


**CLIMATE CHANGE AND EDUCATIONAL POLICIES IN MOZAMBIQUE: A  
HISTORICAL PERSPECTIVE**

**MUDANÇAS CLIMÁTICAS E POLÍTICAS EDUCACIONAIS EM MOÇAMBIQUE:  
UMA PERSPETIVA HISTÓRICA**

**CAMBIO CLIMÁTICO Y POLÍTICAS EDUCATIVAS EN MOZAMBIQUE: UNA  
PERSPECTIVA HISTÓRICA**

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**ABSTRACT**

This article analyzes climate change and educational policies in Mozambique: A historical perspective. It is characterized as qualitative, exploratory research (Creswell; Plano Clark, 2013). The data sources used were data obtained by the researchers through visits and information consultations at the MINEDH (Mozambique) library, from February 28 to March 20, 2023. Furthermore, documents obtained from the INGD (National Institute of Education and Development) relating to the cyclonic periods between 1980 and 2022, from April 4 to May 2, 2023, were considered, in light of Arendtian theory and the concept of resilience. The results showed that, despite the systematic occurrence of climate change, educational policy, teacher training plans and programs, as well as the primary school curriculum and subjects, were not adequate to meet current needs. This is compounded by the problems related to a system characterized by fragility.

**Keywords:** Educational Policy. Primary Education. Climate Change. Mozambique.

**RESUMO**

Este artigo analisa as mudanças climáticas e políticas educacionais em Moçambique: Uma perspectiva histórica. Caracteriza-se como uma pesquisa qualitativa, de natureza exploratória (Creswell; Plano Clark, 2013). Adotam-se como fontes os dados obtidos pelos pesquisadores por meio de visitas e consultas a informações na biblioteca do MINEDH (Moçambique), no período de 28 de fevereiro a 20 de março de 2023. Além disso, foram considerados documentos obtidos junto ao INGD, referentes às épocas ciclônicas entre 1980 e 2022, no período de 4 de abril a 2 de maio de 2023, à luz da teoria Arendtiana e do conceito de resiliência. Os resultados evidenciaram que, apesar da ocorrência sistemática das mudanças climáticas, a política educacional, os planos e programas de formação de professores, bem como o currículo e as disciplinas do ensino primário, não foram adequados com o objetivo de responder às necessidades presentes. Somam-se a isso os problemas relacionados a um sistema caracterizado pela fragilidade.

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**Palavras-chave:** Política Educacional. Ensino Primário. Mudanças Climáticas. Moçambique.

## **RESUMEN**

Este artículo analiza el cambio climático y las políticas educativas en Mozambique: Una perspectiva histórica. Se caracteriza por ser una investigación cualitativa y exploratoria (Creswell; Plano Clark, 2013). Las fuentes de datos utilizadas fueron datos obtenidos por los investigadores a través de visitas y consultas de información en la biblioteca del MINEDH (Mozambique), del 28 de febrero al 20 de marzo de 2023. Además, se consideraron documentos obtenidos del INGD (Instituto Nacional de Educación y Desarrollo) relacionados con los períodos ciclónicos entre 1980 y 2022, del 4 de abril al 2 de mayo de 2023, a la luz de la teoría arendtiana y el concepto de resiliencia. Los resultados mostraron que, a pesar de la ocurrencia sistemática del cambio climático, la política educativa, los planes y programas de capacitación docente, así como el currículo y las asignaturas de la escuela primaria, no fueron adecuados para satisfacer las necesidades actuales. Esto se ve agravado por los problemas relacionados con un sistema caracterizado por la fragilidad.

**Palabras clave:** Política Educativa. Educación Primaria. Cambio Climático. Mozambique.

## 1 INTRODUCTION

The educational process in Mozambique comprises three major peculiar periods of its history and evolution: the period before the arrival of the Portuguese colonial regime (1498), known as the era of customary education; the period of colonial domination (1845-1974), in which education was under private and state management; and the post-independence period (from 1975 to the present).

The customary education model was characterized by initiation, rites, dogma, superstition, religion, magic, as well as tradition, in a context in which the individual was prepared to accept exploitation as a natural law and reproduce it in his age group, family, tribe, ethnicity, and race (Maputo, 1983). Between 1845 and 1974, Mozambique was under the Portuguese colonial regime, a period in which colonial education was marked by the existence of two teaching structures: a) for indigenous people; and b) for the white and assimilated population.

In the midst of these restrictions, teaching produced social stratification that served as a selection factor, establishing symmetry between religion and teaching, separation between theory and practice, in addition to reflecting the absence of adequate programs, course plans, books and manuals, the lack of adult education and the urban character of the school network (SNE, 1983).

Thus, the domination, social stratification, discrimination and exploitation of the Mozambican populations are not the result of a supposed lack of interest in liberating themselves, but rather of the obstacles imposed by the colonial regime, which included social stratification among peoples. When observing the context prior to the arrival of the Portuguese colonial regime in Mozambique, compared to the period of domination, it is noted that the colonial regime exercised total control over men, land and resources, including education, defining who should or should not have access to it. In this way, Arendt's theory allows us to understand how structural inequalities conditioned access to education.

Faced with this problem, a plurality of studies emerges at the national level that are dedicated to understanding this phenomenon from different perspectives and approaches of analysis (Souza, 2019; Vicente & Campos, 2021; Árabe et al., 2024; Mechiço, 2024). According to Árabe et al., (2024) these investigations directed their attention to analyzing the evolution of the education system in Mozambique: reforms, characteristics, constraints, and challenges. Having the assimilation policy, it provided a cultural and linguistic model, a model of civilization based on the use of Portuguese and the minimization of Bantu languages that

contributes to the privilege of the Portuguese language in education in Mozambique even today (Árabe et al., 2024).

Mechiço (2024) highlights that Mozambican education and schooling, thanks to nationalization (nationalization), were instruments for the construction and consolidation of a new society and the New Man. However, for Vicente & Campos, 2021, it is essential to develop an education capable of understanding the multiple dimensions, the complexity of Mozambican culture.

It is observed that, in this period, there was no interest in including environmental education content or themes in school curricula, even in the face of evidence of exploitation of natural resources throughout the national territory. Examples such as gold, ivory and the slave trade significantly favored the exploitation of the environment. This was because the impacts of climate variations in Mozambique were of smaller proportions and scale, that is, they were not frequent and did not cause damage as serious as those observed today.

However, with the proclamation of the independence of the Republic of Mozambique in 1975, the government of Mozambique understood that it should introduce, in the education sector, a new structure (reforms), which consisted of destroying and replacing capitalist models with democratic popular power and the standardization of a single educational system, controlled by the State and at the service of the people.

In this context, education programs have shifted from the ideology of class interests to the scientific ideology of the working class, of the worker-peasant alliance and the liberation of man instead of its exploitation. They aimed to create conditions for greater access to education for Mozambicans, to combat elitism and discrimination in education, to reject individualism, to intensify teacher training and retraining, to rescue the Mozambican personality and its culture, as well as to rebirth the new man, freed from obscurantism and superstition (MEC, 1983).

In this context, considering the successes of the efforts unleashed by the Mozambican people in the struggle for the liberation of the land and man under the colonial regime and, consequently, for the rescue of the management of public affairs, in particular education, in a context in which the country was already beginning to suffer the effects of climate change, the following question arises: what were the first actions or strategies (reforms) that the new administration introduced in the Mozambican education system, related to climate change?

Therefore, the purpose of this article is to describe the historical perspective of Mozambique's educational policies in the face of the climate crisis, focusing its analysis on

the reforms introduced in the National Education System between 1983 and 1991, through the following laws: Law No. 4/83, of March 23; Law No. 6/92, of May 6; and Law No. 18/2018, of December 28. Primary education subjects and their contents are also considered, as well as the *Basic Emergency Plan for the School* (Elaboration Guide), among others. From these sources, we aim to discuss the extent to which these instruments contribute to increasing resilience in the primary school curriculum in the face of the climate crisis in Mozambique. In this way, we appropriate the etymological principles of resilience and Arendt's theory.

## 2 METHODOLOGY

In this article, we assume the etymological principles of resilience, which represent interdisciplinary approaches whose purpose is to provide a set of tools aimed at strengthening the adaptive strategies of educational policies in the face of the climate crisis in Mozambique. In addition, these approaches seek to program strategic actions that aim to respond to the impacts caused by climate change and trigger preparation for facing future environmental disasters (Collen, 2019). In this sense, the ability to adapt is intrinsically inserted in the concept of resilience, as outlined by Folke (2006).

In this case, we also delimit Hannah Arendt's thought on *The Crisis in Education* as a theory, considering the context, the period and the place in which the author developed her reflections on the predominant education models at the time. The choice of Hannah Arendt's thought is justified by its topicality, since, according to Arendt (1957), it is a general crisis that befalls the modern world, affecting almost all areas of human life. This crisis manifests itself in different ways in different countries, spreading to different domains and taking various forms.

According to Arendt (1957), the scenario experienced in America and by other countries in the twentieth century was configured as a periodic crisis of education, associated with the revolutionary wave after the Second World War, the context of the concentration and extermination camps, and the deep malaise that, under the appearance of prosperity, spread throughout Europe after the end of the conflict. In this scenario, it becomes difficult to devote all the attention it deserves to education (Arendt, 1957).

Such a context has similarities with the current reality that characterizes the educational sector in Mozambique, where education has been defined and guided by merely political interests, with the greatest interference ever seen in the country's history since the proclamation of national independence. Education is commodified, selective, and there is the

presence of a stratification model that previously characterized educational systems during the period of colonial domination. Currently, education is shaped by world organizations such as the World Bank, UNESCO, the IMF, among other international agendas, forcing models that lead to the precipice and marginalization.

It is characterized as a qualitative research, of an exploratory nature (Creswell; Clark Plan, 2013). The data obtained by researchers through visits and consultations with information in the MINEDH library (Mozambique), from February 28 to March 20, 2023, are adopted as sources. However, due to the developments in data collection, there was a need to extend the work until December 2023. In addition, documents obtained from the INGD, referring to the cyclonic seasons between 1980 and 2022, in the period from April 4 to May 2, 2023, were considered.

From May 19 to June 15, 2023, we conducted a survey at the Complete Primary School of Machava "A", with the purpose of analyzing the primary education subjects in force and their respective contents. Information from Inde, collected between March 2023 and January 2024, was also considered, with the aim of obtaining data on the (in)resilience capacity of primary-level education policies in the face of the climate crisis in Mozambique.

In this process, the following were considered for analysis: a) the Introduction of the National Education System (1983-1991); b) the Reform of the National Education System (1992-2004); c) Law No. 6/92, of May 6; d) Law No. 18/2018, of December 28; e) the Curricular Plan for the Training Course for Teachers of the First Degree of Basic Education – 7th+3 course, of 2003; f) the Curriculum Plan for Teacher Training for Primary Education, of 2006; g) the Curricular Plan of the Primary Education Teacher Training Course, of 2012; h) the Curricular Plan of the Training Course for Primary Education Teachers and Adult Educators, of 2019; i) Basic Emergency Plan for the School (Elaboration Guide); j) the subjects of primary education and their contents.

This chapter analyzes the subjects offered in primary education, structured as follows: 1st grade, 2nd grade, 3rd grade, 4th grade, 5th grade and 6th grade. Each class has a specific set of subjects and contents, outlined as follows: 1st Class: Portuguese and Mathematics; 2nd Class: Portuguese and Mathematics; 3rd Class: Portuguese and Mathematics; 4th Class: Portuguese, Mathematics, Social Sciences and Natural Sciences; 5th Class: Portuguese, Mathematics, Social Sciences, Natural Sciences, Visual Education and Crafts; 6th Grade: Portuguese, Mathematics, Social Sciences, Natural Sciences, Visual Education and Crafts.

### 3 RESULTS

The current educational system is characterized by a lack of credibility, high rates of illiteracy in a large part of the population, recurrent errors in school books, accentuated corruption, lack of engagement, and the practice of automatic passages, that is, students are forced to move from school level to school without meeting basic learning conditions, under the pretext of the scarcity of vacancies for new admissions, if they fail. This system is also characterized by the almost total interference of the educational policies defined by the MDGs and the SDGs, without taking into account the contextual specificities of the country. As an example, Goal 2 of the MDGs, in force between 2000 and 2015, called for "universal schooling". At the end of this period, Goal 4 of the SDGs, in force from 2015 to 2030, proposes to ensure the "quality of education".

Although these objectives are not wrong, they are elaborated in contexts alien to the Mozambican reality and, consequently, become difficult or even impossible to fulfill. After all, how to achieve quality in education if the country still does not have the capacity to offer schooling for all at the national level? How to guarantee quality if the educational system is based on automatic tickets? How to achieve quality when part of the classes still take place outdoors, with children sitting on the floor, without desks, without adequate boards and with insufficiently trained teachers?

In addition, the system faces challenges such as non-payment of overtime remuneration, overcrowding of classrooms with more than 70 students for a single teacher, with reduced learning hours of between three and four hours a day. In this context, for Arendt (1957), the crisis forces us to return to the questions themselves and demands from us new or old answers, but, in any case, answers in the form of direct judgments.

In view of the numerous events that have been taking place in the world and that have impacted its dynamics and orientation, at the national level, the Government of Mozambique, in addition to implementing actions, programs, strategies and measures aimed at improving access to education for all and ensuring its quality, has developed different legal frameworks, among which the following stand out: a) Reforms in the National Education System, between 1983 and 1991, instituted by Law No. 4/83, of 23 March; b) Law No. 6/92, of 6 May; c) Law No. 18/2018, of December 28; d) primary education subjects and their contents; and e) Basic Emergency Plan for the School (Elaboration Guide).

Likewise, it has implemented actions aimed at mitigating and reducing the negative externalities generated by climate change since the 1980s, through the creation of the current

INGD, instituted by Article 10 of Law No. 10/2020, of August 24, based on the provisions of Article 1 of Resolution No. 30/2016, of October 31, of the Interministerial Commission for the Reform of Public Administration.

The attributions of the INGD, in the light of Article 4, are to coordinate: a) actions of prevention, mitigation, preparedness and response to disasters; b) management and response to emergencies; c) development of arid and semi-arid zones; d) post-disaster reconstruction; e) National Civil Protection Unit; f) process of prevention, mitigation, preparedness and response to the phenomena of risks and threats; and g) strengthening resilience and disaster risk management programs.

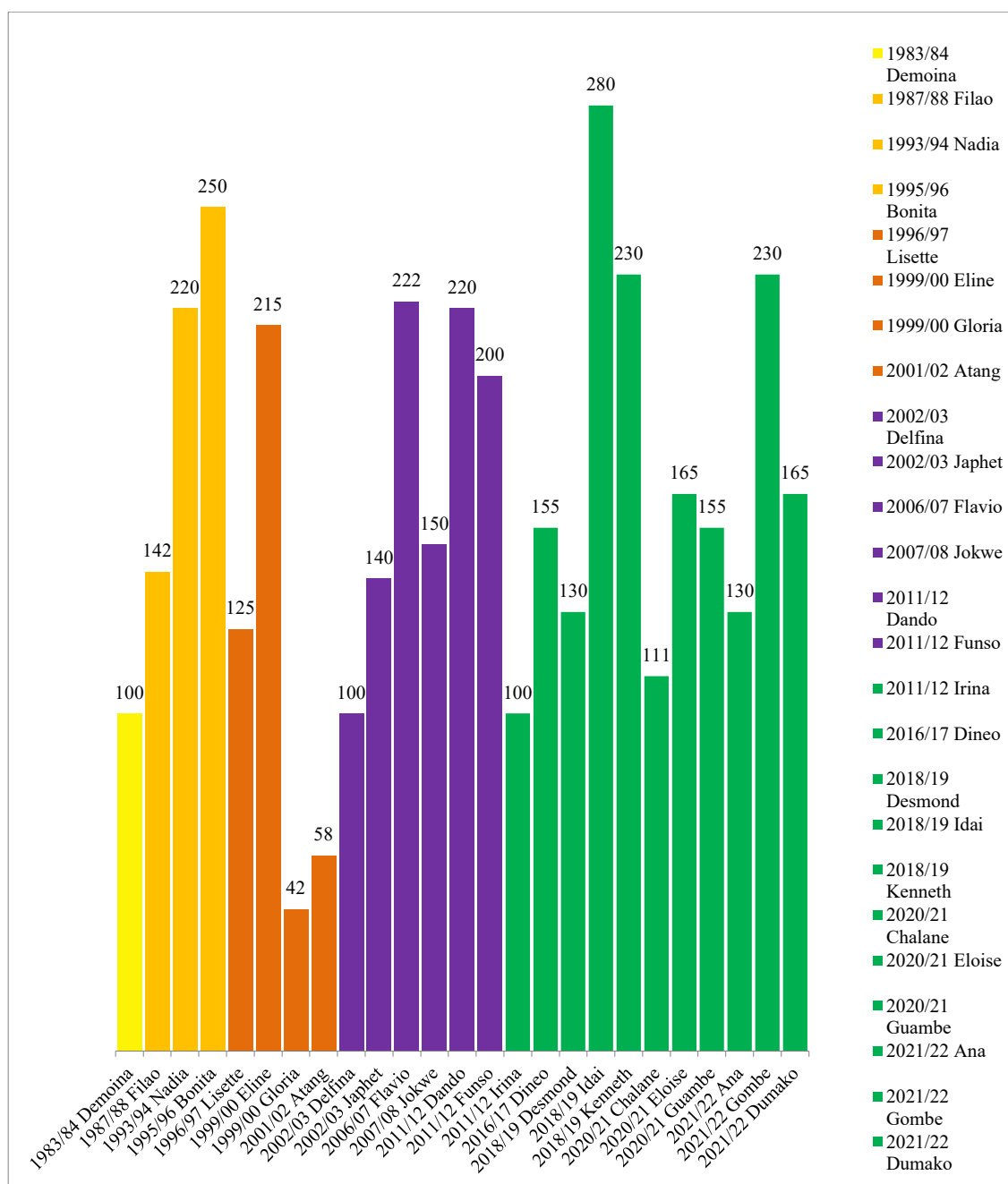
In this context, with the creation of the INGD, in light of Law No. 10/2020, of August 24, in addition to extreme events such as droughts, floods and floods, tropical cyclones began to be monitored in the national territory of Mozambique after the proclamation of independence, on June 25, 1975 (Mutote et al 2024).

It can be seen that, between 1983 and 2022, the INGD accounted for 26 tropical cyclones that affected the national territory, resulting in human and social damage, as shown in Figure 1. We highlight that this total does not include tropical cyclones Cheneso, recorded between January 17 and 29, 2023, in Nampula province; Freddy, from February 6 to 24 in Inhambane, and from March 2 to 14, 2023, in the provinces of Zambezia and Tete; Álvaro, from January 1 to 4, 2024, in the Nampula region; and Filipo, from 10 to 14 March 2024, in the provinces of Zambezia, Sofala, Inhambane, Gaza and Maputo City. With this, there are a total of 32 tropical cyclones in the period from 1980 to 2024.



**Figure 1**

*Cyclones that hit the coast of Mozambique between 1980-2022*



Source: INGD, 2023.

According to Figure 1, the number of tropical cyclones that occurred in Mozambique in the period between 1980 and 2022, without including other extreme phenomena, such as droughts, floods, floods, and earthquakes of lesser magnitude, highlights the fragility and vulnerability of educational policies, in particular. These events, in turn, translate into setbacks in terms of the implementation of public policies, such as the construction and maintenance

of schools, hospitals, bridges, housing, roads and other institutions, placing the country in a growing condition of underdevelopment. In addition, they lead to human losses, an increase in the number of orphaned children and people with disabilities.

Likewise, the current scenario has triggered problems that are already widely known, such as the insufficiency of adequate school infrastructures to accommodate all school-age children, as well as weaknesses in the current curriculum, especially with regard to content and approaches related to climate change. Another important action of the Government of Mozambique, in the context of climate mitigation, was the approval of Decree No. 78/2019, of September 19, which regulates the Dikes for Protection against Floods and Floods caused by the surface waters of rivers, as provided for in Article 75 of Law No. 16/91, of August 3.

## **4 DISCUSSION**

### **4.1 LAW NO. 4/83 OF MARCH 23**

The National Education System (SNE) is a process that contributes to the formation of a Mozambican with a patriotic conscience, scientifically qualified, professionally and technically qualified, and culturally free (Maputo, 1983).

In the light of Law No. 4/83, of March 23, 1983, the SNE aims to eradicate illiteracy, introduce compulsory schooling and train staff to meet the needs of economic, social, scientific, technological and cultural development (Maputo, 1983).

It was also necessary to establish paradigms with the aim of achieving quality training that could add value in terms of qualified labor. It was up to the government, through education, to free man from obscurantism and superstition, promoting critical thinking and developing actions aimed at national progress.

However, the country faced several constraints, such as: insufficient highly qualified labor, scarcity in the technical field and the setbacks resulting from a civil war that lasted for 16 years (1977-1992), generating negative externalities such as the murder of populations especially women and children, in addition to the destruction of infrastructures such as bridges, roads, hospitals, schools, industries and housing.

The SNE was weakened due to the high number of children who dropped out of school before completing their training and learning, in addition to the economic crisis that occurred between 1980 and 1983, which led to a shortage of basic necessities for the population. In the period between 1983 and 1991, the country recorded two tropical cyclones: Demoina (1983/84) and Filao (1987/88).

Law No. 6/92, of May 6, results from the need to readjust Law No. 4/83 in the face of new economic, social, pedagogical and organizational conditions, introducing reforms in the legislation. Law No. 4/83, in Article 14, establishes that the child can attend the 1st class when he turns 7 years old, while Law No. 6/92, in Article 5, allows enrollment in the 1st class for children who turn 6 years old. Article 4(a) of Law No. 4/83 of 23 March recommends the formation of citizens with solid political and ideological preparation, while Article 3(d) of Law No. 6/92 excludes political and ideological preparation, including only moral and patriotic preparation.

In paraFigure E of Law No. 4/83, the aim is to train the teacher as an educator and conscious professional, with deep political and ideological preparation in the values of socialist society. On the other hand, paraFigure e of Law No. 6/92 excludes political and ideological preparation, as well as the values of socialist society. SubparaFigure g of Law No. 4/83 aims to disseminate, through teaching, the use of the Portuguese language, contributing to the consolidation of national unity, which was not included in Law No. 6/92. Meanwhile, paraFigure i of Law No. 4/83 proposes to make educational institutions revolutionary bases for the consolidation of popular power, deeply inserted in the community, and this proposal is excluded in Law No. 6/92.

On the other hand, Law No. 18/2018, of December 28, resulting from the reformulation of Law No. 6/92 of the SNE, advocates in its general principles, in Article 3: a) a balanced and inclusive education; b) values of peace, dialogue, family and the environment; c) the right to fair and effective equality of opportunities in the access and academic success of citizens; sustainable development; respect for human rights; a spirit of tolerance, solidarity and respect for others and differences; d) inclusion; and f) secularism and non-partisanship of the SNE.

Both Article 14 of Law No. 4/83 and Article 11 of Law No. 6/92 comprise primary education up to the seventh grade, attended, in principle, by children from 7 to 14 years of age, divided into two grades: a) 1st Grade, from the 1st to the 5th grades; b) 2nd Degree, from 6th to 7th class. Meanwhile, Law No. 18/2018, in its Article 11, presents a new configuration for primary education: a) 1st cycle, from the 1st to the 3rd grades; b) 2nd cycle, from 4th to 6th grades. Another important element of Law No. 18/2018 is the introduction of monolingual modalities, in an official language, and bilingual, in a national language, including sign language and the official language.

According to Árabe et al. (2024), the reformulation of the SNE by Law No. 6/92 aimed to build an education based on a new project, whose foundation was marked in neoliberal

and capitalist ideology, with roots in the market economy. Thus, Law No. 6/92 also allowed the relationship with other community entities and cooperatives, as well as international organizations, especially the IMF and the World Bank, in the educational process (Árabe et al., 2024).

Thus, one of the relevant aspects to be considered in Law No. 6/92 lies in the inclusion of adult education and the urban character of the school network, which did not exist in the educational structure of the Portuguese colonial regime. Law No. 6/92 is materialized in practice by the Curricular Plan for Primary Education (PCEP), which is a guiding instrument used to train students, providing them with knowledge, skills and attitudes indispensable for their insertion in society.

In turn, the PCEP advocates seven-class primary education and adult literacy as priorities, corresponding to the Basic Education that the Government sought to offer to each citizen, in the light of the Constitution of the Republic of Mozambique. In the period between 1992 and 2017, the country recorded 14 tropical cyclones: Nadia (1993/94), Bonita (1995/96), Lisette (1996/97), Eline (1999/00), Gloria (1999/00), Atang (2001/02), Delfina (2002/03), Japhet (2002/03), Flávio (2006/07), Jokwe (2007/08), Dando (2011/12), Funso (2011/12), Irina (2011/12) and Dineo (2016/17), respectively.

#### 4.2 LAW NO. 18/2018 OF DECEMBER 28

Law No. 18/2018 arises as a result of the reformulation of the curriculum introduced in 2004, in light of Law No. 6/92 of the SNE. In this context, Law No. 18/2018 defines Primary Education as the level of education that aims to: a) provide initial training in the areas of communication, social sciences, natural sciences, mathematics, physical education, aesthetics and culture; and b) develop socially relevant knowledge, basic techniques and skills for manual work, as well as attitudes and convictions that provide greater social participation and entry into productive life.

According to the SNE, Law No. 18/2018 extends Basic Education to nine classes and confers fundamental skills to children, young people and adults for the exercise of citizenship, providing them with general knowledge about the world around them and the means to progress in work and lifelong learning. One of the positive aspects incorporated by Law No. 18/2018 is the introduction of the Local Curriculum in the primary school curriculum.

The local curriculum incorporates diverse subjects relevant to the local community (school, district or province), with 20% of the content identified and planned at the local level.

The objectives of Law No. 18/2018 include: developing local knowledge in students, providing them with knowledge, skills, values and attitudes that allow them to fully participate in the social, cultural and economic development of their community; and to train citizens capable of contributing to the improvement of their lives, their families and the community, based on the appreciation of the local knowledge of the community where the school is located. This law underpins the curriculum currently in force in primary education.

In the period between 2018 and 2024, the country recorded 15 tropical cyclones that hit the national territory, causing significant damage to the education sector. Examples of some negative externalities caused by some cyclones: Tropical cyclone Dinêo, 2016/17, affected 16,274 students and 53 classrooms in Inhambane province. Tropical cyclone Idai, 2018/19, affected 382,717 students, 9,614 teachers and 3,503 classrooms in the provinces of Zambezia, Tete, Manica, Sofala and Inhambane. Tropical Cyclone Kenneth, 2018/19, affected 41,694 students, 897 teachers and 152 schools in the provinces of Nampula and Cabo Delgado. Tropical Cyclone Chalane, 2020/21, affected 75 schools, 170 classrooms and 30 teachers' homes in the provinces of Sofala, Manica and Zambezia. Tropical Cyclone Gombe, 2021/22, affected 801 schools, 216,313 students and 4,429 teachers in the provinces of Nampula and Zambezia. Tropical cyclone Ana, 2021/22, affected 981 schools, 26,702 students and 4,866 teachers in the provinces of Cabo Delgado, Nampula, Tete, Zambezia, Manica and Sofala. Tropical cyclone Freddy, 2023/24, affected 2,419 schools, 7,468 classrooms, 853,271 students and 14,135 teachers in the provinces of Inhambane, Niassa, Nampula, Sofala, Zambezia, Manica and Tete.

#### 4.3 CURRICULA FOR PRIMARY SCHOOL TEACHER TRAINING COURSES

The curriculum for teacher training is an instrument that has been adjusted and adapted according to the needs and objectives that are intended to be achieved. In recent years, the teacher training process has been preceded by a public notice regarding the entrance exams, with the aim of selecting the applications that will later receive training in the training courses for primary school teachers and youth and adult educators.

This process is preceded by a mapping carried out by MINEDH, with the existing institutes at the national level, in order to assess the number of vacancies and the physical space available in each institute, to later quantify the number of vacancies to be offered in the notice.

Thus, the number of vacancies made available in the MINEDH notice reflects the total number of vacancies in each institute at the national level, with 50% destined to internal trainees and 50% to external trainees. This means that the total number of vacancies is defined based on the availability of classrooms and the existing space in the dormitories. Due to the growing demand, at a national level, by trainees who wish to attend the teacher training course, the Ministry of Education and Human Development found it necessary to introduce two training modalities: internal and external trainees.

Internal trainees are considered to be all those who receive training and reside on the premises of the institute; External trainees, on the other hand, are those who travel to the Institute to receive training and, later, return to their homes of origin. After mapping the availability of vacancies in classrooms and dormitories, MINEDH will publish the admission notice, which covers all institutes at the national level.

Example of the notice referring to the entrance exams in the training course for primary teachers and youth and adult educators for the 2025 school year observed the following structure: a) indication of the days, month and year in which the exams will take place; b) duration of the training; c) All candidates who have successfully completed the 12th grade of the SNE, with an overall average equal to or greater than 12 points, are considered eligible; d) be at least 17 years old and no older than 27 years old, to be completed by December 31, 2024; e) at the time of registration, candidates must deliver one (1) passport-size photo and present, cumulatively: f) registration form, duly completed, to be provided by the teacher training institution; g) Certified photocopy of identity card, passport, driving license or voter card; h) certified photocopy of the 12th class certificate of the SNE; i) proof of payment of the registration fee and examination fee; j) subjects (Portuguese and mathematics) to be taught; k) Candidates who have obtained, in each of the exam subjects (Portuguese Language and Mathematics), a grade equal to or greater than twelve (12) points will be admitted to the interview; l) period of the interviews; m) Selection of candidates; and n) duties of the candidates.

The notice will show how vacancies are distributed by province, number of institutes existing at national level, availability of internal and external vacancies, and the respective quantities depending on the number of candidates by gender. From 2024 until the preparation of this study, all previous courses were abolished, maintaining only the 12th grade + 3 years model, which is equivalent to the bachelor's degree.

In general, teacher training exams are held in the institutes themselves. However, due to the high demand from candidates, institutes are forced to use other establishments to accommodate all candidates registered for the examinations. The exam process is supervised by teachers and other technicians. Once the entrance exams are completed, candidates wait for the results to be released and then undergo interviews as part of the evaluation of the process.

The interviews cover content from Mathematics, Portuguese, Social Sciences, Mozambican Languages and General Culture. Usually, the trainers who conduct the interviews are the same ones who teach in their respective areas of knowledge. After participating in the interviews, the candidates are waiting for the results to be announced. The criterion for defining the final grade consists of joining the average of the written exams with the average of the interview, which results in the candidate's final grade. The calculation follows the criterion of the highest score, respecting the availability of existing vacancies.

The qualified trainees, before the start of classes, go through a period of socialization in which they participate in cleaning activities aimed at keeping the institute grounds clean. During this period, the institute observes the behavior of each graduate and their degree of interest. It is also at this time that the trainees have the opportunity to choose whether or not they want to live in the boarding school, with a view to giving priority to those who really need it.

One of the criteria that defines the permanence of trainees in the internship is related to origin, gender, age, socioeconomic conditions, among other factors. The enrollment process follows and the training begins. Before the start of the training, a meeting is held in all institutes with the directors of each institution (directors, assistants, teachers and technical-administrative staff), in which the internal regulations and the regulations for the evaluation of the trainees are presented.

These instruments are guiding and establish what trainees should or should not do during the training period. In the classroom, trainees are subjected to a diagnostic test, which aims to determine the degree of general knowledge that each one has so far. It is also at this moment that the regulations of evaluations, the regulations of the internship and the general regulations of the Institute for Teacher Training are represented.

Thus, the study focused on the analysis of the following curricular plans of teacher training courses for primary education: a) curricular plan for the teacher training course of the first degree of basic education (course 7th+3) of 2003; b) Curriculum Plan for Teacher

Training for Primary Education of 2006; c) Curriculum Plan of the Teacher Training Course for Primary Education in 2012; and d) Curriculum Plan of the 2019 Teacher Training Course for Primary Education and Adult Educators.

These curricular plans were analyzed in terms of their structure, content and pedagogical approach, aiming to understand their contributions to the training of primary school teachers. Primary school teacher training plans are considered work tools that aim to guide daily activity in the noble mission of training and educating future teachers (Moçambique, 2006).

The introduction of primary school teacher training plans, as well as the implementation of the National Education System in Mozambique, was a process that took place after the proclamation of national independence in 1975. Since then, at the time of writing, the government of Mozambique has implemented several programs and reforms in the education sector, through MINEDH. One of these programs is teacher training instruments.

At that time, in order to meet these and other needs, the Mozambican government was forced to create the Primary Teacher Training Centers (CFPPs) to address the shortage of teachers caused by the massive increase in students and the departure of teachers, most of whom were foreigners (Inde, 2003).

Thus, the 1980s were marked by socioeconomic changes that culminated in the introduction of the economic and social readjustment program. In the political context, it stood out for the implementation of the multiparty system, established by the Constitution of the Republic of 1990 (Inde, 2003).

#### 4.4 CURRICULUM PLAN FOR THE TEACHER TRAINING COURSE OF THE FIRST GRADE OF BASIC EDUCATION - COURSE 7+3, 2003

According to Inde (2003), the 6th/7th+3 curriculum, predecessor to the current one, was adopted in the early 1980s for the training of teachers for Primary Education 1 (EP1) of the SNE, introduced in 1983. The curricular plan for the 2003 primary school teacher training course, course 7th+3, as described by Inde and the current MINEDH, sought to meet three fundamental objectives: political-ideological training, academic training and professional training (Inde, 2003).

The 2003 curriculum was composed of curricular areas and subjects totaling 2,711 teaching hours, of which approximately 947 hours (35%) were for general training and 1,764



hours (65%) for vocational training. In the first and second years, general training represented 35%, while vocational training that included internships in the first two trimesters at Primary School, in the third year, and pedagogical days at the CFPP - corresponded to 65% (INDE, 2003).

This training instrument presents general training disciplines that include: a) in the 1st cycle, which comprises the 1st and 2nd grades, the subjects of Portuguese Language, Mathematics, Visual Education, Physical Education and Music Education are included; b) in the 2nd cycle, which covers the 3rd, 4th and 5th grades, the subjects of Natural Sciences and Social Sciences are introduced. Vocational training also incorporates components such as Educational Sciences, School Organization and Administration, Pedagogical Practices (pedagogical days) and Internship.

#### 4.5 TEACHER TRAINING CURRICULUM PLAN FOR PRIMARY EDUCATION – 2006

This plan is structured as follows: justification, general principles, training objectives, graduate profile, study plan, course objectives, methodological guidelines for training and evaluation. The Teacher Training Curriculum Plan for Primary Education aims mainly to meet the requirements of the new Primary Education Curriculum, especially with regard to the expansion of the school network and the improvement of the quality of education. Its objective is to quickly train teachers with adequate professional preparation to successfully face the challenge of educating Mozambicans (Maputo, 2006).

As for the general principles, teacher training is based on the pedagogical principles established in Article 2 of Law No. 6/92, of the SNE, of May 6, 1992, which advocate: a) the development of skills and personality in a harmonious, balanced and constant way, providing comprehensive training; b) the development of creative initiative, the capacity for individual study and the critical assimilation of knowledge; c) the connection between theory and practice, expressed in the content and teaching method of the various disciplines, in the polytechnic character of the education offered and in the interaction between the school and the community; d) the articulation of study with socially useful productive work, as a way of applying scientific knowledge to production and participating in the effort of economic and social development of the country; e) the close relationship between the school and the community, in which the school actively participates in promoting the socioeconomic and cultural development of the community and receives from the community the necessary

guidance to carry out teaching and training that respond to the requirements of national development.

Thus, according to these principles, teacher training for basic education is based on the articulation between theory and practice, in an integrated perspective, on the transfer of knowledge, attitudes and skills for future professional practice, and on the valorization of innovation and research (Mozambique, 2006). Regarding the study plan, it provides for intensive training, with classes taking place in two shifts: the weekly workload will be 36 periods of 50 minutes each, totaling, at the end of the course, approximately 1,440 periods, which is equivalent to 1,200 hours.

As described in the Curriculum Plan for Teacher Training for Primary Education (Maputo, 2006), it is established that the following cross-cutting themes must be addressed: a) education in values, human rights, gender and democracy; b) sexual and reproductive health (STI, HIV/AIDS); c) school health (first aid, most common contagious diseases at school age, prevention of major diseases, nutrition, prevention of drug and alcohol consumption); d) environmental education; and e) introduction to computer science.

#### 4.6 CURRICULUM PLAN OF THE PRIMARY SCHOOL TEACHER TRAINING COURSE - 2012

According to Inde (2012), the transversal themes are defined in the Curriculum Plan of the Teacher Training Course, based on the Primary Education curriculum. During the training, students will be involved in concrete situations that use participatory strategies, oriented towards the development of children's critical thinking and self-esteem (Inde, 2012).

In this curricular plan, the following cross-cutting themes were defined, to be addressed in all modules: a) education for citizenship (rights and duties of the citizen, human rights, children's rights, culture of peace and democracy, patriotic education); b) gender and equity; c) sexual and reproductive health (SRH, STI, HIV, Aids) and life skills; d) school health and nutrition (first aid, disease prevention, nutrition, prevention of drug and alcohol consumption); e) road safety; and f) environmental education (preservation, sustainable use of natural resources, and prevention of natural disasters).

#### 4.7 CURRICULUM PLAN OF THE TRAINING COURSE FOR PRIMARY SCHOOL TEACHERS AND ADULT EDUCATORS – 2019

The Strategic Plan for Education (2011-2016) recommends, among its priorities, the reformulation of the training course for primary school teachers and adult educators, with the objective of training competent professionals both scientifically and pedagogically. These professionals must be committed to the promotion and integrated development of skills and attitudes that enable the application of knowledge in various situations (Inde, 2019).

This plan is supported by Law No. 18/2018, of December 28, which defines Primary Education as the level of education with the following objectives: a) to provide initial training in the areas of Communication, Social Sciences, Natural Sciences, Mathematics, Physical Education, Aesthetics and Culture; and b) develop socially relevant knowledge, basic techniques and manual labor skills, as well as attitudes and convictions that promote greater social participation and facilitate entry into productive life (Inde, 2019).

Thus, the disciplines that make up Primary Education are organized into three areas of knowledge, namely: a) communication and social sciences; b) natural sciences and mathematics; and c) practical and technological activities.<sup>4</sup>

In this Curricular Plan, the following transversal themes were defined, to be addressed in all disciplines: a) education for citizenship (rights and duties of the citizen, human rights, children's rights, culture of peace and democracy, patriotic education); b) gender and equity; c) sexual and reproductive health (SRH, STI, HIV, Aids) and life skills; d) school nutrition and health (first aid, disease prevention, nutrition, prevention of drug and alcohol consumption); e) road safety; f) environmental education (preservation, sustainable use of natural resources and prevention of natural disasters); and g) tax and financial education.

Considering the vulnerability of Mozambique's geographical location, associated with the damage generated annually by extreme events, such as floods, floods and tropical cyclones in the education sector, it identified a slight evolution in the incorporation of environmental education themes in the curricular plans for the training of primary school teachers.

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<sup>4</sup> According to Inde (2019), the Primary Education Curriculum Plan establishes that this education subsystem is composed of two cycles: a) I cycle, from 1st to 3rd grade; and b) II cycle, from 4th to 6th grade. The fulfillment of this objective implies the adoption of a new paradigm in the training of primary school teachers and adult educators, which responds to the challenges of promoting quality and inclusive teaching, through integrative and student-centered approaches. In this process, the teacher assumes the role of organizer and mediator of teaching and learning. With the reformulation of the Curriculum for the Training of Primary Education Teachers and adult educators, this plan defines cross-cutting themes as a set of issues that concern society and that, by their nature, go beyond the limits of a specific discipline (Inde, 2019).

We conclude that all the curricular plans for teacher training, namely: the Curricular Plan for the Teacher Training Course of the First Degree of Basic Education – 7th+3 course, of 2003; the Curricular Plan for Teacher Training for Primary Education, of 2006; the Curricular Plan of the Primary Education Teacher Training Course, of 2012; and the Curricular Plan of the Training Course for Primary Education Teachers and Adult Educators, of 2019, address topics on environmental education as transversal contents.

This chapter recognizes that the inclusion of themes related to environmental education in the Primary Education Teacher Training Plans does not guarantee the use and practical applicability of these contents in the classroom. Therefore, it proposes the need to continuously train, train and train teachers on issues related to environmental education, climate change and natural disasters.

In addition, we understand the urgency of reforming education policy, promoting continuous teacher training, and including topics on climate change and natural disasters as mandatory content in the school curriculum. This involves reviewing the subjects in the curriculum and ultimately developing an environmental culture in communities.

Throughout this chapter we have observed that the themes of environmental education in the Primary Education Teacher Training Plans do not fully meet current expectations, as they are more aligned with political programs and initiatives of international organizations related to the SDGs, among other agendas.

#### 4.8 PRIMARY EDUCATION DISCIPLINES AND THEIR CONTENTS

In view of the various damages caused by climate change in Mozambique in the last 33 years, the following question arises: what content related to climate change (environmental education) is included in primary school subjects and contributes to increasing the resilience of students? To answer this question, we prepared Chart 2, which presents the list of primary school subjects that contain content on environmental education.

Of all these textbooks, we identified that only those of Portuguese, Social Sciences and Natural Sciences have some content related to the theme. In addition, in the 6th grade, no discipline indicated the study on environmental education, as indicated in Chart 2.

**Table 1**

*Primary School Classes, Names of Subjects and Subjects with Subjects on Environmental Education<sup>5</sup>*

Primary school classes	Disciplines	Disciplines with subjects on environmental education
1st Class	Portuguese	Care to be taken with the environment; evaluative adjectives; expressions to assess temperature, colors, domestic animals; importance of domestic animals; Wildlife; animal sounds; plants, care to be taken with plants; types of fruits and tree/fruit ratio; Flavors; water; clean water and dirty water; utility of water. Reading and writing of letters, k, w, y; punctuation; period (.) comma (,); question mark (?); accentuation: tilde (~).
2nd Class	Portuguese	Elements of the environment; reading and writing of <b>ch</b> ; reading and writing of <b>nh</b> ; reading and writing of <b>ar, er, ir, or</b> , your; <b>conservation of the environment; reading and writing of lh; domestic animals; onomatopoeia, indefinite articles; reading and writing of ce, ci;</b> reading and writing of <b>ç</b> ; wild animals; Reading and writing of <b>A-Z, EZ, IZ, OZ, UZ</b> ; fable.
3rd Class	Portuguese	Animal marriage; animals; farm animals; cross-cutting theme (domestic and wild animals); the environment in which we live; verbs to give and to do; proper names and common names; cross-cutting theme (plan visit to Manjacaze; sentence forms, affirmative and negative; state of the weather direct conversation; expressions about the state of time; verb to be; indefinite pronouns; union makes strength; comics; inflection of nouns, gender and number; the fable of the fox and the rooster; cross-cutting theme, accident prevention); formative assessment.
4th Class	Portuguese	Beloved homeland; homeland (synonyms and antonyms, consolidation); cross-cutting theme (national symbols: flags and emblem, irregular verbs); thank you, Lilita!, Elements of the narrative, punctuation marks and writing aids (recalls); rain, poetic text; cross-cutting theme (animals and their importance, domestic animals, collective names); cross-cutting theme (animals and their importance, wild animals, adverbs of place); cross-cutting theme (plants and their importance, family of words-recalls); cross-cutting theme (form of conservation and treatment and treatment of water, verb tenses; past perfect, present and future, didactic text); formative assessment.

<sup>5</sup>The period in which we visited the Complete Primary School of Machava "A", we did not have access to the natural sciences book of the 6th grade .

	Social sciences	Factors contributing to environmental degradation; importance of conservation and preservation of the environment.
	Natural Sciences	Individual and collective hygiene habits; ways of conserving the environment; care to be taken with garbage.
<b>5th Class</b>	Portuguese	The tree; cross-cutting theme (preservation of the environment); poster; preserves the environment; definite and indefinite articles; the bat's anger; narrative text; adjective (inflection in gender, number and degree); Masu, the unfortunate fish; the boy and the tree; formative assessment.
	Social sciences	Forms of representation of the land; cardinal points (north, south, east, and west); the location of a point on the earth's surface; time measurements; time counting; geographical location of Mozambique; physical geographical characteristics of Mozambique and their importance; preservation of the environment.
	Natural Sciences	Hygiene and environment; factors associated with the production and accumulation of garbage in the community; types of garbage; ways of separating household waste; diseases associated with garbage; cholera; mode of transmission; Prevention measures; diarrheal diseases; modes of transmission.
<b>6th Class</b>	No Discipline	No material

Source: Prepared by the author.

The construction of Chart 1 followed three stages. In the first stage, the mapping of all textbooks that make up the primary cycle (1st to 6th grade) was carried out. In the second stage, the pages of each subject and class were checked. The 1st class consists of two subjects, totaling 176 pages of Portuguese and 140 pages of Mathematics. The 2nd class also has two subjects, with 168 pages of Portuguese and 119 pages of Mathematics. The 3rd class includes two subjects, with 144 pages of Portuguese and 193 pages of Mathematics. In the 4th grade, the Portuguese book contains 152 pages, the Mathematics 127 pages, Social Sciences 136 pages and Natural Sciences 144 pages. The 5th grade comprises five subjects: 140 pages of Portuguese, 167 of Mathematics, 128 of Social Sciences, 175 of Natural Sciences and 83 of Visual Education and Craft. The 6th grade consists of 144 pages of Portuguese, 175 of Mathematics, 105 of Social Sciences, 112 of Visual Education and Craft and 112 of Natural Sciences.

The third step consisted of checking all pages that contain content about the environment, climate change, natural disasters and the way they are addressed. Thus, in the

1st grade, we identified that pages 152 to 163 of the Portuguese discipline deal with the care to be taken with the environment, content that is also present in the same discipline of the 2nd grade (pages 79 to 88), the 3rd grade (pages 87 to 106), the 4th grade (pages 75 to 97) and the 5th grade (pages 60 to 72). In addition, in the teaching materials of the 4th grade, pages were found about the teaching of the theme in the disciplines of Social Sciences (pages 118 to 121) and Natural Sciences (pages 65 to 71). In the 5th grade, the Social Sciences discipline indicated the presence of the theme on pages 60 to 72. According to Chart 1, these themes involve the care of forests and ways of representing the Earth, hygiene and the environment.

#### 4.9 BASIC EMERGENCY PLAN FOR THE SCHOOL

In view of the current situation recorded in the world and in Mozambique, in particular, MINEDH (2018), understanding that disasters represent enormous setbacks in the socioeconomic gains achieved and, above all, cause economic, social, political and even cultural difficulties such as the loss of infrastructure and the interruption of social services essential to the lives of populations, including the denial of the right to education, introduced, in coordination with partners such as INGD, Unicef and UN-Habitat, the Basic Emergency Plan for School in 2018.

This plan serves as a guide for its preparation and has the following objectives: to operationalize systematic disaster management through the creation and training of school committees for the management of functional calamities, in addition to the preparation of a basic plan for the school; ensure the safety of students, teachers and other employees; ensure the protection of school infrastructures and assets; identify basic measures for adaptation, prevention, mitigation, preparedness and response to emergencies at the school level; and build the capacity of school communities, especially school disaster management committees (MINEDH, 2018).

The Basic School Emergency Plan also considers the need for the School Committee for Disaster Risk Management (CEGRC) to work in conjunction with the Local Disaster Risk Management Committees (CLGRCs), implemented in the communities by the INGD and other local disaster management structures and bodies (MINEDH, 2018). This plan includes: a) Basic Emergency Plan for the School; b) Analysis and mapping of school risk; c) Alert systems and the Basic Emergency Plan for the School; and d) Monitoring and evaluation of the Basic Emergency Plan for the School.

In the analysis and mapping of school risk, aspects such as threat, vulnerability and risk are included. The threat indicates which natural phenomena or those resulting from human action can affect the school community and children, and this analysis can be presented through a matrix or map, based on the school premises and its surroundings. Vulnerability makes it possible to know the location or insertion of the school in the community, the weak points of school infrastructures, their equipment and the school community, as well as possible damages and losses.

#### 4.10 SCALES OF OTHER NATURAL HAZARDS

The disaster risk management measures related to the activation and deactivation of the Basic Emergency Plan for the School provide that the activation, in a given school, can be done by the INGD or by the school principal. Deactivation, in turn, can occur through the declaration of orange and red alerts by the INGD, or by the school principal in consultation with the school board, if conditions warrant it (MINEDH, 2018).

The disaster risk management system includes: a) early warning and warning subsystem; b) response subsystem; and c) prevention, mitigation, adaptation and resilience subsystem.

Prior notice: a) it can be local or national, depending on the territorial area covered by the risk of disaster occurrence; b) it is incumbent upon the entities responsible for monitoring and forecasting the phenomena to issue prior notice about them.

*Yellow alert:* it is activated when there is a forecast of the occurrence of a phenomenon likely to cause human or material damage. The activation of the yellow alert falls on the coordinating entity for disaster risk management and reduction and on the entities responsible for issuing the prior notice, indicating, at that time, the specific responsibilities.

*Orange alert:* it is activated when there is an imminent occurrence of a phenomenon capable of causing human, material and environmental damage, although with the possibility of reversal.

*Red alert:* it is activated when the phenomenon is irreversible and the occurrence of human and material damage is expected to occur that could turn into a disaster of great magnitude, corresponding to a level 2 emergency situation.

Around it, CENOE is responsible for promoting, planning and maintaining coordination and joint operations between different levels, jurisdictions and institutions that directly participate in emergency or disaster response operations. Its duties include: a) collecting,



processing, analyzing and disseminating, in a timely manner, information on eventual disasters or emergencies; b) to establish working rules for the institutions involved to carry out the systematization of actions and processes, as well as the management and control of operations, ensuring a satisfactory response; and c) to carry out, in coordination with the National Civil Protection Unit (Unaproc) and the DPM, all activities inherent to emergency operations.

As for its operation, Cenoe operates at three levels of alert: a) Surveillance without alert – consists of the permanent monitoring of adverse phenomena that may cause calamities, is carried out in coordination with the National Institute of Meteorology (INAM), and other relevant entities at the provincial level; b) Partial alert – there is permanent monitoring of adverse phenomena, with reinforcement of operational capacities in preparation for a possible emergency, and coordination remains with the same bodies mentioned above; c) Total alert – at this level, the National Emergency is decreed by His Excellency, the President of the Republic. Cenoe/COE starts to operate at its maximum capacity, according to the nature and intensity of the phenomenon.

In addition, kits have been produced to support emergency management in schools. These kits include the training of CEGRC members, students, teachers, school board members and ZIP coordinators, as well as the mapping and physical delimitation of the school, indicating risk zones, evacuation routes and safe locations. The kits also offer solutions for the storage of books and other school materials in protected places, in addition to the construction of physical barriers to protect against strong winds and prevent erosion (MINEDH, 2018).

In general, there are five types of kits: a) the registration kit, which includes a writing script, reams of A4 paper, A4 lined notepads, ballpoint pens, clipboard, sharpener, eraser, pencil, 30 cm ruler and a collection sheet for impact or damage caused by natural threat; b) the alert kit, consisting of a radio, flashlight, whistle, warning flags (two green, two yellow, one blue, one orange and two red); c) the reinforcement kit, consisting of machetes, hoes, pickaxes with handles, shovels, carpenter's saws, universal pliers, hammers, among other utensils; d) the first aid kit, containing antiseptic materials, adhesive bandages, adhesives, eye and ear washing solution, disposable gloves, scissors, water purifier and sanitary napkins; and e) the elaboration script, which includes the monitoring and evaluation of the Basic Emergency Plan for the School, with the objective of testing the efficiency of the plan

and its impact on school readiness and the reduction of the risk of natural disasters (MINEDH, 2018).

After mapping and analyzing the following instruments: a) the Introduction of the National Education System (1983-1991); b) the Reform of the National Education System (1992-2004); c) Law No. 6/92, of May 6; d) Law No. 18/2018, of December 28; e) the Curricular Plan for the Training Course for Teachers of the First Degree of Basic Education – 7th+3 course, of 2003; f) the Curriculum Plan for Teacher Training for Primary Education, of 2006; g) the Curricular Plan of the Primary Education Teacher Training Course, of 2012; h) the Curricular Plan of the Training Course for Primary Education Teachers and Adult Educators, of 2019; i) the Primary Education Disciplines and their contents from the 1st to the 6th grade; and j) the Basic Emergency Plan for the School (Elaboration Guide).

In this chapter, we conclude that, despite the efforts undertaken by MINEDH in the field of climate change, there is still a lack of concrete actions capable of responding more effectively to the impacts caused by natural disasters in the education sector, as well as in communities.

We also found that, despite the systematic occurrence of extreme events that have devastated the national territory, especially the education sector, in the last three decades, there has not been a punctual and objective intervention. This finding leads to the understanding that there is no construction of resilience, either from the point of view of infrastructures, or in the teaching plans in the curriculum, and much less in school subjects related to climate change.

Given the gaps identified throughout this study, we understand that there is insufficient evidence to affirm the existence of resilient programs and actions in the Mozambican education sector, especially in primary education. This finding corroborates the title of this Thesis: In/resilience capacity of primary-level educational policies in the face of the climate crisis in Mozambique: a case study – Sofala province, Beira city.

In addition, we observe that the current educational system treats the process of formation in a way that is aligned with what Arendt (1975, p. 4) characterizes as a crisis of political reason "When, in political matters, sound human reason fails or gives up the attempt to find answers, we are facing a crisis. The disappearance of common sense that we see today is, therefore, the surest sign of the current crisis".

Based on Arendt's thought, it is possible to perceive that the current curriculum imposes on students a teaching-learning process that does not respond to the fundamental needs of the contemporary world, particularly with regard to education about climate change.

Arendt (1957) points out that the role played by education in all political utopias, from Antiquity to the present day, shows how natural it can seem to want to start a new world with those who are new by birth and by nature. With regard to politics, there is obviously a serious misunderstanding here, insofar as "[...] opts for a dictatorial intervention, based on the superiority of the adult, seeking to produce the new as a fait accompli, that is, as if the new already existed" (Arendt, 1957, p. 3).

In the Mozambican context, we observe that education has been guided, primarily, by political interests and agendas, often alien to local realities. As Arendt (1957) argues, education should not have a direct role in politics, since it refers to subjects who are already educated. Those who try to educate adults, in fact, assume a posture of tutelage, distancing them from autonomous political participation.

The national educational system is, therefore, linked to the guidelines and conditions of international institutions such as the World Bank, Unesco and the IMF. These, in turn, remain inert in the face of recurrent structural problems: errors in school materials, high levels of corruption, automatic approval practices, devaluation of education professionals, absence of a national agenda for objective education, improvised outdoor classrooms, overcrowding of classes and social exclusion in pedagogical practices.

In Arendt's (1957) perspective, the child is introduced into an "old world", that is, a pre-existing world, built by previous generations. Even in countries considered developed, such as the United States, the child enters a social and cultural environment that is foreign to him, being young only in relation to his condition of freshman. "The world that children are being introduced to. [...] it is an old world, that is, a pre-existing world, built by the living and the dead; a world that is new only to those who have recently entered it through immigration" (Arendt, 1957, p. 4).

In facing the educational crisis, Arendt (1957) presents three fundamental ideas that are directly connected to the Mozambican educational reality. The existence of an infantilized society, in which children are removed from the conviviality and world of adults, subjected to the so-called "tyranny of the majority". The absence of adult pedagogical mediation favors reactions such as conformism or juvenile delinquency:

The child was not, therefore, freed, but rather subjected to a much more ferocious authority, [...] the tyranny of the majority [...]. Children are, so to speak, banished from the world of adults, [...] left to themselves or to the tyranny of their group [...], a group with which, because they are children, they cannot argue [...]" (Arendt, 1957, p. 6).

The central proposal of this study defends the need for the mandatory inclusion of content related to climate change and natural disasters in the school curriculum. Such content is essential for strengthening resilience, adaptation, and mitigation of climate impacts, especially in vulnerable contexts such as the city of Beira.

Arendt (1957, p. 8) argues that teaching should regain authority, prioritizing prescribed content to the detriment of merely playful or extracurricular practices: "Teaching will once again be conducted with authority: during class hours one will let oneself play and serious work will be done again; greater importance will be given to the knowledge prescribed by the curriculum than to extracurricular activities".

As long as students are not endowed with solid knowledge about the environmental phenomena that surround them, they will continue to be strangers to the very environment in which they live.

As Arendt (1957, p. 10) points out, the child "[...] It presents itself to the educator under a double aspect: it is new in a world that is foreign to it, and it is in the process of becoming. [...] The child is only new in relation to a world that already exists before him [...] and in which he must spend his life". Thus, as the author emphasizes, it is essential that the child is protected and prepared to face the adversities of the world, "[...] The child needs to be specially protected and cared for in order to prevent the world from destroying him. [...] It is the schools that have to do with teaching and learning. Normally, it is at school that the child makes his first entry into the world" (Arendt, 1957, p. 8-10).

Finally, the curriculum mapping carried out in this chapter demonstrated that the contents related to climate change and natural disasters are not treated in a mandatory way in the current curriculum. On the contrary, they are approached in a transversal way and without a structured pedagogical plan. This finding reinforces the urgency of a thorough curricular review, capable of integrating these topics in a systematic way, with mandatory content and methodologies appropriate to the reality of Mozambican primary school students.

## 5 CONCLUSION

This chapter aimed to analyze climate change and educational policies in Mozambique: A historical perspective. The work presents the main characteristics that marked three major distinct periods in the history and evolution of the country: the period before the arrival of the Portuguese colonial regime (1498), the period of colonial domination (1845-1974) and the post-independence period (from 1975 to the preparation of this study). The period prior to the arrival of the Portuguese colonial regime (1498) was characterized by the predominance of rites, dogmas, superstitions, religiosity, magical practices and local traditions.

The period of colonial domination (1845-1974) was marked by the existence of two distinct educational structures: one for the indigenous people and the other for the white and assimilated population. This education system contributed to social stratification, establishing a symmetry between religion and teaching, separation between theory and practice, absence of curricula, course plans, books and adequate manuals.

Education functioned as an ideological expression of class interests, promoting a racist system, with inequalities in access to education, racial discrimination, direct exploitation of the African workforce on plantations, and other exclusionary practices.

The post-independence period of Mozambique (from 1975 onwards) was characterized by the implementation of a unique educational system, focusing on the rescue of Mozambican identity and culture. Education came to be guided by the scientific ideology of the working class, the worker-peasant alliance and the liberation of human beings, as opposed to their exploitation. There were also efforts to combat elitism and discrimination in education, to reject individualism and to intensify the training and continuous training of teachers, among other initiatives.

The data were obtained through visits and consultations with information available in the library of MINEDH, INGD, Escola Primária Completa da Machava "A", and INDE.

The study analyzed: the Introduction of the National Education System (1983-1991); the Reform of the National Education System (1992-2004); Law No. 6/92, of May 6; Law No. 18/2018, of December 28; the Curricular Plan for the Training Course for Teachers of the First Degree of Basic Education – 7th+3 course, of 2003; the Curricular Plan for Teacher Training for Primary Education, of 2006; the Curricular Plan of the Primary Education Teacher Training Course, of 2012; the Curricular Plan of the Training Course for Primary Education Teachers

and Adult Educators, of 2019; the subjects of primary education and their contents; and the Basic Emergency Plan for the School (Elaboration Guide).

In view of the frequent climate threats, and under Art. 10 of Law No. 10/2020, as well as as provided for in Art. 1 of Resolution No. 30/2016, the government of Mozambique created the National Institute for Disaster Risk Management and Reduction (INGD), with attributions to coordinate actions for disaster prevention, mitigation, preparedness and response, among other responsibilities. However, it is observed that the effort made in the education sector, through educational policies reflected in the primary school curriculum with regard to the impacts of climate change, still needs to be improved to respond, in a comprehensive and effective way, to the challenges imposed by extreme weather events. An example is the tropical cyclones that have already hit the national territory, causing significant losses and setbacks in the educational sector.

With regard to primary school teacher training plans, this study recognizes that the inclusion of themes on environmental education, climate change and natural disasters in these plans does not guarantee, by itself, the use and practical applicability of these contents in the classroom. For this reason, it is proposed the need to continuously train and train teachers on issues related to environmental education, climate change and the management of natural disasters. In addition, this chapter points to the urgency of reforming educational policy, promoting the continuous training of teachers and including, on a mandatory basis, topics related to climate change and natural disasters in the school curriculum. This implies reviewing the existing disciplines in the curriculum and, consequently, fostering the development of an environmental culture in the communities.

The study also highlights that the environmental education themes present in primary school teacher training plans do not fully meet current demands, since they are largely aligned with political programs and initiatives by international organizations focused on the Sustainable Development Goals (SDGs), among other global agendas. Thus, it is recommended that, in order to promote resilience in the context of educational policies, it is necessary to systematically incorporate subjects currently considered transversal to the school curriculum; create educational content in media such as television and internet focused on environmental education; regularly train teachers and school managers; and establish community centers in the neighborhoods that promote awareness initiatives on the importance of environmental preservation, with a view to ensuring adequate quality of life conditions for future generations.

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