A total of 937 households in Eastern Province have received biogas systems that convert livestock waste into cooking fuel, offering families an alternative to firewood while creating opportunities to reuse animal waste in farming.

The systems were handed over to the province by the United Nations Development Programme (UNDP) at a ceremony in Rwamagana district on Tuesday. HomeBiogas Ltd installed 500 systems in Rwamagana and Ngoma districts and another 437 in Gatsibo district.

The technology produces gas from animal waste for cooking, while the residue can be used as organic fertiliser. The initiative is intended to reduce reliance on firewood and improve access to cleaner cooking energy.

For some beneficiaries, the change has already reduced household expenses and the time spent collecting fuel.

Johnson Kamanzi, a resident of Rwimbogo sector in Gatsibo district, said his family previously spent about 10,000 Rwandan francs a month buying firewood. Since adopting biogas, he estimates that the household uses only 10% to 20% of the firewood it previously consumed.

Kamanzi also advises other residents on how to use biogas systems.

In Rwamagana district, Nyirantura Saverina said the technology had eased the burden on her children, who previously spent long periods searching for firewood.

“Before I got biogas, my children, who were still at school, would sometimes spend the whole day looking for firewood. I did not have a forest where I could send them to collect it,” she said.

Nyirantura, who keeps two cows, said project assessors selected her household after inspecting her home and finding that the animals were kept in a clean, properly built cowshed.

She said her children can now prepare tea or porridge before school without having to light a traditional cooking fire, reducing their exposure to smoke.

Pudence Rubingisa, Governor of the Eastern Province

Eastern Province Governor Pudence Rubingisa said the programme was helping households turn livestock waste into a useful resource while providing an alternative source of cooking fuel. He called for beneficiaries to maintain the equipment and for the initiative to be extended to more families.

UNDP Resident Representative in Rwanda Fatmata Lovetta Sesay said clean cooking programmes should improve people’s daily lives by reducing exposure to harmful smoke and the time women and girls spend collecting firewood.

The project’s long-term impact will depend partly on whether the systems remain operational. A senior technical adviser at the Ministry of Infrastructure, Gen. B. Cesar said success should be measured not only by the number of households reached but also by the continued performance of the equipment and the ability of families to use it effectively.

Project partners have agreed on arrangements for maintenance, repairs and follow-up support.

The handover ceremony also featured findings from research on biogas and methane emissions conducted in collaboration with the United Nations Food and Agriculture Organization (FAO) and the Rwanda Environment Management Authority (REMA). Equity Bank and other private-sector partners participated in discussions on financing the expansion of clean cooking technologies.

Eastern Province has Rwanda’s largest livestock population but is also vulnerable to drought. Using animal waste to produce cooking fuel offers households another way to make use of locally available resources while supporting wider efforts to promote cleaner cooking and reduce greenhouse gas emissions.