

Ignition Platforms for the Circular Economy

The Philosophy of all the future phases of this project are specifically structured according to the principles of :

Ignition platforms for the circular economy

It would appear that a lot of time and energy is spent on project that are designed specifically to mitigate the effects of a linear economy.. We have decided that there is a large element of value in this. In fact our whole phase one is a mitigation project. But with the benefit of three years of R&D we are now able to cherry pick the diamonds and realise that we would like to focus on projects that ignite An independent circular economy. Thus scratch building a generation not locked into the linear economic mindset. I hope that this will be widely embraced

Phase two is designed as a Pilot project and it intended to commence within two years of the start of the initial pilot project

Phase two is designed to be a more aggressive approach to using the mechanics of the Circular Economy to be a proactive tool to address some of the more urgent issues facing the Southern African political dynamic issues. (these will be explained through the course of the phases of phase two)

It is our intention to obtain through purchase of shared value agreement a large piece of land in one of these areas with a minimum footprint of 2000 hectares. This should allow us incorporate Phase one, develop Phase two and three

Phase two :

Specific concentration on the water starved regions of South Africa

- Karoo region Western Cape
- Karoo Region Hantam Area
- Karoo Region Northern Cape
- Karoo region - Klein Karoo

- Methods to be applied

Flow Control and Damming

These regions in general realise an annual rainfall between 250 and 400 mm of rain per annum. Being harsh desert like regions the rain comes mainly in the form of harsh thunderstorms, which are associated with heavy rain, rushing water, and extensive soil erosion. Most of the topsoil has been long stripped away leaving behind harsh gulley and vast tracts of land with little of no agricultural potential

This can be reversed. A solid working model of this type of reversal project was successfully accomplished in Saudi Arabia between the years 2003 - 2010

Furthermore similar projects were successfully conducted in the USA during the public works programs of post war reconstruction.

South African is confronted right now with the same opportunities and challenges.

To address the environmental problem

The first challenge created by the flood water of a thunderstorm is to control the flow of water. This is most effectively achieved through the creation of Swales , run off zones or weirs. Tyres, which are a waste products , are freely available in most of these areas.

Through the creation of these swales, weirs or run off zones, which are built by linking tyres into blocks, by bolting them together (a system which was perfected in 1905 - see diagram) the water flood, is progressively slowed until it can be ultimately captured and stored in a huge tyre dam.. The dam construction uses the same methodology as the swale construction.

The dam is lined with sqKms of PVC to prevents unnecessary drainage

Evaporation control

Evaporation is a major problem in these arid areas. This is not unique to Southern Africa. Numerous methods have been tried with various levels of success in many parts of the world. Probably the most successful method is that applied in the Hoover dam, whereby millions of ping pong balls are pumped into the dam. This reduces the evaporation by up to 90% west allows for the injection of further rain.

Public Works funding in the this phase :

It is the stated intent of the recently appointed Minister of Finance in South Africa, appointed August 2021. That his intention was to create a public works program for unskilled and unemployed youth. That the funding previously used as a mere social grant to keep these youths idle and on the street would now be channeled into upskilling and using these idle youths to make a constructive contribution to the economic structure of south africa. It is our intention to tap into this program

(Tinus please research the material on these Social Grant and Public Works matters)

It is intended that this phase should take two to three years to accomplish and should run in parallel with phase one. Each phase to be handed into the hand of a project champion or a phase leader, once the full intellectual and capacity property has been transferred.

Phase Two continued

Land Development.

With the stabilisation of adequate water resources the methodology as described in Phase one can now be applied on a larger scale to Phase two. At this stage it is intended that the land in the phase two area, be subdivided into various agricultural areas and these given over to emerging farmers, namely those from the broader population who have developed special skills aptitude and a proven work ethic. It is intended to allow opportunity and resources to be made available to these smaller scale farmers in order to develop the agricultural potential of these individual land units. In essence a Kibbutz type operation.

This phase is designed for two purposes.

The Gestation of a feed-stock of Circular Economists

Primarily to unlock the full agricultural potential of the region, to encourage de-urbanisation and to build a base of farming related skills from which the mentoring of future generations of farmers can emerge. Essentially a starting a generation, totally free from the linear economy.

The second purpose is to fulfil the long standing requirement of the current Government to provide land for emerging farmers. Unfortunately this process has been tainted by the usual politics of expediency , such as land grabs and political interference. By taking this project into an area that has no agricultural value, are intentional about avoiding the waves.

Phase Three

The Development of the Hemp as a Building material industry

Reference : The Brief Overview of the Hemp industry by Mike Fagan
June 2020

The Industrial Hemp Farm

Installation fo 40 hectares of shade cloth: standard height 4 meters

- Planting of 40 hectares of industrial hemp. Plant ratio IAW hemp standard
- Installation of 10 000 solar panels
- Solar electricity provides GPR which allows for humidity control
- Optimisation of growth of the hemp plants
- Two Harvest cycles per annum
- Hemp is regenerative plant. Growth of plant regenerative the carbon structure of the soil
- Hemp is a Carbon Negative product, like a tropical rain forest
- Growing Hemp allows the farmer to farm Carbon Credits
- Hemp hurd once crushed and mixed with lime is a building product

The Industrial Hemp Factory

During Phase three it is intended to develop an Industrial Hemp production unit. Which feeds into the construction industry

In simple terms. Hurd is the major component of the hemp plant. Once the fibre is stripped from the plant the Hurd and seed remain

The fibre is an organic material and is crushed, charred and recycled into the soil for the next plant

The Hurd is crushed, mixed with lime and this is forms into blocks.

The attributes of blocks are multiple and it is very popular world wide construction material

Light

Easy to work with

Excellent thermic properties

Non toxic

Breatheable

Rain resistant

Phase three

Phase three has multiple benefits to adding to the circular economy and it an phase two are designed as Ignition platforms for the circular economy, rather that recovery platforms from the linear economy