The use of these building materials helps save our vegetation cover

Stabilised blocks the way to go, given climate change

Joachim Buwembo

This is addressed both to the individual and the society – call it the nation or government. In these days of economic hardships and climate change, we all need to be careful the way we build. For, not only must we save money in the process, but we also need to preserve and protect the environment. (Wasn't it the last Pope who declared willful environmental destruction a sin?).

Let us start with the huge personal saving that a person stands to make by using stabilised soil blocks to construct their house. There are different commercial names for machines used for making these blocks, and you might know them by one of these. We shall avoid the names lest we be accused of advertising. I think some are now even being fabricated in Katwe. (Where Katwe is a concept, not just a place.)

The blocks we are talking about are those that are made on site using the soil around, which is mixed with a little cement and/or lime and then two *kanyamas* (strong men) use the machine to press and produce a highly compressed block that is ready to use in a short while.

In Uganda, we are used to two most common types of building bricks/blocks. There are the burnt clay or soil bricks and then the concrete blocks, so-called nine-nine. The immediate differences between the stabilised soil blocks and these two types are not using fire as the fired bricks and not using much cement as the concrete blocks.

You could say the most important factor in making the stabilised blocks is compression, which makes them strong. But, and it is a strong BUT, the composition of the soil must be determined by chemical test to determine its properties so as to guide you on the amount of lime and cement to use.

The reasons why a developer should use these blocks are all compelling. First, the cost of these blocks is quite low compared to the others. The machine itself is quite expensive, but you are not going to buy it – you will hire it and ensure the men operating it are well-fed. So the cost of producing a square metre of these blocks is much lower than any other type currently being used in Uganda.

Secondly, these stabilised soil blocks are stronger than any other type used in our market.

Thirdly, to join them requires less cement/sand mix because of their evenness. In some cases, cement is not required in some parts of the walls when interlocking designs are used.

Fourth, these blocks do not require much plaster because they are so flat. Most of the plaster we put on our walls is to hide the uneven shapes of the bricks and the incompetence of the bricklayers. When the blocks are so flat, only a thin layer of plaster may be applied.

Fifth and directly related to the fourth, you actually do not need to plaster if you do not want to. In fact, plastering a wall done with these blocks can spoil their beauty, especially on the outside. On the inside, the plaster may be put in many parts, but on the outside, it is not necessary.

Sixth is that blocks are actually beautiful.

Stabilised blocks do not require firing and so no firewood

10,000

To bake 10,000 bricks, you need a truckload of firewood costing sh500,000. This cannot go on.

Seventh is that the ring beam is quite cheap to make because, with the hollow type, only twisted bars (Y12, Y16) need to be passed through, unlike the usual concrete, grave and disposable expensive wood for the beam framework.

Eighth is that the cost of labour is reduced because the brick-laying is almost just that – block-laying. The time and energy-consuming activities of mixing and "getting the level" are minimised because of the straightness of the blocks.

Now as a society, country or region, the use of these blocks immediately and directly saves our vegetation cover. They do not require firing and so no firewood. The cutting down of trees for firing bricks would, therefore, be reduced. I have read some scary prediction that in less than two decades, Uganda could be a net importer of firewood.

Now when you consider that firewood is used by the poorest of the poor, and Uganda will now require foreign exchange to import it, you need a stronger word than 'crisis' to describe that situation.

The number of people is increasing rapidly and we enjoy the dubious title of being the second most fertile country in terms of women pregnancy. People will need shelter and firewood. To bake 10,000 bricks, you need a truckload of firewood costing sh500,000. This just cannot go on. It can go on at our own peril. So, please talk to your local leaders and ask them what they are doing about enabling the people use the environmentally sensible building technology, which is also cost-saving.