

The impact of the COVID-19 pandemic on the education system in Madagascar: case of basic education

Judith RAHOLDINA RAZAFIMBELO

Institutional Address: Ecole Normale Supérieure d'Antananarivo,

Célestin RAZAFIMBELO

Institutional Address: Ecole Normale Supérieure d'Antananarivo,

Abstract

This paper addresses the Malagasy Republic's response to the COVID-19 pandemic in general and the population's view of the measures taken. However, this paper focuses on the education sector, more specifically, basic education. The government took measures, including a total lockdown and shut down of schools, that seemed to be appropriate. However, the lockdown situation would soon become unbearable, and after one month, the government initiated a gradual easing of the lockdown measures. The return of pupils to schools was a particular priority for many parents, but it was finally decided that only "examination classes" would be allowed to resume studies in their respective schools. The impact of this crisis was particularly felt in the implementation of the Education Sector Plan (2018-2022) and affected student apprenticeships. This paper, therefore, analyzes the scope and limitations of the measures taken by the government in ensuring the continuity of learning, including the following: radio broadcasts for all levels, the distribution of self-study booklets and the use of digital and internet resources for learning purposes. Other related measures such as the preservation of the financial situations of teachers, parental support to reduce instances of school dropout and prospects for financing the education sector have also been considered.

Introduction

Being an island, nobody expected the coronavirus to reach Madagascar. Indeed, because of its insularity, the island has always been protected from the pandemics that have often devastated Africa, including the Ebola virus disease (EVD) epidemic that affected West and Central Africa and, to a much lesser extent, some countries outside the African continent (United States, United Kingdom, Italy, Spain). This paper describes how the island has experienced and reacted to this pandemic and analyzes the impacts of the actions taken and planned by the government, particularly in the education sector.

The education sector in Madagascar is developing in a global context. Madagascar has a geographically a vast territory (587 000 km²) and an estimated population of 27.69 million inhabitants in 2020. In 2019, Madagascar came fifth in the ranking of countries that produce the least wealth per inhabitant, with a GDP per inhabitant of \$471.

Since Madagascar is composed of urban areas and many more or less isolated rural areas, the rate of access to electricity in the country is among the lowest in the world, ranging from 12 to 13% on average, with less than 5% of rural areas having access to electricity despite accomodating 67% of the population compared to 54% of urban areas having access to electricity. However, there is a strong potential for renewable energy that is still largely underexploited (SEforALL, 2019).

The Communications Regulatory Authority (ARTEC, 2018) provides information on telephone network coverage areas and telephone and internet penetration rates on networks provided by Madagascar's four main operators: Bluelines, Orange, Telma and Airtel. The telephone coverage rate is 86%, the cell phone penetration rate is approximately 40%, the coverage rate of 3G and 4G combined is 22% and the Internet penetration rate is 6.3%. This penetration rate has increased considerably and reached 14% in 2020 (We are social, 2020). Nevertheless, this figure is relatively lower than those of other African countries such as Burkina Faso at 22.0%, Côte d'Ivoire at 46.5%, and Senegal at 58.2% (Internet world stats, 2020).

The configuration of the Malagasy education system

According to the date corresponding to the sustainable development agenda to which the Malagasy Republic has been committed to since its ratification at the international convention in Rio de Janeiro in 2016, the school-age population (3-24 years old) estimated at 12.8 million in 2015 is expected to increase to 17.6 million in 2030.

The education and training sector in Madagascar is composed of three departments: the Ministry of Higher Education and Scientific Research (MESupReS), the Ministry of Education (MEN) and the Ministry of Technical Education and Vocational Training (METFP).¹

¹ These three departments are sometimes merged into a single ministry called MEN and sometimes merged into two ministries: the MESupReS and the MENETP resulting from the merging of the MEN and the METFP.

Twenty-two (22) Regional Offices of National Education ensure the implementation of the directives issued by the central ministry in the 22 regions of Madagascar. Within the framework of this paper, we will focus on the Ministry of Education and basic general education.

Primary education, which lasts for 5 years, is officially meant for children between the ages of 6 and 10 and is called primary school. It has 3 steps: the preparatory courses (CP1 and CP2), the elementary course (CE) and the middle courses (CM1 and CM2). These are found in public schools, such as Public Primary Schools (EPP) and community schools; and private schools (denominational or otherwise).

Secondary education lasts for 7 years and is subdivided into lower secondary education, which is a 4-year study program at a college; and upper secondary education in high schools for 3 years.

Each cycle ends with a national examination leading to a diploma: the Certificat d'Etude Primaire et Élémentaire (CEPE), the Brevet d'Etude du Premier Cycle (BEPC) and the Baccalaureat. Each last cycle level is called "examination classes".

A 2018-2022 Education Sector Plan (ESP), subject of much debate

Considering the need for a new inclusive and sustainable development trajectory at the end of the long political crisis from 2009 to 2014 and the conclusions and recommendations of the diagnosis of the education sector (RESEN 2004-2014)², the Education Sector Plan for the 2018-2022 period (ESP 2018-2022) has been developed for the entire education sector. The flagship measure is the creation of 9-year basic education, but it also addresses curricular reforms, instruction languages, assessments, diplomas and the school calendar.

Political instability impacting on education

The various political movements in Madagascar have affected various sectors, and the education sector is among those. Although the ESP is the result of a participatory process from regional consultations (in the 22 regions) followed by national consultations and its approbation by the government in power then and all the educational partners were widely discussed seeking to attain sustainability, still, the supporters of the government during the design of the plan are no longer in their positions during the period of the plan's implementation. In addition, since the continuity of the state is not guaranteed, everything is being debated again by the new powers: what will we keep, what can we change, and what are the reasons. Rediscovering these topics can only lead to a sticky situation and give weight to any form of resistance to change (Bareil, 2004).

Examples:

a) The blending of the college into basic education as "subcycle 3" has not yet been effective two years after the adoption of the sectorial plan; furthermore, it is still unknown

² Law n° 2004-004 on the general orientation of the Education, Teaching and Training system in Madagascar

whether the plan will be successful.

b) Various dissension regarding the school calendar has occurred. The changes recommended by the plan were based on the following: (i) climatic hazards (during the cyclone and tropical storm season when floods prevent schooling, especially when primary schools are places that welcome disaster victims), and (ii) the social and economic situation of families in urban and rural areas (during the lean season, parents do not send their children to school). However, there is very strong resistance to change, even though the arguments made do not truly have a solid basis. The beginning and the end of the academic year do not coincide with what is done elsewhere (such as in France) and would be a barrier for those who want to continue their studies abroad (Nevertheless, how many children have the opportunity to continue their studies abroad?), but the debate still occurs probably because it is backed by people with strong influence. Consequently, the calendar has already gradually changed via gradual shifts in the start of the school year, and national examination dates were abruptly stopped to achieve a more or less gradual return to the old calendar.

c) There is tension between those who support the enhancement of the national identity through using the national language as the instructional language on the one hand and those who advocate for plurilingualism as an unavoidable fact because we need internationalization on the other hand. There is also tension between those who prefer to start learning at school using the mother tongue and those who recommend that children should immediately be immersed in the plurilingual environment during their early schooling.

d) By introducing the 9 years of basic education after which the child will be 15 years old, the legal age for employment, the ESP suggests other forms of assessment at the primary level, but this is faced with the reluctance of parents and certain decision makers for whom the diploma is still the sign and the symbol of success; therefore, these parents and decision makers oppose any idea about abolishing the first certificate of primary education, the CEPE, at the end of primary school.

As for the curriculum, the problem is more limited to education specialists, teachers and officers. The difficulties lie in the implementation and costs of curricular reforms. These costs include both human resources, especially training and expertise; and physical, material and financial resources. The introduction of new content and new approaches is particularly affected, especially the introduction of economic and social sciences (ESS) at the Malagasy secondary level.

Private institutions play an important role in primary and secondary education as "partners" of the state. Successive laws on the General Orientation of Education³ and the Teaching and Training System in Madagascar have regulated private education-administration relations, but some private schools claim that they are rather accountable to the parents who are their financial supporters; therefore, there is often resistance that

³ Loi n° 2004-004 on the general orientation of the education, teaching and training system in Madagascar

is difficult to manage, especially since it should be noted that the term "private" hides a complex reality: the two extremes, high-performing and poor establishments meet.

The government is struggling to find the right person to make the right decision and conduct good management. A change of senior officials, at the level of decision makers, ministers and general directors, every 6 months in the space of two years has led to confusion regarding the decision-making process and the choice of paths to follow.

It was in this educational climate with many doubts, debates and disputes that COVID-19 arose.

The Government's Reactions

On March 11, 2020, the World Health Organization proclaimed COVID-19 a pandemic. On March 21, the Malagasy government officially declared a state of health emergency and implemented complete lockdowns and school closures. These same measures were also taken in many other countries affected by the pandemic. The number of people who have been infected by the virus was still relatively low. If seriously respected, these measures would have circumscribed the pandemic in the cities of Antananarivo and Toamasina. However, the majority of the population is poor, and a large number of them live from day to day through informal activities such as hawking, selling secondhand clothes selling, driving cabs and construction work. They have no other sources of income beyond these. Furthermore, many live in congested environments. For instance, it is a common phenomenon to have a family of ten often living in one room without water or even electricity. Under such conditions, it is obvious that social distancing is not possible.

The government's reactions, such as putting travellers from outside the country in mandatory quarantine, establishing an institution that would centralize the funds and all actions to fight the pandemic, establishing a hospital centre (despite being ill-equipped) to take care of the sick and to isolate them, banning visits, and forbidding the patients from being arrested, all seem to be appropriate. In the event of a COVID-19-related death, it is the hospital that will be in charge of preparing the coffin without the assistance of the family. All these measures are contrary to both social customs when handling serious illnesses and funeral customs. Normally, patients are surrounded by their families, especially when the illness worsens. In addition, as everywhere, death is a family event. For a Malagasy, the worst thing that can happen at the end of his life is not to be part of the family grave, the *fasandrazana*. These measures are probably among the reasons why families hid their patients, treated them at home and did not go to a hospital. Hence, the question regarding the accuracy of the figures officially given arises. It is likely that some cases have escaped the official counting of infected people.

It is difficult to respect the lockdown, especially in working class neighbourhoods. Besides, the need for the city dwellers to be supplied with goods and services means that trucks must be allowed to pass through to the city and beyond. Last, for the state to

function, many agents still have to travel. All these conditions have contributed to the spread and transmission of COVID-19.

Outside the areas with relatively higher incidences of infection, mainly in the cities of Antananarivo, Toamasina, and Moramanga, life continued as usual, except that children no longer went to school. However, sooner than later, voices calling for the reopening of schools emerged.

On April 20, 2020, the President of the Malagasy Republic announced the progressive relaxation of the lockdown measures in order to enable the population to resume work and a gradual return to the normal activities of daily life from 6:00 am to 1:00 pm. In addition, he reopened schools only for "examination classes" in order to prevent a possible loss of the 2019-2020 academic year. This was the main focus of the government since official examinations (CEPE, BEPC, and Baccalauréat) are not only indicators for the achievement of the goals of the education system but also keys that give access to a profession despite the reality that examinations do not correspond to professional skills. For parents, acquiring a diploma is also the purpose of sending their children to school.

In this resumption of "examination classes", the government tended to rely on the opinion that the coronavirus does not pose a great risk for young students and that it is simply important to respect prevention measures. In addition, the government was confident that the CVO⁴, an Artemisia-based herbal tea distributed in classrooms, would serve to prevent if not cure for COVID-19. Therefore, the government provided human resources, materials and infrastructure to these examination classes.

However, the questions that tended to dominate the discourse around school closures were the following: For what reasons would classes be stopped in cities not affected by COVID-19? Were school closures meant to limit the contagion in public schools known to be overcrowded? Or, were school closures enacted due to equity concerns in order to place all pupils in the same situation in terms of school academic calendar?

Impacts of the Health Crisis on Education.

The shutting down of schools to contain the spread of COVID-19 affected approximately seven million learners from early childhood to secondary school across the island. All public and private schools were closed for five months (except for "examination classes"). In practice, however, in some areas not affected by the pandemic, schools remained open despite nationwide decisions to close schools.

On the implementation of the ESP

All plans focused on the implementation of the ESP, including designing a new curriculum, designing and writing textbooks, and training secondary school economics and social sciences teachers, were delayed. Furthermore, almost all calls for expression of

⁴ Covid Organics (CVO) produced by the country's Institut Malgache de Recherches Appliquées (IMRA) from a local plant, *Artemisia annua*.

interest and project start-up have been either postponed or ignored. The fund management within MENETP was deeply constrained, and the Common Fund for Education⁵ is not yet operational. All this occurred in an atmosphere of financial mismanagement resulting from the frequent changes in officials at the top of the MENETP.

One of the weaknesses of the Malagasy education system is its heavy dependence on external funding. Internal funds can barely cover the functioning of the system. Almost all innovations are financed by technical and financial partners, and this is the case for the reforms conducted by the ESP. Accordingly, delays in the supply of funds certainly had consequences that were felt in the system, as was the case with the payment of subsidized FRAM⁶ teachers.

Concerning the learning

Another effect of the coronavirus on learning is the deepened gap between social classes. Well-off families have means, although not huge, to invest in their children's learning, such as investing in books, computer resources, radio and television. However, poor families have nothing and cannot even afford to reserve a corner in their bedroom to allow their children to work. It is therefore feared that a total interruption of school activities for pupils, as occurred during the lockdown, could lead to school dropout and expulsion.

Parents can no longer shoulder the financial burdens associated with their children's schooling. These include membership fees for school management committees, registration and tuition fees for children in private schools, and school supplies. Parents are also obliged to interrupt their children's homeschooling to make them participate in family activities. In this respect, girls, who are kept at home to enable their mothers to work, are more affected. No statistics are available, but given the prevailing situation, these cases are quite numerous.

What is truly sad in Madagascar is that it is the poorest who pay teachers in community schools⁷ affiliated with public schools because often these schools only have unsubsidized FRAM teachers.

Another problem comes from small private schools that depend on tuition fees paid by parents for their functioning and existence. Since parents were no longer paying any fees as schools were closed, most schools were not able to raise funds to pay for the salaries of teachers and other support staff. However, large private institutions, which constituted the minority and whose students drew from the wealthier classes, were able to

⁵ This is a new common financial instrument for the education sector that will allow education funding partners to provide new funding in support of the Education Sector Plan and that will be endorsed by all stakeholders.

⁶ Fikambanan'ny Ray Amandrenin'ny Mpianatra: These are teachers recruited locally by parents. Some are paid entirely by the Parents' Associations and others receive subsidies from the state and are classified as "FRAM subsidized".

⁷ These are schools built by the local community and taught by teachers recruited and paid by the same community or FRAM teachers. They are only regulated after recognition by the state.

cover such costs and continue with studies through distance learning.

Concerning the official examinations

As often happens in other national education systems, official examinations (CEPE, BEPC, and Baccalaureat) serve as efficiency indicators for the education system in Madagascar. Thus, in order to assess the relevance and efficiency of the measures taken, we compare the results of official examinations.

In 2019, Antananarivo had a success rate of 40.56% for the general education⁸ baccalaureate and 18% in the special session organized following the various incidents of the first session. In 2020, the results were exceptionally high throughout Madagascar. Does this mean that the lockdown has favoured the candidates? Did the reduced program make things easier? In any case, the 2020 baccalaureate is a success compared to that of 2019 due to there being a higher rate of success and no significant incidents.

An improvement in the 2020 results compared to 2019 results was also found for the BEPC exams. In the case of Antananarivo, for example, the success rate increased from 36.91% to 51.74%. It would therefore seem that the candidates were able to revise their habits and that the few weeks of returning to school were fruitful. However, it must be stated that the subjects were also adjusted according to the curriculum that could have been used.

As for the results of the CEPE exam, an improvement was also noticed in the 2020 results compared to the 2019 results. The results of the official examinations do not therefore, at first sight, seem to have suffered too much from the study conditions due to COVID-19; nevertheless, a fine empirical study of the different learning methods practised by the pupils during the confinement should be conducted. Similarly, the assessment subjects should also be subject to in-depth analysis.

Strategies to Ensure the Continuity of Learning

To resolve the various problems mentioned, with the support of technical and financial partners, through the Ministry of National Education and Technical and Vocational Education (MENETP), the government established a threefold approach: ensuring the continuity of learning, preparing for the reopening of schools, and strengthening the education system's capacity to respond to crises.

Three solutions have been proposed: 1) radio programs for all levels, 2) handing out self-learning booklets, and 3) use of digital tools and the internet.

Radio broadcasts

This action of the MENETP is aimed at reaching as many learners as possible by broadcasting educational programs for all classes on the core subjects in the school

⁸ A large-scale leakage of test subjects was observed. The session was not cancelled, but to compensate for those who did not see the said subjects, an exceptional second round was organised.

curricula via radio and television.

Initially, UNESCO, through the Capacity Development for Education (CapED) program and the Better Education for Africa Rise II (BEAR II) initiative, supported TVET with the aim of promoting the education of rural youth to facilitate their access to employment.

Due to the pandemic, these programs have used part of their technical resources and their experience to help general education.

UNESCO supports the design and nationwide broadcast of educational programs for national radio and television. The development of educational sheets, translation into scripts for radio or television and the design of self-study booklets that must accompany radio or television are conducted by MENETP's pedagogical designers. A recording studio is available to the ministry. Approximately twenty scriptwriters are trained in the techniques of producing educational radio programs. In addition, UNESCO donated all the equipment of the studio while counting on the sustainability of the project.

It is premature to assess the effectiveness of the program in mitigating the impacts of the pandemic on education. Despite the self-satisfaction announced by officials, civil society believes this is insufficient. This is because not all students have the means to follow these courses on national radio and television. This will result in the exclusion of a large number of students from public education. This is not the case with private establishments that middle-class children attend.

Distributing self-study booklets.

The MENETP has considered that many students do not have access to media. Therefore, the MENETP designed and distributed learning booklets, also known as "core booklets", for primary and middle school students. These booklets cover the following subjects: Malagasy, French and mathematics. The aim of the ministry is to disseminate knowledge through these booklets, to develop skills and to foster memory and the ability to memorize. In the "core booklets", the learner has, at his or her disposal, summaries of lessons, exercises with solutions and various tests to assess the knowledge acquired and finally training in autocorrection. These booklets should help and train learners via self-learning during the lockdown period. All primary and secondary school pupils in the 22 regions will benefit from the 636,000 booklets funded by UNICEF. This is the official discourse!

On the ground level, self-learning booklets for primary students were not available until the resumption of classes. As for the secondary level, if we go to Alaotra Mangoro, the number of "essential booklets" distributed to college students is insufficient, and the booklets were available only at the end of the lockdown period, that is, when the pupils returned to school. Even so, to date, some schools still have not received their supplies.

The distribution of these learning booklets was rushed, often with the aim of achieving a promise made by the President. During the pandemic, the chains of decision making and execution are disrupted, and technicians often lose their landmarks.

Politicians also enter the game: members of Parliament accompany the head district in the distribution of booklets and bilingual French-Malagasy and Malagasy-French dictionaries.

Normally, the "core booklets" together with the dictionary should help to raise the level of Malagasy learners, but here we are mistaken. We will not be able to achieve anything just by distributing tools. We will need trained and skilled women and men to use them. Therefore, should we not consider teachers in the resolution of the impacts of the health crisis on education?

Use of digital tools and the internet.

In areas with internet coverage and for populations with an access terminal, learners and even parents can use digital support; however, the internet is more accessible in urban areas. Resources linked to school curricula were made available via electronic versions and posted online on the ministry's platforms.

At the time of writing this paper, these resources had not yet been availed. However, the following was and is still in plans: "10,000 tablets including educational resources will be given to schools in remote areas at a rate of two per school, and 10,000 teachers will be trained in the use of these resources and in the use of a digital platform created by the ministry". This is planned, and we have to wait and see. The digitalization of administrative institutions is at the heart of the agenda of the existing government. Perhaps in the distant future remote areas will be able to be digitally connected. Leaders and managers come from cities, and they need to be aware of what is happening far away from home. The risk is that these tools remain in the headmaster's office and never reach the teachers who would be the beneficiaries.

Protection of children from COVID-19.

The resumption of educational services is the greatest current concern. The measures adopted by the ministry focus above all on strengthening the sanitary and hygienic conditions of schools. The ministry's school health service has therefore been responsible for conducting cleaning and disinfection campaigns in public and private schools since their reopening. Hand washing devices, thermometers, gloves and masks are given to each school. Each pupil received a hygiene kit containing a mask and soap. In all, 35,000 schools in the most infected areas will benefit from this initiative.

The implementation of this system is highly laudable. However, the operation was only performed once. Fifteen days later, in those schools benefiting from the program, people no longer rushed to wash their hands, and the handwashing system was partially abandoned. It must be noted that in the rural districts that we surveyed there was not a single case of the coronavirus. One wonders whether it was appropriate to distribute all these kits in areas where they were not needed. In addition, all school funds that are directly managed by public primary schools are being reinforced at 40 cents more per child to enable them to care for themselves in response to the effects of COVID-19. The free supply of CVOs has not been further pursued.

The problem of the delay in the implementation in relation to the announcement is even more serious in regard to wages.

Preserving the financial situation of teachers.

The majority of teachers can be ranked among the most underprivileged. Community teachers, "FRAM teachers", paid by the parents' association compose the largest part of the teaching force. In the field of education for all, UNICEF has kindly donated its services for a few years to pay a significant amount of the subsidized FRAM teachers at the lowest wage rate (SMIG). Later, the state took over, but the rest of the teachers, whose numbers are increasing due to population growth, have to be contented with these parents' contributions and live in precarious conditions because parents are also experiencing economic difficulties. Therefore, aware of this problem, the government wanted to help. " ... 56 250 nonsubsidized teachers will receive special assistance".

A work group called the "Task Force" was also established during this health crisis. It is assigned the task of coordinating the ministry's actions and the support of technical and financial partners. What is the situation now? No unsubsidized teacher has received any money, at least in the Alaotra Mangoro region. In the ZAP of the rural communes of Antaniditra and Mandialaza, as the school no longer dares to take contributions⁹ or charge parents, school officials ask pupils to bring a portion of white rice¹⁰ per child per month for unsubsidized FRAM teachers. Maybe they will be paid later, but they have been waiting for three months thus far!

Funding.

The use of funds granted by technical and financial partners in the fight against the pandemic was denounced by Transparency International in a survey on "COVID-19 and governance: lessons learnt from the first wave of the health crisis in Madagascar". The report questions the relevance of the choices that were made in the distribution of the funds and the national dimension of the project and questions the transparency and appropriateness of public decisions. International Transparency complains about the lack of clear reporting on the use of funds and their diversion to the fulfilment of presidential promises and its program. "...out of a total budget of 826.09 million dollars, 35% has been allocated to infrastructure. Health, for its part, has been financed to the tune of 9.37% of the overall budget, and is therefore in fourth place in the budget distribution. According to the figures given by the MENETP, education was financed to the tune of 5.60%" (RFI, 2020).

During an interview, an MENETP official revealed that two action programs are planned and will use two funding sources currently under negotiation.

⁹ The President of the Republic of Madagascar announced at the beginning of the school year that parents would not have to pay anything and that school would be entirely free. This is the first measure taken to help parents and encourage them to send their children to school.

¹⁰ One portion of rice is approximately 290 g.

The first will be used for training activities (27 000 additional teachers), community building of schools (50 schools), development and distribution of educational resources (manuals, teachers' guides, and other pedagogical and didactic materials for primary classes in the 22 regions), and for building up a mobilizable fund (MENETP, 2020). The second funding will support the government in forecasting and responding to potential crises, including the acquisition of rolling stock, the construction of storage warehouses, and securing schools and pupils (multihazard), especially for the most vulnerable districts.

We will not critically analyze the use of the funds because we do not have all the data, and we align ourselves with the conclusions of Transparency International. The Multisectoral Emergency Plan has strayed from its objectives and has become a means to implement the presidential program. We have the right to question why there is such a delay between the announcement of the program and its implementation.

Discussion

Our discussion focuses on the expected relevance, efficiency and effects of the government's pedagogical measures and initiatives concerning the continuity of learning in general education following the pandemic, especially concerning radio broadcasts, self-learning booklets and the use of digital technology.

Radio is one potential tool; however, objectively speaking, national broadcasting has lost some of its former strength power and its monopole.

We interviewed the men in the field who are the district heads call ZAPs¹¹. They were gathered in Moramanga, a small town located 120 km from Antananarivo. The interviews focused on the power of the radio and its appeal to the population. First, in the villages, the ZAP chiefs say that it is very difficult to use the national radio station RNM¹² to broadcast the school programs "Za koa mba te hahay¹³" and "Kilasy pour tous¹⁴" whereas private radio stations work well and broadcast popular music.

Since the programs of the National Radio RNM are not very popular, people prefer and are used to listening to private radio stations. The broadcasting slots for school programs, 11 a.m. and 3:30 p.m., seem to be unsuitable for the lifestyle of rural people; and then at night the programs are rebroadcast after 10 p.m.! On average, households in the Alaotra-Mangoro region where Moramanga is located are fairly well off compared to other regions. Each family has a radio, but members are used to listening to songs and radio dramas. Finally, in rural areas, parents are not used to being involved in their children's learning. Moreover, since their children no longer go to school during this

¹¹ Priority Action Area: Subdivision of School Districts in Municipalities. Depending on the size of the municipality, there may be more than one PTA.

¹² Malagasy National Radio

¹³ Za koa mba te hahay: Literally, I want to learn too.

¹⁴ Kilasy for all: Class for all

lockdown, they have to help with farming and household chores.

Regarding television, in almost every village, there is a family who subscribes to the pay channels (Canal plus and others). However, times have changed. Fewer people invite their neighbours to watch their television. However, that is the only way to access TVM¹⁵ television. If this is the case in Moramanga, what would be the situation of RNM radio and TVM television in the very remote countryside of this large island? There is reason to be skeptical about the achievement of the objectives for the 250,000 households in Madagascar that will benefit from the project. National radio should strengthen and extend its national coverage and improve its penetration rate.

What could be expected from the design of the "core booklets"? To improve teaching quality, especially through teachers, the professional development of teachers is a key component (Phillips, 2008). In the field, according to the planning of the MEN, teachers in Madagascar engage in training throughout their professional lives. However, once the project is over, the trainees have the bad habit of not applying what they have acquired from the training either because of problems related to the implementation of the training (material, financial and technical issues) or because of decisions made by the state itself. Indeed, most of the time, due to political crises and frequent changes in the choice of the approaches, what was acquired during the training has been deliberately erased by the new orientation of the new government. Such was the case after the training on the "skills-based approach" funded by UNICEF, which was replaced by the "situation-based approach", and it returned to square one with the "pedagogy by objectives" (Razafimbelo, C. *et al.*, 2013). In addition, we are sceptical about any future serious use of the "Core Booklets". Like many tools, they are in danger of being left piled up in college libraries or being stored and then thrown away, as is the case with population education textbooks and seven-year primary school textbooks¹⁶, which have been scrambled and destroyed by transitional ministries¹⁷.

The use of digital technology could have positive effects on learning outcomes in Madagascar. However, there are two types of integration (Lauzon, Michaud & Forgette-Giroux, 1991): physical integration, which consists of equipping schools with computer equipment; and pedagogical integration, which corresponds to the use and exploitation of such equipment during a teaching-learning session in order to improve pupil learning. Physical conditions and financial and human resources for digital inclusion are still far from being in place. It is not the use of a few shelves in a few primary schools that will make digitization a reality. It is still a pipe dream considering the existing coverage rate and the digital penetration rate.

However, there are opportunities that need to be explored. The use of mobile phones has been the subject of much research (Lautz-Cauzanet, E. (von), 2018; Mahamud,

¹⁵ TVM: Television Malagasy: National Channel

¹⁶ This is a handbook drawn up within the framework of PROJECT/MAG/87/PO1

¹⁷ Transition period following the 2009 takeover

Andrews & Rockson, 2015). Experiments with encouraging results have been conducted in Madagascar. The use of mobile phones is part of an IFADEM¹⁸ project and consists of distance language learning through the use of telephones on which rhymes were recorded and that could be used for self-assessment and exchange between teachers (Ratompomalala, 2020).

In addition, as everywhere else, social networks are also currently part of our young people's lives. It would be interesting to find a successful formula that would allow social networks to be used in a high-performance educational technology (Arnaud, 2014).

Conclusion

Madagascar is dependent on external funding both in normal times and during the COVID-19 pandemic period. This paper has outlined the prevarication and procrastination of the ESP. However, in the absence of a clear policy, the current government is changing the backbone of the ESP. The innovations proposed under the ESP were therefore the most disrupted by the pandemic because the pandemic diverted aid from technical and financial partners towards other social actions due to the impacts of the lockdown and to the management of the health crisis. Furthermore, curricular reforms had to be linked to new modes of knowledge transfer due to the closure of schools.

The development of self-learning booklets for basic education could not be correctly conducted and delivered on time due to insufficient technical and financial means. These self-learning booklets are being restructured so that they can be used in face-to-face teaching. Dispatching them quickly and training ZAPs in their use are imperative.

Educational broadcasts *via* national radio and national television that struggle to cover the national territory should be done through a partnership with other channels, local or private, that are more appreciated.

As for the difficulties linked to the low internet coverage rate, the use of mobile telephones and social networks that are more affordable should be exploited.

Plans to use the MEN's platforms for distance training of teachers and students are now under study, and this epidemic has shown the ministry the need to develop other modes of training.

The ministry officials currently seem to be squeezed between the Sectoral Education Plan and the Multisectoral Emergency Plan, as well as the upcoming Madagascar Emergency Plan. However, the funding of the education sector will surely have to be rethought in favour of education if we are to promote the quality of education.

¹⁸ IFADEM à Madagascar : <https://www.ifadem.org/en/pays/madagascar>

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