# Knowledge Co-Creation Program (KCCP) Continues to Soar in the Midst of COVID-19

Johane CHIGARIRE's Experience and Lessons Learnt from Attending the Knowledge Co-Creation Program (KCCP) Basics of Solid Waste Management (C) program.

# **Background**

It has been realised that, in developing countries, the amount of generated waste has been increasing due to the rapid concentration of the population with active consumption in urban areas. This waste causes severe contamination of air and water environment, which result in the loss of precious natural resources and ecosystem. Urgent countermeasures against such waste is required in many countries including Zimbabwe. Japan experienced similar problems but it has come close to achieving a sound material-cycle society in recent years. This has been realized through joint efforts of national government, local governments, private companies, associations and citizens, who have worked and played respective roles to optimize, among many other things, the collection and transportation, recycling and intermediate treatment and final disposal of waste.

It is against this background that the Japan International Cooperation Agency (JICA) Knowledge Co-Creation Program (KCCP) training in Basics in Solid Waste Management (C) was conducted, and I felt greatly privileged to be afforded the opportunity to be one of the beneficiaries.

The course aimed at developing capacity of participants from central/local governments, particularly officials who are in charge of Solid Waste Management (SWM), of which I am responsible for providing and operating a service for removing and treating trade or other effluent,



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refuse and human waste for the Mwenezi Rural District Council. The course equipped us with knowledge to improve SWM systems, that is, law, policy, appropriate SWM technology, promoting 3Rs (Reduce, Reuse and Recycle), promoting social awareness and active participation by all stakeholders (citizens included) in ensuring reduction of waste and efficient collection, transportation and final disposal of waste. Overall, the course equipped us with knowledge on how to move SWM from 'treatment oriented counter measures' to 'total management of natural resources'.

## **Lessons Learnt from the Course**

## Lesson 1

The Basics in Solid Waste Management modules greatly assisted in understanding numerous other dynamics of waste management. Of importance to note are the real differences in approaches to waste management applied in Japan and Zimbabwe, and it had, with no doubt, come out clearly that developing countries have to improve on their systems if they are to attain a sustainable solid waste management system. I came out very clear that most developing nations are still practicing open dumping as their waste treatment method. This is because open dumping is the simplest and the least expensive way of waste disposal and unless appropriate budgets are secured and technical skills obtained, there are no other option but to continue with this practice. In the case of Zimbabwe, almost all local governments (authorities) practice open dumping albeit some recent orders from the environmental watchdog, the Environmental Management Agency, that all local authorities should shift from the long practiced open dumping system to standard landfills. However, the issue of appropriate budgets and technical skills as highlighted before seems to be the hindrance to that shift.

## Pictoral Evidence: Rutenga, Mwenezi District, Zimbabwe - September 2021



On the very few occasions where local authorities are attempting to construct the landfills, funding has become a challenge and in most cases, external financial assistance is obtained, leaving the local authorities with no autonomy on when and how to finish the projects. It is my suggestion that, the development of landfills across the country be compulsory and be incorporated in the existing laws. Then, on funding and technical know-how, local authorities in Zimbabwe should be allowed to use part of the devolution (Inter-Governmental Fiscal Transfers) funds they receive from central government on that. This in my view may be the nearest way that can provide the impetus to move away from open dumping otherwise local governments can continue be penalized and fined, thereby draining away the very little resources at their disposal to do even refuse collection hence worsening the situation.

D: Dumping site (open dumping)

C: Dumping site (open dumping)

### Lesson 2

Apart from landfills, the course taught us about the importance of environmental education as a way of reducing the amount of waste to be generated. It was really impressing to realise that in Japan, environmental learning has been made compulsory in schools and it's taught at both preschools and elementary schools. Children would then grow with a positive environmental management mentality, hence they may greatly assist communities in managing the environment. Implementation of waste reduction strategies within such communities is easier since everyone is aware of its importance. In moving forward, developing nations should take a gesture from this strategy and start by ensuring that the learning of environmental management in schools is made compulsory and this should be supported by an Act of Parliament. Teachers should also be made to understand the importance of environment. After having attained that, local authorities would then need to work hand in gloves with the schools ensuring that the learning materials being taught in schools are very practical and kept regularly updated. Such an operating environment will create a win-win situation since everyone will take responsibility of the environment, thereby reducing the costs of waste management in the long run. On top of that, local governments should strengthen efforts to further reduce waste in their respective regions by undertaking eco-community activities (reduction of garbage generation), carrying out campaigns to reduce waste at household levels, fostering of panel exhibitions for children as well as continuously undertaking clean-up campaigns.

### Lesson 3

Moreover, the course made us to understand the concept of recycling very well. All along, we were facing challenges in distinguishing reuse and recycling and the two may seem to mean the same thing if somebody is not subjected to practical learning. Lessons on how to recycle bottles, plastics, papers and even metals were learnt and Japan seems to be far much advanced than us in this area. The Japanese economy has heavily invested in the recycling business whereas developing countries are far from the actual recycling concept if we are to look at what is happening on the ground, as compared to the Japan case. This could be because of low consumption levels due to low incomes which renders recycling business not viable. To make recycling business happen in developing countries, Governments should incentivise those businesses wishing to recycle such that the cost of doing business is made low.

## Lesson 4

In terms of environmental management policy of local government, the course made us to realize that it is important that representatives of the corporate sector and the civil sector participate in formulating a comprehensive environmental plan at the local government level. In preparing the plans, there is need for a thorough environmental scan, then organise the information from various angles such that a comprehensive judgement about the environment can be made taking into consideration both the negative and positive aspects of local communities. If local governments prepare on their own without input from other stakeholders, the implementation of those plans would definitely be difficult. However, to achieve that, they should first spruce up their relationship with their stakeholders.

# **Completion of the Course**

At the end of the course, we examined current waste challenges and we formulated Action Plans proffering practical and feasible solutions to mitigate the identified problems. The Action Plans also described how to improve solid waste management in our respective workplaces by utilizing ideas and experiences acquired in the course. Upon completion, I was elated because not only did we come out richer in knowledge gained, but we were awarded certificates of completion.

Certificate of Completing the Basics of Solid Waste Management (C) Online Program

