

Participatory Evaluation of Development Projects Contribution to Poverty Reduction in Northern Benin

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Abstract

This study analyzed the sustainable changes induced by the "Banikoara Millennium Village Project" on rural poverty reduction. Using the purposive sampling method, 126 household heads were selected from three project beneficiary villages and one non- project beneficiary village. Data was collected through focus group discussions and a structured questionnaire which were processed using descriptive statistics. The results showed that nearly 78% of the respondents have adopted the improved technologies of soil fertility, and yields have increased from 1.2 tons to 3.5 tons per hectare for rice, from 1.4 tons to 2.1 tons per hectare for maize, and from 1 ton to 1.6 tons per hectare for sorghum. We also found that that the project has contributed to decreasing poverty in terms of the achievements of socio-community infrastructures in the education, health and agricultural sectors, the capacity building of communities etc. Majority (85%) of the project beneficiary households consider their current economic living conditions better than the period before the project implementation. This project has a great impact on household food security and shortening the hunger season. However, the project achievements are still fragile and require an action for sustainability. This study suggests that development projects should actively involve the target beneficiaries starting from the needs assessment in particular and implementation to ensure its sustainability.

Keywords: Development project, Millennium Villages, Impact evaluation, poverty reduction.

1. Introduction

Poverty is one of the critical obstacles to sustainable development and the leading cause of death in the world. It is linked not only to low income, but also to other socio-economic factors such as health, education, living conditions etc. (Klein et al., 2011; Liu, 2021). In sub-Saharan Africa, the number of people living below the poverty line has increased while the number of poor people worldwide has declined (World Bank, 2018). Poverty therefore remains the main development challenge in most countries in Sub-Saharan Africa. In Benin, poverty has increased at the national level, from 33.3% in 2007 to 40.1% in 2015 (INSAE, 2015). Poverty is more prevalent in rural areas, although the increase in the proportion of poor households is more pronounced in urban areas (4.4%

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versus 3.9%). Fighting poverty has become a priority objective and Benin has embarked on a process of social change that reflects the ambition of successive governments to lift the country out of poverty. To this end, Benin has developed and implemented several development policy documents including the Growth Strategy for Poverty Reduction (GSPR) covering the period 2011-2015. The GPRS aimed to intensify economic growth in order to accelerate the country's progress towards achieving the Millennium Development Goals (MDGs) by 2015. It was within this framework that the "Banikoara Millennium Villages Project (MVP)" was initiated as a development project. The overall objective of this project is to support and empower the beneficiary communities to emerge from poverty by achieving all the MDGs within 5 years. Four main partners composed the institutional framework guiding the implementation of the project. They are the Government of Japan with a contribution of 80.44%, the Government of Benin with a counterpart funding of 13.67%, the United Nations Development Program (UNDP) with a financial support of 5.25% and the Municipality of Banikoara with a contribution of 0.64% of the total cost of the project. The execution of the project was placed under the supervision of the Ministry of Planning and Development, through the Centre for Partnership and Expertise for Sustainable Development (CePED). This Centre is in charge of technical implementation of projects and interventions in the portfolio of the Ministry. UNDP ensured the technical and financial management of the project whose implementation lasted five years (July 2011 to June 2016).

Development projects focusing on poverty reduction are essential for rural communities livelihood improvement (Aga *et al.*, 2017; Zubir Ibrahim *et al.*, 2018), this study analysed the sustainable changes induced by the project on poverty reduction in the Municipality of Banikoara. It is based on the Paris Declaration on Aid Effectiveness and perfectly embodies the commitment of technical and financial partners to take a greater interest in development results and their evaluation (OECD, 2005). The project evaluations generally look at the extent to which planned activities have been carried out and the extent to which intended objectives have been achieved. They often provide a lot of information on the direct results of the project, but relatively little on the effects of these actions and the resulting impact (Limousin, 2015; Peters, 2016). Thus, despite the billions of dollars injected into development aid each year, there is very little research on the actual impact of projects on the poor (World Bank, 2018). There is therefore an urgent need as stipulated by Maillé (2012), to understand how the development project changes the social structure of the community in order to determine whether these changes represent a benefit to the community or, conversely, a significant negative impact.

2. Theoretical framework of the study

The theory of change, articulated around the Sustainable Livelihoods Approach (SLA), served as a guiding principle for this study. Indeed, the theory of change can be used for the development, management and evaluation of interventions (Mayne, 2017). It helps to identify what data should be collected and how it should be analyzed for an impact evaluation (Rogers, 2014). The theory of change provides an excellent illustration of how and why an intervention is expected to contribute to the achievement of its intended effects (Mayne, 2017). However, interventions are rarely the sole cause of an effect. Thus,

the theory of change describes a causal bundle of activities and assumptions that together are expected to contribute to the achievement of desired outcomes. The use of theory of change in project impact studies has already been analyzed by several authors (Stein and Valters, 2012; Vogel, 2012). These authors note that beyond a general consensus on its importance in project impact studies, there is a proliferation of interpretations on its practical implementation and the way to describe it. To this end, conducting an impact assessment (ex post) based on the theory of change usually combines other assessment approaches. Thus, for this study, the theory of change is used alongside with the Sustainable Livelihoods Approach (SLA). The rationale for using the SLA for this study is that it provides an analytical framework that matches the perception of local communities (Zossou et al., 2012; Scoones, 2015). It was used to analyze the effects of the project on improving the five capitals (natural, physical, financial, human, and social) identified by DFID (1999).

3. Methodology

3.1 Study area

The study was conducted in the Municipality of Banikoara, located in the northwestern part of the Alibori Department in Benin. It covers an area of 4383 km² of which 2148 km² (49%) is cultivable land and 2235 km² is occupied by the W National Park. It is located between 10°50' and 11°30' North Latitude and 2° and 2°40' East Longitude and bordered to the north by the Municipality of Karimama, to the south by the Municipalities of Gogounou and Kèrou, to the east by the Municipality of Kandi and to the west by the Republic of Burkina Faso. The Municipality of Banikoara is characterized by a Sudano-Sahelian climate with two seasons: a rainy season from May to October and a dry season from November to April (Gounou, 2009). Economic activities are based on agriculture, which accounts for more than 80% of the population, livestock (15%) and trade (4%) (IFDC, 2007). The Municipality of Banikoara has an estimated population of 246,575 inhabitants with ten arrondissements and sixty-nine villages and city neighborhoods (INSAE, 2016). This Municipality harboured the pilot project of the Millennium villages in Benin (MVP). The villages Kanderou, Founougo A and Founougo B and Igrigou in the Founougo arrondissement were selected for the study. The first three villages benefited from the MVP, while Igrigou was randomly selected as a control village which did not benefit from the project.

3.2 Method of data collection and analysis

Data collection was conducted in two successive phases from April to June 2021. The exploratory phase consisted of contact, recognition, and integration into the study area. During this phase, an interview guide was used to collect initial data from 21 key project actors, including 3 at UNDP, 2 at the Japanese Embassy in Benin, 4 at CePED, 8 at the Municipality of Banikoara, and from 4 village chiefs (Kanderou, Founougo A, Founougo B and Igrigou). These actors participated in the implementation of the project as resource persons. Discussions with them were organized in the form of exchanges on the project's activities and their perceptions of the factors that explain the results obtained, the impacts and perspectives.

In the second phase, the purposive sampling method was used to select 126 household heads, 92 of them are project beneficiaries (30 in Kanderou, 32 in Founougo A and 30 in Founougo B) and 34 as non-project beneficiaries in Igriggou village. Continuous presence in the village since the start of the project till now, membership in a village group, consideration of the gender approach through female vs. male-headed households, and willingness to participate in the study were the main criteria for selecting the household heads of surveyed. These four criteria were applied to project beneficiaries, while the last three criteria were applied only to non-beneficiaries of the project.

For qualitative data collection, 12 Focus Group Discussions (FGD) have been conducted, at the rate of three focus groups per village and per homogeneous socio-strategic group of women, men and youth. A FGD included a maximum of ten (10) people and a minimum of eight (8) in accordance with Greenbaum (2000) who suggested seven to ten people for a FGD. The FGDs were conducted around the following themes: project need assessment, project perception and implementation approach, project effect/impact by intervention sector, level of capital improvement/ population standard of living, project ownership and sustainability strategy. Semi-structured interviews were also conducted with resource persons selected from among the participants in the FGDs to further explore the themes addressed in the FGDs. Participant observations were used to collect and analyse non-verbal data and overt behaviours of project beneficiaries. Quantitative data were collected through structured interviews with semi-structured questionnaire for household leaders. The unavailability of baseline data prior to the project and difficulties related to the accessibility of school results in some schools led to a home test of 40 schoolchildren (10 per village) in the second grade. These students were selected in the project's beneficiary and non-beneficiary villages using the purposive sampling method. They were individually tested on the same written test of mathematics and written expression to assess academic performance. This approach is used by many authors (Issaieva and Crahay, 2010; Maroy, 2012) in assessing student performance.

The collected data were processed using descriptive statistics. For this purpose, the Wilcoxon test, a non-parametric alternative to Student t-test and based only on the order of the observations of the two samples (van der Waerden, 1969), was used for the comparison before and after the implementation of the project. Analyses were done using Excel and SPSS (Statistical Package for the Social Sciences) software. Qualitative data were used to analyze, discuss, and interpret the results obtained with the quantitative data. Both qualitative and quantitative analyses were based on the theory of change and the Sustainable Livelihoods Approach (SLA). The SLA was used to analyze the effects of the project on the improvement of the five assets. Thus, after describing the components of the different capitals (Table 1), the respondents were asked to rate their capital stocks on a scale of 0-5 before the project (baseline year is 2010) and after the project (impact year is 2021). A recall method exercise was used, and respondents were asked to try to remember their past capital assets to estimate capital stocks in the baseline year. A diagram was drawn to visualize the five capitals. The value 0 (no stock) is at the centre of the diagram and the value 5 (corresponding to complete satisfaction) is at the other end of the axes.

4. Findings and discussions

4.1 Socio-economic characteristics of household heads

The household heads in the survey sample are 53% male and 47% female. These household heads are between 18 and 62 years of age and more than 78% are married, compared to 16.3% who are widowed or divorced and 5.5% who are single. The majority (73%) of household heads are not educated. There are no female household heads who attended elementary school. They represent only 4% of the 16.7% of household heads who are literate in the local language.

4.2 Agriculture and income generating activities

✓ Improved food security

About 78% of respondents in the project villages have adopted improved technologies of soil fertility. This has led to an increase in yields from 1.2 tons to 3.5 tons per hectare for rice, from 1.4 tons to 2.1 tons per hectare for maize, and from one ton to 1.6 tons per hectare for sorghum (Figure 1). In the control village, the current yields of rice, maize, and sorghum are about 1 ton, 1.2 tons, and 0.94 tons per hectare respectively. There is a downward trend in the yields of these three main crops in the control village, compared to before the project time. This remarkable trend actually reveals the decline in soil fertility, which is one of the major problems affecting agriculture in northern Benin in general, and in Banikoara in particular, due to the rapid expansion of cotton production (Baco et al., 2002). Furthermore, this result confirms the result obtained by Zoundji et al. (2018a) whose work showed that sorghum, millet and maize yields increased substantially through the adoption of sustainable practices by farmers in Mali. Thus, the introduction of improved technologies of soil fertility has resulted in increased yields of food crops that would contribute to the subsequent improvement of food security. However, 22% of non-adopting respondents felt that the application of the technologies was burdensome and time consuming. This confirms Van den Ban's (1984) view that the speed of technology diffusion depends on how the technology is perceived by adopters. In addition, respondents deplored the quality of some of the machinery, equipment and infrastructures provided by the project. This is the case of the tractors and rice harvesters provided to Founougo and Kandérou cooperatives. Farmers recounted repeated breakdowns of those machines, which are not adapted to their working environment and do not meet their needs. The beneficiaries were not really involved in identifying their needs during the development of the project. In this context, ownership of the project could be problematic because any project is designed to meet the needs of the beneficiaries (Andreoni et al., 2021). To this end, all development projects must be part of a participatory and inclusive approach that empowers village communities and allows them to set their own investment priorities (World Bank, 2000).

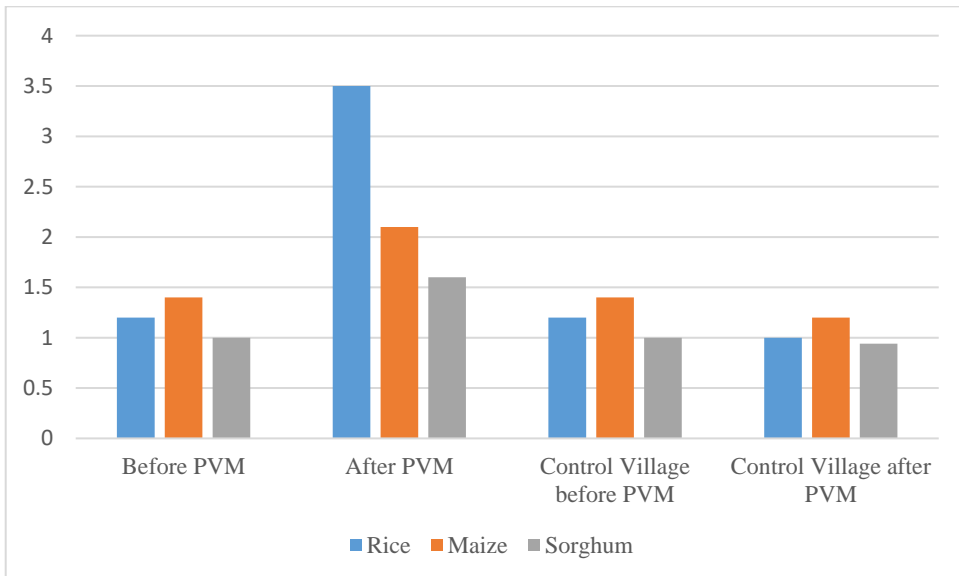


Figure 1: Yield evolution (ton/ha) of main food crops

✓ Improving household income levels through warrantage

The improvement of agricultural yields, the building of storage facilities for food products and farmers' access to credit have favored the implementation of warrantage. Indeed, warrantage, also known as storage credit, is a mechanism that allows farmers to delay the sale of their crops in order to sell them later in the year, at a time when they can generally obtain much higher prices. This stock also serves as collateral for farmers to access credit to potentially conduct income-generating activities immediately after harvest, paying for farm inputs for the next crop year, or being in a position to meet other family expenses (Chetaille *et al.*, 2011; Egah *et al.*, 2014). Households practicing maize and rice warrantage among respondents in the villages of Kanderou, Founougo A, and Founougo B are 64%, 76%, and 72% respectively. According to these households, the implementation of warrantage has led to the following positive changes:

- **Easy access to credit:** The groups benefit from collective credit which is redistributed to members in proportion to their available food stocks (maize and rice). About 72% of respondents that benefited from the project had their first experience with formal credit through the warrantage credit system implemented by a local microfinance structure. The warrantage credit system does not exist in the control village. About 91% of respondents in the control village have heard of this credit system and would like to see this initiative starting in their areas as well.
- **Income-generating activities development.** The cash flow from credit allows women to invest in income-generating activities. The diversification of income sources reinforces the interest and viability of the warrantage system.
- **Reduction of unfavorable loan practices.** The practice of warrantage has reduced the vicious cycle of cumulative debts, social dependency (loans of grain for work or other social obligations), usury, and pre-harvest sales. All respondents in the project villages

acknowledged that they had reduced their access to unfavorable loans by at least two-thirds.

- Improving food security. The sufficient availability of cereals recovered during destocking helps to combat famine and food insecurity during the lean season. About 72% of respondents noted a decrease in family malnutrition in the project's beneficiary villages. In contrast, famine and food insecurity during the lean season were the main problem mentioned by the majority (96%) of respondents in the control village.

The economic outcomes of the warranted credit showed an average increase of 28.66% in the value of stored products in the three villages (Kanderou 26%, Founougo A 32% and Founougo B 28%) benefiting from the project. However, the respondents identified some limitations to the continuation of warrantage activities. These include access problems of markets for the sale of food products. The following testimony from a household head illustrates this:

"Thanks to MVP's support, warrantage started well in our village. However, MVP left us in searching for a market for our products. MVP promised to help us to store and sell our products during the lean season from March to April. But until today our maize is still in store and we are looking for off-takers by ourselves".

The problem relating to sales of destocked produce is essential factor of farmers' demotivation to keep up with the practice of warrantage, as they are not prepared for market access to better sell their products. There is also the high illiteracy rate of the population which hampers the autonomous management of warrantage. To this end, it is important to strengthen functional literacy programs in order to train as many people as possible, particularly women who are the most affected despite their involvement in warrantage management. It is also important to note that the installation of the multifunctional platform (PTFM) for the agri-food products processing and the support for the vegetable growing have contributed to the empowerment of women beneficiaries. In addition to vegetable growing, which is practiced by all the women, it appears from this study that all the project beneficiaries' female household heads practice at least one of the above-mentioned activities.

✓ Promoting vegetable growing

The project has enabled women to improve their technical knowledge in vegetable growing through trainings, acquisition of farm equipment and enhanced organization into groups. The deployment in the village of a technical agricultural advisor has influenced women's motivation and farming system. Thus, in addition to satisfying the food needs of the population, vegetable growing, which was not a well-structured activity before the project, provides women with a regular financial income ranging from about 5,000 FCFA (10 USD) to almost 23,000 FCFA (46 USD) per month after the project. The availability of vegetables and increase in their income in the dry season was also noted, with a significant effect on the financial stability of households. Thus, self-consumption levels were mentioned by respondents as important, along with awareness of the benefits of vegetable consumption on household health. This confirms the work of Zoundji et al. (2018b and 2018c) who showed that the promotion of vegetable growing has a direct

impact on women's empowerment through improved income and consequently on their food and nutritional security.

✓ **Processing of agricultural products**

The multifunctional platform (PTFM) has enabled women to reduce the time devoted to cereal grinding (maize, sorghum, millet) and shea breaking. The majority of female household heads surveyed (89%) and beneficiaries of the project were of the view that the time freed up allows them to develop new income-generating activities and devote more time to Family welfare. For these women, the PTFM contributed to more than 25% of the increase in their income. In addition, children and especially young girls were involved in the artisanal processing activities. However, the use of PTFM had a positive effect on the schooling of these children. This result is consistent with that obtained in Mali, where the introduction of PTFM contributed positively to an increase in women's income, time savings, children's and especially girls' schooling rates, and women's attendance at health centers (Bonjean *et al.*, 2015). The use of PTFM has also contributed to the development and strengthening of social ties and collective action in the community. Indeed, the focus group discussions made it possible to know that there had been family conflicts in the community for years, and some family members did not even greet each other. But with the daily meetings around the PTFM, these families stopped their grudges. Thus, beyond its economic function, the PTFM has become a space of peace and solidarity where the spirit of cooperation has reinforced social cohesion.

The actions carried out in the context of improving agricultural production and strengthening income-generating activities have led to the gradual banking of project beneficiary respondents and the adoption of savings behavior in their daily lives. Indeed, nearly 32% of project beneficiary respondents have currently opened individual savings accounts in local microfinance institutions, compared to 2.66% before the project and about 4% currently in the non-project (control village) village. In addition, the self-employment of beneficiaries, particularly women in the groups, has increased the supply of goods or services at the local level and consolidated rural economic . Likewise, the regular supply of markets has contributed to a decrease in the cost of basic foodstuffs, thus ensuring food security in the various localities. Thus, a rural and local development effect is perceptible through the increase in the beneficiaries' purchasing power, the stabilization of prices and the creation of wealth through the marketing of crops, etc. The use of the income generated by the project is also an important indicator of the knock-on effects that the achievements have generated. Indeed, the additional income is not systematically devoted to food. Some reinvest in productive activities such as private developments, equipment, but also in durable consumer goods (motorcycles, televisions, private solar equipment, etc.) and in social spending (some farmers have declared that they have taken a second wife thanks to the income generated by the rice grown on the developed sites).

4.3 Education

✓ **Improving learning conditions**

Almost all respondents (97%) in the project's beneficiary villages acknowledged that the working conditions of children and teachers has been significantly improved and former huts standing for classrooms gave way to concrete module buildings. Teaching materials are available in all schools with trained teachers. However, school infrastructure and teaching materials are non-existent in the non-beneficiary village where we note a high rate of children between the ages 5-15 years who attending Koranic schools (non-formal education providing religious instruction) and/or accompanying their parents to the farm. As shown in Figure 2, before the project, the number of children attending Koranic schools was double of those attending elementary school and triple of those accompanying their parents to the farm. The trend is almost reversed after the project intervention. The elementary school attendance rate in the project villages is more than six times that observed before the project. The project's achievements with the "education for all" awareness campaigns have enabled the "Fulani" community to start sending their children to school. This community was traditionally hostile to children schooling, characterized by lack in basic literacy skills and access to basic education (Dahiru et al., 2017). However, there are still school-age children who go to the fields and others who go to Koranic schools. This is especially true in the village that did not received the project intervention. This situation could affect the entire municipality of Banikoara because of its proximity to Burkina Faso and Nigeria, where there are risks of child recruitment for indoctrination into Islamic extremist. Besides, the issue of teacher shortage noticed nationwide is also visible in both project beneficiary and non-beneficiary villages. For example, few schools have four teachers out of six for a school with six classes.

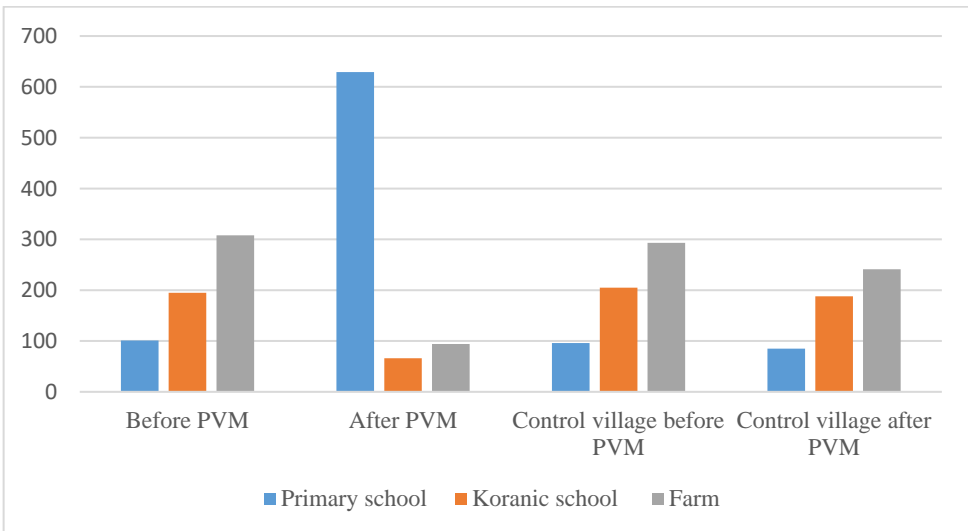


Figure 2: Attendance at primary/ Koranic schools and farm working by children

✓ **Availability of school canteens as a motivating factor**

Almost all respondents (97%) recognized that children are motivated to go to school because of the school canteen. These canteens have led to a massive return to school of children who had already dropped out. The availability of school canteens has become a factor in the choice of schools by parents and children. We also noticed a practice whereby parents withdrew their children from canteen-deprived schools for the endowed ones as soon as school canteens were launched in the village. Unfortunately, out of the 26 schools within the project's coverage 10 of them are canteen-free. Actors in those schools noted some discrimination in the selection of canteen-endowed schools and called for the project officials to rectify that "injustice". This was clearly cited by a director of a school without canteen as : "It is astounding to see schoolchildren walk several kilometers to cross your school and go to another school with a canteen". The introduction of school canteens has an undeniable impact on children's school life. This is evidenced by the school evaluation indicators, including the increase in the number of students with an average of 49 per class and the dropout rate, which is approximately 2.4% for schools with canteens, compared to an average of 32 students per class and a dropout rate of 6% in the project schools without canteens. According to Wall *et al.* (2022), school canteens programs have the potential to alleviate short term hunger to increase concentration and learning capabilities of children. It would be helpful to generalize canteens in all schools permeated by the project and even progressively stretch the process to non-beneficiary villages. Doing this would contribute to increasing demand in education and keeping children at school.

✓ **Improving school children performance**

After submitting individually, the selected students to the same written test in mathematics and written expression, we observed that the improvement of learning conditions, the evolution of student numbers and the availability of school canteens as a motivating factor did not have an effect on the improvement of students' performance in mathematics and written expression. Indeed, the control village that did not receive the project intervention obtained the best performance with the highest overall average and ranks second (60%) after the village of Kanderou in terms of the number of students with an average of 10/20 or higher. These results confirm those of Barnett *et al.* (2018) who observed that the Millennium Villages Project in Ghana has increased attendance at primary school but did not go beyond this MDG and improve the learning outcomes of children. Thus, beyond school infrastructure, students' performance is also determined by the quality of teaching (Harjanto *et al.*, 2018). It is important to remember that one of the major difficulties noted at the level of all these schools is the lack of teachers. There are on average two (2) teachers for a school of six pedagogical groups. In addition to the infrastructure building and establishment of school canteens, the policy in education sector must focus on issues related to recruitment, capacity building through training and professional development. It is widely admitted that capacity building is an important factor, which can contribute to a quality teaching (Martin and Thomson, 2018).

4.4 Capital Improvement

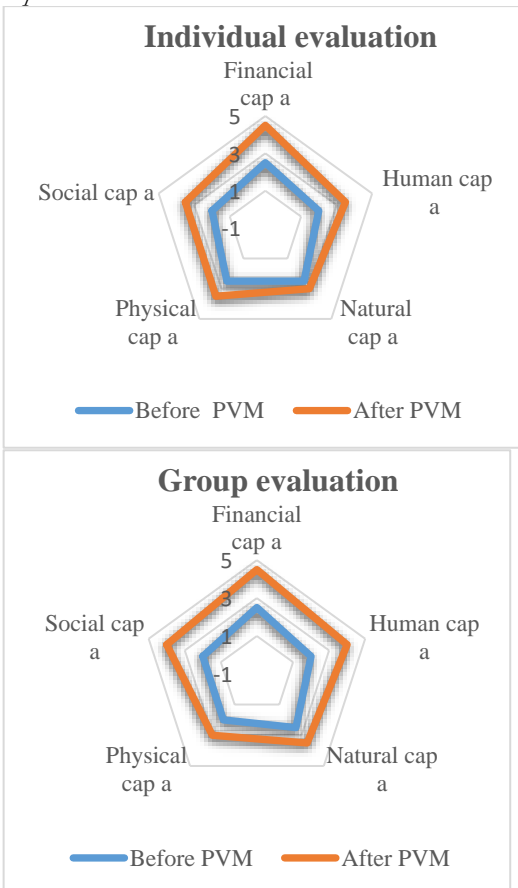
Figures 3 and 4 present the results of the stock assessment in the five capitals for a comparison in the project and non-project villages with the baseline in the year before the project (2010) and after the project (2021).

Table1: Main components of the five capitals essential for sustainable livelihoods influenced by the project

Stock	Entities
Financial	Incomes, access to microfinance, food, goods and needs, financial resources for ceremonies and clothing, children schooling, the rate of saving
Human	Skills/ knowledge, good health, nutrition, happiness, responsibility, ability to labor, happiness
Natural	Soil, land, water, forests, savannah
Physical	Development of lowlands, tools, machines, electricity, schools, health centre
Social	Networks, social claims, intra-group cohesion, inter-group cohesion, information exchange, institutional linkage and support, commitment, solidarity

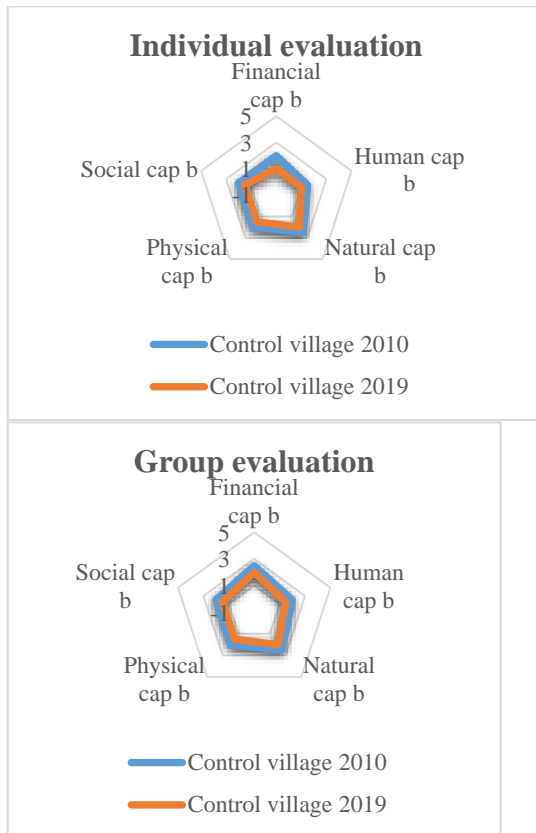
Source : Field work, 2021

Main components of the five capitals essential for sustainable livelihoods where WAFSP initiative could have a direct impact



a = Wilcoxon's test significant by 5% ($P \leq 0,05$)

Figure 3: Changes in capital stocks in project beneficiary villages



b = Wilcoxon's test non-significant ($P > 0,05$)

Figure 4: Changes in capital stocks non-beneficiary project village

The individual and group evaluations in the project villages have clearly showed that the population noted a remarkable improvement in their financial, social, human, physical and natural capital stocks ($p \leq 0.01$ for the Wilcoxon test). Reversely, the population of the control village, which did not benefit from the project, noted a slight decrease in their capital stocks. The effect of the project is clearly visible when comparing the capital stocks before and after the project in the beneficiary and control villages. It matters to mention the feelings of frustration and jealousy of the population in the control village wishing to benefit too from the project's support. The use of the Mann-Whitney-Wilcoxon test showed that the results of the individual evaluation are similar to those of the group obtained by consensus ($P < 0.01$) in the project villages and in the control village. The similarity between the individual and group surveys thus confirms that consensus was indeed reached because the discussions during the group assessments were very lively.

4.5 Population's perception of their current living conditions

About 85% of project beneficiaries perceive their current economic living conditions as good and fairly good; whereas on the other hand more than 82% non-project beneficiaries perceive their current economic living conditions bad or very bad (Figure 5).

The perception of project beneficiary and non-beneficiary populations takes into account the economic environment of the country in general, and that of their area in particular. Indeed, most of non-beneficiary populations (82%) perceive themselves to be in bad or very bad living condition with their poverty status being featured by hard access to quantity and quality food. The non-beneficiary population would experience permanent and seasonal hard periods of food shortage. To cope with the plight, the poor reduce either the number of meals per day, the quantity served at each meal or the quality of the meal. These observations were not made in the project villages. This showed a significant difference between beneficiaries and non-beneficiaries of development project about respondents living conditions and livelihoods improvement. However, the response of communities to an apprehended change is so variable that it is impossible to assess definitively social impacts (Branch et al., 2000; Zoundji et al., 2018c).

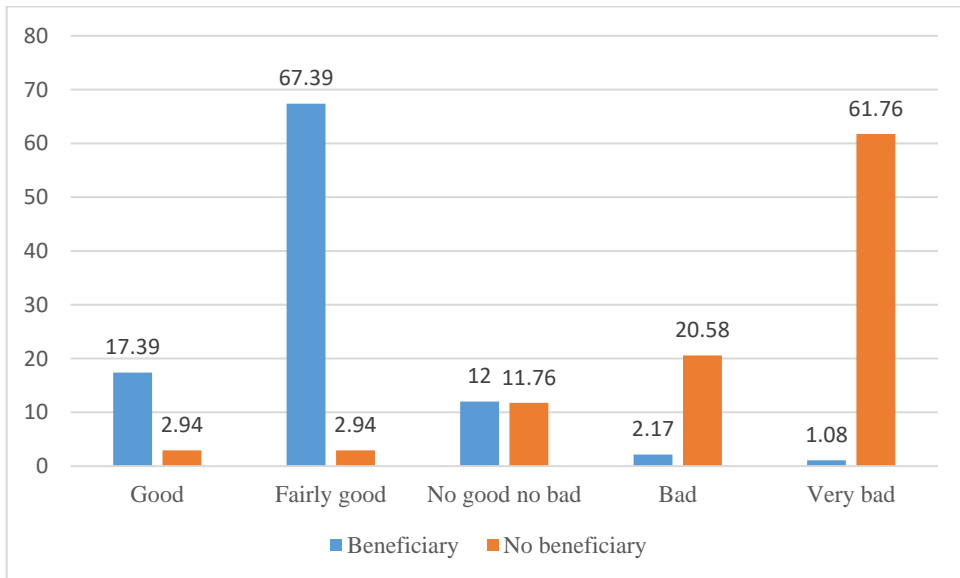


Figure 5: Population's perception over their general living conditions

4.6 Ownership and sustainability of project achievements

Three main factors identified by the respondents with a participatory approach that could lead to project ownership are based on the institutional set-up of the project. These factors are focused on (i) the specific needs of each community (involvement of beneficiaries during the needs assessment and planning), (ii) the involvement and responsibilities of beneficiaries during the project management, and (iii) the sustainable supports / accompaniments of the beneficiaries during the project management. However, the only factor that is partially taken into account in this project is related to the involvement and responsibilities of beneficiaries during the project management. The beneficiaries have been involved with responsibilities only in the project implementation phase, whereas community participation is a key factor for the success of the project, both for its implementation and for its ownership and sustainable impact

(Lavigne-Delville, 2005). The real participation can occur in situations where communities are given the chance to decide about what type of project they want, when they want it and how they want it (Prokopy, 2005). Thus, despite the co-financing of project activities by beneficiaries through the municipality of Banikoara, the project is still perceived by respondents as an intervention that did not take into account their development priorities/needs. Accordingly for authorities of the Municipality of Banikoara, the operational modus of the project is considerate (i) neither of the exertion of competences allotted to municipalities by the Benin decentralization legislation, (ii) nor the developmental dynamics of the municipality backing up their governance act. Usually the development projects often pass through the five interconnected phases of the project life cycle: needs assessment, conceptual designs and feasibility, action planning, implementation, and operation and maintenance. The involvement and active participation of the beneficiaries in the first three stages, which are needs assessment, project design and planning leading to the project sustainability (Aga et al., 2017)

5. Conclusion

The Banikoara Millennium Villages Project has generated visible achievements in terms of the socio-community infrastructure building, communities capacity building, organization of beneficiaries into groups, etc. In the agricultural sector, the study showed that the improvement of agricultural yields, the food storage warehouses construction and the facilitation of farmers' access to campaign credit have favored the implementation of warrantage, which have a substantial impact on the food security and livelihood of the population. Thus, the majority of project beneficiaries perceive that their current economic living conditions are better than before the project. While the non-beneficiary populations consider their economic living conditions to be poor. In this regard, the project's impacts are perceptible through agricultural production, food security and school facilities, with rising school attendance. These results contribute to addressing various Sustainable Development Goals (SDGs) in capital improvement/ poverty reduction (Goal 1), agriculture and income generating activities (Goal 2), health (Goal 3), education (goal 4) etc. Thus, the interconnected nature of the SDGs means that Banikoara Millennium Village Project model has relevance for those seeking to address extreme poverty by taking an integrated approach to sustainable development. However, these achievements cannot be maintained technically and financially by the communities because all the actions carried out are not in line with the socio-economic situation of the direct beneficiaries and their capacity to take ownership. Thus, the achievements of the project remain fragile for several reasons which are related to the behavior of the direct beneficiaries as well as the actors who led the implementation of the project. Then, community development projects or interventions should be built around community needs rather than political or individual needs. Finally, for future interventions, it will be necessary to place the local authorities (the mayor's office) at the heart of the project's needs assessment and implementation to ensure its institutionally anchored which is a potential guarantee of sustainability.

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