

The role of religious authorities in an innovative approach in order to improve human capital for agricultural development: the case of the archdiocese of Bukavu (East of the Democratic Republic of Congo)

Annotation: The province of South-Kivu in the Democratic Republic of Congo is a densely populated area with very good pedo-climatic conditions for agriculture. Though the agricultural potential is very high, poverty and hunger are widespread among rural areas, where families generally practice subsistence agriculture on less than 0.5 hectare. This paradoxical situation is mainly due to the lack of infrastructures and public support to agricultural activities and to a weak human capital. Faced to these problems, the religious organizations, like the archdiocese of Bukavu, take in charge more responsibilities in order to initiate the development of local rural communities by improving their human capital, based on good health, education and social relations for the largest majority of the inhabitants, including the poorest. According to secondary data, it appears that the archdiocese of Bukavu runs a large network of structures dealing with health care, and also a large network of schools, from kindergartens to university. Based on a survey of 51 key actors, it is clear that these actions are highly appreciated. However, it is also considered that the involvement of the archdiocese in socioeconomic development is insufficient and should be reinforced. The archdiocese launched a pilot animal raising program since a decade, defined with the participation of the whole local population. This program increases the management capacity of the beneficiaries. Finally, it appears that religious authorities can significantly contribute to the improvement of human capital in rural communities, especially when public authorities are not enough efficient in developing countries.

Key words: Bukavu, religious organizations, human capital, agricultural development, general welfare

JEL classification: Q18, O10

1. Introduction

The contribution of the civil society to public policies has become the topic of many studies. Several authors studied the involvement of the Congolese Catholic Church into the socioeconomic development of the DRC (Musongora, 2014; Muhingisa, 2017; Ngombaniro, 2018). However, the question of the human capital as the real capacity of the actors to take a part in these processes is rarely considered as an original experience in education.

Nevertheless, experiences like the Peasant University in Brazil (Coudel, 2009) or the Peasant University of the Peasant Organizations and Agricultural Producers from Western Africa (ROPPA/www.rpoa-afrique.org) are new. The goals of these Universities are to valorize the peasant knowledge and to promote peasant agriculture. They argue that peasant societies can adopt, innovate and anticipate: all capacities which are more often denied by the actors of development (Amouan Kassi, 2021). It is under this scheme that the originality of this article consists in the description of the role played by the archdiocese of Bukavu, in the Democratic Republic of Congo, in the improvement of the common human capital for the development of peasant agriculture with an innovative approach.

In the DRC, in general, agriculture is in a disastrous situation, though the country has huge human and natural resources. Its agricultural potential is very high and its total arable area could reach 80 million hectares. However, only less than 10% of this area are effectively managed, with around 3.5 million hectares for vegetal production and 4.5 million hectares for animal raising. In addition, the Congolese rural areas welcome more than 70% of the Congolese population. In contrast, 28% of the 87 million inhabitants (in 2019) are in a situation of food

insecurity and 4.2 million children are affected by a chronic malnutrition (RDC/Ministère de l'Agriculture et du Développement rural, 2010; PDL-145T, 2022).

Indeed, the agricultural sector must face several constraints, including the financing of agricultural activities and infrastructures in general. Generally, the share of agriculture in the national budget does not exceed 2%, far behind the 10% recommended by the Maputo Agreements, while private investments are rare because of the lack of a supporting scheme and the difficult access to bank credit and to agricultural inputs in rural areas. Agricultural yields are low due to the quantitative and qualitative weaknesses of basic infrastructures and services: transportation, agricultural ways, electricity provision, access to extension services, capacities of peasant organizations, institutional capacity and management... (RDC/Ministère de l'Agriculture et du Développement rural, 2010; Ngalamulune, 2022; Vwima and Rushigira, 2020).

In South-Kivu, the territory of the archdiocese of Bukavu is particularly densely populated. So, the access to arable land is difficult for different groups of population; more than 80% of farmers manage traditional family-type small farms, of which the area does not exceed 0.5 ha. They focus mainly on food crops. Most of these peasants use techniques which deteriorate the quality and fertility of the soils, leading to low yields. So, poverty is more spread in these less productive rural areas. Poverty reduces the access to food and increases food insecurity, which concerns supply as well as demand in villages where food production is insufficient since many years and where food dependency is extreme and food imports are very large (TECSULT-AECOM, 2009; Bisimwa and Bashi, 2009; Lebailly, Michel and Ntoto M'vubu, 2015; Vwima and Rushigira, 2020). Besides, the role of women in agriculture is particularly important and the labour force is rather aged, with 60% of workers being over 40, with less than 4 years of education at school (Vwima, 2014).

So being, the question is: what about an agricultural policy able to boost rural development in South-Kivu in particular and in the DRC in general? This question concerns mainly the human capital, as natural resources are very abundant. Though several institutions are already working in the field of education in agronomy (Institut Supérieur de Développement Rural (ISDR/Bukavu), Faculté d'agronomie/Université Catholique de Bukavu (UCB), International Institute of Tropical Agriculture (IITA-BUKAVU), Institut National pour l'Etude et la Recherche Agronomiques (INERA-Bukavu), Institut Technique Vétérinaire Maka (ITV-MAKA)), how to explain the so precarious situation of rural areas?

Some researchers pointed out the non-participation of rural communities in the decision process and implementation and the lack of valorization of research results which could boost agricultural production (Ngalamulume, 2016; Vwima and Rushigira, 2020). According to others, and this is the central hypothesis of this paper, it is crucial to improve human capital in three aspects: health, knowledge and social relations. In a previous study dealing with the role of associations in socioeconomic development (Kalumire Bashwira, 2022), survey results show how the archdiocese of Bukavu could play a role in order to improve human capital for agricultural development in South-Kivu thanks to an innovative approach with three dimensions: health, education and social relations. According to the World Bank (Yong, 2018), human capital explains from 10 to 30% of income differences per capita.

2. Materials and Methods

This paper is based on both primary and secondary data. The secondary data come from official documents from the Democratic Republic of Congo or the archdiocese of Bukavu, from reports

of different organizations... The primary data are collected through a survey among key actors of agricultural development.

As recommended by Beaud and Weber (2010), field surveys can be used in order to have a deeper understanding of the role that the archdiocese of Bukavu can play in the improvement of human capital.

The approach is a qualitative one, consisting in data collection through a semi-open survey among key actors involved in development activities.

The interviewed persons were selected according to a reasoned choice, taking into account their involvement level in local development activities: managers of diocesan development services, intellectuals and university professors, members of associations devoted to socioeconomic development (Friedberge, 1997). The size of the sample was determined by the so-called "reputation method". According to this method, some key actors are interviewed and then give the names of other key actors whom they know and who are interviewed in their turn, and so on. (Piotet and Sainsaulieu, 1994). For the survey, the first person to be interviewed was the archbishop of Bukavu himself. Finally, the sample size reached 51 persons, when the names of already interviewed key actors came out (Kalumire, 2022).

The main topics are dealt with in order to show how the archdiocese of Bukavu would be involved in the improvement of human capital and of the participation of the population in societal relations in order to develop family agriculture. These topics constitute the base for the guidelines of the survey. They are the following ones:

- (1) Is the agricultural sector, within the territory of the archdiocese of Bukavu, a vector of growth for the local communities?
- (2) How do the interviewees appreciate the role of the religious authorities in the field of investments in the market economy, especially in the case of the agricultural sector?
- (3) What about extension and accompanying services to peasant communities in the agricultural sector provided by the archdiocese of Bukavu?

3. Results and Discussion

The archdiocese of Bukavu is mainly rural. It includes the town of Bukavu, the territories of Kabare, Walungu and Idjwi, the communities of Luhwinja and Burhinyi in the Eastern part of the territory of Mwenga and the South-Western part of the territory of Kalehe. More than 80% of the inhabitants live in rural areas, mainly practicing subsistence agriculture (Ngombanero, 2018).

3.1 Access to health care and education

Under the scheme of the partnership convention N°1250/CAB/MW/S/020/CAJ/OWE/2018 of August 2nd, 2018 concerning cooperation in the field of health care signed by the government of the DRC and the national episcopal Conference of Congo (CENCO), the archdiocese of Bukavu, in order to increase the possibility for peasants who live within its boundaries to live longer and in good health, is committed to deal with local health care structures and to improve the access to basic good quality health care for the poorest. So, the archdiocese has to take care of one third of the population of the province of South-Kivu. It has to manage a large network of 11 health zones with 11 reference general hospitals (HGR), 5 hospital centers (CH), 68 health centers (CS), including 32 with a maternity, 2 specialised centers, education centers to life,

including the diocesan center to fight AIDS (Codilusi) and the health insurance network of the communities of Bukavu (REMUSACO) which is a federation of 22 health insurances with several hundreds of thousands of beneficiaries, etc. The REMUSCO is connected to 140 medical trainings spread throughout the province of South-Kivu. This network helps the poorest to have access to the basic health care (BDOM/Bukavu, 2020).

A convention signed with the government in 1977 concerning the National Schools gave to the Catholic Church the management of several schools. Nowadays, the Coordination of the Convention Catholic Schools of Bukavu (CECC/Bukavu) manages 547 schools, among which 13 kindergartens, 356 primary schools and 178 secondary schools for 237,210 pupils, 119,064 boys and 118,146 girls (CECC/Bukavu, 2020).

Based on the decree n° 06/106 signed by the President of the Republic on June 12th, 2006, the Catholic University of Bukavu (UCB) organizes 7 faculties, 4 institutes and schools and 5 research centers. The faculties deal with the following topics: architecture and urbanism, law, agronomy, economics and management, medicine, computer and environmental sciences, social sciences. The faculty of agronomy was founded in order to make available local and regional expertise. One of the goals of the university is to lead young students to understand the problems of their society and to contribute to solve them (UCB, 2018; UCB, 2019).

3.2 Role of the archdiocese of Bukavu in agricultural development

For a semi-directed interview, questions are open. However, though each interviewee has his/her own way to express his/her ideas, precise information linked to the research topics constitute the answers to the three main questions of the survey guidelines. Several answers to questions (1) and (2) represent very similar ideas. This fact proves the objectivity of the expertise of the interviewed resource persons. Based on these results, question (3) was elaborated and led to the interview of the archbishop of Bukavu about his vision of agricultural development for the wealth of the peasant community, contained in the agropastoral pilot projects initiated by the religious authorities of the archdiocese of Bukavu.

The main lessons drawn from the survey are:

- (1) In relation to the agricultural sector in the territory of the archdiocese of Bukavu as a vector of growth for the local communities

The interviewees think that the potentialities that the archdiocese of Bukavu benefits from in the agricultural sector constitute a great opportunity to create jobs and wealth. They also observe at the same time that these potentialities are under-exploited or even sometimes not exploited at all. As the other large landowners in South-Kivu, the archdiocese of Bukavu develops a traditional type of agriculture on reduced areas and rents out its agricultural land to landless peasants who practice a subsistence type of agriculture. Considering its human and natural resources, its reputation and its influence within the local communities, the archdiocese of Bukavu should, according to the interviewees, invest more in the modernization of agriculture, as it is done in the fields of health and education in South-Kivu and promote an agricultural development model to local communities in order to alleviate poverty and undernutrition.

- (2) In relation to the role played by the archdiocese of Bukavu in the investment in marketed production in the agricultural sector

The survey respondents identified the existence of different problems which prevent the religious authorities of the archdiocese of Bukavu from playing a crucial role in the investments in favour of market agriculture thanks to a modernized and more efficient way of production which can make agriculture become a true growth factor.

The problems which are cited by the interviewed persons are notably: insecurity in rural areas where armed conflicts often happen, the general lack of financial and technical means and, as consequences, insufficient infrastructures, equipment and technical tools, the culture and religious challenges against the spirit of entrepreneurship, risk aversion and finally the lack of a local agricultural development plan built according to a global vision and where the individual and community participation is free and active.

In brief, there is a paradoxical situation, apparently an insurmountable blockage. According to the surveyed people, there are, on one side, the opportunities to invest in the agricultural sector as a vector of growth for the archdiocese of Bukavu and, on the other side, there are several problems which hinder the initiatives which are built up in order to develop agricultural activities in the socioeconomic and natural context of the archdiocese of Bukavu.

- (3) In relation to extension and accompanying services provided to peasant communities in the agricultural sector by the archdiocese of Bukavu

Two pilot programs are implemented by the archdiocese of Bukavu, confirming its option to support small scale agriculture.

The agropastoral program at school

This program consists in giving a group of pupils and teachers two rabbits or a pig for each member of the group in order to raise them at home. The first young rabbits and piglets are then distributed to a second group of teachers and pupils and so on till everybody has been concerned and the process can begin again. The beneficiaries must also cultivate a plot which is fertilized with the rabbits and pigs manure, mixed with domestic waste, leaves from trees etc. These activities are supervised by the direction of the school in order to ensure the continuation of the process. This program began in catholic primary schools of the parishes of Burahale and Mulamba of the territory of Walungu (Paroisse Burhale, 2017; meeting with the archbishop Mgr Maroy, February 10th, 2023)

The agropastoral program in the villages

This program is similar to the program for schools. Here, the beneficiaries are households which receive a cow. In addition, some households receive a bull to be used by all the households of the group for reproduction purposes. For the Bashi, the local population, a cow has a cultural signification. The first calves which are born are distributed to another group and so on. While receiving a cow, a household has the obligation to cultivate a field which will be fertilized with the manure of the animal.

So, the particularity of this program is not only to give work (animal husbandry) to the farmers, but also to improve the quality of soils which have been deteriorated by overexploitation, and so to increase food staple production in order to reach household's self-sufficiency and to sell the exceeding quantities. This program began in the village of Mwegerera in the parish of Burahale under the name: "Cow raisers association of Mwegerera" (ASSEVAM) with the goal to spread over other parishes (Paroisse Burhale, 2017; meeting with the archbishop of Bukavu, February 10th, 2023).

Both abovementioned agropastoral programs have been implemented since a little bit more than one decade, under the guidance of the archbishop of Bukavu, Mgr François-Xavier Maroy, in consultation with all the beneficiaries themselves, who are all conceptors, owners and actors of the programs. It is a model of community project, with the will and active participation of all the members of the community.

The archdiocese of Bukavu and its partners support these agropastoral programs by financing the initial investments. Later, specific extension services are built up, including local agronomists and veterinary doctors. They have to inform the small scale farmers about new techniques and tools (seeds, fertilizers, fodder crops, vaccines, irrigation, seasonality...) and to draw their attention on risk management, the promotion of a favourable environment and sane and local food (Amitiés Belgique – Bukavu, 2018).

4. Conclusion

This paper showed how the archdiocese of Bukavu contributes to build the human capital of rural communities. This contribution is not limited to the health and knowledge dimensions of human capital. The archdiocese also promotes small scale agriculture by improving the rural capacity to solve the problems of local rural communities in order to begin the development process.

In South-Kivu, the rural world is faced to the problem of valorization of its natural resources in agriculture, the peasants being left alone without any efficient public policy. So, the archdiocese of Bukavu rents out its land to landless peasants and, since one decade, engaged in extension services and accompanying actions in order to reinforce the social status of the peasants, as well as their qualities as entrepreneurs and managers, through two agropastoral pilot programs in schools and in villages.

Indeed, the vertical integration which was imposed to the farmers for the modernization of agriculture was, according to Fortin (1971) “the unique selection and education mechanism of farmers”, because “left to themselves, they go to a failure; guided, they could become efficient entrepreneurs”. However, Fortin himself acknowledges that vertical integration is dangerous for farmers, though he is in favour of it because it represents an efficient constraint for modernization. On the contrary “Peasant Universities” today want to valorize the traditional peasant knowledge and to promote small scale agriculture. Actors involved in development can not deny the peasant communities their innovation and anticipation capacities (Coudel, 2009; Amouan Kassi, 2021).

Finally, in addition to good health and knowledge, the question of human capital is also linked to social participation. Development mainly depends on people’s will. Social aptitudes like personal and collective willingness can lead to good economic results. Local communities agropastoral programs introduced by the archdiocese of Bukavu in schools and villages must be supported for the promotion of local and community entrepreneurship and management. When social cohesion is reinforced around a project, people recover confidence and the willingness to take care of themselves in order to fight against poverty and hunger. So doing, agricultural development can be possible by a step-by-step transition from traditional and small scale agriculture towards sustainable agriculture in which the peasant remains at the centre.

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