|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  | * All feedstock which are approved by Dept. of Forestry * All farmers (commercial, communal, and resettled) should provide * Combination of all harvesting techniques (and provisions to access all techniques by all) * Easy aftercare * Associations/co-operatives should process the feedstock * Farmers should bring the feedstock to a centralised location for processing | **Production and collection of biomass** |
| * No refineries | * Otjiwarongo and communal farmers nearby * Proof of concept of whole value chain (Pilot) * Demonstration plant including socio-economic impact, environmental assessment * Choice of anchor product 🡪 energy carrier * Indigenous harvest equipment * Training farmers to maintain equipment properly | * Pilot Upscale and replication in other places * Pilot stays the same but investigates more details such as by-product valorisation etc. | * Products for water filtration/animal feed * All in the list and also fencing poles * Activated charcoal * Biobased chemicals (fuel/energy carrier as least preference) * Government should not own the biohub/biorefinery * Location should be near communal areas | **Biorefinery** |
| * No local market * No investors * No sustainable goals for existing industries | * Fuel/electricity as anchor product and create a domestic market for it * Policies (incentives/subsidies) enabling anchor product transition by current industries * Policies for research and infrastructure development | * Expand the policies to other products similar to chosen anchor product * Policies further to have a conducive environment for transition and entrepreneurship | * Policies for transport, infrastructure, research and development, soil, water management, biofuels, harvesting equipment * Incentives, subsidies and credits * Biodiversity policies * MSDS (material safety data sheets) for all the products and materials which are being handled | **Trade and policies** |
|  | * Pilot will create confidence in all stakeholders, policymakers, and investors (and also attract new investors due to the spread of word) * Challenges to be addressed are traditional leaders has to be capacitated, in rainy season no/difficult harvest, equipments break often (and spare parts coming from EU) * Placing a pilot in Otjiwarongo can influence people like politicians (as it will become visible to all) | * Will generate a momentum which will play a crucial role in self-sustaining the model |  | **Impact** |
|  | * Foreign investor in Pilot | * Same pilot foreign investor should develop a strategic partnership with national(/local) organizations to enable and capacitate * Some organizations such as GIZ, Agribank, Associations, ministries, etc. * Bring ship-owners (or maritime/enduse sectors) as investors |  | **Roles and responsibilities** |