

Full Length Research Paper

The contribution of farmers' organizations to smallholder farmers' well-being: A case study of Kasulu district, Tanzania

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Farmers' Organizations' (FOs) play a significant role as an institutional vehicle for promoting agricultural development through helping farmers solve common problems in relation to agricultural inputs, credit, technical knowledge and marketing of produce. All these services aim at improving farming activities and enabling them to gain economic benefits to sustain their well-being. Based on the above, this paper assessed the contribution of FOs to smallholder farmers' well-being in Kasulu district. Specifically, the study assessed farmers' perception towards FOs, identified goods and services accrued by farmers from the organizations, and the contribution of goods and services from the same to farmers' well-being. A cross-sectional research design was employed whereby data was collected from 160 randomly selected farm households. Primary data was collected using a pre-structured questionnaire with both open and close-ended questions. Both quantitative and qualitative information was collected. Observations from the study showed that FOs contributed positively to their members' well-being. Generally, FO's members had a relatively higher income compared to the non-members, based on t-test analysis; the difference was shown to be statistically significant. Generally, the results indicated that extension services and the use of inorganic fertilizers and pesticides were positively associated with a household's income and assets ownership. Therefore, it is recommended that, rural farm households be encouraged to form or join farmers' organizations as these have a great potential of solving their problems.

Key words: Farmers' Organization, smallholder farmers, well-being.

INTRODUCTION

Farmers' Organizations (FOs) emerged in the world due to farmer-felt needs such as sharing of local resources (land, labour, water) and market pressures (prices and access to markets). Other needs are access to services

(credit, input supply, and advisory services) or for purely social reasons (social security, food security) (Wennink et al., 2007). Before the era of liberalization, cooperatives were the main farmers' organizations in Sub-Saharan

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Africa (SSA). However, most of these cooperatives were created and managed under government directives (Chilongo, 2005). Due to state control, these cooperatives lacked accountability, became dependent on state subsidies and hence were uneconomically viable. Nonetheless, due to the withdrawal of the state from being a provider of many services through privatization, democratization and liberalization, most cooperatives failed to compete in the open-market economies, and eventually collapsed (World Bank, 1995 cited by Abaru et al., 2006). The decline of cooperatives and other FOs, lead to farmers' lack of a collective voice. Consequently, farmers cannot access inputs and technologies at affordable prices. Subsequently, a number of small-scale farmers remain poor and cannot influence policies that affect their well-being: hence, the need for formulation of farmers' organizations.

Generally, cooperation among farmers in search for common solutions to their problems is seen as one of the major ways in promoting the well-being of small-scale farmers, even if cooperatives encounter shortcomings (Grigoryan et al., 2008). Accordingly, during the 1990s developing countries, Tanzania included, encouraged formulation of farmers' organizations at different levels in order to enable their incorporation into research, extension system and other services (Carney, 1996). The formation of FOs is an important tool of assuring smallholder farmers improve their standard of living. FOs provide a wide range of services such as sourcing of agricultural inputs, access to knowledge and information, reducing transaction costs associated with marketing, allow collective lobbying for desired changes and as such they have the potential to positively influence agricultural policy outcome (Hellin et al., 2007, cited by Mapila et al., 2010). Furthermore, FOs might be a good vehicle for donors to reach small-scale farmers, as a group living in sparsely populated rural areas with weak infrastructure; this could in turn facilitate assistance in terms of grants or loans that can enable these farmers improve their well-being (Bachke, 2009).

Despite the fact that FOs play a crucial role in the development of rural agriculture and farmers' well-being, there is nonetheless a lack of clear indication on their contribution to the well-being of individual farmers, especially for Kasulu District, the study area. The paper therefore aims to; assess farmers' perception of FOs; identify goods and services accrued by farmers from FOs and to assess the contributions of goods and services obtained from FOs towards farm households' well-being.

METHODOLOGY

A cross-sectional research design was used to generate data for the study on which the paper is based. The study was conducted in Kasulu district, which is divided into 7 divisions. The divisions are further sub-divided into 30 wards and 90 villages. To obtain respondents, both purposive and simple random sampling techniques were used. Purposive sampling was used to select

wards and villages in the study area. The selected wards were Munanila and Nyakitonto. The villages selected from the two wards were Mkatanga, Kibwigwa, Nyakitonto and Kitagata. From each village, 40 respondents were randomly selected, out of whom 20 respondents were FOs members and 20 were non-members. The study also involved five key informants (Ward Extension officer (WEO), District Cooperative Officer (DCO), and village leaders) selected purposively to explain or further clarify issues related to the FOs in the study area. Purposive sampling was also used to select Focus Group Discussion (FGDs) participants, 4 FGDs each involving 10 participants (5 males and 5 females) were conducted.

The study involved 160 respondents (80 FOs members and 80 non-members). In order to address the specific objectives, both primary and secondary data were collected. A structured questionnaire and interview checklist/guide were used for primary data collection. Qualitative data was analysed using content analysis. Quantitative information from the questionnaires was coded and analysed using Statistical Package for Social Science (SPSS) software. Descriptive statistics such as frequencies, percentages, mean and standard deviation were determined in order to answer objectives one and two. Inferential statistics, t-test, Chi-square and multiple linear regressions were carried out to answer objective three. The study's unit of analysis was the household. The regression model used is shown below:

$$Y = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \beta_4 X_{i4} + \beta_5 X_{i5} + \beta_6 X_{i6} + \beta_7 X_{i7} + \beta_8 X_{i8} + \beta_9 X_{i9} + \epsilon_i$$

Y = dependent variable (farmers well-being determined by income and asset ownership)

β_0 = constant

$\beta_1 - \beta_9$ = are regression coefficient which is a determinant of change to Y.

$X_1 - X_9$ = Independent variables ϵ_i = error term

X_1 = Access to market information (information on price and demand), X_2 = Access to extension service, X_3 = Use of inorganic fertilizers, X_4 = Use of pesticides, X_5 = Access to credit, X_6 = Use of herbicide, X_7 = Use of Improved seeds, X_8 = Respondents education level, X_9 = Respondents marital status.

RESULTS AND DISCUSSION

Respondents' socio-economic aspects such as age, sex, marital status, education level, household size and respondent's occupation are as shown in Table 1. Generally, these characteristics have some influence on farmers' involvement in farming and decision to join Farmers' Organization (FOs). For example, age is a variable, which can determine the period of one's entry into agricultural production and other activities. In addition, one's age can influence an individual's preferences of whether or not to participate in certain activities. Results from the study (Table 1) show that more than half of the respondents (both FOs members and non-members) were above 35 years; 83.8 and 77.5% of both FOs members and non-members were males. Additionally, more than 84% of both FOs members and non-members were married and had completed primary school education. Table 1 also shows that farming was the main economic activity of all (100%) the respondents (FOs members and non-members).

Table 1. Demographic and socio-economic characteristics of the respondents (n = 160).

Characteristic		FOs members (n _{fo} = 80)		Non-members (n _{nm} = 80)	
		Frequency	Percent	Frequency	Percent
Age of respondents	23 – 35	31	38.8	38	47.5
	36 – 60	47	58.8	42	52.5
	61 and above	2	2.5	-	-
Respondents' Sex	Male	67	83.8	62	77.5
	Female	17	16.2	18	22.5
Respondents' Marital status	Married	72	90.0	73	91.2
	Widow	7	8.8	7	8.8
	Single	1	1.2	-	-
Respondents' Education level	Adult education	6	7.5	4	5.0
	Primary education	68	85.0	71	88.8
	Secondary education	6	7.5	5	6.2
	Diploma and above	-	-	-	-
Respondents' Household size	Below 3	3	3.8	2	2.5
	3 - 5	30	37.5	35	43.8
	6 - 9	46	57.5	41	51.2
	10 and above	1	1.2	2	2.5
Respondents' main occupation	Farming	80	100	80	100
	Petty trade	32	40.0	39	48.8
Respondents other activities	Livestock keeping	40	50.0	37	46.2
	Wage employment	6	7.5	4	5.0
	Carpentry	2	2.5	-	-

NB: n_{fo} = sample size for FOs members and n_{nm} = sample size for the non-members. Source: Field data 2012.

Table 2. Farmers' perception of FOs (n=160).

Statements	FOs members (n _{fo} =80)		Non-members (n _{nm} =80)	
	Disagree	Agree	Disagree	Agree
1.FOs helps farmers to seek agricultural service e.g. credit	3(3.8)	75(93.8)	12(16.7)	67(83.7)
2.FOs members access market information through FOs	6(7.4)	4(92.6)	14(17.5)	66(82.5)
3. New agricultural technology disseminated through group approach	18(22.5)	62(77.5)	31(38.8)	49(61.2)
4. Farmers join FOs gain experience and knowledge	4(5.0)	76(95.0)	16(20.0)	64(80.0)
5. Working in FOs is better than working individually	3(3.7)	77(96.3)	40(25.0)	60(75.0)
6.Through FOs members get agricultural training through farmers field school	15(18.7)	65(81.3)	24(30.0)	56(70.0)
7. Farmers in FOs were access more to extension services than non-members	6(7.6)	74(92.4)	14(17.5)	66(82.5)
8. Individual farmers have low bargaining power enabling traders impose low price to their products	38(45)	52(65.0)	39(48.8)	41(51.2)
9. There is no difference between FOs members and non-members in accessing services (e.g. Loan and extension services)	69(83.2)	11(16.8)	46(57.5)	34(42.5)
10.Farmers working in FOs access agricultural inputs i.e. fertilizers, pesticides and improved seeds compared to non-members	0	80(100)	8(11.3)	72(88.7)

Numbers in brackets indicate percentage. Source: Field data 2012.

Farmers' perception of FOs

A Likert scale type of statements as shown in Table 2

determined farmers' perception. Observations from the study (Table 2) show that more than 70% of both FOs members and non-members agreed with the statements

that favour services offered by FOs to its members. Mapila et al. (2010) and Kassam et al. (2011) reported a similar observation. As regards with the services offered to farmers from other development partners through FOs, more than three quarters of the respondents (both FOs members and non-members) agreed with the statement, that development partners such as NGOs (Non-governmental Organizations) reach farmers through FOs; hence, farmers in such organizations are more likely to get more services than those with no affiliation. This finding is in line with Nshimirimana (2009) and Jason (2008) who reported that farmers in FOs were linked to development partners such as NGOs, and these had access to agricultural services. Also 83.3 and 57.5% of FOs members and non-members respectively disagreed with the statement that there was no difference between FOs members and non-members in accessing services through FOs. These results imply that most of the respondents had a positive perception towards services provided by FOs to members.

Goods and services obtained from FOs

Goods and services accessed by the FOs members interviewed include; inorganic fertilizers, pesticides, improved seeds, herbicides, credit, extension services, and market information. Generally, literature has shown that use of these goods and services has an influence on crop production, hence increased crop yield. Results show that 62.5 and 45% of both FOs members and non-members received between 50 to 200 kg of fertilizers. These results imply that there were more FOs members than non-member who used inorganic fertilizer. The above observation seems to be in line with a study by Alemayehu (2008) which reported that FOs provide credit for agricultural inputs such as fertilizers; hence, members are more likely to use fertilizers in their production thus increasing their yield or productivity in terms of product per unit of land used (kgs/ha). Non-members use less fertilizer due to high costs despite the Tanzanian government subsidizing input prices.

Observations from the study further show that 68.8 and 48.8% of both FO's members and non-members used pesticides in the range of 1 to 5 L to spray their crops in particular coffee trees. As regards access to the extension services, observations from the study show that most (93.8%) of the FOs members and a few (12.5%) of non-members use extension services. This observation generally conforms to the stated benefits of farmers organizations that, FOs enable integration of farmers with extension services (Carney, 1996). Observations from the study further show that 66% of the FOs members and 27.5% of the non-members received credit in the range of 50 000 – 250 000 Tanzanian Shillings (TZS). These findings generally suggest that FOs members had more access to goods and services in

comparison to non-members. Therefore, this observation implies that the FOs members have better chances of raising their crop productivity and income if the goods and service offered are put into use (Demaine, 2008).

Contribution of goods and services from FOs on farm production and income

Access to goods and services from FOs has a positive impact on farmers' production and productivity (Demaine, 2008). Access to goods and services enables FOs members to increase the area (acreage) under cultivation. This is justified by the results of the t- test (Table 3) which show that there was a significant difference ($P < 0.05$) in the acres the farmers cultivated before and after joining FOs.

Observations on estimated income levels from both farm production and off-farm activities show that, income of 67.5% of the FOs members' had increased after joining FOs as compared to before joining. The results further show that 67.5% of the FOs members earned an income of above 2 000 000 TZS, while non-members 45% earned incomes of between 1 000 000 and 1 500 000 TZS per annum. This result suggests that goods and services received by farmers from FOs contributed positively to farmers' incomes. Similar observations have been reported by Bachke (2009) in Mozambique, Jason (2008) in Malawi and by Mushi (2000) in Mvomero district. In addition, the results of a t-test (Table 4) show a significant difference in the income earned ($p < 0.05$) before and after joining FOs, and among the groups.

Improvement of respondents' well-being

Well-being was determined by a household's ability to meet its children's education costs, its asset ownership, and a households' food security status. The results (Table 5) of the study reveal that 67.8 and 83.3% of both members and non-members of FOs had children in primary school. This result implies that the respondents interviewed were able to meet the costs of education offered in public schools and not in private schools. This can be attributed to school fees paid in public schools and the selection criterion for joining secondary education in public school. In addition, Table 5 shows that almost all the children attending secondary schools went to public schools. Generally, the fees in public schools are lower than those in the private sector hence many parents/guardians with limited resource will pay for public education. Moreover, the Chi-square test results (Table 6) show a lack of a significant association ($P > 0.05$) between children's attendance to both public and private schools and parents' memberships to FOs.

Household assets are the components of a household's physical capital and can be used to measure a

Table 3. t-test results on acres allocated to coffee and tobacco farming before and after joining FOs.

Characteristic	Mean	Std.Dev	P- value
Acres for coffee before joining FOs	0.3750	0.45138	0.001*
Acres for coffee after joining FOs	1.000	1.8271	
Acres for tobacco before joining FOs	0.3175	0.480	0.001*
Acres for tobacco after joining FOs	1.6250	1.190	

*Significant at the 5% level, Source: Field data 2012.

Table 4. t-test results on income (TZS) earned by farmers before and after joining FO's and between FOs members and non-members.

Characteristic	Mean ('000)	Std.Dev ('000)	P- value
Income before joining FOs	2,645	2,410	0.001*
Income after joining FOs	6,306	1,104	
Income of FOs members	2,325	1,105	0.001*
Income of non-member	1,130	5,822	

*Significant at the 5% level, Source: Field data 2012.

Table 5. Distribution of respondents by type of school attended by children (n=160).

Type school	FO members		Non members	
	Frequency	Percent	Frequency	Percent
Public primary school	59	67.8	65	83.3
Private primary school	2	2.3	-	-
Public secondary school	24	27.6	13	16.7
Private secondary school	2	2.3	-	-

Source: Field data 2012.

Table 6. Chi-square test results on food security, houses owned and children's education based on FOs membership.

Characteristic	Chi-Square value	P- value
Number of meals consumed	15.185	0.001*
Education attained by children	1.096	0.296
Types of house owned	42.977	0.001*

*Significant at the 5% level.

household's well-being. According to Komba (2008), assets provide people with the opportunities and options in the face of impoverishing forces. Moreover, being asset poor limits people's capacity to improve and safeguard their well-being. The study's findings show that the majority (85%) of FOs members owned a house with walls made of burnt bricks, mud floor and corrugated iron sheets (CIS) roofing after joining the FOs. These results imply that after joining the FOs, members were in a good position to improve their houses. A similar study by Pinto

(2009) shows that farmers in organizations have been able to register improved production and access to marketing, which enables them, build modern houses. This is further reflected by Chi-square test results (Table 6) which shows a significant association ($P < 0.05$) existed between the types of the house owned and membership to FOs.

Food security is critical for peace and social stability; and according to FAO (2011), a household's food security is more than food production. Generally, a

Table 7. Multiple linear regression results for respondents' income and asset ownerships after joining FOs.

Variables	Income				Assets			
	Coefficient				Coefficient			
	Beta	Std.E	t	Sig. level	Beta	Std.E	t	Sig. level
Constant		0.991	6.240	000		0.344	6.240	0.000
Fertilizers	0.204	0.544	2.455	0.015*	0.204	0.544	2.455	0.015*
Pesticides	0.235	0.633	2.154	0.033*	0.258	0.612	2.201	0.029*
Improved seeds	-0.067	0.295	-0.972	0.333	0.083	0.034	1.162	0.247
Herbicides	-0.121	0.425	-1.199	0.232	-0.226	0.862	-2.118	0.036*
Credit services	-0.051	0.212	0.716	0.475	0.073	0.238	0.994	0.322
Extension services	0.538	0.311	6.707	0.000*	0.291	0.354	3.505	0.001*
Market information	-0.003	0.361	-0.038	0.970	0.065	0.062	0.880	0.380
Marital status	0.171	0.670	2.200	0.029*	0.051	0.540	0.648	0.518
Education level	-0.025	0.281	-0.384	0.702	0.072	0.868	1.044	0.298
	Adjusted R. Square (R^2) = 0.346, F-value = 8.010*				Adjusted R. Square (R^2) = 0.297, F-value = 6.610*			

* = statistically significant at the 0.05 significance level.

household is food secure if it has the ability to access and utilize sufficient quantities and quality of food to support a healthy and active lifestyle. Findings from the study show that 62.5 and 3.8% of FOs members and non-members respectively are able to consume three meals per day. This result implies that being a member of a farmer's organization enables one to have the opportunity to be food secure because the income obtained from commodities produced is used to sustain other household requirements such as construction of modern houses and paying for school fees. In addition, where a household produces both food crops and cash crops it then becomes easy for the household to retain all or most of the food produced for own consumption. Therefore, food produced by the household can then be used for own consumption. As stated earlier, membership to FOs enables easy access to inputs, which are important in raising crop productivity and eventually households' income. Generally, the extra income from crop sales can allow a household to buy enough food or other food stuffs not produced by the household. Furthermore, the results of the Chi-square test (Table 6) shows a significant ($P < 0.05$) association existed between the number of meals consumed by households and membership to FOs.

Results of the multiple linear regression analysis on membership to FOs and households' well-being

A multiple linear regression model was employed to determine the contribution of goods and services accrued by FOs members to their well-being. The well-being of members was determined by considering income and assets ownership before and after joining FOs; two separate models were run using the same set of

variables (Table 7). Results in Table 7 show that extension services, use of inorganic fertilizers and pesticides were positively associated with a household's income and assets ownership. Extension services had a regression coefficient of 0.538 (significant $P < 0.05$). This implies that an increase in access to extension services by FOs members enables farmers to improve farming which leads to increased crop yields as well as income and assets ownership by 53.8%. Generally, access to extension services by FOs members created awareness particularly of modern farming techniques, which helped them to improve agricultural productivity and increase income and assets ownership. This observation conforms to what was reported by Mushi (2000) that access to extension services assists farmers to solve farming problems. Based on the regression analysis results (Table 7), a household's use of pesticides and fertilizers were positively related to FOs members' assets ownership, with regression coefficients of 0.258 and 0.204 respectively (significant at $P < 0.05$). These results imply that an increase in the use of pesticides and fertilizers would increase agricultural productivity as well as FOs members' ownership of assets. This is consistent with FAO's (2002) observation that use of fertilizers would supply the nutrients needed by the crops and thereby increases crop yields. Moreover, pest management techniques (both conventional and the integrated pest management practice (IPM) learned or obtained through FO's could lead to a reduction of incidences of diseases and pests and thereby improve the quality and quantity of agricultural produce.

Conclusion

Farmers' Organizations' (FOs) are important in farming

households' agricultural development. The paper therefore aimed at assessing farmers' perception of FOs; identify goods and services accrued by farmers from FOs and to assess the contributions of goods and services obtained from FOs towards farm households' well-being. Based on the findings from the study it can be concluded that FOs members access more services than is the case with non-members, as a result this enables them to raise their productivity. It can also be concluded that goods and services farmers obtained through FOs contributed positively to increasing farm production as is proven by t-test analysis whereby crop yields of FOs members were significantly ($P < 0.05$) higher compared to non-members. Generally, the higher yields were a result of a combination of factors, these include, easy access to agricultural inputs, extension services and marketing information, which are core objectives of farmers organizations. Lastly, it is concluded that, membership to FOs brought positive changes in the well-being of its members and that access to extension services, use of pesticides and inorganic fertilizers were positively and significantly associated with FOs members' income and assets ownership.

Based on the study's observations and conclusions it is recommended that, rural farm households be encouraged to form or join farmers organizations as these have a great potential of increasing farmer's income and asset ownership. It is also recommended that village/ward agricultural extension officers and village/ward community development officers do their best to ensure farmers join farmers' organization. Doing this will not only allow farming households to have a common voice but will also allow them to improve their productivity based on the various services provided by FOs.

Conflict of Interest

The authors have not declared any conflict of interest.

REFERENCES

- Abaru M, Nyakuni A, Shone G (2006). Strengthening farmer's organizations: RELMA's experience in Eastern and Southern Africa. [http://www.worldagroforestry.org/projects/relma/pdfs/strengthening_farmers_organisations.Pdf] site visited on 25/4/2012.
- Alemayehu MS (2008). Farmers' Perception on the Effectiveness of Cooperatives in Disseminating Agricultural Technology in Ethiopia. Dissertation for Award of MSc Degree at Sokoine University of Agriculture, Morogoro, Tanzania. P.102.
- Bachke ME (2009). Are farmers' organizations a good tool to improve small-scale farmers' welfare? [<http://www.umb.no/statisk/ncde-2009/maren-e-bachke.pdf>] site visited on 8/6/2012.
- Carney D (1996). Formal Farmers Organizations in the Agricultural Technology System: Current Roles and Future Challenges. ODI Natural Resource Perspectives, London. P.121.
- Chilongo T (2005). Tanzanian Agricultural Co-operatives: An Overview. A Draft Report. Moshi University College of Co-operative and Business Studies, Moshi, Tanzania. P. 69.
- Demaine H (2008). Formal Farmers Organizations in the Agricultural Technology System: Current roles and future challenges. ODI Natural Resource Perspectives, Johannesburg, South Africa. P.14.
- FAO (2002). Farmers' organizations in central and eastern European countries and their role. In: Provision of Input-output Service in the Context of Accession of the European Union Proceeding FAO Workshop, 11 – 14 June 2001, Prague, Czech Republic. pp. 187 – 190.
- FAO (2011). The State of Food Insecurity in the World: How does international price volatility affect domestic economies and food security? <http://www.fao.org/docrep/014/i2330e> site visited on 14 / 7 / 2012. P. 55.
- Grigoryan A, Hakhnazaryan T, Kwapong NA (2008). Farmers organization in the development of agriculture in the South Caucasus: Case of Armenia Paper Prepared for Presentation at the ICA Research Conference, Riva del Garda, Trento, Italy, 15 – 18 October, 2008. P. 23.
- Jason A (2008). Farmers' Organizations in Malawi for Southern Cross/Oxfam GB Final Report. Southern Africa Trust (SAT), Lilongwe, Malawi. P. 72.
- Kassam L, Subasinghe R, Phillips M (2011). Aquaculture farmer organizations and cluster management: Concepts and experiences. Fisheries and aquaculture technical paper [<http://www.fao.org/docrep/014/i2275e/i2275e.pdf>] site visited on 6/8/2012.
- Komba MP (2008). The contribution of Victoria farming and fishing project in poverty reduction in Musoma rural District, Mara region, Tanzania. Dissertation for Award of MSc Degree at Sokoine University of Agriculture, Morogoro, Tanzania. P. 81.
- Mapila M, Makwenda B, Chitete D (2010). Elitism in the Farmers Organizations Movement in Post-colonial Malawi. Putting people first. National Smallholder Farmers Association, Lilongwe, Malawi. P.10.
- Mushi C (2000). The role of farmer groups in rural development in Mvomero district, mountains agricultural development Project. Dissertation for Award of MSc Degree at Sokoine University of Agriculture, Morogoro, Tanzania. P. 99.
- Nshimirimana R (2009). Appraisal of existing farmer organizations and linkages with development partners in Burundi. Dissertation for Award of MSc Degree at Universite Espoir D'afrique, Department of Business Administration and Economics, Bujumbura, Burundi. P. 69.
- Wennink B, Nederlof S, Heemskerk W (2007). *Access of the Poor to Agricultural Services: The role of farmers' organizations in social inclusion*. Bulletin No. 376. KIT Publishers, Amsterdam. P. 160.