

## Adopt a Fruit Tree: Counting on Climate Action to Achieve SDG 3, 4 and 13

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Education is key to climate adaptation and climate action

By end of 2021, Kenya had achieved a forest cover of 8.8% against the constitutional requirement of 10%. In 2022, the government revised the target to 30% tree cover in order to achieve the country's commitment of reducing greenhouse gas emissions by 32% by 2030 and towards the end of 2022, Kenya launched the President's campaign on growing 15 billion trees by 2032.

Rapid population growth is counter-productive for environmental sustainability. As the population grows, there is increased natural resource withdrawals as demand for land escalates and its utility changes leading to increased pollution and general destruction of biodiversity. Between 2009 and 2019, Kenya's population grew by about one million annually (from 37 million to 47 million, respectively and the population in urban areas more than doubled between 1999 (5,429,790) and 2009 (12,023,570) and almost tripled in 2019 (14,835,425). However, as the population continues to grow, especially due to the population momentum earned from earlier high fertility rates, there is a major concern over high maternal and child deaths in Kenya. Between 2009 and 2019, maternal mortality ratio reduced marginally from 362 deaths per 100000 live births to 355 in 2019 while neonatal mortality has stagnated for almost a decade at 22 deaths per 1,000 live births in 2014 to 21 deaths per 1,000 live births in 2022. During the period adolescent pregnancy remained high as was the maternal mortality ratio (464 deaths per 100000 live births) in 2019 (KNBS, 2014; KNBS, 2019; KNBS, 2023).

As Kenya aims to attain 100% basic education, indicators such as retention/completion and transition rates in primary and secondary school become important yardsticks. Table 1 shows the primary school completion rates and transition to secondary school for the period 2017 to 2022. As can be observed, the 100% transition is quickly fizzling out requiring urgent action to put the milestone back on track.

Table 1: Trends in Kenya's Primary school completion and transition rates, 2017-2022

Year	Completion Rate (%)	Transition Rate (%)
2017	84	66.9
2018	84.2	72.5
2019	85.4	73.3
2020	95	91
2021	86	79
2022	88	79

Source: GoK, (2020); MoE (2022); Mutisya, et al. (2022)<sup>i</sup>

During the Nairobi Summit on ICPD25 in 2019, Kenya committed to end preventable maternal deaths by 2030. However, given the current situation, Kenya is on the verge of missing out on the ICPD25 commitments as well as the global development targets 3.1 and

3.2 on maternal mortality reduction to 70 per 100,000 live births and neonate deaths reduction to about 12 per 1,000 live births by 2030, respectively.

Leveraging on the Population Health and Environment programme, the National Council for Population and Development has initiated a project on growing fruit trees in schools, health facilities and homesteads. Dubbed Adopt a Fruit Tree, the project aims to improve survival of mothers and their neonates as well as increase retention, completion and transition rates in the education sector thereby reducing adolescent pregnancy and child marriages. This is a multi-partner project which will work with state and non-state actors down to community and household level.

## Methods

The initiative uses a two-pronged approach:

For retention, completion and transition in basic education, learners are sensitized on importance of education and staying in school; the dangers of the triple threat, i.e. new HIV infection, gender violence and pregnancy as well as imparting of lifeskills. Upper primary school learners adopt a fruit tree seedling that they will care for during their school life. As the tree grows, the learner's performance is expected to improve. Upon transition, the learner will hand over the tree to another one who will continue caring for the tree. At maturity, learners will enjoy fruits of their labour and excesses will be sold and proceeds used to support other school needs or even enhance the school meal programme. In this aspect, the school adopt a tree initiative will support good nutrition to learners while inculcating environment conservation – climate action. Over and above, the fruit trees will support carbon sequestration – another climate action!

To contribute to maternal and child health and wellbeing, the adopt a fruit tree initiative sets to improve survival of mothers and children through ensuring that pregnant women attend Ante Natal Care (ANC) for the mandatory eight visits. To be able to do so, upon making the first visit, pregnant women/expecting couples are provided with two fruit tree seedlings – one to be planted at the health facility or an area allocated by the county government and another to be planted at home. Every subsequent visit will follow a similar pattern. Couples will be responsible for caring for both seedlings at home and health facility. Upon birth, the woman/couple will get two seedlings again which they will plant and give a name similar to that of the newborn. If they did the 8 visits, it means they will have 18 seedlings (half in their homes). The seedlings ought to be cared as importantly as caring for the pregnancy and baby. Upon fruit bearing and maturity, the mother/baby or family is free to harvest and sell the fruits. In this regard, the family gets good nutritional supplements from fruits and also can sell and earn some income.

## Expected Results

### 1. Contribution to SDG 4 Target 4.1

Attainment of 100% retention, completion and transition rates from primary to secondary: A pilot was initiated at the end of June 2023 in two primary schools in Kilifi County (one is a special needs school). The two schools are adjacent to each other so the sensitization on importance of education and caring for the environment was done once. Learners picked fruit trees seedlings of their choice from orange to mango, cashews, guava, etc. The seedlings and manure were sourced from the Kenya

Agriculture and Livestock Research Organization (KALRO) in Msabaha Kilifi County.

It is expected that school performance will improve together with retention, completion and transitions. A reduction in adolescent pregnancy is also expected.

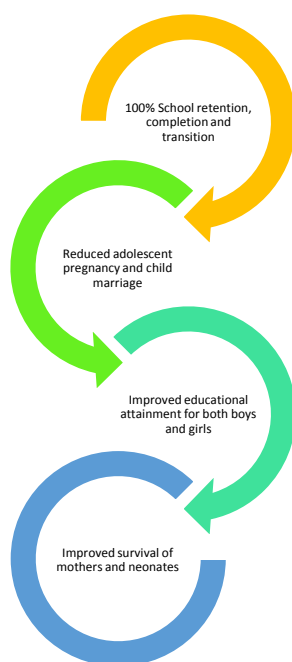
2. Contribution to SDG 13 Target 13.3  
Increasing awareness on climate change and supporting adaptive capacity building
3. Contribution to SDG 3 Targets 3.1 and 3.2  
For the maternal and child health initiative, conceptualization has been done and resource mobilization is currently ongoing to set up a pilot project.

### Expected Outcome

When children stay in school, they have a better chance at life!

Reduced maternal and neonate deaths

Improved household livelihoods.



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KNBS,

MoE, (2022). Basic Education Statistical Booklet

Mutisya, D. K; Kimeu, R. M & Nyamboga, C. M. (2022). Effects of Instructional Leadership Practices on Students' Performance in Public Secondary Schools in Machakos Sub- County, Machakos County, Kenya. *Journal of Popular Education in Africa*. 6(1), 87 – 101.

<https://sdgs.un.org/goals>