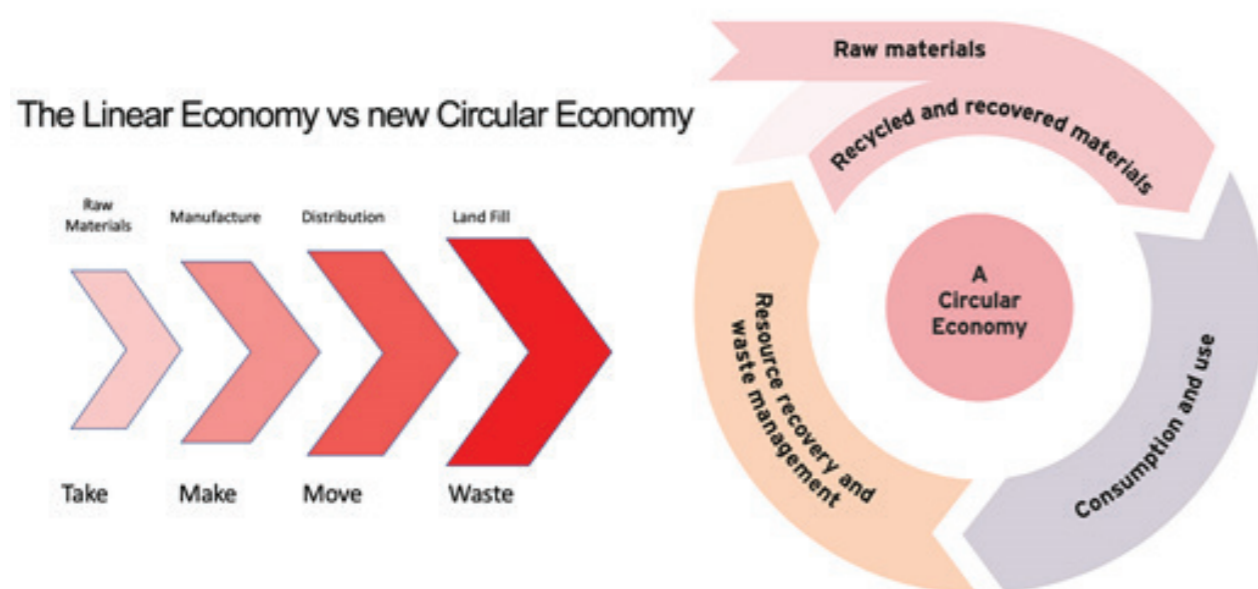


LOGISTICS OF CIRCULAR ECONOMY WITH SUSTAINABLE RECOVERY FROM COVID-19

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Circular Economy is the methodical technique to economic development outlined to benefit the environment, business, and society. In comparison to the ‘take-make-waste’ Linear model, the Circular economy model aims to bring in the cycle of environment and production close enough resulting in reducing waste to a very extent. In this way, the product’s life is multiplied. There is a curtailment on how plentiful the earth is laying out its resources. This means eliminating waste – biodegradable wastes into composting and non-biodegradable or transformable wastes into, reusing, remanufacturing, and finally recycling.



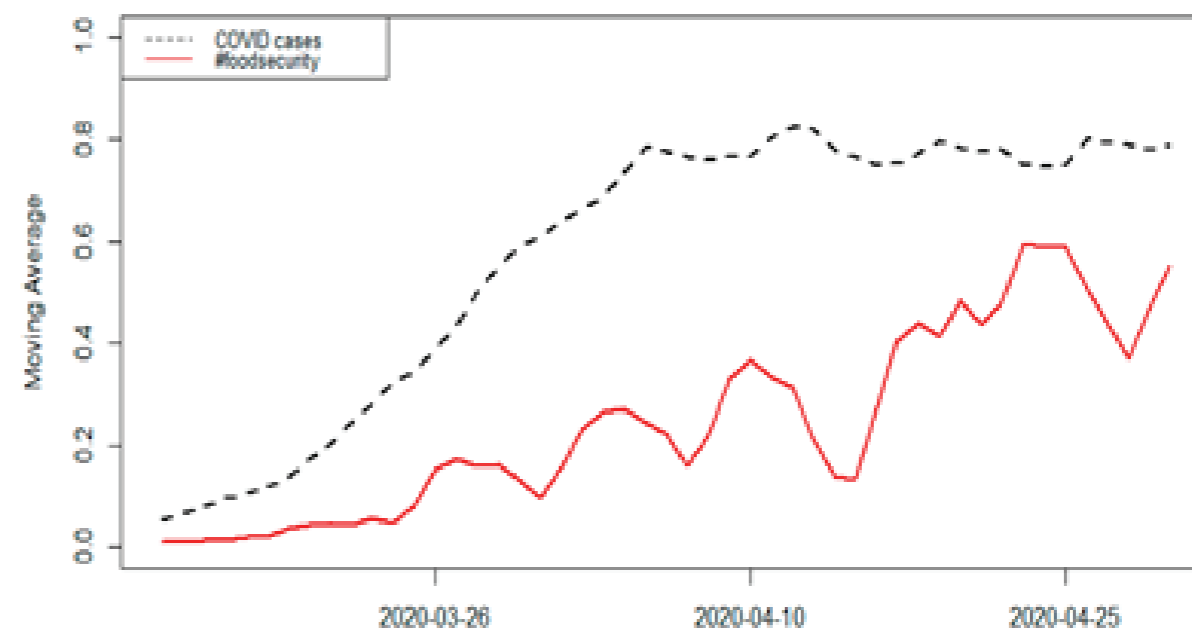
Asia, the world’s largest and most populous region. Its growing cities are turning out increasing quantities of waste, and processing that waste is becoming increasingly difficult. This poses big challenges in several areas. On an economic level, local government are paying more for landfills, as space becomes harder to find and paying a lot on transporting the waste. The waste also creates environmental problems, not all of it is collective, in some ways it is left untreated and disposed of on public land or water. This causes pollution and poses a health risk to local communities. And with population growth, rapid urbanisation and economic

development, the problem of municipal waste is set to increase. The waste problem also has a social impact, waste picker squanders through the waste and recycles the waste as much as they can. But their working conditions are often dangerous, and it is a precarious livelihood. Currently, when the entire globe is in the clutches of the pandemic, Covid 19 and the world has gone under complete lockdown, restricting the transportation and economic activities coercing the supply-side capacity, resulting in an increase in food privation and waste, mainly perishable natural produce. During

shortage in labour and exposure risk to self, there is a downfall in protecting and managing the animal-household waste, which has to be a major concern presently. Confinement measures inclination towards the Circular Economy approach as it aims to maintain the value of the product until returning them to the recycle houses while minimizing the major waste production. These measures contribute to diverse Sustainable Development Goals. To address all these aspects of the growing waste problems; the points involve needing to start treating waste as a Resource. In 2004, ESPCA started to look for new environmental and sound approaches that will help the poor

in self-financing in the long run. A model developed by an NGO in Bangladesh was singled out as one possible approach. Waste concern set up a model of this centralised neighbourhood base compost plants. They integrated the resources of coverage centres that are focused on organic waste which makes up to 60-80% of the municipal waste in developing Asian countries. The approach was from the homes and businesses in the community to encourage them to sort their ways at the source. The organic waste is sorted again at the centres and put into a compost plant where it takes around.

Tweets and COVID cases dynamics from 09/03/2020 to 30/04/2020



Graph depicting the effect Covid-19 in economy.

90 days to then turn into high-quality compost, which is then sold to farmers. The new centres in Cambodia, Vietnam and Sri Lanka have also added recycling facilities, earning them a bit of extra money, and further reducing the amount of waste left to go to landfill.

A single centre can process two to twenty times of wastes a day serving a population of up to one thousand to fifty thousand people a day, turning 80-90% of waste into resources and leaving only 10-20% left for the landfill.

This approach to urban waste management invites environmental and social benefits with an emphasis on creating a sustainable business model. The plants use simple and local technology which keeps the cost of building and operating them low. The local authorities also save money by reducing the amount of waste they have to transport to the expensive landfill. In the integrated resource for public interest did more than just to save money thanks to the revenues for sowing compost and recyclables to

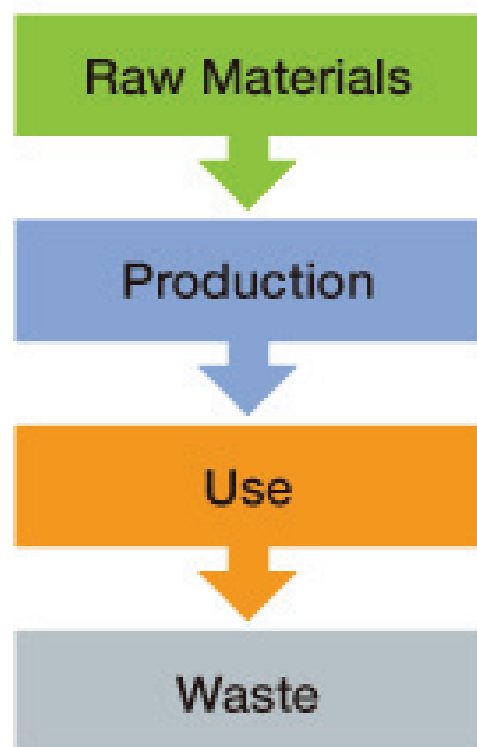
cover their operating cost and have the potential to make a profit. Furthermore, the compost plants were designed in an easy methodology that was approved by the US climate change framework. This means that it could qualify as a clean development project. Managing waste better reduce the amount of pollution released into the air, land, and water. The improved resource recovery recycling as much as possible and composting reduces the number of fresh resources that industries must use, and the amount of methane emitted from landfills which decreases the carbon footprint and benefits the planet. The local communities are included in the process of giving training on how to separate and decompose their waste. Encouraging city-wide commitment and managing waste in keeping the city clean. The centre also hires waste pickers who mostly work in the informal sector giving them a steady income and improved working conditions.

Precision Farming or site-specific crop management, is the concept based on monitoring, calculating, and acknowledging the inter-field variability in crops. The individual data combining with other information to support management decision in managing the use of pesticides, fertilisers at the right place, right time, and the optimum amount of using the fertilizer.

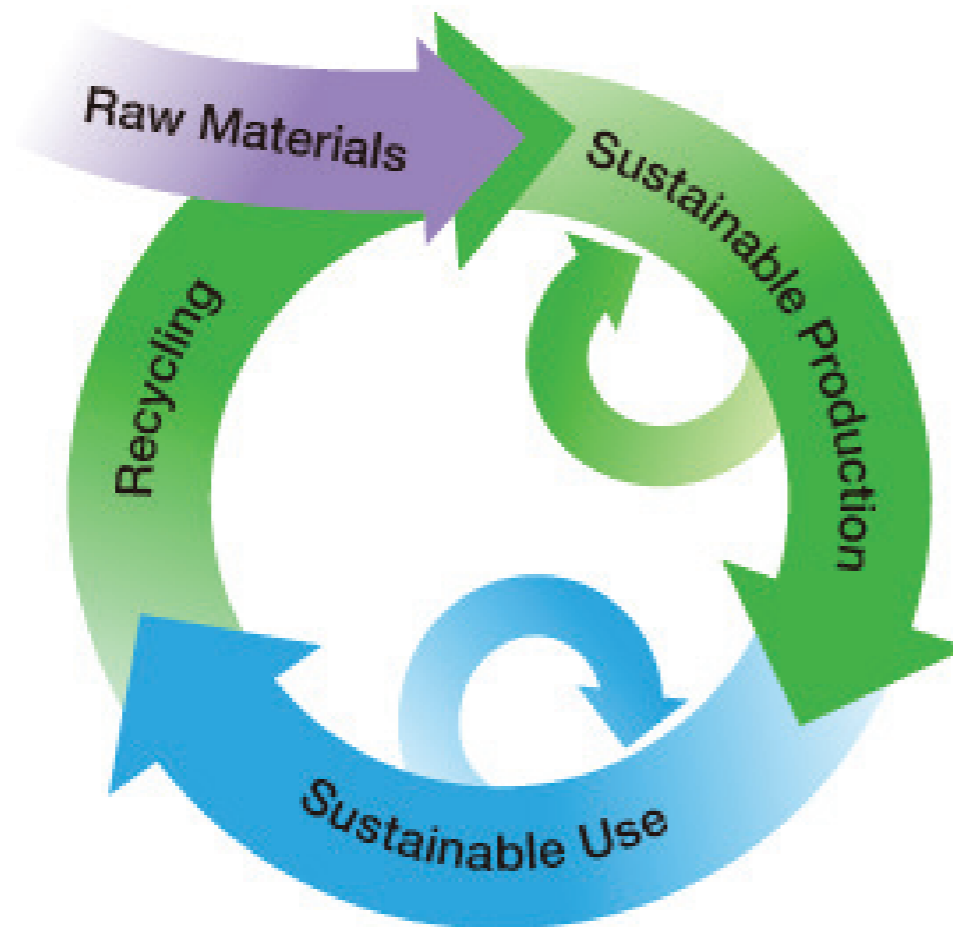
This results in acquiring the best field management with minimal resources and labour. In the field of bio fertilizers, biological waste including grass, stubble, crop stalk, leaves, stock, seed pods, seeds and animal waste are usually constructed throughout farming. The use of bio fertilizers made from waste would become a resource that recuperates worthy fertilizer components. The farmers could use this cheapest resource and turn them into compost, which could add much more nutritive value to the soil, maintain soil health, fertility,



Linear economy



Circular economy



and sustainability, and additionally promoting plant growth.

In Europe, following the blueprints of the circular economy, the emission of carbon dioxide could be halved by 2030. Furthermore, analysing the sector specifics of the UK could reduce greenhouse emission at its lowest to 7.2 billion per annum just by keeping its hands off the organic waste into landfills. Land degradation costs billions worldwide, without comprehending the hidden cost of landscapes, heavy use of fertilizers and loss of biodiversity. Increased soil productivity, less to no waste in the food value chain, and returning of nutrients will improve the value of land and soil. Returning biological nutrients into the soil will reduce the work and costs of replenishing the land with additional but valuable nutrient.

The circular economy is Restorative and Regenerative by design beats the linear model of 'Take-Make-Waste' as it hails in reducing the number of extrinsic inputs of agriculture produce, closing nutrient loops and diminish negative impact to the domain by abolishing wastewater and discharge. In the light of the Circular Economy, farming can suggest a million opportunities from key production using correct agricultural techniques, to recyclable and consumable agricultural scraps and material. The potential gain of switching to a circular economy extended beyond the economy and into the natural environment. By designing waste into consumable as far as possible, regenerating the materials or agricultural waste rather than discard. The circular economy speaks about a strong contribution to achieving global climate targets.