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Advocacy paper

# Investing in social protection to reduce child labour and improve child well-being in the mica villages in the South of Madagascar

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n° 2022.02, November 2022

This is an advocacy paper on “[Investing in Social Protection to Reduce Child Labour and Improve Child Well-Being in Mica Villages in the South of Madagascar](#)” commissioned by the UNICEF Madagascar Country Office to Economistas de la Cooperación S.L. (ECOPER).

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# Acronyms

ACTP	"Asa Avotra Mirindra" cash-for-work productive safety net
AEPI	Association d'Exportateurs de Pierres Industrielles
AFD	French Development Agency
CCT	Conditional cash transfer
CRS	Catholic Relief Services
CT-OVC	Cash Transfers for Orphans and Vulnerable Children
DoL	Department of Labour
ECHO	Directorate General for European Civil Protection and Humanitarian Aid Operations
EITI	Extractive Industries Transparency Initiative
EU	European Union
FID	Development Intervention Fund
GDP	Gross domestic product
GNI	Gross national income
HDI	Human Development Index
ILO	International Labour Organization
IMF	International Monetary Fund
INSTAT	National Institute of Statistics
LIC	Low-income country
LMIC	Low and middle-income country
LUL	Let Us Learn
MENA	Middle-East and North Africa
MCIS	Multiple Indicator Cluster Survey
MGA	Malagasy Ariary
MIC	Middle income country
MMRS	Ministry of Mines and Strategic Resources
MPPSPF	Ministry of Population, Social Protection and Promotion of Women
NBC	National Broadcasting Company
NGO	Non-Governmental Organization
NSSN	National Social Safety Net (PNFSS)
ODA	Official development assistance (APD)
ODI	Overseas Development Institute
PNCTP	Palestinian National Cash Transfer Programme
PNPS	Madagascar National Social Protection Policy
pp	Percentage points
PSSB	Basic Social Subsidy Programme
RMI	Responsible Mica Initiative
SAGE	Social Assistance Grants for Empowerment
SDG	Sustainable Development Goal
SCG	Senior Citizen Grant
TdH	Terre des Hommes
TMDH	Cash Transfer for Human Development
UCB	Universal Child Benefit
UCT/TMNC	Unconditional cash transfer
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHR	UN Refugee Agency
UNICEF	United Nations Children's Fund
US	United States
USD	United States Dollars



# Introduction



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Over 11,000 children are estimated to be exploited in the mica sector in Madagascar under harsh and unsafe conditions. While poverty is widespread in the country, which is at the bottom of the main global development rankings, the extreme conditions under which these children and their families live and work have called the attention of the public and the authorities of Madagascar and beyond. Indeed, since a 2019 Report by “Terre des Hommes and Somo (SOMO, 2019)” shed light on this situation, it has been widely denounced by media actors, such as the National Broadcasting Company (NBC), and condemned by institutions such as the European Parliament. The markets of the United States (US) and the European Union (EU) have responded to international calls and now avoid purchasing mica from Madagascar.

Madagascar and its international partners are committed to the Convention on the Rights of the Child and the 2030 Agenda. They all agree on the need to take immediate and effective measures to eradicate child labour in the mica mines of Madagascar and other industries. They all share concern on children kept out of school under such unhealthy conditions and at such a scale and agree that this perpetuates intergenerational poverty and undermines any development strategy for Madagascar.

As a matter of fact, several international actors are currently mobilizing technical and financial support towards the Madagascar regions where the problem concentrates (Anosy, Androy, and Ihorombe). This support tends to focus on the restructuring of the mica value chain, which is currently dominated by informality, and the adoption and application of workplace standards. The Government of Madagascar,



with United Nations Children’s Fund (UNICEF) technical support, supported the above-cited report and is engaged in child protection in the mica regions, believes that, in addition to a long-term reform of the mica value chain, immediate measures with direct effect on children’s rights are required. Mainly, UNICEF advocates the use of child benefits to ensure basic nutrition, health and education for all children in mica communities.

This paper draws on international academic literature as well as country-specific analysis and argues that this approach is consistent with available scientific evidence, and aligns to national and international agendas. Moreover, the paper summarizes a wide range of impact evaluations that prove the effectiveness of cash transfers in terms of nutrition, health and education, and it estimates the cost of such an intervention targeting mica communities, concluding that it would be financially sustainable and coherent with ongoing plans for the mica value chain and the overall Malagasy mining sector.

The contents of this paper are the result of mixed-methods research that included data analysis, an extensive document review covering impact evaluations of cash programmes in Madagascar and beyond, and field work in three mica communities, Fort Dauphin and Antananarivo. [The research benefitted from inputs from more than 20 international and national institutions, from both the public and private sectors](#)<sup>1</sup>. The paper is structured as follows. Section 1 provides an overview of life conditions of the children exploited in the mica regions and their families, along with some information on the regional and national development context. [Section 2 summarizes the academic literature of social safety nets, and more specifically regular cash transfers programmes, and additional evidence collected through country-specific desk and field research.](#) Section 3 outlines current trends in the development community regarding the use of regular cash transfer programmes as a development strategy. Finally, the text concludes with a set of recommendations for the implementation of a Universal Child Benefit (UCB).

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1 UNICEF and the authors express their gratitude for their valuable insights to Ministry of Mines and Strategic Resources (MMRS), Ministry of Population, Social Protection and Promotion of Women (MPPSPF), Intervention Funds for the Development (FID), Terre des Hommes (TdH), Pact, Art, FAFIFI, ILO, UNESCO, World Bank, the EU Délégation, Agence Française de Développement,, Chinese Embassy); Chamber of Mines, Association d’Exportateurs de Pierres Industrielles (AEPI), and the Extractive Industries Transparency Initiative (EITI). During the field mission, UNICEF collected stories from residents of the mining regions to illustrate the situation of mica miners and beneficiaries of current social protection programmes. These stories are presented in this report (see Boxes 2 and 4)

# 1. Poverty and child labour in mica mines



## Key findings <sup>1</sup>

- More than 11,000 children aged 5 to 17 work in mica mines in the Madagascar regions of Anosy, Ihorombe and Androy, under hard and unsafe conditions.
- More than 190,000 children in 35 municipalities, in which extreme poverty is generalized, are at risk of being exploited in mica mines and hazardous activities.
- Thirty-three percent of children in mica mining communities finish primary school, compared to 75 per cent nationally. Another 4,219 children under five would live or spend the day in mica sites alongside their parents.
- There are 175 sites in 35 municipalities of the regions of Anosy, Androy and Ihorombe.
- In total, a population of about 28,500 people live and work in informal mica sites, which account for 90 per cent of the country's production of mica.
- Despite hard working conditions and the contributions of children, the monthly average income obtained by families from mica collection is estimated at only USD 6.56.
- The income of informal miners, adult and children, represents 17 per cent of the export value of the Malagasy mica.

<sup>1</sup> In-text citations for each key finding are provided below and full references can be found at the end of the document.

# Child exploitation in the mica mines

## Box 1. A mica mining family in Amboasary

An estimated 11,406 children aged 5 to 17 work alongside their families in the Southern Madagascar regions of Anosy, Androy, and Ihorombe, according to field research conducted for the elaboration of this paper<sup>2</sup>. Another 4,219 children under five live in the mica sites according to the same estimations and, including adults, the total population living and working in the precarious conditions of the artisanal mica mines of Madagascar would amount to 28,500 persons.

In total, it is estimated that 35 municipalities in the regions of Anosy, Androy and Ihorombe host mica mines population with a population of 443,000 people with extreme poverty generalized in the immense majority of households. An estimated 190,509 children under 15 years old form part of those households and suffer multidimensional poverty as explained further in this section (see Table 1). All of them are at high risk of falling in the trap of mica mining and other worst form of child labour.

These figures are consistent with a seminal work on the impact of the mica supply chain on Malagasy children's rights conducted by SOMO and commissioned by "Terre des Hommes (SOMO, 2019)<sup>3</sup>". This research also described the type of work performed by children, which varies depending on age from collecting mica waste, to digging mining shafts, extracting mica in the interior of the mines, turning pulleys and carrying heavy loads of mica. It also documented the harsh and unsafe working conditions under which these children extract, carry and sort mica. They are exposed to heat and low oxygen levels within the mine, sun in the surroundings, and toxic dust particles both underground and above. They are not provided with any protection equipment, or even safe drinking water and sanitation. Similar conditions were observed in the sites visited during the elaboration of this paper. The precarious life of these children and their families may persist beyond working hours, given that, in some cases, mica workers have settled in the proximity of remote mines with a complete absence of proper housing, infrastructure or services, with implications for health and education. The living and working conditions negatively affect health in multiple ways.

In Vohibola, 15 km from Amboasary in Southern Madagascar, Soja Molisoa and his wife Miza Razie live from mica mining with their 10 children. Having practiced this profession for several years, they are upset about the extremely low price of efforts made to operate this mine. The daily income between MGA 3,000 (USD 0.72) and MGA 4,000 (USD 0.97) made it possible to only buy three cups of rice. "It's not much for 12 mouths to feed. But this money guarantees us enough to eat at least once a day", explains Miza Razie.

In this part of the island, the mica mining is an activity that has grown due to the severe prevailing drought. Families have chosen the activity for the lack of satisfactory harvest throughout the year to meet all their needs. The situation is even more delicate for Miza Razie and her family who do not own land to cultivate or livestock. "We survive only thanks to this activity", she says.

Like this family, mica mining is carried out by vulnerable families with young children. This is the case of the family of Soja Heritsivany who is in charge of 20 children. "12 are my own children and eight are my grand-children from four of my daughters who are single mothers. In addition, 12 of them are under 15 years old", she says.

Together, parents and children also work in mica mining. With a price from MGA 100 (USD 0.02) to MGA 150 (USD 0.03) per kilo, mutual aid is crucial to be able to earn between around MGA 3,000 (USD 0.72) and MGA 4,000 (USD 0.97) during the day. Children do not enjoy their fundamental rights, among others, access to basic health care, or education because parents rarely have the means to care for them or ensure their studies. Having inclusive social protection, through allowances for children and equal opportunities, is an alternative that will reduce child poverty and encourage more investment in their well-being for their development.

Source: (unicef.org, 2022b)

<sup>2</sup> According to data collected from the mica exporters' association (AEPI), there might be around 12,500 adults working in artisanal mica mines along with their children. Considering observed population trends in mica sites, it is estimated that every two of those adults represent a household. If such households reflect the average of the Madagascar Multiple Indicator Cluster Survey of 4.5 (INSTAT, 2019), the total population of informal mica sites can be estimated at 28,500 persons, of which 15,625 would be children, and 4,219 children under five. Consequently, children at work (between 5 and 17) would amount to 11,406.

<sup>3</sup> SOMO estimated the number of child workers in the mica mines at 10,800.

The mining work produces back pain related to the carrying of heavy loads, muscle pain and injuries, due to repetitive tasks without protection, and frequent coughs and respiratory issues related to the mica dust particles present in the air of the mines and the surrounding areas, in which they build improvised shelters.

Child labour and remoteness also hinders access to education. The above-cited research estimated that 38 per cent of the children in mica mining communities do not go to school, compared to the national average of 22 per cent. **Overall, roughly a third of children in these communities finish primary school, compared to three-quarters nationally.** During site visits, focus groups of mothers and fathers confirmed that their children contribute to the household income, and that they cannot afford school fees and related expenses. Moreover, remote mines lack schools and families often refuse to leave their children in their communities of origin for safety reasons.



## The drivers of child labour

The mica sites in which children work are informal and handmade, and often remote. They are quarries and mines explored in colonial times, later abandoned, and now exploited by families under harsh conditions. While families make the primary decision to take children out of school and organize communities in the above-described workplaces, this situation has been favored by the interruption in the issuance of exploration and exploitation permits for decades, and the lack of responsible procurement practices by mica exporters, which has resulted in a share of informality of 90 per cent, according to local informants.

This said, the main root cause of this situation is income poverty, as indicated in the 2019 mica report and broader research on children and women living in and around the mining sites in Madagascar (UNICEF, 2014; SOMO, 2019). Mica miners lack alternative livelihoods mainly due to the lack of land and variability of the weather; the latter problem being progressively exacerbated as a result of climate change. During the site visits and meetings with local authorities, it was confirmed that recent droughts in Madagascar moved people from family agriculture to mining work. Moreover, scarcity during droughts provoked high levels of indebtedness with food providers, which have prolonged the economic vulnerability of the families during rainy periods.

One adult extracting mica in an artisanal manner can gather 10 kg per day, and given that only 10 per cent of the Malagasy exports of mica come from formal exploitations, the sale of the mineral to an export company or an intermediary is guaranteed. However, according to the association of mica exporters informal miners must accept prices per kilogram of around USD 0.04, which, considering the number of working days, results in an average monthly income of USD 6.56 per adult. Considering that children tend to contribute to the production of the parents, the average monthly income per household amounts to USD 13.13.

Several local NGOs have informed that distribution of food aid in kind during critical times have had an immediate effect on some of these families, which have abandoned mica sites and returned to their communities provoking complaints from intermediaries of the mica value chain. This finding, as well as the testimonials of the families met during site visits, confirms the idea that the main driver of the children's' work at mica sites is the search of a minimum income to meet basic nutritional needs.



Mica is the name for a group of minerals formed in different layers and with a structure allowing it to be split into thin sheets. It is chemically inert, lightweight, flexible, strong, and resistant to high temperatures and temperature changes, able to insulate, withstand high voltages, absorb or reflect light and protect against ultraviolet light. This range of properties makes it suitable for use in diverse products including paints, soil conditioners, make-up and smartphones.

The mica sector in Madagascar encompasses six broad phases. Mining takes place on an artisanal basis in at least 73 quarry sites in the south of the country. The mining is followed by collecting, which is carried out by some 400 traders, both employees of exporting companies and independent ones. Loading on to trucks is often done by young local men. Following transportation, mainly by export companies, the mica is then sorted, a process which is also mainly controlled by the exporters, and which employs an estimated 2000 sorters. Along with mining, sorting is one of the most labour-intensive phases in the supply chain. Thirty companies then export the sorted mica via three ports.

Source: SOMO, 2019

## The national and regional context

While the living and working conditions of children in mica mines are particularly harsh, child labour is widespread in Madagascar. According to INSTAT (2018), approximately half of Malagasy children aged 5-17 are affected by child labour, with 32 per cent of children engaged in dangerous working conditions, and 4 per cent of children working in mines and related activities.

Moreover, the regions where mica mines are situated have poverty, health and education indices that are among the lowest in the country. According to desk research conducted for this paper<sup>4</sup>, there are 175 sites in 35 municipalities of the regions of Anosy, Androy and Ihorombe. **In 2013, the poverty rates of these three regions ranged from 78.2 per cent (Ihorombe, ranked tenth) to 85.4 per cent (Anosy, ranked fifth) and 96.7 per cent (Androy, ranked first) while the national average was 71.5 per cent (INSTAT, 2013).** In 2016, the human development index (HDI) score of these regions was between 0.36 and 0.49, below the 0.51 national average (SOMO, 2019)<sup>5</sup>. Various additional indicators inform on the low development level of mica regions, which are among the worst ranked in the country (see Table 1).

Child labour rates are above average in all the three mica regions, including work in dangerous conditions. For instance, in Androy, 62 per cent of all children from five to 17 years old are involved in work. Additionally, a higher-than-average proportion of girls get married early and have children early (between 7 per cent and 15 per cent of girls below 15 have children).

All this affects education outcomes, as around a third of the children in the regions only finish primary school, despite the national average being 76 per cent, and half of the children in Androy and Anosy do not even attend primary school.



<sup>4</sup> This has to be triangulated with local informants. In particular, the AEPI has agreed to provide to screen the lists of mica sites and mark those that are currently active. The regional office of the Ministry of Mines in Anosy is also collaborating to place the sites in the map and link them to villages or "fokontany".

<sup>5</sup> Ihorombe's score is the lowest nationally. In 2012, Androy had both the highest share of the population living in poverty as well as the most intense levels of poverty in the country, and poverty levels in Anosy were very high in relative terms (SOMO, 2019).

**Table 1. Development indicators in mica production regions compared nationally, 2018**

		Madagascar Androy Anosy Ihorombe			
Poverty (%) (2013)	Poverty rate <sup>6</sup>	71.5	96.7	85.4	78.2
Child labour (%) <sup>7</sup>	All	47	62	56	56
	In dangerous conditions	32	40	40	39
Child marriage (%) <sup>8</sup>	Women	12	23	15	25
	Men	3	7	3	4
Education (net attendance rate <sup>9</sup> ) (%)	Primary	76	27	31	32
	1st half secondary	27	10	12	16
	2nd half secondary	13	9	7	7
Child nutrition (%) <sup>10</sup>	Moderate emaciation <sup>11</sup>	6	7	8	7
Child mortality (out of 1000)	Neonatal <sup>12</sup>	22	24	17	22
	<sup>13</sup> Infant	41	39	39	39
	Child <sup>14</sup>	20	17	37	19
Child vaccination <sup>15</sup> (%)	Basic vaccines <sup>16</sup>	41	31	45	24
	All vaccines <sup>17</sup>	33	24	39	9
Household hygiene (%)	Access to potable water	41	26	26	24
	Access to sanitation	17	11	6	14
	Access to basic hygiene <sup>18</sup>	23	6	13	8
Fertility (%)	Adolescent fertility rate	15	25	20	17
	Childbirth before 15 years	5	9	7	15
	Childbirth before 18 years	36	46	47	60

Source: (INSTAT (2013))

Regarding health, conditions in the three regions are also among the poorest. **In Ihorombe, only 9 per cent of all children aged 12 to 23 months, the lowest level nationally, are properly vaccinated.** Only a quarter of the population in the three main mica provinces have access to safe drinking water, whereas the national average is 41 per cent. On average, 9 per cent have access to a basic facility to wash their hands with soap and water in or near the house (versus 23 per cent nationally). Roughly 2 per cent (three times less than the national level) have access to a toilet they do not need to share with other households. In Anosy, 74 children out of 1,000 die before they are five years old, while in Androy and Ihorombe, respectively, 24 and 22 out of 1,000 children do not live to be older than one.

6 National poverty line was, in 2013, MGA 535,603.

7 Children from 5 to 17 years old involved in labour during the week before the survey.

8 Individuals aged 15 to 49 who married before age 15.

9 The number of students in the age group officially corresponding to a given level of education who attend school at that level, expressed as a percentage of the population in that age group.

10 Children under 5 years old.

11 Emaciation is defined as weight loss and unnatural thinness due to a loss of subcutaneous fat. A moderate level corresponds to two standard deviations under the mean.

12 First month.

13 Up to 1 year.

14 From 1 to 5 years old.

15 Children from 24 to 35 months old.

16 BCG, Polio3, DTC3, rubeola.

17 BCG, Polio3, IPV, DTP3, HepB3, Hib3, PCV3, Rota2, rubeola.

18 Basic hand washing device.

## 2. Safety nets as a poverty eradication tool: scientific evidence



The above-described issues are not exclusive to Madagascar. Worldwide, children are twice as likely to live in poverty as adults, and millions of children globally are not covered by social protection at all, with only one out of three receiving some form of child or family benefit. [However, regular cash transfer programmes have been proven to drive down poverty rates and help children flourish. In general terms, cash transfer programmes have been widely analyzed with clear evidence generated about its positive impact on poverty.](#) In the following paragraphs, a review of assessments of such tools is presented, with a focus on their impact on the type of issues highlighted in the analysis of the mica communities, including the economic exploitation of children.

### Key findings

- **Social safety nets, in the form of regular cash-based interventions in Madagascar have reduced child labour rates in beneficiary households from 27 per cent to 10 per cent in 15 months.**
- **Similarly, they increased net school enrolment rates by more than 10 percentage points.**
- **Regular cash transfer programmes in Madagascar have also reduced long-term food insecurity by about 18 days per year, or a 12 per cent decrease overall.**
- **Simulations for developing countries show that 1 per cent of GDP invested in a Universal Child Benefit would reduce total poverty and child poverty uniformly.**



## Regular cash transfer programmes reduce child labour and increases schooling

In Madagascar, the government, with conditional cash transfer programmes supported by UNICEF and the World Bank, has witnessed how cash positively affects child labour levels (see Table 3). **In the period 2016-2018, 11- to 14-year-old boys from TMDH beneficiary households became 16 percentage points (pp) less likely to work for pay.** Additionally, the programme affected unpaid work, as girls aged five to ten became less likely to perform domestic work and 11- to 14-year-old children became less prone to become involved in unpaid labour (AIR, 2019).

After 15 months of implementation, the FIAVOTA sharply decreased the incidence of child labour among beneficiary households (UNICEF, 2018). In 2016, 27 per cent of the children aged 5-17 were engaged in economic activities, versus less than 10 per cent in 2018.

Evidence collected in Madagascar also shows a positive impact of cash on school enrolment. Both **the TMDH and its supplementary transfer, the LUL, increased net enrolment rates for children aged 11 to 14 (by 10 pp and 6 pp, respectively) (AIR, 2019; Doc, 2019). Similarly, the FIAVOTA programme, increased net enrolment rates by 12 pp for 6- to 12-year-olds (UNICEF, 2018b; World Bank, 2019c).** In the cases of both the TMDH and the FIAVOTA programmes, increases in enrolment may have been produced due to the removal of financial barriers. The TMDH programme led to large increases in education expenditures (UNICEF, n.d.); it raised households' paid school fees (17 pp), school expenditures per child (USD 3.37 per year) and the school supply expenditure per child (USD 1 per year) (AIR, 2019). In the case of the FIAVOTA, following 15 months of implementation, beneficiary families became less prone to mention the lack of financial resources as a factor behind school drop-out (resources were implicated in 60 per cent of cases in 2018 compared to 75 per cent in 2016) (UNICEF, 2018 ).

**Table 3. Madagascar social protection programmes**

TMDH	The Monetary Transfer for Human Development, (TMDH) is a conditional cash transfer funded by the World Bank (and by UNICEF) and focused on improving primary school attendance. The TMDH has recently absorbed the beneficiaries from FIAVOTA.
FIAVOTA	An emergency cash transfer programme originally set up in response to the 2016 drought in the south of the country, but now assuming more developmental objectives in line with those of TMDH.
LUL	In 2016, the TMDH was supplemented with a UNICEF-funded transfer for children transitioning to secondary school, called Let Us Learn (LUL), which is now finished.
ACT-P	The "Asa Avotra Mirindra" (ACT-P) is a cash-for-work productive safety net launched in 2015 by the government with financial support from the World Bank and aimed at providing income support during the lean seasons through paid work for workers assessed as poor in select districts. In addition, unconditional cash transfers are provided for vulnerable persons who are unable to work (up to a maximum of 20 per cent of the total number of beneficiaries).
Zara Mira	"Zara Mira", which was officially launched in March 2022 in the commune of Tataho, Vatovavy Fitovinany region, and in the commune of Ifotaka, Anosy region in the South in June 2022, is an Universal Child Benefit (UCB) programme. In addition to accompanying measures, the Zara Mira programme includes a non-conditional monthly transfer of MGA 10,000 (USD 2.43) for any child up to 15 years old and pregnant women living in the project's target localities (with payments being made every two months), and an additional monthly transfer of MGA 30,000 (USD 7.29) for people living with a severe disability.

The FIAVOTA and TMDH increased not only school enrolment but also long-term attendance of children from 6 to 12 years old, with the former also reducing dropout rates (Doc, 2019a). The TMDH and the LUL increased the time children spent studying outside of school (by 14 and 16 minutes per day, respectively, in the 15 to 18 and 11 to 14 age ranges) and resulted in a 15 pp enhanced ability, in the case of the older group under the LUL, to progress to the next grade.

Beyond Madagascar, the academic literature provides evidence of similar effects. Snilstveit et al. (2015), in their assessment of programmes targeting primary and secondary schools in 52 lower and middle income countries (LMICs), found that cash transfers were the most effective basis among various programmes that aim to improve access to education, measured as rates of school participation. Moreover, several studies show that this works even when the cash is not conditional on school enrolment (Pega et al., 2017). Increases in school rates under unconditional cash transfers (UCT) terms are not as high as those with conditional cash transfers (CCT), but by comparison their unit costs are lower, as they do not require monitoring and enforcement (Benhassine et al., 2015)<sup>19</sup>.

In the same vein, at the international level, cash transfers have been found to be effective in removing financial barriers for families by covering direct schooling costs (tuition fees, uniforms, textbooks, etc.) and opportunity costs<sup>20</sup> (loss of income from child labour) (Snilstveit et al., 2015). Though the cost of education is perceived by most people as a profitable investment, poor households might lack information about education returns and are more likely to live in communities without clear norms and models in this respect (Baird, McIntosh and Özler, 2011).

At the international level, Snilstveit et al. (2015) also found that cash transfers were the most effective basis among other types of intervention for reducing dropout and improving completion. Moreover, cash transfers not only improve educational outcomes by enabling access to basic services; through beneficial impacts on health, cash also produces positive impacts on education. This includes earlier school enrolment caused by improvements in health and nutrition (Molina Milán et al., 2020) and enhanced cognition and educational outcomes in the longer run through the use of health products and services (J-PAL, 2020).



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<sup>19</sup> As an attempt to combine the effectiveness rates of CCT and the low cost of UCT, labelled cash transfers avoid investments oriented to enforce conditions but, upon the basis of behavioral economics, they are believed to increase the UCT effectiveness as parents mentally process the purpose for which the cash is transferred (Benhassine et al., 2015).

<sup>20</sup> The opportunity costs of attending school increases with age, as informal work and marriage opportunities arise and hence effective cash programmes increase the value of transfers in accordance with a child's age (Snilstveit et al., 2015). The transfer recipient is also a relevant factor, with the cash being more effective when transferred to mothers (Snilstveit et al., 2015) and literate beneficiaries (UNHCR, 2012).

# The impact of regular cash transfer programmes on health and nutrition

Available evidence on the FIAVOTA and TMDH programmes indicates that cash transfers in Madagascar are also affecting health, nutrition, food security and well-being<sup>21</sup>. As per the World Bank's evaluation reports (World Bank, 2019c), in the 2016-2018 period, FIAVOTA encouraged the general population to attend health centers, and it reduced the incidence of disease in the general population, particularly among children.

With regard to the TMDH, it also decreased the incidence of disease in the general population (Doc, 2019a). However, its impacts on children were weaker<sup>22</sup>, as it only positively affected children between five and ten years old by increasing the likelihood of them attending health clinics (with a 20 pp increase for boys and 26 pp increase for girls) and owning a pair of shoes (increased by 16 pp for boys and 22 pp for girls) (AIR, 2019).

Between 2016 and 2018, the FIAVOTA enabled beneficiary households to consume more food<sup>23</sup> with a parallel improvement in food diversity (Banque Mondiale, 2019a). After 18 months, TMDH's cash intervention had reduced long-term (measured over 12 months) measures of food insecurity substantially, by about 18 days per year, or a 12 per cent decrease overall (UNICEF, n.d.)<sup>24</sup>, without affecting food diversity (Doc, 2019a, UNICEF n.d.).

**The well-being effects of the social protection programmes go beyond health and nutrition.** In 18 months, the TMDH generated significant improvements (14 per cent increase) across two separate measures of parent-child interaction (UNICEF, no date) and, despite the non-significant effects on child nutrition, it led to progress in children's cognitive development, language learning and social skills (UNICEF, n.d.).

International evidence also indicates that cash-based programmes have positive impacts on nutrition. A meta-evaluation in Brazil found a positive association between CCT programmes and improvements in recipients' diet and nutritional status (Martins et al., 2013); and the first comprehensive systematic review of 21 UCT programmes in LMICs, mostly conducted by governments, concluded that UCTs improved longer-term expected outcomes such as resistance to illness, food security and dietary diversity (Pega et al., 2017). **Although effects on mental well-being have not been assessed, evidence from Malawi (Angeles et al., 2019) indicates an improvement in mental wellbeing among the country's youth resulting from the national UCT program.**



21 This is also true for other Malagasy cash-based interventions such as the ACT-P.

22 Its extension, the LUL, had no impact on children's health. The midterm survey found that LUL's children beneficiaries were, in any case, quite healthy even before the baseline survey.

23 This is also true for other Malagasy cash-based interventions such as the ACT-P.

24 For 2016-2018, AIR (2019) found that TMDH decreased the number of days of insufficient food in the previous week by 22 pp.

# The impact of regular cash transfer programmes on productive activities and self-reliance

Evaluations of social protection cash transfer programmes capture different impacts that favour an enabling environment for socio-economic development beyond addressing basic needs such as education, health and nutrition. [Several studies have revealed the positive impact of cash transfers on livelihoods through the effect of encouraging self-employment and entrepreneurship among beneficiaries.](#) Moreover, cash transfers are more suited to stimulating local markets of goods and services than in-kind assistance. The Directorate General for European Civil Protection and Humanitarian Aid Operations (ECHO) (ECHO, 2013) advocates the use of cash as soon as markets start recovering from a humanitarian crisis, as it restores livelihoods, stimulates production, dynamizes trade, helps traders to establish new links with other markets, thereby boosting employment potential. [This is consistent with evidence provided by the academic literature \(Harvey & Bailey, 2011; Bastagli et al. 2016\).](#)

Cash transfers increase liquidity, producing wide-ranging financial benefits with onward flows into a great variety of businesses and services within a community, and may have multiplier effects in accordance with Keynesian economic theory. Doocy and Tappis (2017) found that UCT programmes generated more than USD 2 of indirect market benefits for each USD 1 provided to beneficiaries, compared with USD 1.50 of indirect market benefits for each USD 1 equivalent provided to beneficiaries through vouchers. In Mozambique and Zimbabwe, the average multiplier effect of two UCT programmes was 1.59. In other words, an injection of cash with an amount up to USD 1 would generate additional income of USD 0.59 for the local economy, a result which is generalizable to other sub-Saharan countries, according to the authors (Handa et al., 2016). Other studies (Concern Worldwide, 2011) in rural Zimbabwe calculate a multiplier effect of 2.29 for humanitarian cash versus only 1.67 for food.

The distribution of cash also fosters access to administrative and financial services and paves the way for economic formalization. First of all, it fosters civil registration of children and adults<sup>25</sup>. Secondly, it is often supported by mobile banking, and encourages access to micro-finance services for poor communities (UNHCR, 2012). For instance, there is evidence of Mexico's "Progres-Oportunidades-Prospera" cash transfer program exposing beneficiaries to other formal financial services (such as remittance services) as a result of their regular visits to program branches (Masino and Niño-Zarazúa, 2018).

Social protection cash transfer programmes also represent an investment in human capital, which is a prerequisite for long-term economic development. In the time lapse of one generation, investments in children's health, education and nutrition materialize in a skillful and productive workforce that enables the development of capital intense economic activities and structural transformation. [There are numerous empirical analysis that find correlation between human development and per capita income, and recent research on public expenditure show that direct investments in children's health and education have the highest marginal value of all public investments, with the benefits exceeding by five times the cost to government on average \(unicef.org, 2019\).](#)



25 One of the few requirements for receiving a UCB would be that the recipient be adequately registered with the authorities.

The idea of cash transfers is supported not only by materialistic arguments, but also by policy guidelines issued by humanitarian actors, which tend to agree that cash-based aid preserves people's dignity, as it allows them to make choices and fosters self-reliance and resilience. Cash empowers beneficiaries to determine their own needs and the best ways to meet them within a given community, regardless of the reasons for their vulnerability. In displacement contexts, cash, which can be spent anywhere, facilitates new relations between displaced and host communities (Oxfam, 2006; UNHCR, 2012; EC, 2019). Empirical research on this kind of impact is not so developed as to provide hard evidence for the previous statements, but along with the accumulated experience of the institutions concerned, incipient qualitative research does confirm such views. [Qualitative and participatory research on beneficiaries' and communities' perceptions of five UCT programmes in the Middle-East and North Africa \(MENA\) and Sub-Saharan Africa suggests that UCTs have positive qualitative impacts on beneficiaries' individual \(self-perception\), intra-household \(quality of life\) and community \(social capital\) levels<sup>26</sup>](#). In the same vein, S. Bastagli et al. (2016) points to cash providing recipients with economic autonomy and self-sufficiency.

## Cash transfers do no harm

Major concerns on unintended negative impacts have been contested by research. Initial critics of cash transfers argued that several unintended effects would make these programmes counterproductive. It was argued that a sudden influx of cash would raise inflation; its misuse could bring additional social issues, such as alcoholism; and that vulnerable people would become more dependent on aid<sup>27</sup>.

Certain negative spill-overs have been found by some researchers, such as domestic conflicts around the use of cash and resentment from non-beneficiaries (Samuels and Jones, 2013), but most empirical literature comes to reject theoretical concerns about cash transfers. The inflationary effects of cash interventions have been rejected in the revision of large-scale national programmes owned and operated by governments in Ethiopia, Ghana, Kenya, Lesotho, Malawi, Zambia and Zimbabwe (Handa et al., 2018). Examples are provided by empirical analyses covering contexts other than development programming in Somalia, Pakistan, the Philippines and the USA, where more than USD 6 billion were distributed following hurricanes Rita and Katrina (Bailey and Pongracz, 2015). [Other worries have also been contested and refuted with evidence. Handa et al. \(2018\) conclude that cash transfers are not fully used for short-term consumption but rather invested \(either in human capital or productive activities\); that they do not create dependency \(decreasing participation in productive work\); and that they do not increase fertility.](#)



26 Two in the Middle East and North Africa (MENA) region (the Palestinian National Cash Transfer Programme (PNCTP) in Gaza and the West Bank, and the Social Welfare Fund (SWF) in Yemen); and three in Sub-Saharan Africa (Kenya's Cash Transfers for Orphans and Vulnerable Children (CT-OVC) programme, Mozambique's Basic Social Subsidy Programme (PSSB), and Uganda's Senior Citizen Grant (SCG), part of the Social Assistance Grants for Empowerment (SAGE) programme). The research was carried out by the Overseas Development Institute.  
 27 For instance, ECHO (2013), along with Oxfam (2006) and UNHCR (2012), suggests conducting a market assessment prior to implementing cash transfer programmes to evaluate the risk of causing or contributing to inflation in the prices of key goods if there is not sufficient supply.

Evidence also rejects some popular concerns about cash transfers, such as the possibility that cash discourages beneficiaries from working. On the contrary, according to the academic literature reviewed above, cash transfers tend to foster self-employment and entrepreneurship. [The possibility that beneficiaries misuse the money received in higher spending on alcohol or tobacco is also contested by the literature even when transfers are unconditional \(Handa et al., 2018\)](#). Some analysis have shown that cash grants are also used to repay debts, but overall it nevertheless ultimately increases expenditure on nutrition, health and education as expected by donors (Harvey and Bailey, 2011). Handa et al. (2018b) add that cash transfer programmes do not induce higher spending on alcohol or tobacco. In the humanitarian sector, beneficiaries also seem to use cash as expected. For instance, Pakistan Catholic Relief Services (CRS) provided cash grants of USD 35 each to complement in-kind shelter materials as part of its response to the 2005 earthquake. Although no conditions were attached to the cash, most of the money was spent on shelter, and households complemented the cash with considerable investments of their own (Harvey & Bailey, 2011).

Finally, it must be stated that during focus groups discussions, when parents gathered by gender were asked about three priorities on which they would spend a cash transfer of USD 2.5 per child, their responses aligned with academic literature and impact evaluations. [While food was the first priority for all respondents, the second and third priorities for most of them were school fees and materials for their children, and productive investments such as chicken, cattle or small shops](#). Only one informant put among their three main priorities the settlement of debts acquired during the dry season.

## Lessons learned from the humanitarian experience

Cash transfer programmes have been fostered on the basis of their expected efficiency. Assuming that beneficiaries make use of the cash received in a way which is closely aligned to the donors' will, cash transfers are found to be a logistically simpler and economically cheaper alternative to the delivery of goods and services.

Unfortunately, only a limited number of empirical analyses have tested this hypothesis, and most of them focus on humanitarian contexts, although the same reasoning could apply to social protection programmes. These studies have found that cash programmes framed under nutrition goals are more cost-effective than food aid (Bailey, 2013). [A review of 30 livelihood programmes, 11 unconditional cash transfer interventions and seven cases based on graduation, concluded that cash transfers are, at least in the short term, more efficient than other approaches, with efficiency being measured as a proportion of the annual household consumption gain against total programme costs \(Sulaiman, 2016\)](#). In the same vein, an academic review of ten studies suggested that cash transfer programmes attain similar results and have a lower cost per beneficiary than vouchers and in-kind distribution, partly due to lower administrative costs (Doocy & Tappis, 2017). For these and other reasons, international guidelines on humanitarian assistance recommend the systematic use of cash. Most humanitarian donors are increasing their use of cash transfers, with the most important ones, such as ECHO, officially considering cash as its preferential modality for aid delivery (UN, 2016; ECHO, 2019)



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### 3. The potential of a Universal Child Benefit programme for eradicating child labour

#### Key findings

- USD 2.5 per child and month is the unit cost estimated by UNICEF for a UCB programme to boost children's nutrition, education and health in municipalities of the Anosy region.
- The cost of extending such benefit to the municipalities hampered by the economic exploitation of children in mica mines would be USD 5.72 million per year.
- The UCB annual cost in mica municipalities would represent only 0.44 per cent of the ODA received by Madagascar, and 0.04 per cent of its gross national income (GNI).
- The Madagascar policy on social protection foresees the extension of social protection to 50 per cent of the population from its current coverage of 2.5 per cent.
- The 2017 Social Protection Law provided the legal basis for a fund to channel mining royalties and company donations towards the social protection budget.
- Simulations for developing countries show that 1 per cent of GDP invested in UCBs would reduce total poverty and child poverty uniformly.

Based on its experience as a financial and technical partner of the Madagascar social protection system and co-leader of the cash working group, UNICEF has designed a solution to address child labour and protect children's rights in mica communities.

The following paragraphs describes the UCB and assesses its relevance to the needs of families and children in mica communities, as well as its coherence with actions taken by other private and public actors.

#### What are Universal Child Benefits (UCB)?

UCBs are a type of cash transfer consisting of an amount of cash paid on a regular basis to the family or primary caregiver of children until they reach a certain age, regardless of their socioeconomic constraints or any other factors. While they might be subject to some eligibility criteria in order to enhance positive impacts on children's wellbeing, UCBs are addressed to all children. **UCBs are meant to be integrated in social protection systems, as part of a non-contributive scheme addressing poverty and vulnerability on a solidarity basis, and with a view to reducing and preventing poverty and vulnerability.**

Their approach differs from other programmes in their focus. They address children in general on the basis of their fundamental rights, and they aim at breaking the vicious circle of intergenerational poverty by ensuring that all children reach maturity in good health and education, and enabled to make their living and contribute to their communities' development. This universal perspective becomes particularly relevant in the mica mining context, where poverty is widespread and all children, regardless of whether they are currently involved in work or not, are at risk of falling off the child labour ramp.

In line with the empirical literature on cash transfers, analyses of universal and large-scale child benefits have proven effective in reducing child poverty. [An ODI-UNICEF \(2020\) study of 15 OECD countries showed that full or quasi-UCBs reduced income poverty in households with children by five pp and contributed 15 per cent of the impact of cash transfers in reducing child poverty.](#) In some countries, they are responsible for around half of the impact of cash transfers on child poverty reduction. Cross-country comparison shows that countries with universalistic approaches reach higher poverty reduction rates than those relying on targeting strategies, while universalistic systems that are combined with additional support measures for low-income households appear to have the highest poverty reduction impact (ODI-UNICEF, 2020).

The same analysis (ODI/UNICEF, 2020) presents results of simulations on low-income and middle-income countries (LICs and MICs). These foresee that 1 per cent of gross domestic product (GDP) invested in UCBs would reduce total poverty and child poverty uniformly.

## Feasibility and efficiency of a UCB for mica communities



In the municipality of Ifotaka, in the Amboasary District, the Government of Madagascar, with financial and technical support from UNICEF, is carrying out a UCB programme called "Zara Mira". The programme includes a non-conditional monthly transfer of USD 2.5 for any child living in the project's target localities (with payments being made every two months). All children up to 15 years old and pregnant women are eligible, on the sole condition that they are adequately registered. An additional monthly transfer of MGA 30,000 (USD 7.29 at current rates of exchange) is made for children and adults with moderate and severe disabilities. The program is managed in partnership with the Ministry of Population, Social Protection and Promotion of Women (MPPSPF) and implemented by the Development Intervention Fund (FID).

Drawing on wide evidence of the effectiveness and efficiency of cash transfers, "Zara Mira" has been designed as an unconditional program, meaning that no conditions are formally imposed to beneficiaries on the use of cash. [However, the program comes with accompanying measures that include awareness raising activities related to children's health and education, family planning and financial education, combining the universality of the benefit with additional targeted guidance for households in most need.](#)

[education, family planning and financial education, combining the universality of the benefit with additional targeted guidance for households in most need.](#)

As per previous sections, it is estimated that 35 municipalities in the regions of Anosy, Androy and Ihorombe host mica mines in which children are economically exploited. [Implementing child benefits to combat child labour with a universal approach would entail targeting a population of 443,000 people, of which 190,509 are children under 15 years old. A USD 2.5 UCB for such a target population would therefore represent an annual cost of USD 5.72 million.](#)

The efficiency of cash transfers designed to address extreme poverty in developing countries relies on the unit cost; although the number of beneficiaries is enormous, the amount required to make a difference in the life of one child is so small that total costs are suitable for national development plans funded with public resources and development assistance. Such an amount would represent 0.44 per cent of the official development assistance (ODA) received by Madagascar every year, less



than 2 per cent of the credit facilities provided in 2020 and 2021 by the IMF to face the COVID-19 crisis in Madagascar, and 0.4 per cent of the country's GDP. It is also a small budget when compared to the country's 2019 public expenditures, as it represents 2.7 per cent of the public expenditure in public works and infrastructure (UNICEF, 2019b).

#### Box 4. The story of Jean Berthin

In Ifotaka, in Southern Madagascar, 13-year- Jean Berthin, dreams of one day becoming a doctor. He puts all his hope in his studies to achieve his goal.

However, with Berthin and his three siblings, balancing the expenses is a real headache for his parents. The children, for example, missed the entire 2020-2021 school year because the family's priority was to find food. There was no budget for school supplies and tuition fees.

Berthin and his family migrated to Ilakaka to work in quarries, but eventually returned to Ifotaka where his father's work as a butcher suited them better. The family earns between MGA 2,000 (USD 0.49) and MGA 3,000 (USD 0.78) per day for at least one meal a day.

This monetary poverty is the real obstacle to the development of Berthin and his family. Living on less than USD 1.90 a day, it is a complex task for her mother to think about Berthin's well-being. "I want my children to succeed in their lives. For Berthin, in particular, I would like him to acquire knowledge because his capacity for physical work is very limited," explains his mother Berthine Maho. Indeed, Berthin gets exhausted very easily because of a physical handicap.

But there is hope! Berthin is one of 20,000 children in the 48 fokontany of Ifotaka to benefit from the Universal Child allowance and equal opportunities through the "Zara Mira" social protection programme. This is an universal transfer for every child under 15 years of age, as well as a set of accompanying measures designed to maximize the impact of the allowance on children's well-being. It promotes changes in parental behavior, including the economic empowerment of women.

The receipt of this monthly allowance is a glimmer of hope for the whole family, it has allowed them to reorient their financial management. The school fees of the three school-aged brothers are paid regularly and they have returned to school with adequate school supplies and tuition fees.

Berthin is currently studying in Amboasary, 40 km from his village where his entire family lives. "Our income has increased since we benefited from this program. We are planning to rent him a house closer to his school and pay for his daily needs," says his mother.

Source: (unicef.org, 2022a)



## Coherence with the National Social Protection Strategy

The concrete solution conceived by the Government of Madagascar with technical support from UNICEF to tackle child labour in mica mines is very well aligned with the vision of the National Social Protection Policy (PNPS), which sees the extension of social protection under the fight against poverty, vulnerability and precariousness. [More precisely, this policy envisages the extension of social protection by 2030 so that half of the vulnerable population has effective social protection coverage by this date, and the share of people living in extreme poverty is reduced to 15 per cent.](#)

**Universal Child Benefits are adapted to long-term poverty reduction strategies.** By reducing the risk of children to poverty, UCBs help to overcome the material, health, social and psychosocial affects which can have long-term impacts on children's lives, both when young and as adults, thus contributing to breaking cycles of intergenerational poverty (ODI/UNICEF, 2020). In 2020, only 3.1 per cent of children were covered by social protection programmes (UNICEF, 2021)<sup>28</sup> (see Table 2), and therefore the award of a UCB to mica communities that are clearly under extreme poverty and suffer additional vulnerability related to their working and living conditions is a good way to proceed with the implementation of the national strategy.

**Table 2. Estimated national coverage of Madagascar's social protection programmes, 2020**

	Households		Persons		Children	
	N	%	N	%	N	%
TMDH (including LUL and Fiavota)	113,131	1.72	474,051	1.71	290,895	2.25
ACTP	43,690	0.66	218,450	0.79	109,225	0.84
Total	156,281	2.38	692,501	2.50	400,120	3.09

Source: (UNICEF, 2021)

## Coherence with the mica plan



28 This figure will be updated if possible.

The awareness raised by the 2019 mica report on the situation of thousands of children has attracted financial and technical support from national and international development actors, as well as private companies engaged in mica value chains at the national international level. In addition to local NGOs and the Malagasy ministers responsible for mining, social protection and labour, [these include international NGOs, such as Pact and TdH, multi-stakeholder platforms, such as the Responsible Mica Initiative \(RMI\), and bilateral donors, such as the US Department of Labour.](#) During the field mission prior to the elaboration of this paper, other donors showed interest in accommodating some sort of support for this agenda in the framework of broader cooperation plans that are already going on. It is also well known that local authorities and the local companies involved in the mica value chain are willing to cooperate in the eradication of child labour in mica mines.

The contributions of the various actors are being coordinated under the umbrella of the Mica Plan, a master plan aimed to optimize resources allocated to this issue but has not been yet defined in detail. In any case, all the stakeholders share information on their projects and programmes in this field and it is well known that there is a shared vision on a profound reform of the mica value chain involving public authorities, communities and the private sector. The idea is to award exploitation licenses to the communities currently involved in artisanal mining, while providing them support to introduce equipment and safe working standards, and engaging them against the economic exploitation of children. At the same time, while increasing the share of mica coming from regularized sites, exporters would be asked to avoid child labour and the violation of human and labour rights in their procurement chain. At the end of the national value chain, a certificate would be awarded to mica coming from legitimate sources and this would open the door of the US and EU markets to Malagasy exporters.

Although this reform is very much needed, and may provide formal and dignified livelihood opportunities for the target population and reduce the exploitation of children in mica mines, it is a long term strategy that might skip a generation of child workers. [Moreover, it does not tackle the root causes of child labour in mica mines, or in other mines or sectors. In order to drive resources directly to vulnerable children and to produce immediate results in terms of nutrition, health and education, cash transfers, and in particular UCBs, are more adequate tools.](#) Besides, according to local informants, UCBs would enormously accelerate formalization processes as it is expected that such measures move not only children but also entire families from mica sites to their communities of origin, and pressure would be put on the need to obtain mica through workplaces that are compliant with the law and basic ethical principles.



## Long-term financial sustainability



The finance needed for the extension of the social protection system to mica municipalities represents an amount that can be accommodated in ODA budgets, as explained above. Such assistance would be consistent with the experience gained by donors in the humanitarian sector, in which cash has become the preferential modality for aid delivery, and it would align to Sustainable Development Goal (SDG) Target 1.3 which frames the global expansion of social protection systems under the “End Poverty” goal, and the Addis Ababa Action Agenda, which advocates international support to the financing of social protection.

However, the Universal Child Benefit programme is a long-term intervention likely to be further expanded to other municipalities and regions. Therefore, its long-term financial sustainability must rely on the government’s capacity to mobilize domestic resources.

Indeed, the 2017 Law on Non-Contributory Social Protection foresees the set-up of a common fund for non-contributory social protection to be fed with public and private resources, including royalties for the exploitation of natural resources and private donations (RdM, 2017). Such a fund would be a good vehicle to channel taxes obtained from companies making profits from the mica value chain, and donations from other international companies linked to the Malagasy mining sector or the global mining value chains.

In this respect, it is remarkable that mica production is currently producing a return to local communities of only USD 20,000 to 30,000 per year, which represents 0.45 per cent of the export value of this material extracted by children and poor families under unacceptable working conditions. [The legal rate established by the 2007 Decree, which sets the royalties and returns from mining activities, foresees a 1.4 per cent return for local communities, entailing a rate of revenue collection that is three times higher \(RdM, 2007\).](#)

In any case, there is a large consensus on the need to increase the taxation on the operation exploitation of mining activities in Madagascar and its alignment with national development plans. A reform of the mining code and the set-up of a sovereign mining fund fed with royalties obtained through the application of higher rates is currently under discussion. Such a reform would be an excellent opportunity to legally link the mining fund under discussion with the common fund for social protection.

# Conclusion

The worst forms of child labour are widespread in the mica mines of Madagascar, which are informally exploited in about 35 municipalities in the regions of Anosy, Androy and Ihorombe. These municipalities host a population of 443,000 people with extreme poverty generalized in the immense majority of households. Among them, an estimated 190,509 children under 15 years old form part of those households and suffer multidimensional poverty. All of them are at high risk of falling in the trap of mica mines and other types of economic exploitation.

These families produce 90 per cent of the mica exported from Madagascar and receive an average monthly income of only USD 6.56. According to field work, a UCB of only USD 2.5 per month would result in improved nutrition and access to education, and trigger the search of alternative livelihoods in the communities of origin.

Evidence collected in Madagascar shows that regular cash-transfer programmes reduced child labour between 16 and 17 pp in less than two years. They also improved school enrolment by between 10 and 12 points. In 18 months, they substantially reduced long-term measures of food insecurity, and generated significant improvements in parent-child interaction, as well as in children's cognitive development, language learning and social skills.

International research on safety nets further confirms the effectiveness of cash interventions and points to additional positive impacts of regular cash transfer programmes. For instance, researchers and practitioners agree that cash enhances beneficiaries' dignity and autonomy, and recent studies have found multiplier effects of cash. Overall, major concerns on the negative impacts of cash (inflation, misspending, etc.) have been contested by research. Moreover, in humanitarian contexts, cash transfers have been found to be more efficient than in-kind aid. Simulations for developing countries show that 1 per cent of GDP invested in UCBs would reduce total poverty and child poverty uniformly.

The Government of Madagascar has set up a programme to tackle child labour in mica communities, consisting of a non-conditional monthly transfer of USD 2.5 for any child living in the project's target localities. All children between 0 and 15 years old, in addition to pregnant women are eligible, on the sole condition of being adequately registered. An additional monthly transfer of MGA 30,000 (USD 7.29 at current rate of exchange) for children and adults with moderate and severe disabilities. The programme is managed in partnership with the MPPSPF and the FID. Such a programme is consistent with empirical research in Madagascar and beyond, and its cost would represent USD 5.72 million, or only 0.44 per cent of Madagascar's ODA and 0.04 per cent of its GNI. Indeed, the Madagascar policy on social protection foresees the extension of social protection to 50 per cent by 2030 and is currently at 25 per cent, so that such a programme would be just a step towards the implementation of the Madagascar strategy in combatting poverty and precariousness through non-contributive social protection.



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The donor community, which has condemned the situation of the Malagasy children working in the mica mines, and committed to taking immediate and effective measures to eradicate child labour by 2030, could finance the launch of this initiative, which represents 0.44 per cent of the ODA received by Madagascar. In the medium and long-term, Madagascar's government should finance such a programme with domestic resource mobilization. More precisely, the joint social protection fund foreseen in the Social Protection Law should be put in place for that purpose. Such a fund is to be fed with mining royalties, among other domestic sources of finance, and therefore its design and implementation could be related to the reform of the mining code under discussion.

Finally, it should be stated that several private and public actors are joining forces to launch a restructuring of the mica value chain based on formalization, corporate responsibility and certification of ethical standards. While such reform addressed to economic actors might produce beneficial effects in the long term, a UCB will produce immediate and direct effects on children. **Moreover, it will accelerate the process of regularization and the reliance on mica mines by poor families will be reduced, along with their vulnerability to economic exploitation.**



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# Références

## Rapports sur les documentations et les programmes

- Abdul Latif Jameel Poverty Action Lab (J-PAL) (2020) Cash Transfers for Health, J-PAL Policy Bulletin. Available at: <https://www.povertyactionlab.org/policy-insight/using-cash-transfers-improve-child-health-low-and-middle-income-countries> (Accessed: 7 September 2020).
- AIR (2019) 'Impact Evaluation of UNICEF's Let Us Learn Cash Transfer Supplement Programme in Madagascar MIDLINE REPORT'.
- Angeles, G. et al. (2019) 'Government of Malawi's unconditional cash transfer improves youth mental health', *Social Science and Medicine*. Elsevier, 225(February), pp. 108–119. doi: 10.1016/j.socscimed.2019.01.037.
- Bailey, S. (2013) 'The Impact of Cash Transfers on Food Consumption in Humanitarian Settings : A review of evidence', (May). Available at: <https://reliefweb.int/sites/reliefweb.int/files/resources/cfgb---impact-of-cash-transfers-on-food-consumption-may-2013-final-clean.pdf>.
- Bailey, S. and Pongracz, S. (2015) Humanitarian cash transfers : cost, value for money and economic impact. Available at: <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9731.pdf>.
- Baird, S., McIntosh, C. and Özler, B. (2011) 'Cash or condition? Evidence from a cash transfer experiment', *Quarterly Journal of Economics*. doi: 10.1093/qje/qjr032.
- World Bank (2019a) 'ANALYSE SPATIALE DES ZONES D'IMPLEMENTATION DU PROGRAMME ARGENT CONTRE TRAVAIL PRODUCTIF À MADAGASCAR VERSION FINALE NON PUBLIEE'.
- World Bank (2019b) 'ANALYSE SPATIALE DES ZONES D'IMPLEMENTATION DU PROGRAMME DE TRANSFERTS MONETAIRES POUR LE DEVELOPPEMENT HUMAIN A MADAGASCAR VERSION FINALE NON PUBLIEE'.
- World Bank (2019c) 'EFFET DES PROGRAMMES DE PROTECTION SOCIALE FIAVOTA-ACTP-TMDH EDUCATION – SANTE - NUTRITION: VERSION FINALE NON PUBLIEE'.
- World Bank (2019d) 'IMPACT DES PROGRAMMES DE PROTECTION SOCIALE FIAVOTA-ACTP-TMDH SUR L'AGRICULTURE ET L'ELEVAGE'.
- World Bank (2019e) 'IMPACTS DES PROGRAMMES DE TRANSFERTS MONETAIRES ACT-P,TMDH ET FIAVOTA SUR LA CONSOMMATION, LA PAUVRETE ET L'INEGALITE : VERSION FINALE NON PUBLIEE'.
- World Bank (2019f) 'IMPACTS DES PROGRAMMES DE TRANSFERTS MONETAIRES ACT-P,TMDH ET FIAVOTA SUR LE MARCHE DU TRAVAIL : VERSION FINALE NON PUBLIEE'.
- World Bank (2019g) 'Revue des Dépenses Publiques en Protection Sociale à Madagascar Rapport final VERSION NON PUBLIEE'.
- Bastagli, F. et al. (2016) Cash transfers: what does the evidence say? A rigorous review of programme impact and of the role of design and implementation features. Available at: [www.odi.org/twitter](http://www.odi.org/twitter) (Accessed: 10 October 2020).

- Benhassine, N. et al. (2015) 'Turning a shove into a nudge?: A "labeled cash transfer" for education', *American Economic Journal: Economic Policy*. doi: 10.1257/pol.20130225.
- Doc (2019a) ANALYSE COMPARATIVE DE L'IMPACT DES PROGRAMMES DE PROTECTION SOCIALE FIAVOTA-ACTP-TMDH -Powerpoint.
- Doc (2019b) PANIER DE DÉPENSES MINIMUM MEB MADAGASCAR Travaux du Comité Restreint du Cash Working Group - Power Point.
- Doocy, S. and Tappis, H. (2017) 'Cash based approaches in humanitarian emergencies: a systematic review', *Campbell Systematic Reviews*, 13(1), pp. 1–200. doi: 10.4073/csr.2017.17.
- EC (2019) EU Cash Compendium 2019 Doing More Cash Better. Available at: [https://ec.europa.eu/echo/sites/echo-site/files/eu\\_cash\\_compendium\\_2019.pdf](https://ec.europa.eu/echo/sites/echo-site/files/eu_cash_compendium_2019.pdf).
- ECHO (2013) 'Cash and Vouchers: Increasing efficiency and effectiveness across all sectors', DG ECHO Thematic Policy Document, (3). Available at: [http://ec.europa.eu/echo/files/policies/sectoral/them\\_policy\\_doc\\_cashandvouchers\\_en.pdf](http://ec.europa.eu/echo/files/policies/sectoral/them_policy_doc_cashandvouchers_en.pdf).
- ECHO (2019) Joint Donor Statement on Humanitarian Cash Transfers | Cash Learning Partnership. Available at: <https://www.calpnetwork.org/publication/joint-donor-statement-on-humanitarian-cash-transfers/> (Accessed: 1 December 2020).
- GoM (2020) 'Public Works and Welfare: Midline Results of a Randomized Control Trial of Madagascar's Productive Safety Net Programme (draft-not published)'.
- Handa, S. et al. (2018) 'Myth-busting? Confronting six common perceptions about unconditional cash transfers as a poverty reduction strategy in Africa', *World Bank Research Observer*. Oxford University Press, 33(2), pp. 259–298. doi: 10.1093/wbro/lky003.
- Handa, S. (Unicef) et al. (2016) Can Unconditional Cash Transfers Lead to Sustainable Poverty Reduction? Evidence from two government-led programmes in Zambia. Available at: [https://www.unicef-irc.org/publications/pdf/IWP\\_2016\\_21.pdf](https://www.unicef-irc.org/publications/pdf/IWP_2016_21.pdf).
- Harvey, P. and Bailey, S. (2011) Good Practice Review Cash transfer programming in emergencies (Humanitarian Practice Network). Available at: [www.odihpn.org](http://www.odihpn.org).
- INSTAT (2013) 'MADAGASCAR MILLENNIUM DEVELOPMENT GOALS NATIONAL MONITORING SURVEY'. Available at: [www.instat.mg](http://www.instat.mg). (Accessed: 3 March 2022).
- INSTAT (2018) Enquête en grappes à indicateurs multiples (MICS), 2018.
- INSTAT (2019) 'Madagascar', Multiple Indicator Cluster Survey (MICS), August. Available at: [https://www.unicef.org/madagascar/media/3121/file/UNICEF\\_Madagascar\\_Executive\\_Summary\\_MICS\\_ENG.pdf](https://www.unicef.org/madagascar/media/3121/file/UNICEF_Madagascar_Executive_Summary_MICS_ENG.pdf) (Accessed: 2 July 2022).
- Martins, A. P. B. et al. (2013) 'Cash transfer in Brazil and nutritional outcomes: A systematic review', *Revista de Saude Publica*, pp. 1159–1171. doi: 10.1590/S0034-8910.2013047004557.
- Masino, S. and Niño-Zarazúa, M. (2018) 'Improving Financial Inclusion through the Delivery of Cash Transfer Programmes: The Case of Mexico's Progresá-Oportunidades-Prospera Programme', *The Journal of Development Studies*, 56(1), pp. 151–168. doi: 10.1080/00220388.2018.1546845.
- McCord, A. (2009) "Cash transfers: affordability and sustainability", (30). Available at: <http://scholar.google.com/>



scholar?hl=en&btnG=Search&q=intitle:Cash+transfers:+affordability+and+sustainability#0.

- Megersa, K. (2019) "Cash transfer programmes in high inflation contexts". Available at: [https://assets.publishing.service.gov.uk/media/5ddfd9d040f0b650b4d18a9f/686\\_Cash\\_Transfer\\_Programmes\\_in\\_High\\_Inflation\\_Contexts.pdf](https://assets.publishing.service.gov.uk/media/5ddfd9d040f0b650b4d18a9f/686_Cash_Transfer_Programmes_in_High_Inflation_Contexts.pdf).
- Molina Milán, T. et al. (2020) "Experimental long-term effects of early-childhood and school-age exposure to a conditional cash transfer programme", *Journal of Development Economics*. Available at: <https://reader.elsevier.com/reader/sd/pii/S0304387818312768?token=5B24DF7CE36731775BAE7E5D4CE5B1B488D2D9728AD0580AE9ACA67218723EAA9F8194C6D96870FB18C37E904DBA01C2>.
- ODI/UNICEF (2020) "Universal child benefits Policy issues and options". Available at: <https://www.unicef.org/media/72916/file/AUE-ODI-UNICEF-Report-2020.pdf>.
- Oxfam (2006) *Cash-Transfer Programming in Emergencies*. Oxfam Policy & Practice. Available at: <https://policy-practice.oxfam.org.uk/publications/cash-transfer-programming-in-emergencies-115356> (Accessed: 18 September 2020).
- Pega, F. et al. (2017) "Unconditional cash transfers for reducing poverty and vulnerabilities: effect on use of health services and health outcomes in low- and middle-income countries (Review)", *Cochrane Database of Systematic Reviews*, (11). doi: 10.1002/14651858.CD011135.pub2. [www.cochranelibrary.com](http://www.cochranelibrary.com).
- Pérez, A., Ayensa, N. and Lacalle, M. (2020) *Cash for development. The use of microcredits and cash transfers as development tools* Policy Department for External Relations, STUDY. Brussels: European Parliament. doi: 10.2861/012058.
- RdM (2007) "Modalités de recouvrement des redevances et ristourne minières", Arrêté interministériel, République de Madagascar, 21985.
- RdM (2017) "Politique nationale de protection sociale relative au régime non contributif à Madagascar", Loi, République de Madagascar, 28. Available at: <https://www.assemblee-nationale.mg/wp-content/uploads/2020/11/Loi-n°2017-028-régime-non-contributif.pdf> (Accessed: 3 July 2022).
- Samuels, F. and Jones, N. (2013) *Holding cash transfers to account: Beneficiary and Community Perspectives*, Overseas Development Institute. Available at: <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8380.pdf>.
- Snilstveit, B. et al. (2015) "Interventions for improving learning outcomes and access to education in low- and middle- income countries: a systematic review", (December 2015). Available at: [https://www.3ieimpact.org/sites/default/files/2019-01/SR24-education-review\\_2.pdf](https://www.3ieimpact.org/sites/default/files/2019-01/SR24-education-review_2.pdf).
- SOMO (2018) "GLOBAL MICA MINING AND THE IMPACT ON CHILDREN'S RIGHTS"
- SOMO (2019) *Child in Madagascar's Mica Sector: Impact of the mica supply chain on children's rights from the Malagasy mines to the international product line*. Commissioned by Terre des Hommes.
- Stauton, C. (2011) "Hard cash in hard times: a Social Accounting Matrix Multiplier Analysis of Cash Transfers and Food Aid in Rural Zimbabwe". Available at: <https://www.ids.ac.uk/download.php?file=files/dmfile/Staunton2011CashtransfersandfoodaidinZimbabweCSPconferencedraft.pdf>.
- Sulaiman, M. (2016) "Making Sustainable Reductions in Extreme Poverty : A Comparative Meta-Analysis of Livelihood , Cash Transfer and Graduation Approaches", (October). doi: 10.13140/

Thome, K. et al. (2016) The local economy impacts of social cash transfers.

UN (2016) "The Grand Bargain - A shared Commitment to Better Serve People in Need". Available at: <https://www.jips.org/uploads/2019/03/Grand-Bargain-final-22May2016.pdf>.

UNHCR (2012) "An introduction to cash-based interventions in UNHCR operations", pp. 1–25.

unicef.org (2019) Four key arguments for investing in human capital. Available at: <https://www.unicef.org/globalinsight/stories/four-key-arguments-investing-human-capital>.

unicef.org (2022a) In Madagascar, a fresh start for children thanks to the Zara Mira social protection program. Available at: <https://www.unicef.org/madagascar/en/stories/madagascar-fresh-start-children-thanks-zara-mira-social-protection-program>.

unicef.org (2022b) "In Madagascar, advocacy for the extension of a social protection programme for children". Available at: <https://www.unicef.org/madagascar/en/stories/madagascar-advocacy-extension-social-protection-program-children>.

UNICEF (2014) "The situation of children and women living in and around mining sites in Madagascar".

UNICEF (2018) "Fiavota Midline - Policy Brief En - Publiée".

UNICEF (2019a) "Child in Madagascar's mica sector Impacts of the mica supply chain on children's rights from Malagasy mine to international product line".

UNICEF (2019b) "Citizens budget".

UNICEF (2021) "TOWARDS A UNIVERSAL AND INCLUSIVE SOCIAL PROTECTION FOR THE CHILDREN OF MADAGASCAR". Available at: [https://www.unicef.org/madagascar/media/7016/file/Towards a universal and inclusive social protection for the children of Madagascar.pdf](https://www.unicef.org/madagascar/media/7016/file/Towards_a_universal_and_inclusive_social_protection_for_the_children_of_Madagascar.pdf) (Accessed: 17 March 2022).

UNICEF (no date) "Human Development Cash Transfer: TMDH Midline Impacts. Draft- not published".

World Bank (2019a) "Analyse d'inclusion des ménages bénéficiaires des programmes de filets sociaux de sécurité à Madagascar Rapport final VERSION NON PUBLIEE".

World Bank (2019b) "Détermination du panier de dépenses minimum des ménages dans le Sud de Madagascar Rapport final VERSION NON PUBLIEE".

### Autres documents de programme programme

Doc (2018) UNICEF Assessment of the Extractive industry in Eastern and Southern Africa Engagement – Key Issues – Strategy Questionnaire.

Doc (2019a) ANALYSE COMPARATIVE DE L'IMPACT DES PROGRAMMES DE PROTECTION SOCIALE FIAVOTA-ACTP-TMDH -Powerpoint.

Doc (2019b) Mica in Southern Madagascar: A review of findings from Pact's March 2019 field trip (Powerpoint).

Doc (2019c) PANIER DE DÉPENSES MINIMUM MEB MADAGASCAR Travaux du Comité Restreint du

Cash Working Group - Power Point.

Doc (2021) Analyses budgétaires des secteurs sociaux axes sur les enfants à Madagascar 2021 - Budget brief protection sociale.

Doc (n.d.) Global Theory of Change: Ending Child in Mica Mining.

# ANNEX I: Methodology

This paper was commissioned by the UNICEF Madagascar Country Office in order to assess the relevance, efficiency and feasibility of an expansion of the Universal Child Benefit programme to address child labour in mica mining communities in Southern Madagascar. The analysis built on ECOPER's previous experience in systematizing impact evaluations and academic literature on 120 cash transfer programmes worldwide.

Following a methodology agreed with UNICEF and presented in an inception report submitted in mid-February, the elaboration of this paper included a document review on the negative impacts of economic exploitation in the targeted area; a review of previous cash programmes in Madagascar; a review of international literature on UCB's and other modalities of cash transfers; and field work in Antananarivo, Fort Dauphin and mica communities.

The analysis was guided by the following questions.

## Research questions

1. What is the current situation regarding child labour and the negative impacts of economic exploitation on children in the mica regions?
2. What is the current state of social protection in the mica regions?
3. How can UCB programmes contribute to reducing child labour?
  - 3.1 How can UCB programmes contribute to protecting children, reducing child labour and promoting better outcomes in schooling, health and nutrition in the target communities?
  - 3.2 What will be the unit cost of UCB programmes in the target communities and how would it compare to other interventions?
  - 3.3 How can UNICEF UCB programmes be scaled up to mica regions, the mining sector and/or the whole country from a financial standpoint?
  - 3.4 How can UNICEF UCB programmes be embedded in national institutions in order to ensure its sustainability and universality?

## Child labour in Madagascar mica mines, regional and national context

The main references for this review were the UNICEF report 'Child Labour in Madagascar's Mica Sector' (UNICEF, 2019a); the SOMO report "Global Mica Mining and the Impact on Children's Rights" (SOMO, 2018); the UNICEF report on "The Situation of Children and Women Living in and around Mining Sites in Madagascar" (UNICEF, 2014); the Multiple Indicator Cluster survey (MICS) in Madagascar for 2018 (INSTAT, 2018).

## Cash transfers in Madagascar

This analysis drew on evaluation reports from cash programmes in other areas of Madagascar covered by the National Social Safety Net (NSSN) programme, which itself comprises two programmes

**Table 3. Midline impact evaluations: temporal scope and programmes involved**

Reference	Scope	ACT-P	FAVOTA	TMDH	LUL
AIR (2019)	2016 -2018			X	X
UNICEF (no date b)	18 months (nd)			X	
UNICEF (2018a)	2016-2018		X		
World Bank (2019f, 2019e, 2019c, 2019d)	2016-2018		X	X	X
GoM (2020)	2017-2018	X			

Source: own elaboration

In the first place, the Monetary Transfer for Human Development, (TMDH), a conditional cash transfer funded by the World Bank and UNICEF and focusing on improving primary school attendance/attendance. In 2016, this programme was supplemented with a UNICEF-funded transfer for children transitioning to secondary school, called Let-us-Learn (LUL)<sup>29</sup>, which is now finished. The TMDH has also recently absorbed the beneficiaries from FIAVOTA, an emergency cash transfer programme originally set up in response to the 2016 drought in the South of the country, but now assuming more developmental objectives in line with those of TMDH.

Secondly, A cash-for-work productive safety net called “Asa Avotra Mirindra” (ACT-P), launched in 2015 by the government with financial support from the World Bank and aimed at providing income support during the lean seasons through paid work for workers assessed as poor in select districts. In addition, unconditional cash transfers are provided for vulnerable persons who are unable to work (up to a maximum of 20 per cent of the total number of beneficiaries).

The documents related to these programmes included a midline report of the TMDH-LUL (AIR, 2019), a midline report of the Cash for Productive Work/ACT-P (GoM, 2020) and joint midline impact evaluations of the ACT-P, the TMDH and the FIAVOTA programmes (Banque Mondiale, 2019f, 2019e, 2019c, 2019d).

### International literature

The specific data on Madagascar was complemented with a broader review of institutional and academic literature on the effectiveness, efficiency and impact of cash transfer interventions.

This task focused on findings of six systematic reviews (Martins et al., 2013; Snilstveit et al., 2015; Sulaiman, 2016; Doocy and Tappis, 2017; Pega et al., 2017; Pérez, Ayensa and Lacalle, 2020), four impact evaluations (Handa et al., 2016; Thome et al., 2016; Angeles et al., 2019; J-PAL, 2020), and seven reports by experts and practitioners (McCord, 2009; Harvey and Bailey, 2011; Samuels and Jones, 2013; Bailey and Pongracz, 2015; Bastagli et al., 2016; Handa et al., 2018; Megersa, 2019). The reports issued by experts and practitioners cover 70 cash-transfer programmes in 31 Low and Middle-Income Countries (LMICs) and 63 MFIs operating in 16 LMICs. The academic papers address 66 cash-transfer programmes in 37 LMICs.

Through this review information on several effects was processed. This included short-time effects, such as the variance with the usage of health services and products by cash recipients as well as the subsequent immediate health outcomes (J-PAL, 2020), and longer-term effects on health, nutrition and food security (Martins et al., 2013; Doocy and Tappis, 2017; Pega et al., 2017; J-PAL, 2020); mental wellbeing (Angeles et al., 2019); cognition (J-PAL, 2020); learning outcomes (Snilstveit et al., 2015);

<sup>29</sup> UNICEF also funds the TMDH in some localities in the South.

income (J-PAL, 2020); and productive investment and access to services (Harvey and Bailey, 2011). The long-perspective assessments often also consider negative unintended effects, such as higher spending on alcohol or tobacco and inflation (S. Handa et al., 2018).

Effects are also considered together with programme costs: this is what analysts call “cost-effectiveness”. This assesses, for instance, annual household consumption gain as a proportion of total programme cost (Bailey and Pongracz, 2015; Sulaiman, 2016). To date, according to Harvey and Bailey (2011), there are only a limited number of cost-effectiveness analyses on cash transfers.

Regarding scalability, the review covered research assessing the cost of pilot cash transfers based on the total targeted population as a percentage of public spending or Gross Domestic Product (GDP) (S. Handa et al., 2018), and dependence on donor provision (McCord, 2009).

Specific works on UCBs were also included in this review (ODI/UNICEF, 2020; UNICEF, 2021)

**Table 4. Academic literature: type of programmes, number of programmes involved, and research questions addressed**

Category		N. of programmes	Question 3.1 (effects)	Question 3.1 (cost-effectiveness)	Question 3.3 (scalability)
Emergency programmes	Doocy & Tappis (2017)	8	X	X	
	Martins et al., 2013	1	X		
	Snilstveit et al. (2015)	1	X		
	Bailey (2013)	19		X	
	Bastagli et al. (2016)	2	X		
	Harvey & Bailey (2011)	4	X		
	Sulaiman (2016)	10		X	
Social protection programmes	Angeles et al. (2019)	1	X		
	Martins et al. (2014)	5	X		
	Pega et al. (2017)	15	X	X	
	S. Handa et al. (2018)	8	X		X
	Snilstveit et al. (2015)	34	X		
	Bastagli et al. (2016)	19	X		
	J-PAL (2020)	16	X		
	McCord (2009)	5			X
	S. Handa et al. (2016)	2	X		
	Samuels and Jones (2013)	5	X		
Thome et al. (2016)	7	X			
Mixed and unspecified	Snilstveit et al. (2015)	1	X		
	Pega et al. (2017)	2	X		
Unspecified	Snilstveit et al. (2015)	2	X		
Total		120			

Source: own elaboration

More details on these sources are provided in the reference list.

## Field work

Once the above-described sources were reviewed, preliminary responses to the research questions were elaborated, and triangulated through field research in Antananarivo, Fort Dauphin and some mica communities were conducted. This included interviews with government departments at the national and regional level (Ministry of Mines and Strategic Resources (MMRS), Ministry of Population, Social Protection and Promotion of Womenry of the Population Social and Women (MPPSPF), Intervention Funds for the Development (FID)) ; national and international NGOs (Terre des Hommes, Pact, Art, FAFIFI) ; international partners (ILO, UNESCO, WB, EU Delegation, AFD, Chinese Embassy); private and multi stakeholder entities (Chamber of Mines, Association d’Exportateurs de Pierres Industrielles Industrial Stones Exporters (AEPI), and EITI). The field work also included observation of three mica sites, and focus groups with parents (separated by gender) and local authorities. During

the field mission, a mica community in which UNICEF and the MPPSPF are currently providing a UCB programme was visited and meetings were held their local staff and beneficiaries.

The information collected during field work included data on the mica value chain provided by privileged observers, as well as key findings on the institutional and financial framework in which the UNICEF UCB proposal is to be inserted. Additionally, feedback to the preliminary conclusions of the research was collected from key stakeholders, and a multi-stakeholder analysis was conducted.

Following the field work, an additional document review on the institutional and financial framework was conducted. This review included the webpages of the stakeholders and their operational and strategic documents, as well as national legislation on mining and social protection (RdM, 2007, 2017)

## ANNEX II. Data

In collaboration with the AEPI, data was collected on the mica value change, and estimations were made on its outreach in terms of workers, communities and overall population.

Table 5. Mica production in informal mines

Data provided by AEPI	min	max	median
Mica price (source), Ar/ kg	100	250	175
Mica price (source), USD / kg	0.03	0.06	0.04
Daily production by adult, kg	10.00	10.00	10.00
Working days by year	180.00	180.00	180.00
Exports, tons /year	20,000.00	25,000.00	22,500.00
Informality rate	0.90	0.90	0.90
Waste rate between collection and export	0.10	0.10	0.10
Mica price (export to China), USD	180.00	300.00	256.00
Mica price (other exports), USD	350.00	350.00	350.00
Royalty and rebate (%)	2%	2%	2%

Source: interview with AEPI, May 2022

ECOPER calculations based on previous data	min	max	median
Daily sales by adult, USD	0.25	0.63	0.44
Average monthly mica income by adult, USD	3.75	9.38	6.56
Average monthly mica income by adult, USD	7.50	18.75	13.13
Informally produced mica, tons	20,000	25,000	22,500
Number of informal miners	11,111	13,889	12,500
Exports, USD /year (actual)	3,600,000	7,500,000	5,760,000
Licence fees and rebates, USD	40,000	83,333	64,000
Exports, USD /year (potential)	7,000,000	8,750,000	7,875,000
Licence fees and rebates, USD /year (potential)	140,000	175,000	157,500
Value share for informal miners	14%	21%	17%

Based on the previous data and demographic data provided in the Madagascar MICS report, the number of mica child workers was estimated at 11406. This was based on the hypotheses that two adult miners represent a household and the number of children in each household reflects the Malagasy fertility rate.

Table 6. Children in mica mines

Data from AEPI and MICS	min	max	median
Number of adults in mica mines (see mica production estimates)	11,111	13,889	12,500
Household size according to MICS average	4.50	4.50	4.50
% of population under 5 according to MICS average	15%	15%	15%
% of population under 15 according to MICS average	43%	43%	43%
% of population under 18 according to MICS average	50%	50%	50%

Source: AEPI, and MICS

ECOPER estimations based on previous data	min	max	median
Number of households engaged in informal mica mines	5,556	6,944	6,250
Total population in informal mica mines	25,000	31,250	28,125
Of which children	13,889	17,361	15,625
Of which children under 5 y.o.	3,750	4,688	4,219
Children at work in mica mines	10,139	12,674	11,406

Field work confirmed that informal mica mines were explored in colonial times and have been since then informally exploited. The list of mica sites available in the internet was classified by municipality and region, and combined with official population data. It was concluded that 35 municipalities with 443,045 people host informal mica sites..

**Table 7. Population in mica municipalities**

Region	District	Municipalities mica	Pop	Rural/urban
Anosy	Betroka	Ambalasoa	6,778	Rural
Anosy	Betroka	Ambatomivary	7,627	Rural
Anosy	Amboasary Sud	Ambindandrakemba	N/A	N/A
Androy	A m b o v o m b e - Androy	Ampamata	7,881	Rural
Anosy	Betroka	Analamary	2,676	Rural
Anosy	Betroka	Analapatsy	13,028	Rural
Androy	A m b o v o m b e - Androy	Andalatanosy	35,205	Rural
Anosy	Betroka	Andranobory	9,408	Rural
Anosy	Betroka	Andriandampy	4,648	Rural
Anosy	Betroka	Ankaramena	8,854	Rural
Androy	A m b o v o m b e - Androy	Antanimora Sud	N/A	N/A
Anosy	Betroka	Beapombo II	N/A	N/A
Anosy	Amboasary Sud	Behara	19,269	Rural
Androy	A m b o v o m b e - Androy	Bekily	N/A	N/A
Androy	A m b o v o m b e - Androy	Bekitro	23,724	Rural
Anosy	Betroka	Bekorobo	9,658	Rural
Anosy	Amboasary Sud	Belafa area	N/A	N/A
Androy	A m b o v o m b e - Androy	Belindo Mahaso	14,072	Rural
Anosy	Betroka	Benato Toby	9,523	Rural
Androy	A m b o v o m b e - Androy	Beraketa	15,616	Rural
Anosy	Betroka	Betroka Commune	N/A	N/A
Anosy	Ankariera	Bevilanys	N/A	N/A
Anosy	Amboasary Sud	Esira	10504	Rural
Anosy	Amboasary Sud	Esiva	N/A	N/A
Anosy	Betroka	laborotra	4,879	Rural
Ihorombe	lakora	lakora Commune	N/A	N/A
Anosy	Betroka	Ianabinda	10,966	Rural
Anosy	Betroka	Ianakafy	11,492	Rural
Androy	A m b o v o m b e - Androy	Imanombo	23,493	Rural
Ihorombe	Ihosy	Irina	4,812	Rural
Anosy	Betroka	Isoanala	18,493	Rural
Androy	A m b o v o m b e - Androy	Jafaro	31,976	Rural
Anosy	Betroka	Jangany	14,715	Rural
Anosy	Amboasary Sud	Mahaly	15,234	Rural
Ihorombe	Ihosy	Mahasoa	17,362	Rural
Anosy	Betroka	Mahasoa Est	8,266	Rural
Anosy	Amboasary Sud	Maromby	9,501	Rural
Androy	A m b o v o m b e - Androy	Maroviro	7,904	Rural
Anosy	Betroka	Nanarena Besakoa	N/A	N/A
Anosy	Ankariera	Ranopiso	11,303	Rural
Ihorombe	Ihosy	Sahambano	6,979	Rural
Ihorombe	Ihosy	Satrokala	14,161	Rural
Ihorombe	Ihosy	Soamatasy	9,274	Rural
Androy	A m b o v o m b e - Androy	Tanandava	13,826	Rural
Anosy	Amboasary Sud	Tanandava Atsimo	N/A	N/A
Anosy	Betroka	Taolañaro (Fort Dauphin)	N/A	N/A
Androy	Tsihombe	Tsihombe Commune	N/A	N/A
Anosy	Amboasary Sud	Tsihombe Commune	N/A	N/A
Ihorombe	Ihosy	Zazafotsy	9,938	Rural
		Total	443,045	

Source: Mindat.org and Mahatsangy



Then, the cost of a mica UCB targeting the children under 15 in the 35 municipalities was estimated and compared to national benchmarks such as the social protection budget, the GNI and the ODA.

**Table 8. Scalability and affordability of a mica UCB**

Data	
Number of municipalities	35
Population	443,045
% of population under 15 according to MICS average	43%
Net cost of UCB per child and month, USD	2.50
Madagascar ODA budget, 2022. USD million	1,289.50
Madagascar ODA /GNI ratio, 2022. %	9.70%
Madagascar GNI. USD million	13,294
Madagascar social protection budget, USD million actual 2021	22.95
Madagascar social protection budget, external funding, USD million actual 2021	13
Madagascar social protection budget (2023 target consistent with SNPS)	102.94

Sources: MICS, OECD, UNICEF

ECOPER calculations	
UCB target children	190,509
Mica UCB cost per year, USD Million	5.72
Mica UCB cost, % over ODA	0.44%
Mica UCB cost, % over GNI	0.04%
Mica UCB cost, % over social protection budget	25%
Mica UCB cost, % over social protection external funding	44%
Mica UCB cost, % over social 2023 target	6%

Additionally, data from fiscal returns from mica mining to communities was consolidated and compared to legal provisions.

**Table 9. Mica returns**

Data from MMRS	
Total 2019, USD	19,948
Total 2020, USD	28,039
Total 2021, USD	29,773
Legal rate	1.4%

Sources: MMRS

ECOPER calculations	
Average return	25,920
% over exports value	0.45%



For more informations :

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