

The Salesforce logo, which is a blue cloud shape with the word "salesforce" in white lowercase letters inside it.

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# Tableau Challenge – Group A1

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# Introduction

We used Early Childhood Development framework to approach the challenge (Raikes et al, 2014).

<https://nam.edu/perspectives-2014-a-measurement-framework-for-early-childhood-birth-to-8-years-of-age/>

Factors influencing early child development

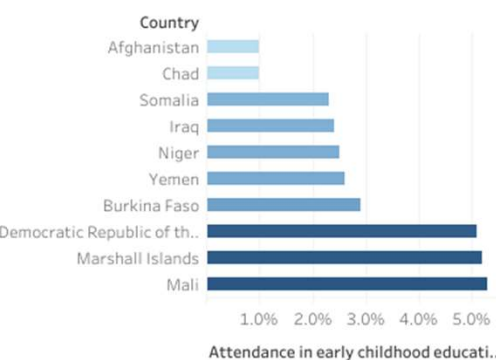


## EDUCATION in early childhood development has a big impact on a child's life later on

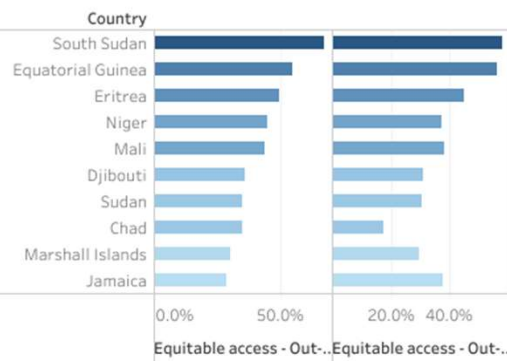
Least-developed countries and other economically disadvantaged nations are facing significant educational challenges, as evidenced by **low completion rates, high out-of-school rates, and low literacy rates, particularly among females**. The educational challenges faced by least developed and poor countries are multidimensional and deeply rooted in economic, cultural, and political contexts. Tackling these issues requires a concerted effort by local governments, international organizations, and civil society to enact strategic, sustainable, and culturally sensitive interventions. Addressing these challenges is not only vital for the individual development of citizens but also for the broader socio-economic development of t..

A negative correlation between attendance in early childhood education programs and out-of-school rates at various stages of schooling (one year before the official primary entry age, primary school age, lower secondary school age, and upper secondary school age) implies **higher attendance in early childhood education programs is associated with lower rates of children being out of school later on**.

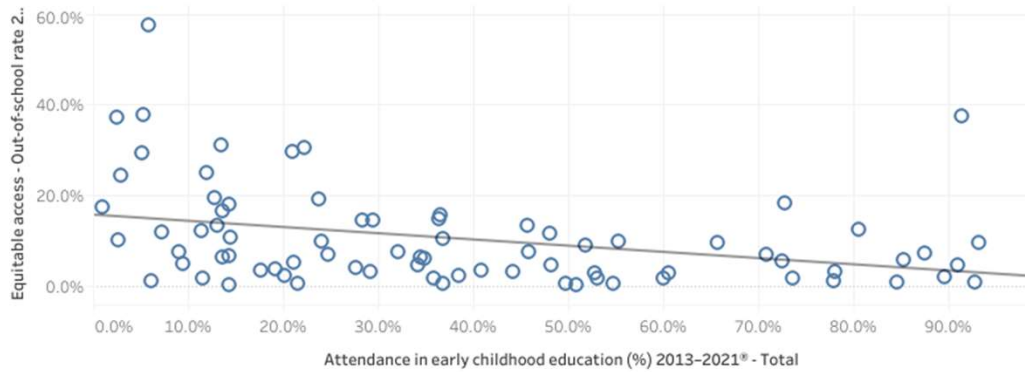
### Attendance in early childhood education



### Out-of-school rate

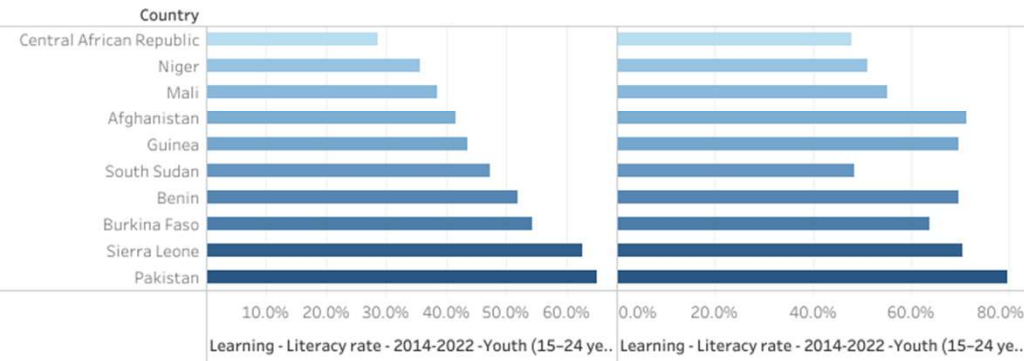


### Attendance in early childhood education vs. Out-of-school rate in Primary School

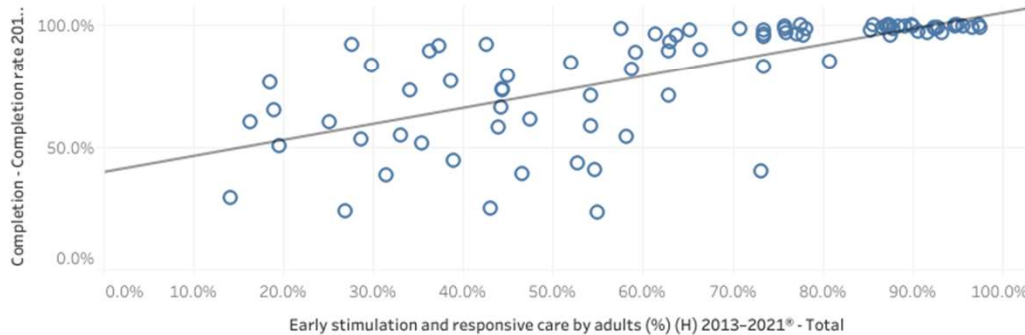


On the other hand, a positive correlation between early stimulation and responsive care by adults and completion rates for primary, lower secondary, and upper secondary education suggests that **higher engagement in learning-promoting activities during early childhood is associated with higher rates of completing each level of education later on**.

### Literacy rate: Female vs. Male



### Early stimulation and responsive care by adults vs. Completion Rate of Primary Education



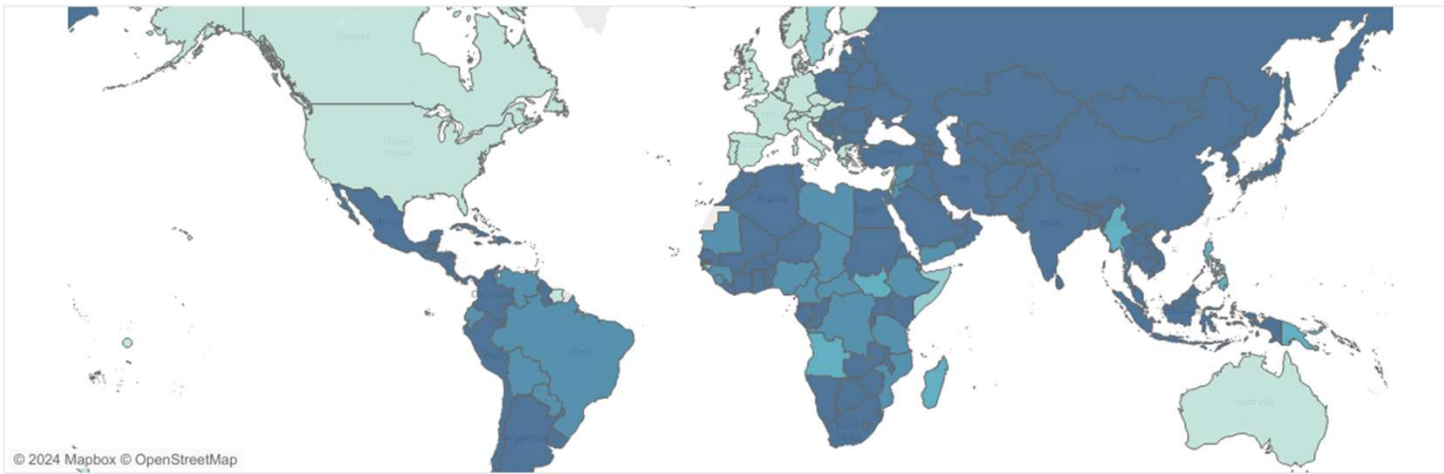
## Increasing infant/children vaccination rate, especially in least developed countries, is important!

### Overview - Vaccine

BCG

Percentage of infants/children receiving vaccines

0% 99%

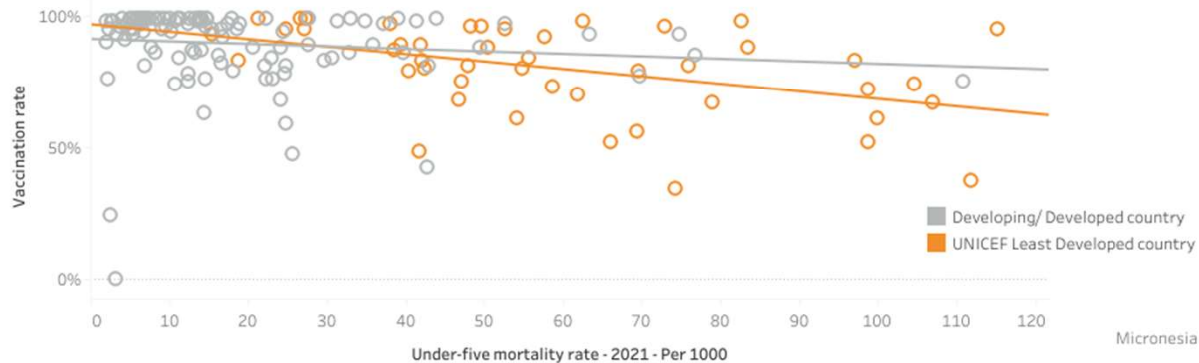


- More than 50% of bottom countries with **lowest vaccination rate** are **Least Developed countries**.

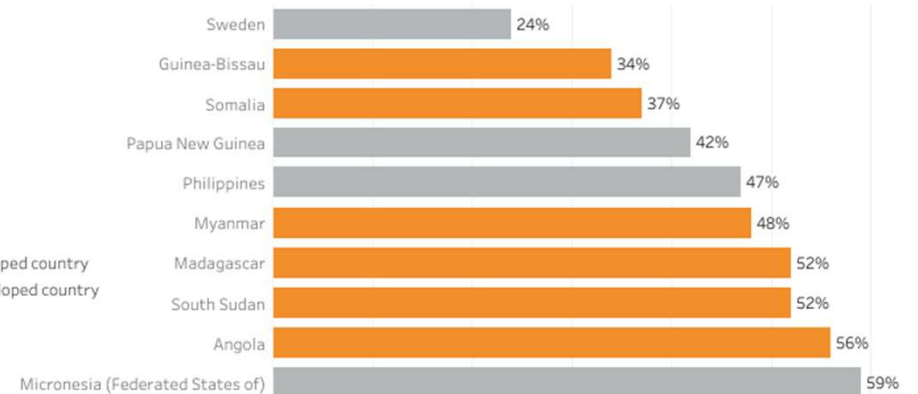
- **European, North American, Australian continents** have **lower BCG vaccination rate**, probably due to their low Tuberculosis burden/rate.

- **Targeted vaccination policies are recommended:** Identify high-risk countries for each type of diseases & Prioritize vaccination

Vaccination rate is **strongly correlated** with Under-five mortality rate (especially in least developed countries)



10 countries with lowest BCG vaccination rate among children/infants



# Not all children under 5 years old are registered at birth!

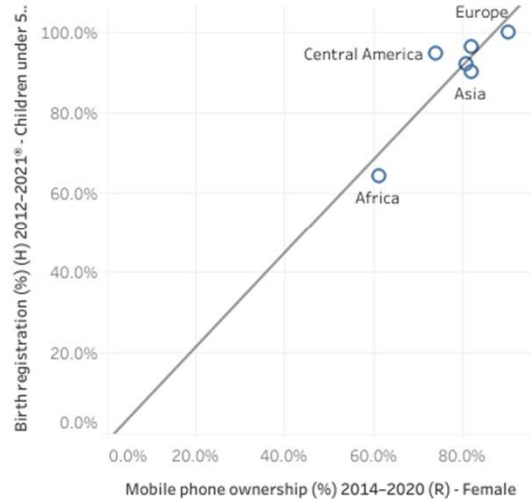
Birth registration rate overview: lowest rate in Africa and South Asia



## Birth Registration for Every Child?

Action: identify areas/countries with low registration rates and target interventions to improve access to registration services (e.g. improving access to information through economic empowerment initiatives to boost mobile phone usage).

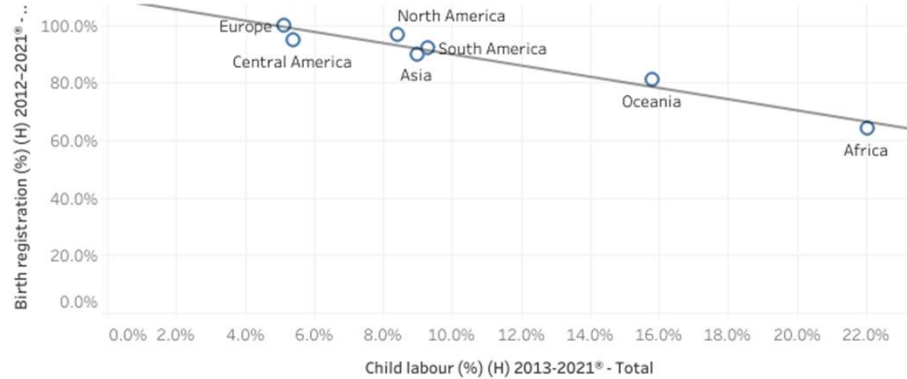
Higher access to information has strong correlation with higher birth registration rate



## Why birth registration rate is an essential indicator of a child's wellbeing?

- It provides a child with **legal recognition, identity, and protection of fundamental rights**.
- It increases the likelihood of children **accessing vital services** like healthcare, education, and social welfare programs
- Birth registration data is crucial for governments and policymakers to **design and implement effective policies and programs** for children's wellbeing

Lower birth registration rate has strong correlation with high child labour rate



5 countries with lowest birth registration rate

Country		
Ethiopia		2.7%
Somalia		3.0%
Malawi		5.6%
Papua New Guinea		13.4%
Zambia		14.0%

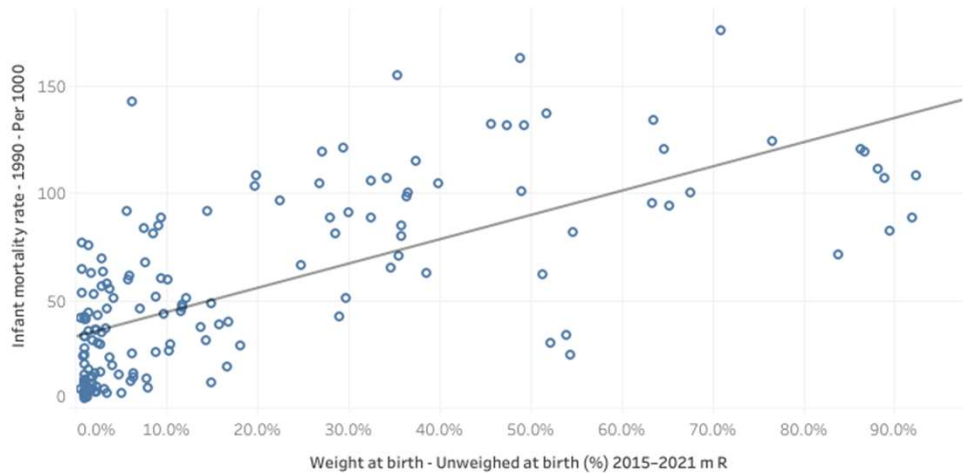


Least developed countries exhibit higher rates of low birthweight and underweight births, coupled with higher levels of vitamin supplementation.

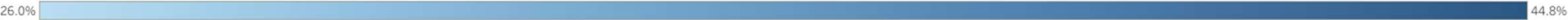
Least developed countries have nearly triple the global median rate of underweight births.



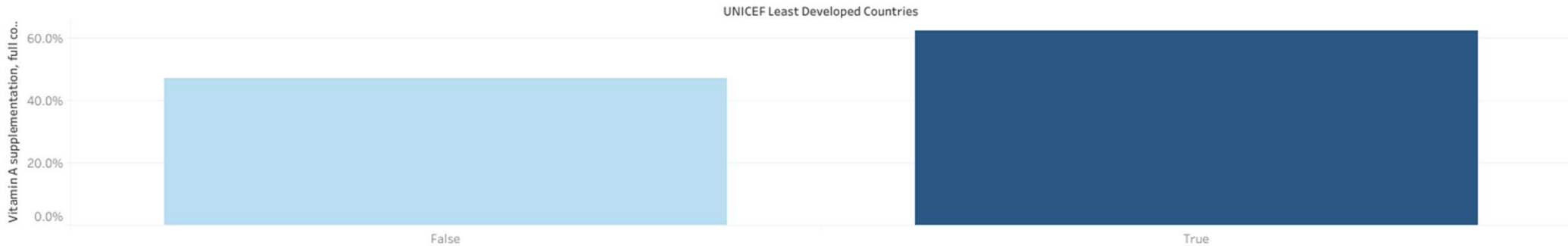
Infant mortality shows a strong correlation with low birth weight.



Zero vegetable or fruit consumption (6-23 months) (%)

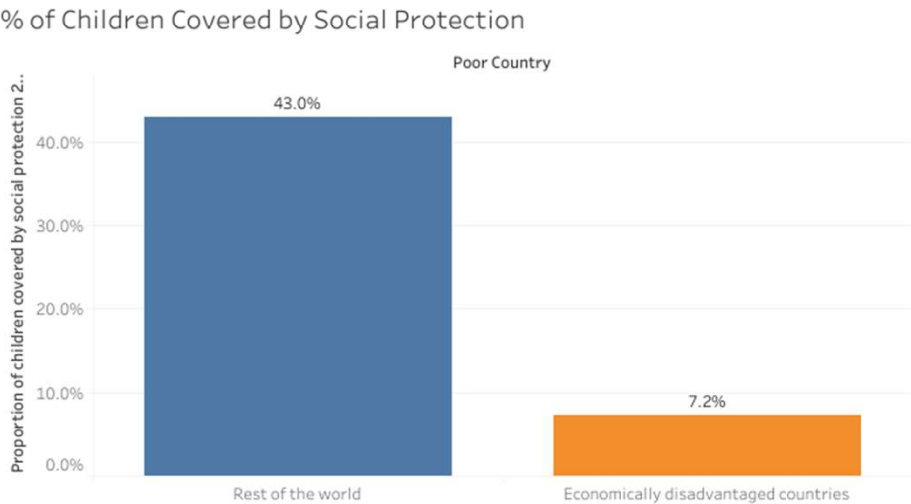
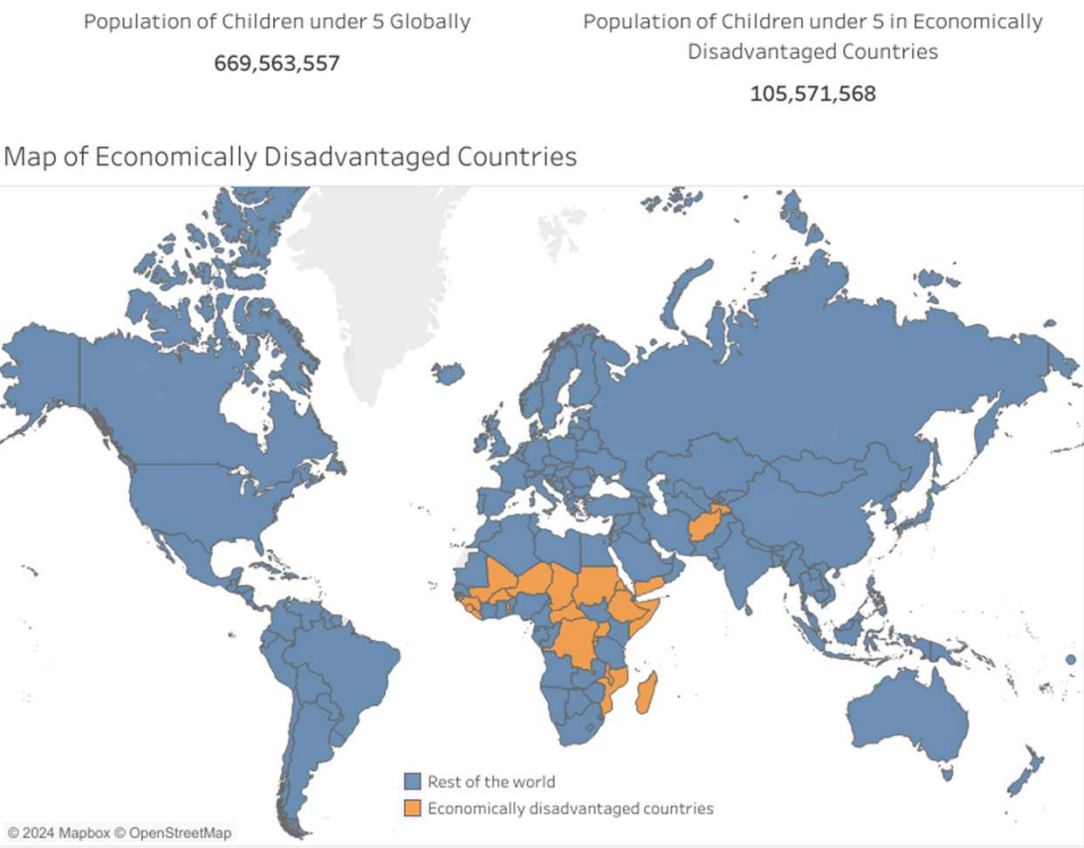


Least developed countries have a higher rate of full-coverage vitamin A supplementation yet higher rate of zero vegetable or fruit consumption. Being targets for health improvement initiatives doesn't address the underlying long-term issue of limited access to diverse fruits and vegetables in their diets.



# Poverty of Children Around the World

Over 100 million children under 5 live in poor countries with **GDP per capita less than 1000 US dollars**. Most of these countries are in Africa plus Afganistan and Tajikistan. On average, only around **7% of children in poor countries are covered by social protection**. It is compared to the average of 43% in not poor countries. At the same time, the **bottom 20% of population by income** in economically disadvantaged countries **receive only 10% of all social protection benefits**. All in all, children in economically disadvantaged countries are likely to live in poverty due to the economic situation in their countries. However, children from the poorest families also get little social benefits, making their situation even worse.



% of Social Protection Benefits Received by Bottom 20% of Population by Income in Economically Disadvantaged Countries

10%



#ForEveryChild, Every Right!

Thank You