



# Early Childhood Development – a critical stage of human development

Growing scientific evidence confirms the importance of early childhood development (ECD) – the period from conception to the start of school – for the future outcomes of young people and societies. In particular, the first **1,000 days of a child's life** are the most important period of development, when critical brain connections are made and the child is most sensitive to stimulation and nurturing. Research shows that inequalities in learning and other child development outcomes emerge as soon as a child is born and, if not addressed early, tend to persist throughout life.¹ Positive experiences during the formative early years lay the foundation for the child's long-term wellbeing and better outcomes in education, health, social skills and economic productivity that determine the prosperity of societies.² A safe, nurturing and stable family environment is the most important factor in a child's life. By taking a whole-family approach and supporting parents, as well as children as early as possible, ECD programmes optimize learning opportunities for the child and strengthen parents.³

## Investment in ECD is an investment in the world's most precious resource

Quality ECD is globally recognized as the most impactful investment in human capital which brings multiple and far-reaching economic and social benefits for individuals. families and societies. Research shows that children who benefit from integrated ECD interventions that are identified as essential for their growth and development are more successful on average in their professional futures and lives.4 The return on investment (ROI) from ECD programmes ranges from US\$6 to US\$17 per dollar invested,5 which makes it the most efficient way to optimize public expenditure on health, education and social inclusion. ECD prepares children for school and helps them stay in education longer, leading to gains that can help lift their future families out of poverty, which also supports the country's economic growth.6

ECD is a **powerful opportunity to break intergenerational cycles of inequity**. The greatest impact and return are realized by investments that target society's most

vulnerable individuals and families. The rate of return on investment in ECD for disadvantaged children is 7–13% per annum through reduced poverty and social exclusion of vulnerable groups. While a system providing universal coverage for ECD interventions is ideal, under budget constraints countries should first target the most vulnerable. However, young vulnerable children are the least likely to access and benefit from quality ECD provision.

The case for investment in ECD reached a historic milestone when global leaders endorsed ECD as a target in the Sustainable Development Goals and advised governments to adopt national investment benchmarks for ECD spending of 1–2% of gross domestic product (GDP). In response to these global commitments, governments across the world are increasingly positioning ECD at the core of their development agenda. Support for holistic ECD remains a child rights issue and a key responsibility of the state.

### Examples of how countries benefit economically from ECD investments:

- Increased productivity in the labour market: Children enrolled in early childhood education (ECE) programmes scored 50 points more than other children in reading literacy, mathematics and science on PISA testing and tend to have greater productivity and increased earnings – by up to 25%.<sup>9</sup>
- Reduced public expenditure on other programmes: Investing in children's wellbeing at a young age allows societies to reduce social spending in the medium term on health, poverty-reduction, and other social care programmes, support for the unemployed and programmes to decrease crime rates.<sup>10</sup>

## The study "The Potential of Additional Investment in Early Childhood Development in Montenegro"

The study "The Potential of Additional Investment in Early Childhood Development in Montenegro", conducted by the Institute for Strategic Studies and Prognoses (ISSP) in 2019–2020, 11 presents the ECD investment case for Montenegro and demonstrates that investment in ECD is not only a desirable goal but rather a critical priority for the government's policies and financing, with long-term benefits for children, families and society. The analysis was guided by the globally recommended Nurturing Care Framework (NCF) for ECD, developed by the WHO, UNICEF and the World Bank Group in 2018, which supports policymakers to take coordinated actions to strengthen ECD.<sup>12</sup> It defines investment in ECD as the commitment of financial and other

resources through policies, programmes and interventions aimed at ensuring children's holistic early development.

The study covers all sources of public spending, without aspiring to analyse private and civil society investments, and shares key findings and recommendations from three mutually reinforcing components of the study which aim to:

- Determine the current level of investment in ECD, through a budget analysis;
- Explore priority investments for Montenegro and the cost of the so-called aspirational package; and
- Determine the return on investments of the aspirational package.

### The current level of ECD expenditures

The study performed a *budgetary analysis* to estimate total ECD expenditures and levels of investments in each ECD service, based on the data available in Montenegro's central budget for 2016, <sup>13</sup> and the budgets of institutions involved in the implementation of ECD services. The analysis covers major expenditures in the ECD sector structured per domain of the NCF, which promotes optimal development for all children based on good health, adequate nutrition, opportunities for early learning, responsive caregiving, and safe and secure environments. The services analysed were grouped into several categories depending on data availability, which spans from services for which data is available in the state budget (e.g. expenditures on preschool education), to services with missing data, which required assumptions to enable calculation of investments (such as the number of days of medical care for a new-born). Brief information about the services included and total expenditures per domain is presented in Table 1 below.



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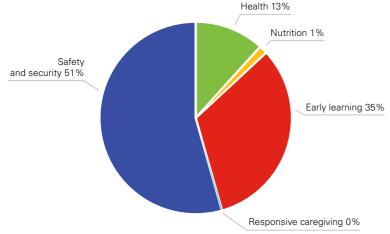
Table 1: The services included and expenditures per domain

NCF domain	What was included	Expenditure in 2016 in € million
Health	Preventive examinations of pregnant women, reproductive health counselling centres, perinatal care, preventive and curative examinations of children through the age of 6, patronage nurse services, vaccination of children, and services offered by centres for children with special needs and mental health centres at the primary healthcare level	6.67
Nutrition	The purchase of food for preschool institutions which is covered by the Ministry of Finance and Social Welfare (nutrition counselling already included under Health)	0.61
Early Learning	Expenditures for preschool education and based on Montenegro's 2016 Budget Law <sup>14</sup>	18.10
Responsive Caregiving	No investments in this domain of ECD in 2016 were included (maternity and parental leave expenditures included under Safety and Security)	-
Safety and Security	Cost of birth registration, maternity and parental leave expenditures, new-born child benefit expenses; social benefits (means-tested cash benefit and child allowance, excluding category-based benefits); and social and child protection services for children under 6 years of age	26.5
TOTAL		51.88

Public investments in ECD policies and programmes amounted to €51.88 million in 2016, representing 1.3% of GDP, or 2.4% of the 2016 state budget. Safety and security and early learning were the costliest elements of Montenegro's expenditures on ECD, representing 51% and 35% of the total budget, respectively, as shown in Figure 1. Without social protection expenditures, the percentage of GDP investment would be as low as 0.68%. Spending of 1.3% of GDP is below the targeted 2% of GDP

recommended by the ECD Action Network (ECDAN), and the amount required to operationalize the G20 ECD initiative. The level of investment without social protection expenditures is also below the estimated 0.8% of GDP required to provide the World-Bank-defined 'basic package of services', and is significantly lower than the estimated 3% of GDP needed for middle-income countries to offer the enhanced package of services, which also excludes social protection.<sup>15</sup>

Figure 1: Structure of investments in ECD programmes in Montenegro in 2016



Source: ISSP calculations

Furthermore, all the services supporting young children need to be harmonized, as all five domains of the NCF are needed for children to reach their potentials, which requires improved coordination and advances in service coverage and quality in all domains. This is critical for vulnerable families who need a significant level of support across all domains.

## Aiming high for Montenegrin children and society – the "aspirational package"

The 2020 analysis of ECD services in Montenegro confirmed the existence of positive policies, programmes and services in all domains of nurturing care, but noted the need for improvements in almost all areas. 16 Areas where additional funding is needed were identified, including those with the potential to yield a high return on investments and ensure improved social inclusion. The process led to the creation of an 'aspirational package' that incorporates a set of prioritized services in which investments are needed to:

- Support the alignment of services to international standards;
- Institutionalize progressive existing and emerging initiatives;
- Improve the coverage and quality of services, including through initiation of new programmes; and
- Expand the focus on vulnerable and insufficiently covered population groups, including through promotional initiatives and protocols.

The second step provided estimations of the level of investment required for each service of the aspirational package (as per Table 2 below). The estimates mostly cover the operational costs and are based on a set of assumptions meaning that they would require further refinement, once more precise data becomes available. The estimates do not include the investment in the infrastructure. and they mostly exclude investments in improvements of quality, due to a lack of data and difficulty in estimating such costs for services and programmes. However, all the envisaged investments in the expansion of the overall service coverage, improved targeting of most vulnerable families and a higher commitment to the implementation of already initiated evidence-based services and programmes are likely to broaden the scope and contribute to the quality of integrated support offered to families. To implement the aspirational package of services, additional annual investment in ECD programmes of €7.51 million would be required.

Table 2: Summary of desired additional investments in Montenegro

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Sector	Desired provision	Costs (€ million)	
Health	<b>Home-visiting services</b> provided according to regulations*	0.23 – operational costs	
	Perinatal "baby-friendly" concept introduced in all maternity wards	0.08 – operational costs	
	Immunization – 95% of 0–6-year-olds vaccinated	<b>0.20</b> – demand-generation activities and training of health professionals	
	Improved screening and early intervention (EI) services following the social model of disability	<b>0.40</b> – training and protocols, rough estimate due to a lack of data	
Nutrition	Promotion of breastfeeding	<b>0.05</b> – promotional campaigns and improved counselling	
Early Learning	Reaching general coverage of 95% for 3–5-year- olds	5.8 – increase in operational costs only	
	Full coverage of children with disabilities by inclusive early education programmes	0.13 – outreach and better access (estimate)	
	Full coverage of Roma children	<b>0.1</b> – outreach and better access (estimate)	
Responsive Caregiving	National scale-up of emerging parenting programmes *	<b>0.30</b> – operational costs based on the example of one programme	
Safety and Security	Introducing child protection protocols and counselling/therapy for victims of violence *	0.10 – operational costs	
	National scale-up of family outreach services/ improvements of the foster care programme	0.12 – operational costs	
		TOTAL: 7.51	
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<sup>\*</sup> denotes services with a high potential for multi-sector coordination<sup>17</sup>

### Can Montenegro afford not to invest in ECD?

The cost–benefit analysis provides data about the potentials of specific investments to offer the greatest returns and benefits to individuals and society. The application of this methodology required the costing of the benefits of programmes to facilitate the calculation of their monetary value. In the absence of empirical studies relevant to the ECD programme's impact on the targeted population in Montenegro, <sup>18</sup> a comprehensive literature review was conducted to select the countries with costed programmes

comparable to Montenegro's situation.
Based on these findings, the ROI values for a selection of services included in the aspirational package were calculated. For the preschool programmes, the cost–benefit ratio was calculated specifically for Montenegro, based on a similar programme in Spain. All calculations were based on the assumption that service quality standards in Montenegro are similar to those of the services for which cost–benefit ratios were available.



- **Global Breastfeeding Initiative** data was used to calculate the ROI,<sup>19</sup> which indicated returns of **US\$35<sup>20</sup>** with key benefits in the prevention of child mortality, cognitive development, educational attainment, job prospects and lifetime earnings.
- The ROI for *immunization* was projected based on the data from the immunization study<sup>21</sup> conducted by the Global Alliance for Vaccination between 2011 and 2020,<sup>22</sup> which found a net return of about **16 times the cost of investment**, which is the ROI used for Montenegro.
- Assessment of the **preschool education** ROI was based on a comprehensive literature review of the costs and benefits of well-known initiatives and large-scale public programmes in the U.S. and studies from Europe. The study used to determine the ROI was initiated in Spain in 1997 as part of the education reform. The RIO ratio projected was around 4:1, noting multiple positive results, including the impact on maternal employment and improved child development.<sup>23</sup> The RIO for the preschool programmes in Montenegro was adjusted and it stands at **7.4.**
- The ROI for **parenting support programmes** was projected based on the data generated through the 'Incredible Years' parenting programme in Estonia,<sup>24</sup> which revealed an internal rate of return of 23%, and, for each euro invested, saved **€14.40** in the long run,<sup>25</sup> which was the ROI applied for Montenegro.

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The budgetary projections below are based on the estimated costs of a selection of services of the aspirational package and cost–benefit ratios of each service included in the cost–benefit analysis. The analysis provides a strong case for investment in ECD based on detailed projections of the monetary and social benefits related to different additional investment models in services for children and families. The findings also point out the loss or the opportunity cost that Montenegrin society may pay if it fails to invest in ECD. Additionally, evidence stresses that the benefits of programmes targeting mainly vulnerable populations are likely to be even greater, <sup>26</sup> which deserves a separate analysis.

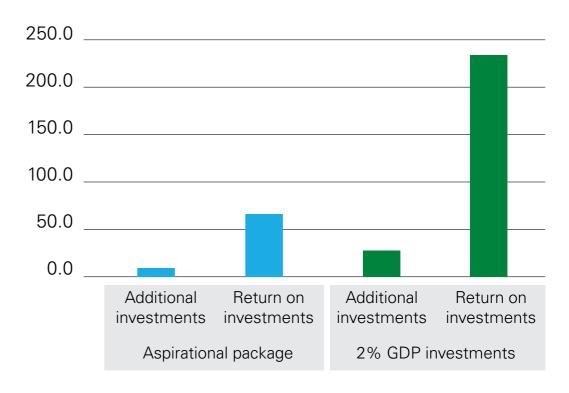
Table 3: Return on investment for a selection of services

An annual investment of	with an ROI of	would yield long-term benefits (€ million)
<b>0.08m</b> in introducing <i>BFHI</i>		2.80
<b>0.23m</b> for improved coverage of patronage/home-visiting service	35	8.05
<b>0.05m</b> for breastfeeding campaigns		1.75
<b>0.20m</b> in programmes to increase childhood immunization coverage to 95%, parental awareness-raising, capacity development of health professionals, and improved management of vaccines	16	3.20
<b>5.80m</b> to increase <i>preschool education coverage</i> for 3–6-year-olds	7.4	42.92
<b>0.30m</b> in the <i>parenting skills</i> programme	14	4.20
TOTAL		62.92

A total additional investment of €7.28 million could yield long-term benefits of €62.92 million (1.6% of 2016 GDP, or 1.3% of 2019 GDP). The rate of return is underestimated, given that data on ROI for screening, developmental monitoring and early intervention, preschool education for vulnerable children, family outreach services, foster care and counselling and therapy services were not included in the calculation.

If Montenegro increases its investment in ECD programmes **from 1.3% to 2% of 2016 GDP**, this would translate into an additional investment of **€27.2 million**, leading to a long-term return of **€234.2 million**, or 4.7% of the country's 2019 GDP.

Figure 2: Estimated investment and return on investment (in € million)

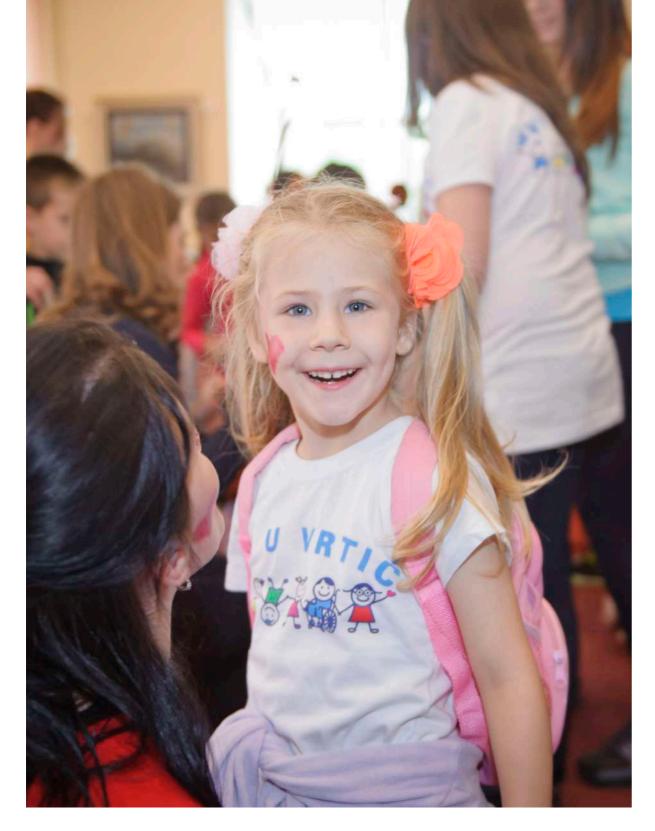


### EVERYONE has a role and EVERYONE benefits – it's time to act on the evidence

There's growing recognition of the value of investing in quality ECD. The present study provides convincing evidence and proposes a strong case for increased investment in programmes, services and initiatives in all five domains of the NCF. Montenegro has a good foundation to build on additional investments to expand ECD coverage, optimize support to families and provide interventions that maximize the opportunities for children to achieve their full potentials. Mobilization of adequate financial resources to expand ECD, especially for the most marginalized,

is a major challenge that requires strong commitment. Any commitment to young children needs to take into account that the realization of their rights and the utilization of their potentials have a time-bound window of opportunity for action. There is a loss to individuals, families and society when children's potentials are not utilized for lack of adequate support.<sup>27</sup>

Failure to act on the evidence presented in this study would mean a loss of potential for Montenegrin society. To avoid such a loss,



Montenegro should consider adopting a comprehensive, fully costed, national ECD strategy that integrates all domains of the nurturing care framework, which will require embedding and aligning of the strategy within relevant sectors. This would also help facilitate much-needed multi-sector collaboration in the ECD sector.

Continued funding for existing services and the introduction of new ones should

be accompanied by analyses of their costs and the impact of such investments on beneficiaries in order to accurately determine the ROI and guide future development in the ECD sector.

The sooner Montenegro actions the investment case proposed in the study, the more likely the country will find itself on the road to greater prosperity that is shared by all.

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#### Disclaimer:

The contents of this report is the sole responsibility of the author and can in no way be taken to reflect the views of the European Union, UNICEF and its partners.

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- 17. The package of services that requires additional investment does not include material benefits, such as financial support and child allowances. However, material benefits play an important role in poverty reduction. According to a 2018 study by MONSTAT ("Statistics on Income and Living Conditions") social transfers contribute to poverty reduction by 7.8%. Enhancing these benefits should be considered, expanding outreach to cover all families with children aged 0–6 years at risk of poverty.
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