

Empowering women through vocational training: Evidence from rural areas affected by armed conflict in Mozambique

Empoderando as mulheres por meio da formação profissional: Evidências de áreas rurais afetadas por conflitos armados em Moçambique

Empoderar a las mujeres a través de la formación profesional: Evidencia de áreas rurales afectadas por el conflicto armado en Mozambique

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Abstract

In Mozambique, despite improvements in literacy and school enrolment rates over the recent decades, the gender disparity in terms of economic opportunity has not improved significantly among the younger cohort of the population. Most of the poor people live in rural areas affected by armed conflicts, where there are higher rates of illiteracy and infant mortality, limited access to energy, safe water and sanitation. In these rural communities, where employment options in the non-agricultural sector are extremely limited, vocational training opportunities for women is essential aspects for boosting job creation and generating new employment opportunities. Institutions of higher education, through university extension, can be driving forces of sustainable local development, based on interrelationship between the University and society and exchange of systematized/academic and popular knowledge. Thus, the aim of this study is to describe challenges and opportunities in conducting intensive training for economic empowering of young underprivileged girls in areas of armed conflict in Mozambique. Methodologically, transferring of knowledge took place by combining methods of course and practical demonstration. The findings of the study suggest that the effectiveness of the university extension process cannot be achieved by following the traditional teaching method, by which knowledge transfer is hierarchical - from teacher to student, but rather, using different teaching and learning methods, according to the needs and profile of the trainees. Also, making the timing and location of classes and training convenient for all women can help to ensure high rates of take-up a more harmonized work-family balance.

Keywords: Empowering women; Gender disparity; University extension; Vocational training.

Resumo

Em Moçambique, apesar das melhorias nas taxas de alfabetização e matrícula escolar nas últimas décadas, a disparidade de gênero em termos de oportunidade econômica não melhorou significativamente entre o grupo mais jovem da população. A maioria dos pobres vive em áreas rurais afetadas por conflitos armados, onde há taxas mais altas de analfabetismo e mortalidade infantil, acesso limitado a energia, água potável e saneamento. Nestas comunidades rurais, onde as opções de emprego no setor não-agrícola são extremamente limitadas, as oportunidades de formação profissional para mulheres são aspetos essenciais para impulsionar a criação de empregos e gerar novas oportunidades de emprego. As instituições de ensino superior, por meio da extensão universitária, podem ser motores do desenvolvimento local sustentável, baseado na inter-relação entre a Universidade e a sociedade e no intercâmbio de saberes sistematizados/acadêmicos e populares. Assim, o objetivo deste estudo é descrever desafios e oportunidades na condução de treinamento intensivo para empoderamento econômico de meninas carentes em áreas de conflito armado em Moçambique. Metodologicamente, a transferência de conhecimento ocorreu por meio da combinação de métodos de curso e demonstração prática. Os achados do estudo sugerem que a efetividade do processo de extensão universitária não pode ser alcançada seguindo o método tradicional de ensino, pelo qual a transferência de conhecimento é hierárquica - do professor para o aluno, mas sim, utilizando diferentes métodos de ensino e aprendizagem, de acordo com as

necessidades e perfil dos formandos. Além disso, tornar o horário e o local das aulas e do treinamento convenientes para todas as mulheres pode ajudar a garantir altas taxas de aceitação e um equilíbrio trabalho-família mais harmonizado.

Palavras-chave: Empoderamento das mulheres; Disparidade de gênero; Extensão universitária; Formação profissional.

Resumen

En Mozambique, a pesar de las mejoras en las tasas de alfabetización y matriculación escolar en las últimas décadas, la disparidad de género en términos de oportunidades económicas no ha mejorado significativamente entre la cohorte más joven de la población. La mayoría de los pobres vive en áreas rurales afectadas por conflictos armados, donde hay tasas más altas de analfabetismo y mortalidad infantil, acceso limitado a energía, agua potable y saneamiento. En estas comunidades rurales, donde las opciones de empleo en el sector no agrícola son extremadamente limitadas, las oportunidades de formación profesional para las mujeres son aspectos esenciales para impulsar la creación de empleo y generar nuevas oportunidades de empleo. Las instituciones de educación superior, a través de la extensión universitaria, pueden ser motores del desarrollo local sostenible, basado en la interrelación entre la Universidad y la sociedad y el intercambio de saberes sistematizados/académicos y populares. Por lo tanto, el objetivo de este estudio es describir los desafíos y oportunidades en la conducción de capacitación intensiva para el empoderamiento económico de niñas jóvenes desfavorecidas en áreas de conflicto armado en Mozambique. Metodológicamente, la transferencia de conocimiento se llevó a cabo combinando métodos de curso y demostración práctica. Los hallazgos del estudio sugieren que la efectividad del proceso de extensión universitaria no puede lograrse siguiendo el método de enseñanza tradicional, en el que la transferencia de conocimiento es jerárquica -de docente a alumno-, sino utilizando diferentes métodos de enseñanza y aprendizaje, de acuerdo con las necesidades. y perfil de los aprendices. Además, hacer que el horario y la ubicación de las clases y la capacitación sean convenientes para todas las mujeres puede ayudar a garantizar altas tasas de aceptación y un equilibrio más armonioso entre el trabajo y la familia.

Palabras clave: Empoderamiento de la mujer; Disparidad de género; Extensión universitaria; Entrenamiento vocacional.

1. Introduction

Historically, Mozambique is a dominantly rural settlement. The country with a long history of military and political instability faces ongoing economic and political uncertainty. Problems of political instability present the country with enormous challenges for educating students, growing the economy, and responding to community's needs. The country is ranked 185th out of 191 countries and territories in the 2021 UNDP Human Development Index, and 136th out of 191 countries in the UNDP Gender Inequality Index. Only 63% of the population is literate (World bank, 2021), with literacy rates characterized by large urban/rural and gender disparities. The overall literacy rate for adult women is 54% as compared with 74% for adult men (World bank, 2021). This situation is aggravated by Mozambique's high exposure to climate change that have become increasingly regular in recent years. On the other hand, the war exacerbated women's subjection and marginalization.

In Mozambique, while 94 percent of girls in Mozambique enroll in primary school, more than half drop out by the fifth grade, only 11 percent continue to study at the secondary level, and just 1 percent continue on to college (USAID, 2020). Though women comprise the bulk of the unskilled workforce, especially in agriculture (63%), their work is largely unremunerated, and they face many obstacles and discrimination because of strongly held beliefs about gender roles (Rosa et al., 2023; UNU-Wider, 2019).

In academia, many studies have been promoted toward sustainable agriculture; forest management (Chichango et al., 2023; Ganje et al., 2020); sustainable management of its other resources (Chichango & Cristóvão, 2021; Macanguisse et al., 2022, Chapanga et al., 2021, Khanlawia et al., 2022), and at the same time taking necessary measures to combat climate change (Pekka et al., 2022) as well as address the Human livelihoods and human security (Cristóvão & Massinga, 2020). However, there is a dearth of contributions by scholars on sustainable, inclusive and empowered rural communities and the role of knowledge as a change agent to address the Mozambican predicament in the globalizing world. Despite the effort of the Government, women continue to be underrepresented in Science, Technology, Engineering and Mathematics (STEM) fields.

Although the country has a good legislative and strategic framework to promote equal access for men/women to human capital development, the implementation of these have lagged and most key indicators show stagnation (World Bank, 2021).

Investing in decent job creation however, as well as in education and training opportunities for the underprivileged girls in areas of armed conflict, will contribute to more prosperous and stable society. The effects last for generations.

The Mozambican Institutions of Higher Education, through university extension, can be driving forces of sustainable local development, based on interrelationship between the university and society and exchange of systematized/academic and popular knowledge. Community-based non-formal education - in particular, programmes involving skills training for income generation - are considered vital in tackling the inter-related problems arising from poverty. Thus, Universities, as change facilitators, extensionists should then be concerned with the preparation of projects that are responsive to the needs and interests of rural communities.

To empower young girls in Sofala and Manica Provinces, a project known as "Women, Peace and Security", funded by the United Nations (UN - Women) and implemented by Local Economic Development Agency-Sofala in partnership of University Zambeze, trained 1300 marginalized and vulnerable girls. In this context, the aim of this study is to describe challenges and opportunities in conducting training for economic empowering of young underprivileged girls in areas of armed conflict in Mozambique.

2. Methodology

To meet the objectives, the authors use the describing and explaining research methods. The describing methods include scientific methods and procedures based on the teaching and learning process. In addition, to conduct explaining method, it is unavoidable using bibliography procedure to support in the elucidation.

According to Barros et al. (2013, p15), the teaching and learning methods for the rural university extension are elected by the educators themselves, extensional or researcher with certain skills according to the local scenario. The age range of beneficiaries required pedagogical and andragogic methodologies simultaneously. The technics conceptualized respectively as process of systematic reflection and production of knowledge in formal adult education through a horizontal, peer-to-peer relationship between the facilitator and beneficiaries, using the motivation and previous experience of each (Ramos et al., 2013, p. 13).

The methods can be classified and characterized as to the scope and structure; however, this classification is only in the didactic approach, in practice in the pedagogical process is used the combination of many different methods to achieve the objectives recommended (França, 1993). Thus, transferring of knowledge - took place by combining methods of course and practical demonstration.

Ramos et al. (2013) classifies course method as "Method that produces knowledge of a theoretical and practical nature, with specific programming, covering other didactic-pedagogical methods and resources, aiming at a group of people with common interests". According to the same author, the Course method is more effective when it is associated with other teaching methods, and when in a short time, there is need to build and rebuild knowledge, theoretical and practical information for a given homogeneous target group, in different areas of training.

Implementing Course method allowed the motivation of the beneficiaries to participate in the formation, through the dynamic of the groups of beneficiaries created and the incentive offered. Considering the sociocultural differences between the trainers and the beneficiaries, the Course method, combined with the Pedagogical and Andragogic methodologies were conducted in simultaneous in this process.

The use of teaching materials demonstration, in practical classes, is a technique frequently used in the Course method. This procedure, although it dominates most of the training time, presents results with a high level of satisfaction in a short period, for beneficiaries without /with less knowledge of previous concepts.

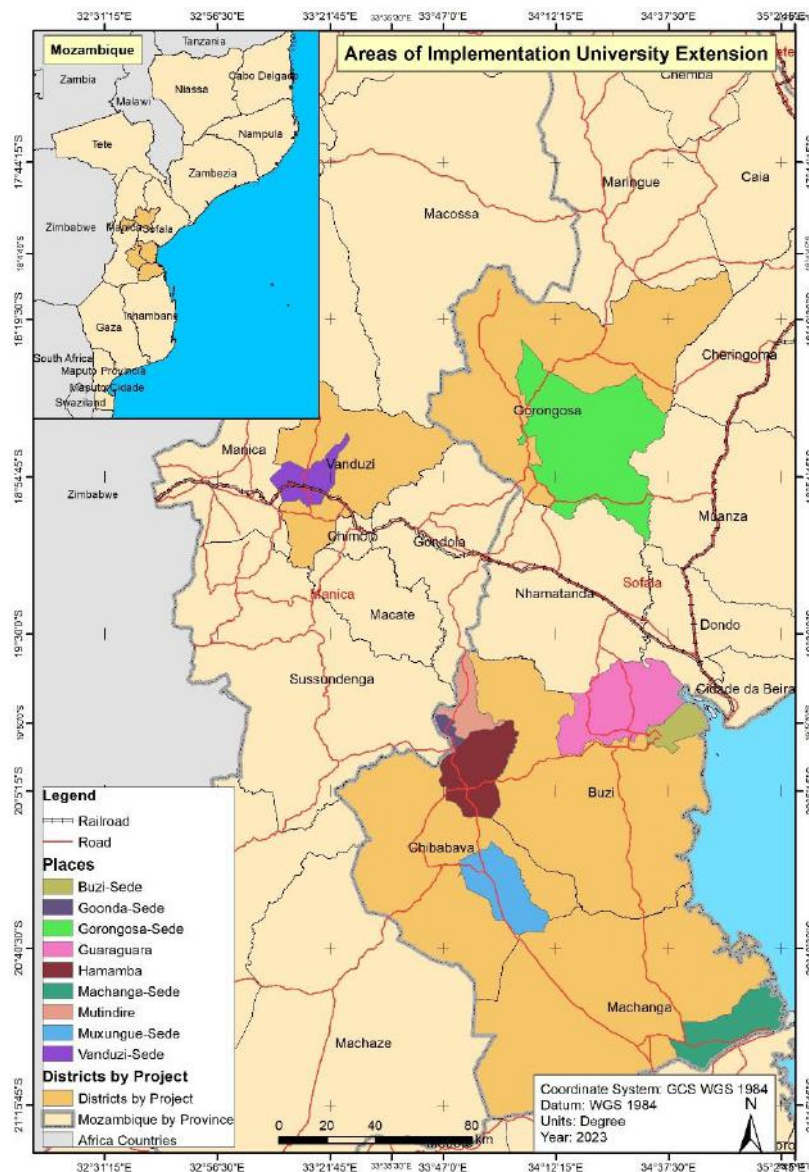
The using materials for the development of educational procedures, prevent the excessive repetition of procedures until

the consolidation of knowledge. The technique is used until, the beneficiaries individually or group, can get the skills, thus exercising the brain in what is considered a learning process of "learning to do, doing and understanding" (Ramos et al., 2013).

2.1 Local of Project Execution

The project "Woman Peace and Security" took place in two distinct stages; the first was between June and September 2021, in Manica, districts of Vanduzi, localities of Chiramera, Matsinhe and Bela. In this, 250 young girls aged 18 to 50 years completed the training in Civil construction, residential electrical installation, Cooking, Maintenance of Motorized, and hydraulic plumbing, see Figure 1.

Figure 1 - Local of Project Implementation.



Source: Authors.

The second stage took place in Sofala Province in districts namely: Gorongosa, Buzi, Machanga and Chibabava. Here, 1140 young girls aged 18 to 50 benefited from the project. In Table 1, it is illustrated the distribution of the course and the respective locations.

Table 1 - Distribution of courses by district.

District	Village	Course
Vanduzi (250 Beneficiaries)	Chiramera, Matsinhe and Bela	Civil Construction, Electrical installation, Motorcycle Mechanics Maintenance, Cooking, Electrical installation, and Hydraulic Plumbing
Chibabava (240 Beneficiaries)	Muxungue	Motorcycle Mechanics Maintenance
	Hamamba	Motorcycle Mechanics Maintenance and Electrical installation
	Mutindiri	Electrical Installation, Cooking, Cutting and Sewing
	Goonda	Cooking, Cutting and Sewing
Buzi (300 Beneficiaries)	Buzi	Hydraulic plumbing, Motorcycle Mechanics Maintenance, Cooking,
	Guara - Guara	Civil Construction, Electrical installation
Gorongosa (360 Beneficiaries)	Gorongosa	Civil Construction, Electrical installation, Motorcycle Mechanics Maintenance, Cutting and Sewing, Cooking, Electrical installation and Hydraulic Plumbing
Machanga (240 Beneficiaries)	Machanga	Motorcycle Mechanics Maintenance, Cooking, Cutting Sewing and Electrical Installation

Source: Authors.

2.2 Trainers involved in the program

The team working for training were 15 professionals of this number 8 teachers, 2 administrative technicians and 5 professional technicians selected in the places where the trainings took place. From ADEL Sofala team, a field coach and a representative linked to the District Women's Health and Social Action Services in each district were involved. There was also, in some cases, the intervention of a community leader or representative in the community to facilitate communication in the community. Students of UniZambeze were involved in the training.

2.3 Challenges and Opportunities

Regarding the observations that marked the authors' professional experience, was to trust and euphoria demonstrated by the beneficiaries. The manifestation of the desire to learn was shown by the seriousness, assiduity, and organization of the beneficiaries during the courses. However, there was a need, in some areas, for the creation of forms of motivation for the reduction of absenteeism in training.

Therefore, the motivation included the allocation of a daily allowance in value that covered the transport from home to the training site and another for breakfast. The amount was controlled by marking the daily attendances of the beneficiaries. The disbursed were made at the end of at least, two weeks or at the end of the training. This motivation, although costly, proved to be effective way to keep order in classes, in all the communities where the training took place.

The other method of motivation was the guarantee of attribution of self-employment kits to the beneficiaries at the end of the training, so that, they could start the activities for which they were trained as entrepreneurship. With this, the beneficiaries worked very hard to learn and it was possible to keep the classes with the equal number of the beneficiaries.

The uncertainties of the assimilation capacity of the thematic contents, planned for the beneficiaries, in short period, was one of the concerns of the team of trainers, because of the profile of the beneficiaries. Most of them had never attended a school, either because of the war or, even for sociocultural reasons adopted in the communities. The maximum level of education of the few literates was primary education. It was worse by the existence of 43 different local languages spoken in different locations of Mozambique (Pondja, 2021). This required an accurate strategy of communication methods.

To overcome communication difficulties, appropriate communication methods and techniques were implemented for each site. The technique reduced and harmonized the perception of the contents taught. The strategies consisted of the identification of a locality person, with capacity for persuasion and communication with the beneficiaries. However, the Socio-Interactionist method was more efficient, it takes account the values and the historical baggage of the trainees, allowing them to exchange the experience by working groups. Working in-group, in most time, there was always one that could translate or

interpret more clearly, the instructions emanated by the facilitators during the transfer of knowledge (BALARDIM, 2020).

The other strategy was the use of the Freirean method mentioned by Balardim, (2020), in this, the knowledge transfer is associate with the reality work. In this case, comparing the didactic material/equipment, with locally known instruments and, with a similar function, thus, it was possible to give the nickname using the local language, with the attention that, that was only method of communication for learning.

Another challenge was faced to transmit basic concepts. Some fundamentals of physics and chemistry, scientific names of equipment and instruments that were used in the courses of electricity, hydraulics, civil and motorcycle maintenance.

As known, the concepts and fundamentals constitute the basic elements for understanding the phenomena, such as for the electrical installation in a residence, there is a need for knowledge of electrical quantities and concepts of power transmission, in case of hydraulic plumbing, there is a need for knowledge bases of hydraulic principles, etc. Figure 2 illustrates a practice of maintenance of a hydraulic channeling circuit and electrical installation.

Figure 2 - Learning hydraulic installation and Electrical installation.



Source: Authors.

To overcome this challenge, it was necessary to select appropriate methods for interaction with the participants, such as the case of the Célestin Freinet method, which argues that real work stimulates learning. The demonstration of negative aspects resulting from the handling or wrong procedures served as examples of the need for faithful repetition of the procedures demonstrated by the facilitators.

2.4 Demonstration Field

The identification of places for training was strategical, to reconcile the theoretical classes with the practices. The places that took in the classes also served as demonstration units and benefited of maintenance intervention during the practices. The strategy saved financial resources that would be spent for excursions or demonstration field visits.

Many churches welcomed the project, since we were in the period of restrictions due to the pandemic (Covid19). The Figure 3 below, illustrates the maintenance of electrical installation in a church located in Matsinho (Manica) carried out by the beneficiaries during the training course of electrical installation and the assembly of water piping in the Hydraulic Plumbing Course.

Figure 3 - Electrical Installation Maintenance and Hydraulic Plumbing: Practical classes.



Source: Authors.

3. Results and Discussion

Since the training was aimed at young women and girls, it was notorious, in the first instance, some mistrust on the part of family members and communities of the beneficiaries, what explain the existence of higher level of stereotypes in communities. The communities of the country areas have a local structure known or not by the government, but its functions is to solve local conflicts, so that any intervention in the communities, there is a need to have monitoring of these local structures that are very reverent on the site.

The training took place in all planned locations; the budget foreseen for the implementation of these activities was disbursed in full by the funders. Of the trained number, more than 95% (1290 Beneficiary) reached the end of the course. Which is a satisfactory situation. The beneficiary received certificates of participation and self-employment kits. The remaining (5%) of the beneficiaries gave up, another party, did not show interest in the project or even, for the impediment of their relatives.

However, it was evident the attention that should be given before, during and at the end of any implementation of projects and outgoing activities in the communities. This precaution includes not altering the routine of communities, not interfering with cultural habits and especially intervention in any activity without first having the endorsement and company of local leaders in the communities.

Considering the profile of the beneficiaries, the Andragogic method, associated with the Frerian methodology (Paulo Freire's Method tested in 1960) and the Célestin Freinet method, were fundamental for the success of the training. They contributed to this occurrence. It is a fact that the beneficiaries were not literate, but they had a certain experience of life in the community, where they are inserted and with that, and by age, they knew very well what they wanted. By placing them with the real work experience, it was easily possible to stimulate learning, without, however, winding the theories of the concepts taught in the traditional teaching and learning method.

4. Final Considerations

The effectiveness of the university extension process cannot be achieved by following the traditional teaching method,

by which knowledge transfer is hierarchical - from teacher to student, but rather, using different teaching and learning methods, according to the needs and profile of the trainees.

Surprisingly, the beneficiaries, most part of districts, chose the areas of cooking and Cutting and Sewing, contrary to the government's effort for promoting, for social inclusion, women's education programs in Science, Technology, Engineering and Mathematics (STEM).

However, despite of the support obtained at this stage of the project implementation, there is a need to monitor the benefits in the process of implementing the activities of undertaken in their communities. Through support in effective business plans and boreoarctic, documentation processes if necessary.

The authors propose to study the sustainable, inclusive and empowered rural communities and the role of knowledge as a change agent to address the Mozambican predicament in the globalizing world.

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