Original Research Article

Socioeconomic impact of agricultural projects financed by the district development fund: case study of the district of Vilankulo - Mozambique

ABSTRACT

According to the constitution of the Republic of Mozambique, it defines that agriculture is the basis for the country's development. However, production and productivity levels are low. This reality led the Government to raise and approve the District Development Fund (DDF) to finance economic activity, prioritizing agriculture. Thus, the present research arises in order to analyze its socioeconomic impact on the beneficiary communities. To achieve this objective, semi-structured interviews and unsystematic observation were carried out. Results indicated that all respondents increased 6 times their agricultural production areas by more than previous, which allowed for the increase and diversification of agricultural products. The money obtained from the sale of the surplus were used for personal purposes such as purchase of radios, telephones, school supplies to their kids and housing improvements. It lead improvements of ways of living to the agriculture practitioners. These data are in line with the objectives of the creation of the DDF itself, which can be considered as an example to be followed for the other districts of the country. It is concluded with this that the DDF is contributing to the improvement of the living conditions of the beneficiary population in the district of Vilankulo.

Keywords:*Agriculture, Financing, Agricultural projects, Improvement of living conditions.*

1. INTRODUCTION

Microfinance in the world appears as a factor that generates employment and income for people (Sela et al., 2006). In the 1970s on the Asian continent, specifically in Bangladesh, the first microfinance companies emerged, with this country being known as “the birthplace of microcredit” as an instrument to combat poverty (De Vletter, 2006).

In Mozambique, only 2% of families have savings (Francisco &Siúta, 2014). The experience of creating funds to serve certain segments of economic and social activities dates back to the 1980s, with emphasis on the agrarian development and rural development fund (FFADR), the fishing development fund (FDF), the development fund for housing (DFH), the fund for the development of agricultural hydraulics (FDAH), credit fund for urban companies, within the scope of the urban rehabilitation program (URP) (De Vletter, 2006), which agrees with the development policies described by Agum et al. (2015).

The greater scope of microcredit in Mozambique began in 1987 with the creation of the agrarian credit and rural development bank (CACRDB), which focused on promoting small-scale rural businesses for particular interest groups such as former combatants and ex-miners. (Coutinho, 2007).

According De Vletter (2006), during the evolution of microfinance in Mozambique two distinct phases can be highlighted:

First phase: Predominance of NGOs in rural areas, with a peak in 1987: in this phase, microfinance was largely promoted by international NGOs with experience in the field of microfinance.

Second phase: Change of focus to urban areas: this phase was characterized by a change in the focus of microfinance institutions and operators. The following years were characterized by the reduction of international projects and NGOs, the growth of national NGOs, associations and national operators including cooperatives.

However, there are dynamics among small-scale farmers (Feijó & Agy, 2014). Therefore, communities that benefit from support from non-governmental organizations have greater income in agricultural production due to small business opportunities. If the capital comes from loans, the income obtained in agriculture is mainly intended for investment in production. Financial support without reimbursement commitments coincides with the use of resources for consumption (Mosca, 2014). Thus, the research aims to analyze the socioeconomic impact of projects financed by the DDF on beneficiary farmers.

2. METHODOLOGY

This research was carried out in the district of Vilankulo, among agricultural producers in the family sector who benefited from financing from the District Development Fund (DDF), following the following steps: literature review, document consultation, field work and data analysis . The bibliographical research was carried out using books and scientific articles, while the documentary research was carried out using normative documents and reports from the district government. The fieldwork consisted of semi-structured interviews and observation of the beneficiaries' businesses. The study population comprised all DDF beneficiaries practicing agricultural activity in the District of Vilankulo, from which a sample of 35 farmers was taken, corresponding to 10% of the population, using the methodology of (Matakala&Macucule, 1998). To interpret the data, the following variables were analyzed: production levels, jobs created, income; with the assumption that these variables measure the socioeconomic impact of development actions.

The interviews aimed to seek a variety of in-depth information linked to the impact of agricultural projects financed by the DDF at the level of the District of Vilankulo. This information consisted of the increase in production area, level of employment, marketing of agricultural products, verification of access to DDF financing by family sector farmers, assessment of farmers' satisfaction in this sector with DDF financing, verification of farmers' perspectives financed by the DDF.

To analyze the data in this study, the Microsoft Excel program was used to create tables and graphs, which allowed better visualization and interpretation of the data collected.

3. RESULTS AND DISCUSSION

The sample determined for the case study was 35 farmers from the family sector, of which 6 are female corresponding to 17.1% and 29 are male corresponding to 82.9%. it indicates that the financing of agricultural projects in the District of Vilankulo is the sole responsibility of men, although the greater number of family farming practitioners are women compared to men (MOSCA et al., 2013), which particularly contradicts the fact that low-income populations can have access to these services in a continuous and comprehensive way (Mavale, 2015). Around 50% of the farmers interviewed are between 41 and 50 years old, which indicates that they are in the economically active phase, with the expectation of increasing the area and level of production, consequently the family income that will provide them with the best conditions of life. This idea is in line with (Mosca, 2014) when stating that local initiative investment, known as “7 million” can make important results appear, as is the case of easy and comprehensive access to financial resources, encouraging small entrepreneurs, generate employment, improve people's income and create wealth at a local level.Figure 1 shows results by gender of interviewed farmers who received financing from the district development fund.

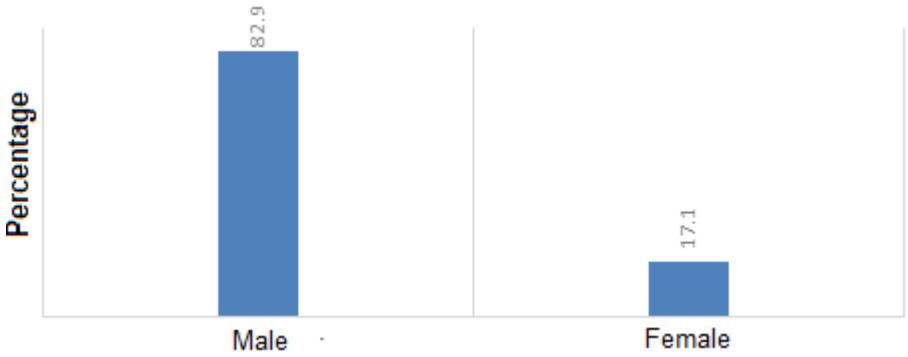

Figure 1: Farmers interviewed by gender

In Figure 1 shows that the majority interviewed in the case study, the beneficiaries of DDF financing, for agricultural projects, were male around 29 beneficiaries corresponding to 82.9%. They are relatively educated, a fundamental condition for preparation and management of projects, which their knowledge make men courageous to ask for credit, taking into account that they have the ability to analyze their viability/feasibility and more involvement in commercial agriculture. The rest were 6 farmers, corresponding to 17.1%, are female, being less educated and consequently do not have the capacity to prepare and manage projects, where most of them are more involved in domestic work and subsistence agriculture, the majority of them are married and the decision-making power in local culture belongs to men. Contrary results were found in a study by Mosca et al. (2013) in which men were dedicated to economic activities such as crafts and commerce, while women practiced agriculture.Other authors collaborated with this article because they found a higher percentage of female agricultural practitioners (74.5%) compared to males (25.5%) (Mubai et al., 2014).

In rural areas, households headed by women are potentially poorer because they are more often dependent on agriculture, have poorly diversified sources of income and low levels of education that limit their access to paid work (INE, 2007).

In approaches to social inequalities in Mozambique, it is noted that women are often the weakest actor, particularly with regard to access to resources, such as land and finance, despite the fact that rural women work many hours in agricultural activities. Women's low income is structured in other socioeconomic and cultural factors, many of which are important to understand their vulnerability. According to Valá, (2006), women's lack of security in relation to land ownership, the concentration of extension services on the male figure, barriers to obtaining commercial credit and other forms of discrimination constitute determining factors for placing women in the vicious circle of low income, low productivity, high workloads and poor health.In Figure 2, the results by age group of farmers benefiting from the district development fund were presented.

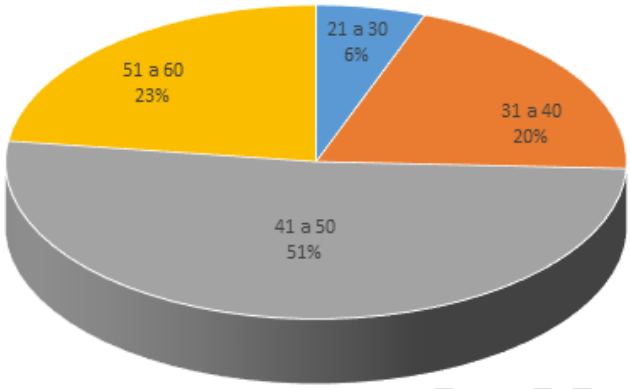

Figure 2: Age of farmers interviewed

The overall of interviewees (Figure 2), it shows that from age 21to 30 years, corresponding to 5.7%, there is a lack of interest in the practice of agriculture as the main source of income, which is why this age group does not invest in preparing and requesting financing to increase the level of production and family income. Moreover, the sectarians in the neighborhoods do not have complete confidence in their suitability, taking into account that their attestation is necessary for the approval of the project. In addition, 70% of beneficiaries are between 31 and 50 years of age. For those older than this, the interest in seeking financing reduces, because there is less strength to work with rudimentary techniques.In Figure 3, education levels and respective frequencies are shown.

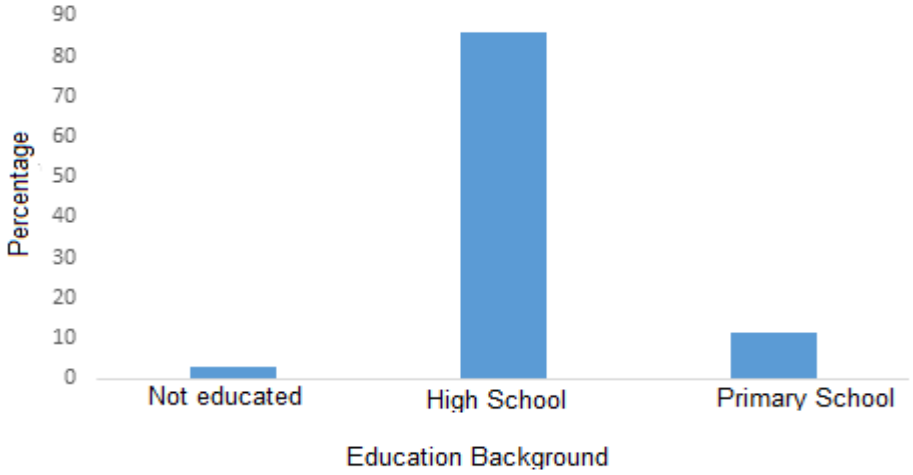

Figure 3: Education levels and respective percentage values

Regarding the level of education, only 1 (one) interviewee corresponding to 2.9% is not educated, in this context this presents immense difficulties in the elaboration of agricultural projects and in the adoption of new techniques, clearly this group of farmers presents low levels production due to non-application of new techniques. Of the interviewees, 85.7%, corresponding to 30 interviewees, have a primary level, as this is the level of education for the majority of agricultural practitioners, as they do not have the skills required for the urban job market, opting to return to the rural area, where Agriculture is an income-earning activity and, to boost this income, they choose to develop projects and request financing. As shown in Table 3. These results agree with Mosca (2014), when stating that in Mozambique family farming is managed by heads of families with a low level of education.

In Figure 4, the marital status of the interviewees and their percentage

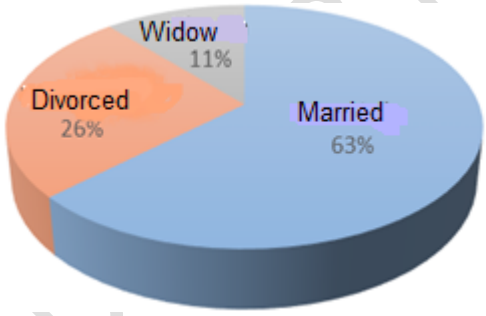

Figure 4: Marital status versus percentage values

The interviewees in Figure 4 are not single because they are over 18 years old, the minimum age for marriage. Of the 62.9% of interviewees, they are married and belong to an age group in which in rural areas it is almost mandatory to be married, as if that were not enough, it corresponds to an economically active age. According to the same Figure, 25.7% are divorced because they did not agree to remain married. All interviewees responded that there had been an increase in agricultural production areas.Figures 5 and 6 illustrate the areas and their respective percentages before and after being financed with DDF

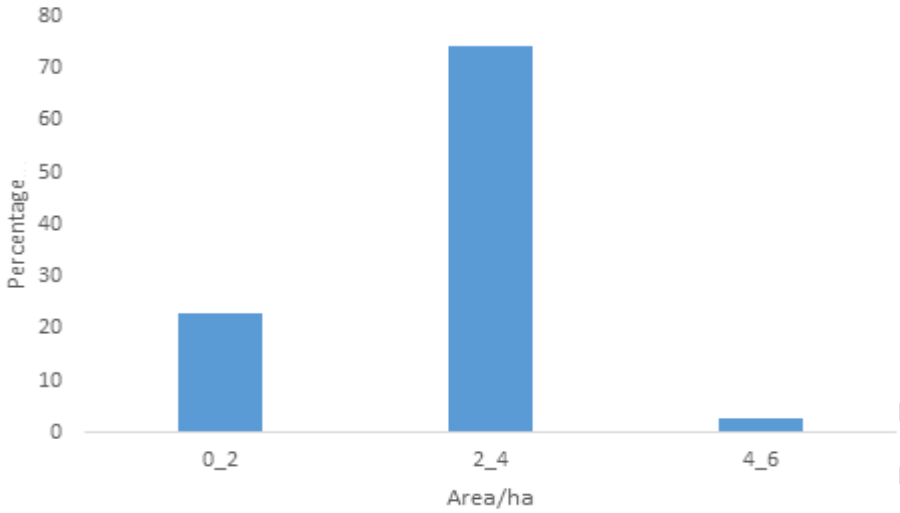

Figure 5: Practiced area (Ha) before being financed with DDF

Of the total number of interviewees (Figure 5), around 22.9%, before receiving DDF financing, cultivated an area between 0-2 hectares for their agricultural production. These are those considered small farmers. Cultivate between 2-4 hectares 74.3%, this percentage is medium farmers. In the list of large farmers (4-6 hectares) 2.9% was found. Carrilho et al. (2003), in their work on the Role of Commercial Family Farming in Rural Development and Poverty Reduction in Mozambique, state that the area cultivated per family varies, on average, between 1.6 and 1.2 hectares (with and without the use of manual labor). -of salaried labor, respectively), which is equivalent to 0.47 and 0.39 hectares of farmland per adult.

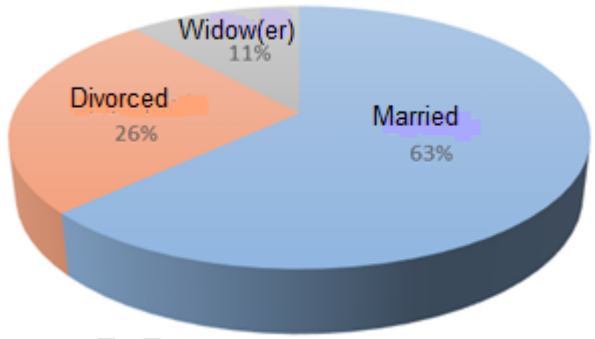

Figure 6: Practiced area (Ha) after being financed with DDF

From Figure 6, no interviewee stated that they cultivated an area between 0-2 hectares after receiving DDF financing, because it made it possible to increase the area of agricultural production. 62.9% of those interviewed responded that they practiced their agricultural activity in an area of 2-4 hectares because, with the financing, they began to hire workers who made it possible to increase the cultivation area and 25.7% of the 9 farmers cultivate between 4-6 hectares. The remaining 11.4% cultivate between 6-8 hectares because they hired more workers.

Based on the Agro-Livestock Censuses (CAPs) of 2000 and 2010, an increase in the total number of farms in that period was verified by 612,492 farms. It was found that farms with 2 ≤ 5 hectares increased by 500,582 farms (117%) and farms with more than 5 hectares increased by 33,902 farms (42%) times. Farms with less than 2 hectares increased by 3% between 2010 and 2001 (MINAG, 2010).

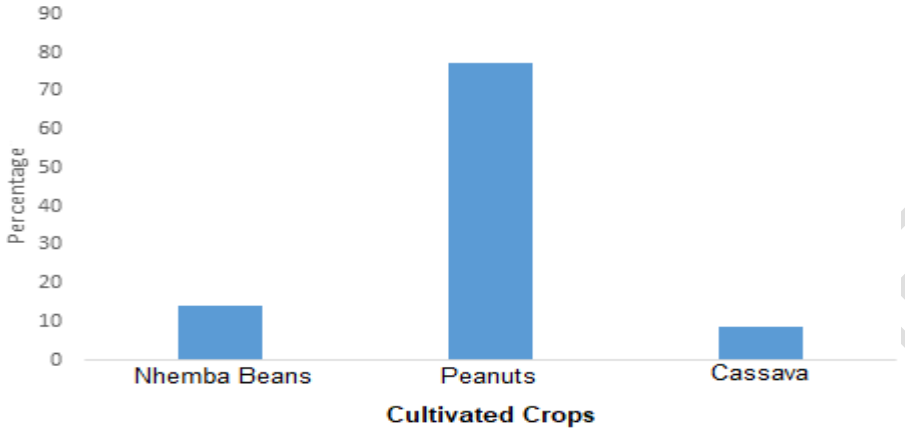

Figure 7: Cultures practiced in the District of Vilankulo

According to Figure 7, 14.3% of the total respondents grow beans, 77.1% grow peanuts and 8.6% grow cassava. Agricultural activity is practiced throughout the district, mostly by the family sector, with drought-tolerant crops also standing out.

The most cultivated crops are corn, with drought-tolerant crops also standing out, such as cassava Manihot esculenta, sorghum Sorghum bicolor and millet Pennisetum glaucum. Peanut Arachis hypogaea, Nhemba Beans Vigna unguiculata, among other species of beans, are also cultivated, harvested in two seasons that depend exclusively on rainfall. It is also worth highlighting the production of potato, thanks to the introduction of the Mahave irrigation system (PGPI, 2017).

Table 1: Area of activity where financing was applied

	Funded area		
	Agricultural production	Processing	Marketing
Interviewees	35	5	35
Percentage (%)	100	14.3	100

All interviewees responded that they had used financing for agricultural production and the commercialization of agricultural products they produced. With 5 interviewees corresponding to 14.3%, in addition to having applied the financed amount to agricultural production and the marketing of the respective products, they also applied it to the processing of these products, especially cowpea cultivation, which requires processing before commercialization. As shown in Table 1, all producers of cowpea and peanut crops stated that they had surpluses in all agricultural seasons, which enabled them to sell part of their production, unlike cassava production, which was only used for self-consumption.Table 2 illustrates the amount of surplus agricultural products before and after financing by the DDF.

Table 2: Quantity of surplus product (Tons) per crop before and after DDF financing

	Before Financial		After financing			
Cultures	0 – 0.5	0.5 - 1	0 - 2	2 - 4	--------	22 - 24
Nhemba Beans	X			X		
Peanuts		X		X		
Cassava	X					X

Before financing, cowpea production ranged from 0 to 0.5 tonnes while peanut production ranged from 0.5 to 1 tonne.

After the financing, crop production increased significantly, because they were able to hire workers to expand their production areas and carry out all the necessary cultural work.

The money from the sale of surplus agricultural products was applied in the following way: All interviewed beneficiaries claim to have purchased the following goods: radios, cell phones, clothing and building improved houses. This money also allowed them to pay for their children's schooling, wages for their workers and improve access to medical and medication assistance for family members (Table 2). Therefore, the process of selling agricultural products takes a long time and can be transformed or processed, allowing their value to increase.

According to (Mosca, 2017), the structure of the markets is unfavorable to small producers. In most cases, an oligopsonic structure persists, which makes undistorted price formation difficult. To this important element, we must add the imperative for producers to sell their production after harvest due to storage difficulties and consequent risks of post-harvest losses, low training and information for producers about markets and prices, little negotiating capacity, the risks of marketing and the low articulation of markets with effects on price formation and difficulty in approximating values across the territory, between years and according to the seasonality of agricultural production.

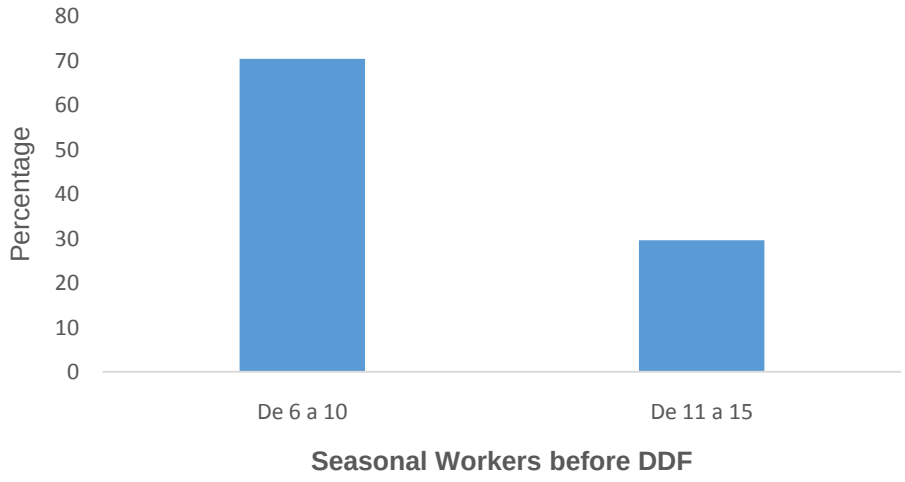

Figure 8: Seasonal workers before receiving DDF funding

According to Figure 8, more than 70% of the total respondents responded that they had seasonal workers, in the range of 6 to 10 workers, 29.6% of the same total had workers in the range of 11 to 15 seasonal workers before receiving the DDF financing.

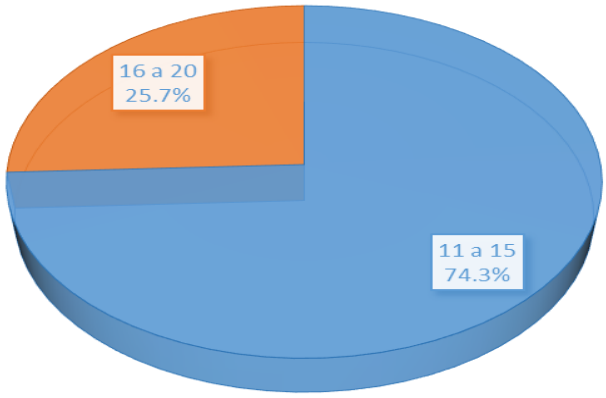

Figure 9: Seasonal workers after receiving DDF funding

Figure 9 indicates that 74.3% of total respondents had between 11 to 15 seasonal workers and 25.7% had between 16 to 20 seasonal workers after receiving DDF funding. These results collaborate with the results of Menete, 2018 in his work on the implementation of public policies to reduce poverty in Mozambique: the case of the DDF and PSSB (2006 to 2017), which showed that there is an increase in jobs and consequently an increase in family income.

4. CONCLUSION

- Many of the beneficiaries of DDF financing are mostly married followed by divorced and the last are widowers.
- All beneficiaries of the financing stated that they observed an increase in production areas and agricultural surpluses and consequently in monetary gains resulting from the sale of these surpluses.
- The increase in production required more employment of labor in both the production, processing and marketing phases.
- Families were able to acquire more goods such as radios, clothing, cell phones, improve their homes and access basic services such as school for their children, medical assistance and medication.

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