Other weak points identified were the poor distribution of these journals and the fact that some do not show farmers how to put the technologies into practice (Table 9). Despite the identified weaknesses, all respondents who cited these journals also declared that they were complementary to TFV and not competitive.

The content categories of TFV were scored by respondents with respect to their effectiveness (Table 10). Respondents were also asked to score the general effectiveness of the journal, from 0 -- meaning the journal is not effective at all (that is, it helps meet none of their objectives) – to 10, meaning total effectiveness in their activities. The average score of the general effectiveness of the journal was 8 (min = 5, max = 10, median = 8).

Readers of TFV interviewed mentioned that they mostly remembered information in the following categories: technical tips, health and nutrition, letters, news and practical, as indicated in Figure 19.

Table 9. Main strengths and weaknesses of journals that can substitute for or complement TFV.

Main strengths	Frequency (F)		Main weaknesses	F
Educate in international/other countries' agricultural development	15		Is foreign/more for abroad and does not fit with local realities	7
Provide readers with general/wide information on agriculture	3		Not widely distributed	5
Focus on specific topics and develop them	2		Does not have technical tips and does not help to practice	4
Close to TFV	1		Language too difficult for farmers	4
Contain more topics	1		More general and focuses mainly on development news	4
Delivered on time	1		Difficult to access	3
Free of charge	1		Skips some months (not regular)	2
Insist in food processing technique	1		Content is less interesting	1
Often give agricultural policy	1		Expensive	1
Present innovations (new technologies)	1		Does not present agricultural innovations	1
It talks about crops cultivation and farmers' experience	1		Few pages and old style of presentation	1
Present agriculture policy	1		It is only online	1
Share farmers' experiences	1		Less developed/diversified	1
Short and current news	1		Small characters	1

Table 10. Effectiveness of TFV journal per category and overall.

Categories	N	Missing	Score out of 10 (0 for lowest and 10 for highest)			
			Mean	Median	Minimum	Maximum
Economy	66	41	7.3	7.5	0	10
Letters	84	23	7.3	8.0	0	10
Technical tips	101	6	8.6	9.0	5	10
Practical tips	66	41	7.9	8.0	2	10
Health and nutrition	95	12	8.0	8.0	2	10
Society	47	60	6.2	6.0	0	10
News	65	42	6.7	7.0	0	10
Focus	28	79	5.8	6.0	0	10
Youth dynamics	38	69	7.1	7.0	2	10
"Coup de pioche"	23	84	7.9	8.0	2	10
"Dossier technique"	24	83	8.4	8.8	5	10
Policy	32	75	5.4	5.5	0	10
"Soir au village"	27	80	6.9	7.0	2	10
Abroad	32	75	6.2	6.0	2	10
"Reportage"	37	70	7.6	8.0	1	10
"Bon à savoir"	42	65	7.9	8.0	2	10
Regions	41	66	7.6	8.0	1	10
Debates	34	73	7.5	8.0	1	10
Environment	35	72	7.6	8.0	4	10
Market trends	13	94	8.4	9.0	5	10
General effectiveness	107	0	8.0	8.0	5	10

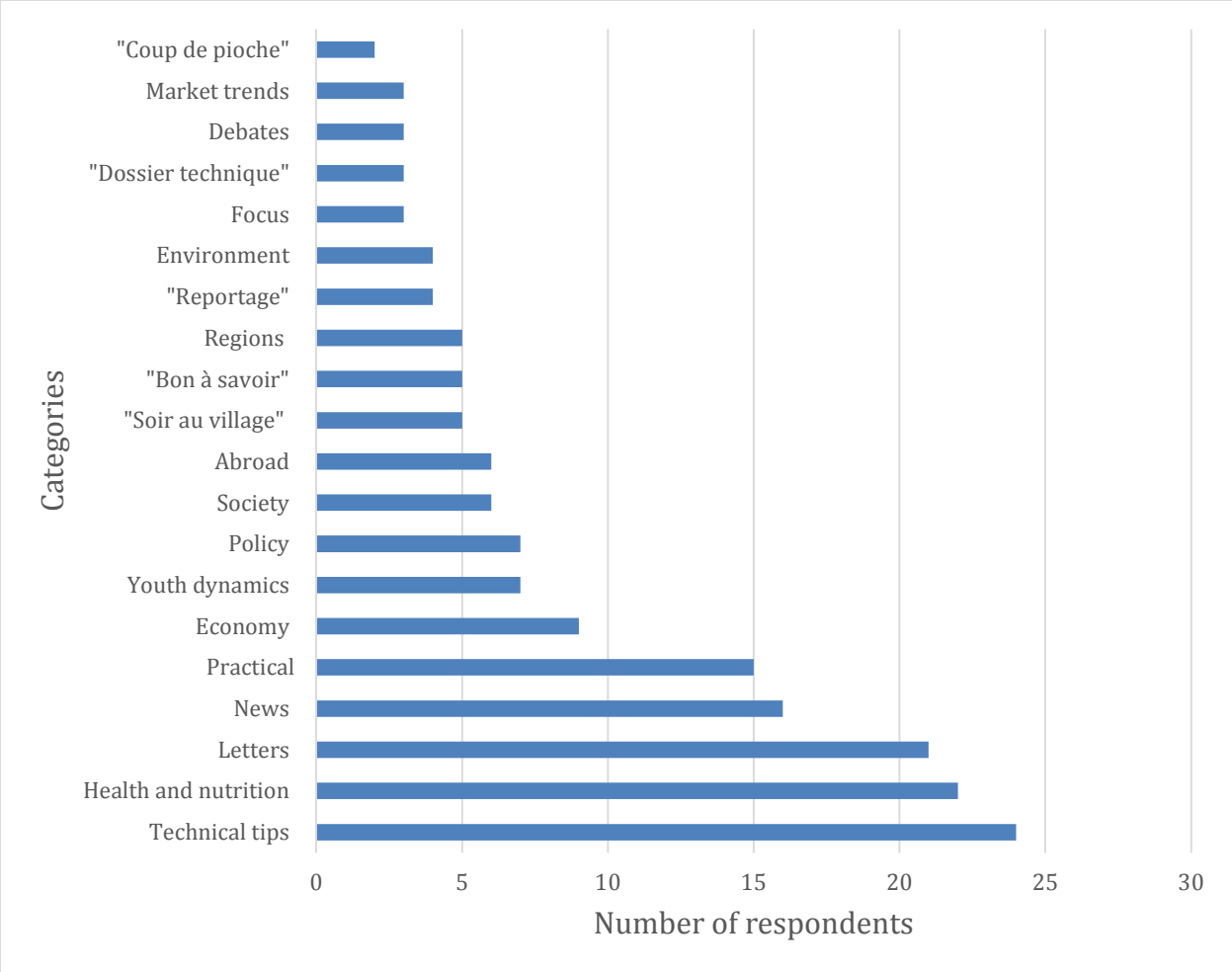

Figure 19. Number of respondents that remembered something per category.

Respondents indicated that training farmers and providing practical information for their activities are among the main strengths of TFV (Figure 20). In addition, users of the journal also appreciated the fact that it focuses on farmers' concerns and presents topics in a simple manner so that farmers can easily understand. One extension worker testified that TFV helps him in doing his job better. Indeed, some referred to the published technical tips to complement what they learned in school.

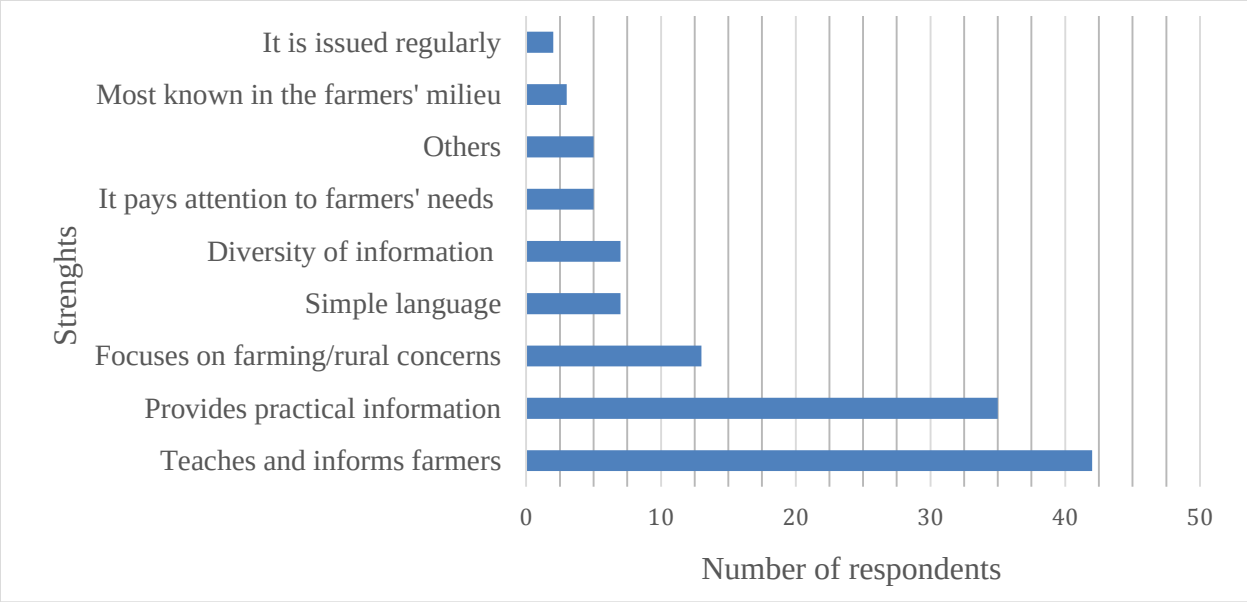

Figure 20. Main strengths of The Farmer's Voice.

Note: Number of respondents adds up to more than 107 because some respondents gave multiple responses.

To indicate possible aspects for improvement, respondents identified the following weaknesses of the journal (Figure 21): delay in delivery and irregularity, and low distribution, especially in the rural areas and in towns where there is no official distributor. Some respondents also complained that TFV does not deal sufficiently with aspects such as fund-raising, agroforestry and processing.

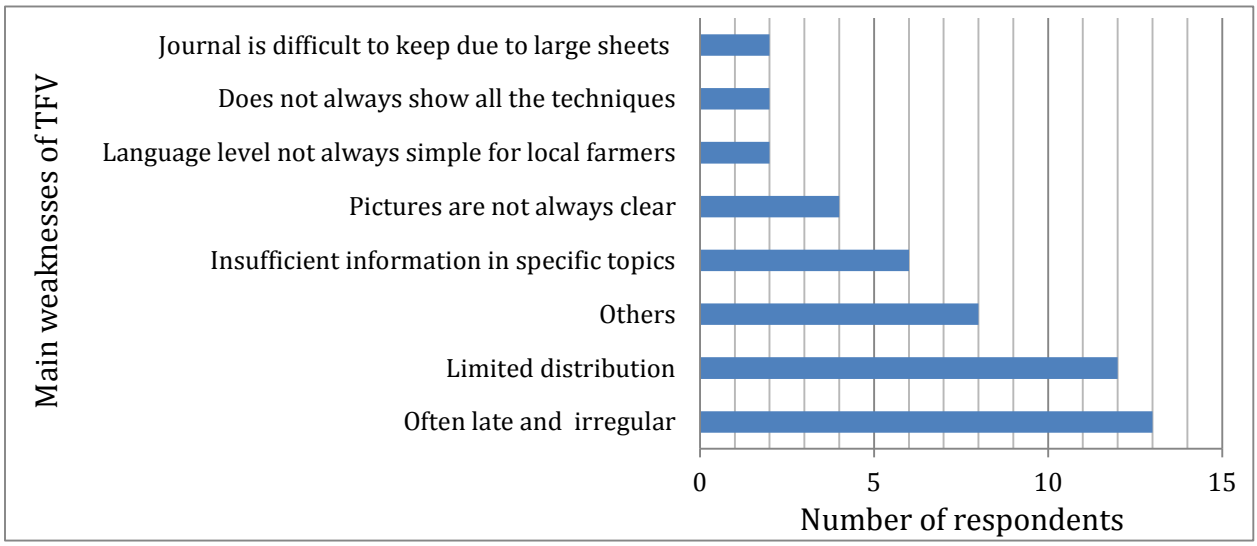

Figure 21. Main weaknesses of TFV.

Despite these weaknesses, readers interviewed acknowledged the usefulness of TFV. Many of them provided concrete examples of how TFV had helped them to achieve their objectives (Box 3). Overall, TFV had been very useful to readers, and some entered agriculture thanks to the journal. It had also helped many farmers improve their livelihoods and that of their families.

Box 3. Examples of how TFV helped readers to achieve their objectives.

- From TFV I have learned how to better store maize, onion, beans and cocoa and process Moringa products. I have also improved my mushroom production and how to process starch.
- I am an electrician by training. But, from the trainings and the motivation I got from TFV, I decided to specialize in agriculture. Today, I don't regret because many colleagues envy me.
- I refer to TFV for many crops that I want to grow, and even for the maintenance of my farm.
- I have created a plantain farm thanks to technical tips I read in TFV.
- I have cured my high blood pressure using information from TFV.
- I have helped many farmers to write proposals in plantain, maize and Irish potatoes, thanks to TFV technical tips.
- I read from TFV how to treat cough and I applied it with success on my children, so that I do not have to take them to the hospital all the time.
- If a farmer using TFV does not succeed, the problem should be from his/her side, because the journal gives all the necessary information to improve (and if you don't understand, you can contact them for clarification).
- In the year 2000, we had in the sub-divisional office of agriculture a club for TFV reading. Each extension worker had to read the issue of the month, then one presented the synthesis and we discussed. This has helped us to improve in our job as extension workers.
- It is from TFV that I have learned how to produce watermelon, and today I am doing very well.
- It is from TFV that I have learned pig farming, and last year I sent my children to school thanks to pigs that I sold.
- It is from TFV that I have started raising poultry, though I just conduct one batch per year.
- My basic training is forestry, but I have learned agriculture thanks to TFV, and today I am specialized in farming. I have also attended seminars organized by this journal, and it helps me to develop many things like production and use of Moringa in animal husbandry.
- I got my first knowledge on agriculture from TFV.
- I know many colleagues, extension workers, who like me, use TFV technical tips as main guidelines to train farmers and formulate their proposals.
- TFV enables farmers to successfully create and manage farm enterprises; it is a source for self-employment.
- TFV has published in relation to my farming activities, which encouraged us to improve. Many

Box 3. Examples of how TFV helped readers to achieve their objectives.
people now contact us and we have received a lot of farmers to train. • When I visit a kiosk, TFV is the first journal that I read because it helps farmers to improve their skills. • With regard to its strategies and impact, the work of TFV is very complementary to that of the Ministries in charge of agriculture and rural development.

Impact of TFV on youths and women

Who are the youths and women using TFV?

In the present study, we use the definition of the African Youth Charter, where "youth" means "every person between the ages of 15 and 35 years old". Ten youths (i.e., 9.3 percent of the total sample) were interviewed. Half of them were farmers, and four were involved in training farmers. Half of the youths were from the West region, followed by the Northwest (30 percent). 40 percent of youths were female.

Among the 30 women interviewed in this study, 43.3 percent were involved in training farmers. Around half (14) of the women interviewed came from the Northwest region and 11 came from the West region. 60 percent of youths were married, and 80 percent had education above secondary school (Table 11). On the other hand, more than one-third of the female readers went only to primary school.

Table 11. Educational levels of women and youths who read TFV.

Level	Frequency women	Proportion women (%)	Frequency youths	Proportion youths (%)
University	10	33	4	40
Primary	9	30	1	10
High school	6	20	4	40
Secondary	4	13	1	10
Never been to school	1	4	0	0
Total	30	100	10	100

Agriculture was the main activity for half of the youths; four were employed in the private sector but had agriculture as a secondary activity. Youths cited maize, beans and plantain as the main crops generating income. Half of the female readers interviewed had agriculture as their principal activity, and 11 as a secondary activity. Maize, beans, poultry, cassava and vegetables were their main sources of income.

Many youths first got in contact with TFV from a kiosk or NGOs/CBOs (30 percent for each). Thirty percent of women did so from NGOs/CBOs, and 20 percent discovered TFV in their

farming groups. The two oldest readers among youths started reading the journal in 2003; one-third of the women were already reading TFV at that time.

To access TFV, 40 percent of youths had subscribed, and 30 percent bought from kiosks. Among those who subscribed, only one paid from his own pocket -- for two readers, their organization paid, and the last one got assistance from a relative. Among the female respondents, 57.1 percent paid for the journal themselves.

How do youths and women use TFV?

Sixty percent of youths take at most one week to read an issue of TFV. Half of the respondents of less than 35 years old read all information in TFV, and one-third of the women readers did so. Youths were mainly attracted by practical information that can help them to make their agriculture more productive. In addition to that, women were attracted by information on health/nutrition.

Extension workers, NGOs and farmer groups were the main other sources of agricultural information for youths and women. The proportion of women was higher for each of the sources mentioned (Figure 22). Indeed, more youths (20 percent) than women (10 percent) declared that they did not have a source of information other than TFV. The magazine was a complementary source for most youths, and three considered it the most important source. The proportion of women who use information from TFV in their activities (93.3 percent) was greater than that of youths (80 percent).

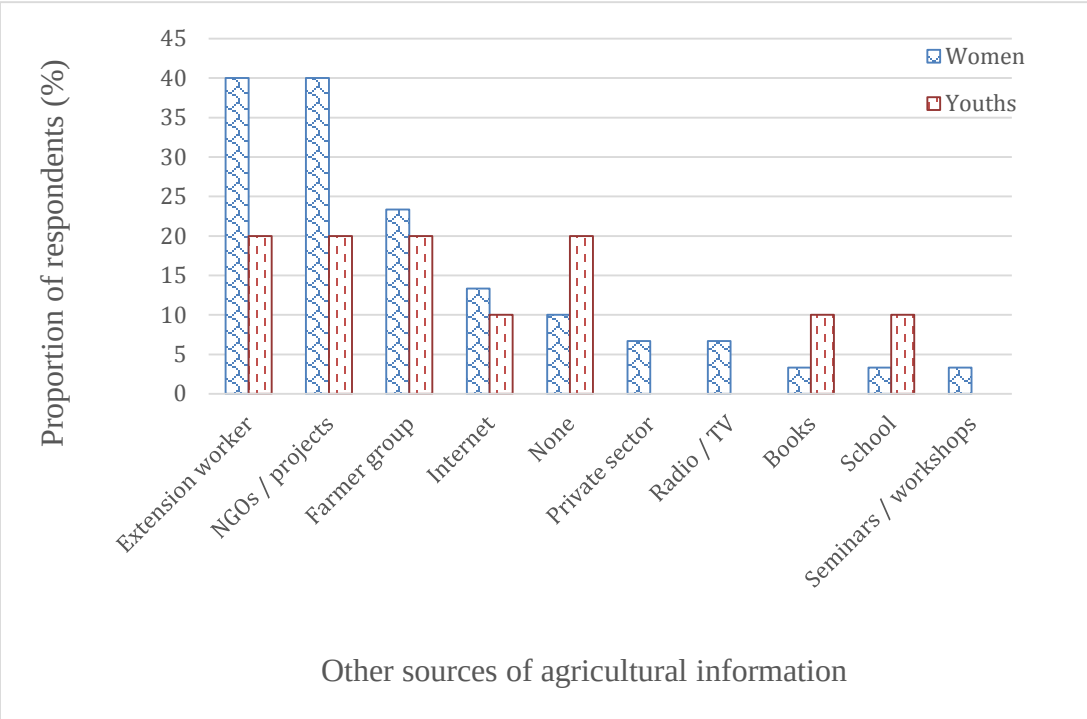

Figure 22. Sources of agricultural information other than TFV for women and youths.

All youths had shared TFV and discussed topics from the journal with others; 93.3 percent and 80 percent of women had shared their journals and discussed topics from TFV with others, respectively. Young people shared their journals with six people on average (min = 2, max = 20, median = 4), and women shared with an average of seven people (min = 0, max = 50 and median = 5). Though the majority of youths (60 percent) discussed topics from TFV just occasionally, 20 percent regularly did this, and the same proportion discussed them very often. Half of women also occasionally discussed information they read from TFV with their peers, 37.5 percent did this very often and 12.5 percent did this often.

The main motivation for women and youths to read TFV was the discovery of new technologies. In addition, youths wanted to gain experience from success stories and also get market information. Many youths (70 percent) had kept some issues of TFV for reference. None of the readers younger than 35 years had contributed to TFV, and only two women did. However, 30 percent of youths and women were willing to share their experience through the journal. All youths and women were of the opinion that TFV contributes to changing farmers' practices. Indeed, all young farmers agreed that information from TFV had helped them to improve their farm operations. Furthermore, 40 percent believed that the journal had helped them to improve their social status. All women interviewed also declared that the information found in TFV had helped them to increase their production. 37 percent and 25 percent, respectively, said they had improved their social status and their skills to train other farmers. 20 percent of youths affirmed that they used information from TFV to train other farmers, and 40 percent of women said the same. 80 percent of youths and 73.3 percent of women interviewed declared that they had learned and mastered new farming practices, such as crop production and animal husbandry, thanks to TFV.

However, two youths confirmed that they were not able to master some topics developed in the journal. One said he did not have the required skills; the other one admitted he did not follow the instructions. Nearly one quarter of the female readers interviewed (24.1 percent) also complained about not mastering some practices developed in TFV for the following reasons: lack of skills, failure to respect instructions, and lack of practical exercises with a resource person/trainer.

Rating of TFV by women and youths

The readability of TFV was highly rated by youths and women. Indeed, the majority (60 percent) of youths and 50 percent of women found TFV easy to read, and ten percent of young people and 20 percent of women found it very easy (Figure 23). All youths said they understand everything that is explained in TFV. But, as indicated in Table 12, around 7 percent of women found the journal difficult to understand.

Just one youth and one woman considered TFV to be expensive. Among subscribers, 40 percent of youths and 57.3 percent of women did not receive their monthly issue on time.

The majority of youths (80 percent) declared that information published in TFV sometimes matched their needs and sometimes not. This was also the case for 36.7 percent of women. For one-third of the female readers, however, information in TFV always matched their needs. For the remaining 30 percent the answer was "most of the time, yes". All youths believed that the

content of TFV is adapted to their needs, as well as to women's needs. Only one female respondent declared that information from TFV was not adapted to her needs nor to the needs of youths.

The majority of youths (90 percent) and women (80 percent) were not able to identify another journal that can complement TFV.

In rating its effectiveness, women scored TFV 8 out of 10 on average (min = 6, max = 10, median = 8). These values were the same for youths, except for the minimum, which was 7.

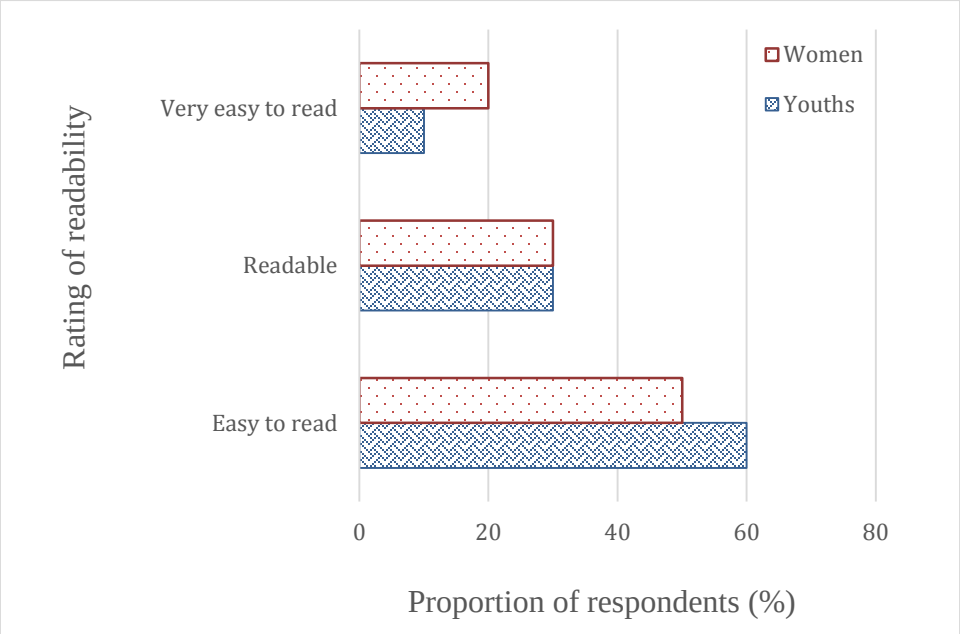

Figure 23. Rating of readability of TFV by women and youths.

Table 12. Rating of the level of language in TFV by women and youths.

Rating	Frequency women	Proportion (%) women	Frequency youths	Proportion (%) youths
Easy to understand	13	43	4	40
Comprehensible	9	30	5	50
Very easy to understand	6	20	1	10
Difficult to understand	2	7	0	0
Total	30	100	10	100

Discussion

Readers' profile

From the present study it is clear that The Farmer's Voice, a magazine focused on agriculture, attracts mostly readers that have agriculture as their main activity (56 percent) or are training farmers as part of their job (such as government extension workers and NGO field staff members). Most readers of TFV have a quite high education level – 73 percent of respondents had secondary-level education or above. Two respondents, however, had never been to school and asked relatives for assistance in reading TFV. Half of the readers interviewed were between 51 and 65 years old, and less than 10 percent were younger than 35. This is rather surprising because one would expect younger people to be more educated and therefore more regular users of TFV. On the other hand, the low representation of young people among users of TFV may also reflect the general trend of an aging farming population in Cameroon, or possible preference of youths for other more modern sources of information, such as radio/TV or Internet. But the study was not able to confirm this.

People learned about the existence of TFV from various sources: by discovering it in a newspaper kiosk, through their farmer group, or via an NGO or farmers organization. Three-fourths of the respondents had been reading TFV for over five years and can thus be considered regular and loyal users of TFV. This is confirmed by the fact that 63 percent of the respondents were subscribers; only 21 percent bought TFV in a kiosk. In our sample, only a few borrowed or read TFV in a library, but this might have been biased by our sampling procedure, which used subscribers' lists complemented by key informants as a basis for selecting respondents. Indeed, the fact that 90 percent of the respondents declared that they shared the journal with on average eight other people suggests that many people borrow TFV, at least occasionally.

Our study showed that 75 percent of the respondents took less than a week to finish reading TFV. This was much higher than the 56 percent found by SAILD in 2012. However, we also found that the higher the education level, the less time readers took to read the magazine. Slightly over half of the respondents read everything. Nevertheless, the most important points of interest for most readers were categories directly oriented toward improving production, income and livelihoods, such as practical guidelines, technical information, and health and nutrition topics.

As expected, TFV is not the readers' only source of agricultural information. Nevertheless, for 41 percent it is the most important source, and 57 percent – particularly extension workers, NGO staff members and members of farmer groups – considered it as complementary to other sources. The Internet was mentioned as an alternative source of agricultural information by 23 percent, and radio/TV by 14 percent of respondents.

Use of TFV

Almost all interviewees used information from TFV in their daily activities – the majority directly in their farms – but 18 percent used it for extension in the field. It must be noted that, among the 107 readers of TFV in our sample, seven were government extension workers, 11 were NGO field staff members and 24 were farmer trainers, all involved in giving advice to farmers.

Furthermore, the vast majority of readers, extension workers and farmers alike, shared TFV with eight other persons on average. One respondent, a radio broadcaster, told us that he regularly used topics from TFV in his radio programs, which are followed by about 6,000 listeners. Many also actively discussed subjects mentioned in TFV with colleagues and fellow farmers.

The main motivation to read TFV was to discover new technologies (which, in half of the cases, actually come from peers). This motivation seemed even more important for readers with extension and/or training responsibilities. The latter also looked for information on markets and health issues more than farmers did.

That TFV provides useful information of direct use to its readers is confirmed by the fact that many readers said they kept copies of the magazine for further reference. They also often remembered why they archived a particular copy. The oldest issue we were able to trace during our survey dated from 1989, and the person still remembered why he kept it.

TFV also allows its users to participate in the journal. In our study, however, we found few respondents that had actively sent in contributions to TFV, mostly readers with a higher level of education. Nevertheless, about one-third of the interviewees said they would like to share information with their fellow farmers through TFV. The study also showed that government extension workers sent in contributions more often than any other category of reader, which is not surprising, given the nature of their job.

Evaluation of TFV

Respondents were asked to evaluate TFV on quality, price, content, complexity and timeliness. In general, readers were quite satisfied with TFV and scored it on average 8 out of 10 for overall usefulness and effectiveness. Categories such as technical tips, dossier technique, and health and nutrition scored highest; the items "abroad," and "society" scored lowest. Sixty-four percent considered TFV easy to read, and 54 percent rated it easy to understand. Many readers confirmed that they were able to practice and master new technologies after reading TFV and following instructions. Our results showed that this mastery increased with increasing levels of education, suggesting that it would be advisable to complement information from TFV with explanations from an extension worker or farmer trainer. That is actually what is happening in the field – our study demonstrated that extension workers use information from TFV to prepare their training and advisory activities. In one place, extension workers even created a reading club where they discussed issues of TFV to improve their work.

As major strengths of TFV, interviewees mentioned that it teaches and informs, gives practical information and meets farmers' needs. On the other hand, readers complained about delays in delivery (mentioned by more than half of the readers), irregularity, and low rate of distribution in some (most often remote) areas. Half of the respondents said that the price of TFV is about right. In addition to the fact that 77 percent of interviewees pay for TFV themselves, this is a good indication of the usefulness of TFV. Indeed, all respondents in our study agreed that TFV significantly contributed to changes in their farming practices, as was illustrated by many testimonies in this report. Less than one-fourth could identify a journal that would be able to substitute for TFV. The only major competitor to TFV identified in our study was Spore

Magazine, published by CTA[2], but SPORE is not as widely distributed in Cameroon as TFV and lacks practical tips to put the innovations described directly into practice on one's farm. For the above reasons, it can at most be considered as complementary to TFV. As a matter of fact, TFV generally announces new issues of Spore and encourages its readers to subscribe to this magazine.

Usefulness of TFV for women and youths

Our study also looked specifically at the usefulness of TFV for women and youths (15 to 35 years of age). To get a good idea of women's use and perception of TFV, we purposely selected a greater proportion of women (36/155 or 23 percent) than the proportion of women identified as users of TFV (59/330 or 17 percent). Finally, we were able to interview 30 women out of a total of 107 respondents, representing 28 percent of our sample. The list of subscribers did not specify age, so we were not able to do the same for youths. In our sample, less than 10 percent were in the age category of 15 to 35 years.

Youths and women learned about TFV in the same ways as male adults – i.e., from a kiosk, NGO or farmer group. Our results, however, showed that youths and women subscribed less than male adults, and also that fewer pay for TFV themselves. In terms of reading habits, women tend to focus more on specific items than men, who tend to read everything. Women also keep more issues than men. It is understandable that women, knowing their heavy workload, look for information of immediate use to them and keep issues in case they want to refer to other topics later.

All youths and women were of the opinion that TFV contributes to changing farmers' practices and mentioned concrete examples of how TFV had helped them to improve their farm production, and also their social status. Like adult men, young and female readers used information from TFV to train others.

Most youths and women in our study agreed that TFV was addressing the needs of youths as well as those of women. They did not have specific difficulties in reading and understanding TFV. This, however, does not mean that all young or female farmers would be able to read and understand TFV easily – current users of TFV are not necessarily representative of the entire farmer population, but that is equally true for the adult male readers.

Conclusion

The effectiveness of any advisory medium, including agricultural extension magazines, depends on its ability to disseminate the message properly so that it is understood and readily accepted, thus facilitating the adoption of new practices. It is in this light that the current study was initiated. The main objective was to characterize and assess the effectiveness of The Farmer's Voice in Cameroon to understand its relevance and impact.

Our results demonstrate the usefulness of TFV to extension workers, farmer trainers and farmers alike. Extension workers and trainers use the information from TFV to improve their

[2] CTA = Centre Technique de Coopération Agricole et Rurale (http://spore.cta.int).

extension and training activities; farmers focus on the practical guidelines and technical tips to improve their agricultural production. Though youths and women are present in comparatively small numbers among regular users of TFV, our study shows that their needs and interests are well addressed by TFV. They also said that reading and understanding TFV is easy.

Many readers declared that they are able to directly apply the knowledge acquired from TFV on their farms most of the time, provided that the articles are not too technical. However, a good number of readers admitted that assistance from an expert is helpful to fully master the new techniques. In other words, agricultural extension is pluralistic and various sources of information complement one another. In this sense, there seems to be a perfect match between TFV and other sources of agricultural information, especially extension workers.

Recommendations

Given TFV's usefulness, we formulated a number of recommendations to increase the impact of TFV on farm productivity and farmer livelihoods in general:

- Provide extension workers and NGO field staff members with TFV through two years subscriptions.
- Institutionalize the TFV reading and sharing club among extension workers in each subdivision or zone, and encourage farmer groups to do the same.
- Encourage rural radio stations to discuss topics from TFV with their listeners.
- Improve the distribution of the journal to ensure timely delivery even in remote areas (e.g., by creating central delivery points in subdivisions and rural market places or other suitable points).
- Provide online subscription for an online version of the magazine in full text.
- Increase collaboration between TFV and research organizations to make sure the latest research findings are translated into simple language for communication to its end users, the farmers.

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Annex 1. Meaning of categories of TFV

(Source: SAILD, 2012)

1 - Technical tips

This is one of the oldest categories of the TFV journal and the most attractive -- around 80 percent of people acquire the newspaper to search this category. It explains how to produce a specific crop step by step.

2 - Health / Nutrition

This is a regular category in TFV. Because the health page offers recipes based on plants that are present in the readers' environment, it is the second favorite topic of preference.

3 - Technical

This category addresses a specific technical subject and goes hand in hand with technical tips.

4 - Letters

This section provides practical and concise answers to questions sent in by readers.

5 - Practical

Because of the practical information it contains, this section is similar to technical tips, but it is more concise and has fewer details.

6 - Economy

This category deals with economic and technical information. This is a rather new category compared with, for example, categories such as health/nutrition.

7 - Market Trends

Market Trends presents prices of some agricultural commodities on the markets in 10 regions of the country.

8 - Regions

This category addresses what is happening in various regions. This is the first non-technical category.

9 - News

This section reports fresh information related to rural development. It is the second non-technical category.

10 - Good to know ("*Bon à savoir*")

This is occasional category highlights an important piece of information that could be of interest to the readers.

11- Reportage

This category talks about facts and events related to rural development in general.

12 – Youth dynamics

This section relates success stories of young farmers. It aims to generate interest in farming activities in other young people. It's a very irregular category in the newspaper.

13 - Debate

This is a non-permanent category that generally deals with issues of agricultural policy.

14 - "Coup de Pioche"

This is a satirical and non-permanent category in the newspaper.

15 - Policy Brief

This category deals with issues of advocacy or agricultural policy. Though advocacy topics are less attractive to farmers, this category remains important for the future of the agricultural sector.

16 - Society

This is another irregular section which presents some important events from the society.

17 - Evening in the village ("*Soir au village*")

This irregular category aims to entertain readers with stories coming from villages.

18 - Abroad

This category reports information from abroad to develop and strengthen experiences of farmers or rural promoters.

Annex 2. Pictures from the field

A civil servant and farmer reading TFV in her office in the Northwest region of Cameroon. *Photo: Tsafack*

A subdivisional delegate of agriculture presenting TFV in his office in the West region of Cameroon. *Photo: Tsafack*

A retired government extension worker presenting his stock of TFV in his house in the West region of Cameroon. *Photo: Tsafack*

A mechanic engineer and farmer, in his work place in the Northwest region of Cameroon. *Photo: Tsafack*

A field staff reading TFV in her office in the Centre region of Cameroon. *Photo: Tsafack*

A farmer reading TFV at her front door in the West region of Cameroon. *Photo: Tsafack*

A farmer trainer in her farm in the Centre region of Cameroon. *Photo: Tsafack*

A farmer trainer presenting his stock of TFV kept in his house in the Centre region of Cameroon. *Photo: Tsafack*

Two samples of TFV front page (English and French version). *Photo: Tsafack*

Annex 3. Other explanations of how TFV contributes to improving farmers' practices

Reasons	Frequency
• The techniques explained in the journal can easily be applied. They stimulate readers to try new things.	3
• Farmers now consider the market potential (market survey) before producing.	2
• I am now doing organic farming (without chemicals).	2
• I have increased my yields thanks to suitable farming techniques.	2
• I have modified my cultivation techniques for groundnut, moving from growing in association to monoculture.	2
• Most farmers now prefer improved seeds.	2
• When I read, I do practice and it helps me to improve the way I manage my farm.	2
• Farmers are now able to raise more fowl.	1
• Farmers better use integrated/sustainable techniques in agriculture.	1
• Farmers can carry out activities in the absence of extension workers.	1
• Farmers have reduced the practice of burning during field preparation.	1
• I now put one tomato plant per seed hole.	1
• I now record my expenditures to know what I gain from my farming activities.	1
• I now use herbicides and pesticides which have less negative impact.	1
• It has helped my husband to integrate his activities in the farm, so that we now work together.	1
• It provides farmers with suitable contacts.	1
• My cocoa is well fermented, so of better quality, compared to the past.	1
• Topics are not general but take into account different agro-ecologic zones of Cameroon.	1
• When I have followed the indications, my pigs grew faster. So, I have adopted the method.	1