Africa, a Circular Continent

Western Economics might argue that Africa has not yet fully "benefited" from what is historically known as the linear economy - instead it has seemingly leapfrogged into something that seems so much more rewarding for the "profit and planet and its people" now referred to as "a circular economy". A hype, you say? Not really. On the contrary! Africa could prove to be the continent playing the tune that other will follow in this economic revolution - and where the countries of the North might have to adopt and follow in a forced march.

Linear economy is the current approach of extracting raw materials, often from African soils, to manufacture, assemble and then distribute many of the products including electrical and electronic consumer goods purchased on our store shelves. This process, in its entirety is often designed in a way that the raw materials are sent after their extraction several times around the planet for the required assembly steps with the obvious negative impacts on our environment. After a brief use of the consumer good it then either becomes (technically) outdated or the customer prefers to discard it rather than using it over a long period. Often, its repair is actually more expensive than buying a new product. In that way many of our consumer goods and products (or packaging thereof) are simply discarded or dumped into the environment, end up at a landfill or get incinerated as "residue" when reaching the end of their perceived "useful" lifespan- seen as useless "waste". This is a perception that is determined by the linear thinking on which the linear economy model is based.

An end of life product that ceases to be useful at some point (which might be "single use" in case of some packaging) and is then declared to be a "waste" is also bearing a multitude of costs and tells of investments lost forever: costs of environmental destruction, investments in research and development, residual energy now lost, in working hours, and many more. In contrast to this model, the circular economy suggests preserving consumer goods and products as long as possible in our market economies, but changing our way of thinking about the object or even using it differently. The aim is to preserve the investments made, reduce our environmental impacts and make the companies sustainable over the long term with innovative approaches in a service economy rather than selling products.

In Africa, many countries have already adopted national plans for sustainable development, the ban on the use of single-use plastics and the implementation of decree on electronic waste. In 2016, the African Circular Economy Network (<u>www.ACEN.Africa</u>) was born in South Africa based on the belief that Africa could thrive on a brand-new and well-thought of model, not necessarily following a linear model at the end of the race. It has now spread across the continent in more than 25 countries to tell great stories, those of regeneration of materials, the reuse of products available over the longer term and innovative services.

Here are a few.

Of course, there are many examples in the field of recycling, especially upcycling, such as the start-up in Cameroon that turns tires into flooring, or AmbiReciclo in Angola that recycles tires and vegetable oils. In Senegal, many recycling programs exist (SeTIC, Proplast (Recuplast)). In Egypt, UpFuse has recycled more than 50,000 plastic bags since 2013 in fashion accessories. In Côte d'Ivoire and Ghana, Coliba has developed a mobile application for municipalities to identify the value of waste and monetise it. In Ghana, the Agbogbloshie Marketspace Platform (AMP) is creating value from e-waste by giving it a second life. The African Development Bank in Abidjan, Côte d'Ivoire, for its part has rolled out a program aimed at 2,000 jobs in the collection and recycling of plastics. In Morocco, Tawafouk values waste. In Uganda, it is a car cleaning company that reuses water in a closed loop. In Rwanda, the e-waste recycling plant has collected more than 120 tons of electronic waste and repaired 400 computers in the first six months of its launch. In Mauritius, Belle Verte provides waste management

solutions while reselling recycled or upcycled products, as does Environment 360 in Ghana through its waste recovery cooperative.

If we continue our journey in the re-manufacturing and refurbishing loops, we are going to Kenya with the social enterprise "Circular Economy Hub" which is about to launch its re-manufacturing and refurbishment unit of electronic products from Kenya and the European Union. In South Africa, Barloworld re-manufactures and reconditions Caterpillar machine parts for resale on the market with the same warranty as a virgin product.

In the smaller beneficial loops of the circular economy, namely the maintenance, repair or productsof-service, we have of course the example of Hello Tractor in Nigeria which gives access to hundreds of farmers of shared agricultural equipment. In eco-design, innovations abound in the FabLab of Abidjan or at Nairobi Circular Design in Kenya.

In the biological and therefore agricultural cycles, Lono in Côte d'Ivoire facilitates the lives of small farmers through permaculture solutions that prevent them from investing in fertilizers that have become too expensive. Of course, we cannot miss out on the famous Songhai Farm in Benin, which has been using permaculture for several decades, having influenced the concept of the Blue Economy but also the very impressive Agriprotein unit in South Africa that produces proteins relying on the work of soldier flies using organic waste to lay their larvae, future source of proteins for animal feed. In Zambia, ICLEI Africa, a partner of the ACEN Network, is implementing an ambitious composting programme in Lilongwe. In Mozambique, a study on regenerative thinking was carried out in the Açucreira sugar factory in Xinavane on the basis of the concept of South Africa and supported by the three industrial symbiosis and exchange of materials programmes. Ethiopia, for its part, has a national programme to regenerate its agriculture. Meanwhile, the social enterprise Djouman organises Agri-Bootcamp in permaculture throughout West Africa and organic restaurants open in Accra where you can eat on leaves of Katemfe.

Finally, biomimicry is in full swing to regenerate the Berg River in South Africa, a river irrigating the wine plantations but also the source of future urban neighbourhoods of Abuja in Nigeria.

Africa is full of inspiring innovations!

Most of these examples come from the very members of the ACEN Network they are structuring, each in their own country. The circular economy is a model that is defined on the basis of locally available resources and energies. Each of our members evolves into a local ACEN Chapter where they implement innovative solutions and share them with the Network to spawn creativity.

To co-build a beautiful definition of Africa that wins, you can join us by writing to us at Info@ACEN.Africa

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