

5.6 COMMUNITY GARDENS UTILIZING VERTICAL FARMING TOOLS FOR FOOD SECURITY

What problem is the solution trying to address?

- Access to innovation and technology for farmers.
- Maintaining food supply chain in times of conflict, shock and stress.
- Gender inclusion, nutrition and livelihood preservation/increased household income
- Water use efficiency.
- Environmental issues by using recycled materials like pallets.

What, in brief, is the solution?

Community and individual back-yard gardens utilizing vertical farming tools, local technologies, recycled and upcycled materials, low-cost drip irrigation or hydroponics.

It ensures the functionality of food systems in areas vulnerable to conflict and disasters. By;

- Deploying technology the communities food production systems are strengthened, yields increased and livelihoods improved.
- The solution ensures Nutrition is also addressed.
- Gender inclusion; women farmers are empowered.

What was/ were the source(s) from which this solution emerged?

Patience Koku, leadership group member of Action Track 5

What is the theory of change?

Combining community gardening with vertical farming will give farmers access to relevant technology in their production.

This scalable solution can be implemented utilizing minimal resources for maximum results, inspite of disruptions to normal food production systems as a result of conflict shock or stress.

The attendant improved yield increase and continued production in times of crisis ensures food shortages can be minimised or averted as communities in times of crisis can continue 'to grow their own food'.

The systems can be set up even when communities are displaced with little or no pressure on already stretched resources.

The outcome is a resilient food system that produces efficiently in 'normal' times and functions optimally in times of crises ensuring that food supply challenges are minimised if they cant be avoided completed.

The solution enables farmers and communities to grow more with less(water, land, input).

Through the value chain linkages ensures farmers earn more from the sale of their surplus thereby improving livelihood. The nutrition and several health of the communities is optimised.

Why does this solution align to the definition and criteria for a 'game changing solution' developed by the Summit?

The solution has great impact potential at scale, the synergy of community garden and vertical farming is game changing as both are current tools practiced independently with vertical farming being promoted currently in an urban context, this solution has the potential to revolutionise vegetable and fruit farming and provide a ready to go solution in times of conflict, shock and stress where conventional farming poses challenges or impossible. Alternative farming solutions must be encouraged to produce a resilient food system.

The cross cutting benefits across nutrition, livelihood improvement, water use efficiency, health, environmental and social divides make it a game changer.

What is the current and/or likely political support for this idea?

The FAO, IFPRI, UNHCR and several organisations, institutions, and state actors.

Are there certain contexts for which this solution is particularly well suited, or, conversely, contexts for which it is not well-suited at all?

The solution is well suited to all contexts where food security, sustainable and efficient food systems are promoted.

Communities can grow their own food efficiently at all times leveraging on technology whether they be rural or urban and across times of stress, conflict or peace.

It is well suited ALL countries in various instances.

What do you think are the key actions required to address this solution?

Policy backing to ensure that the entire value chain is deployed.

Leveraging on institutional support from the UN, member states donor organisations and the private sector to deploy access to finance, market, resources training.

Engaging the entire value chain from policy to implementation is vital to ensure it meets its full potential as a game changing solution.