

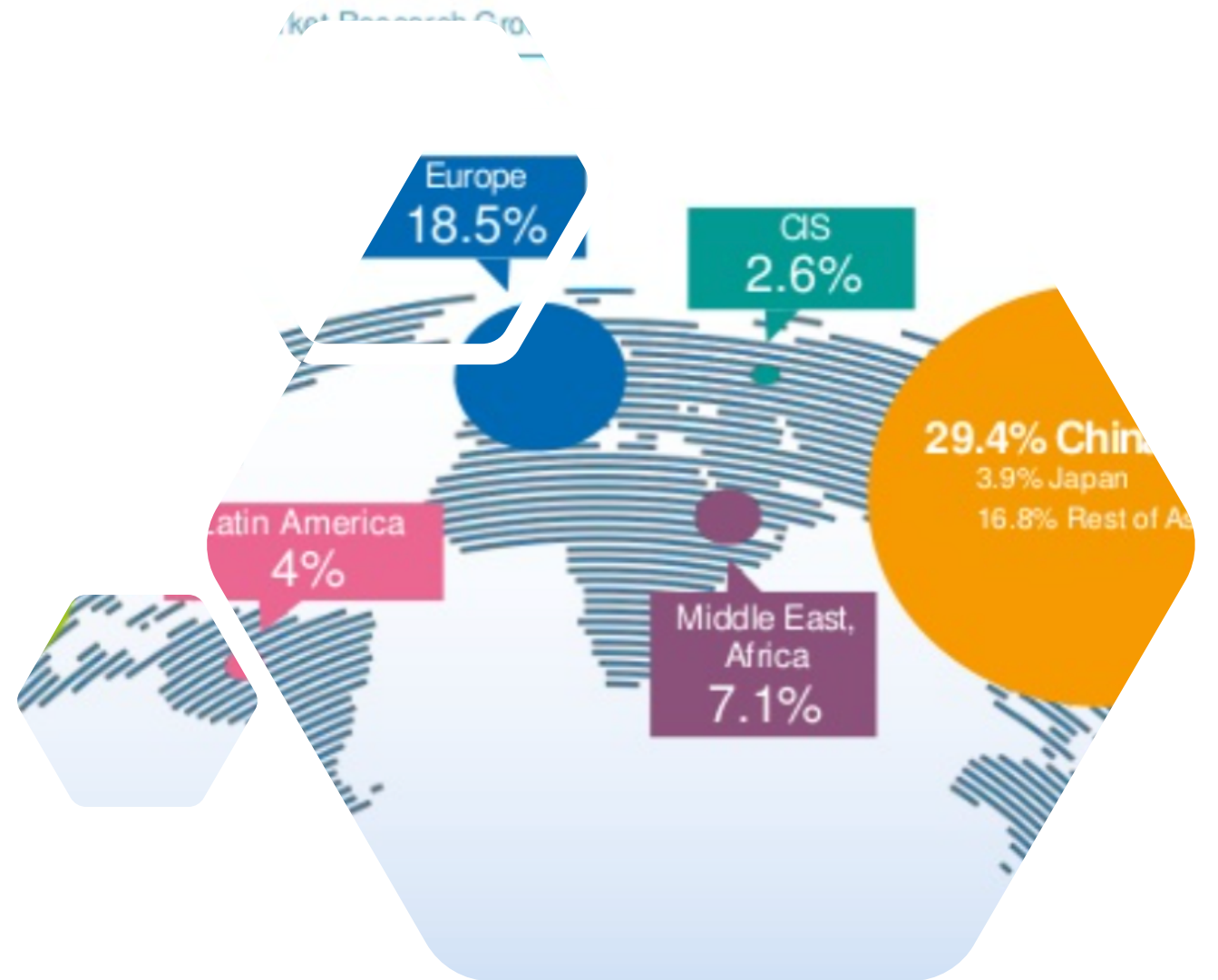
Circular Growth in Africa

Plastic Recycling Opportunity



Global Market

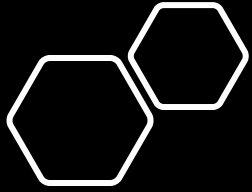
- \$42 Billion in 2018
- CAGR 7%
- Increasing awareness
- PET 73.4 million tons 2020



Recycling Market in Africa

- Estimated over 400 million metric tons imported 1997-2017
- Eight African Countries Manufacturing plastics 15 million metric tons
- Approximately 1.85 million metric tons per year available for bottle to bottle recyclers

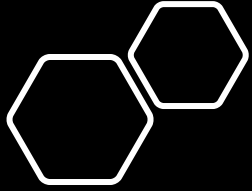




Supply/ Value Chain

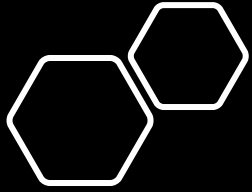
	Gathering	Collection Site	Aggregation Site	Recycle Plant	Bottle Plant
Who?	Individuals	Small group of employees on dedicated facility footprint.	Large group of employees at a dedicated facility (buildings & land).	Established corporation, international subsidiary or collation.	Established corporation or international subsidiary.
Location?	Remote areas, small villages and communities that may not be road served.	Larger but still rural villages and towns that are served by road and vehicles but not Hwy.	Regional cities or capitals. Has good Hwy access and is a transportation hub.	Capital or industrial city with reliable power supply and labor force. Access to all transportation modes.	Capital or industrial city with reliable power supply and labor force. Access to all transportation modes.
How Moved?	By foot, in bags By tri-cycle bike Last mile transport	By hand from gatherer to storage. Sorted and stored by hand. Moved to Aggregation Site by truck.	By mechanical and by hand. Use of forklifts and other heavy equipment and Large trucks.	By forklifts and other heavy equipment or automated factory chain.	By forklifts and other heavy equipment or automated factory chain.
Financial Terms?	Payment on delivery from Collection Site.	Payment on pickup by aggregator truck made to business.	Payment is 30 days from delivery to recycle plant. Cashflow management required.	Payment is 30-90 days from delivery to bottle plant.	Payment is 30-90 days from delivery bottler.
Storage?	Limited by location and collection device (bag).	Small to medium lot size and storage requirements based on frequency of pickup vehicle.	Large storage required for additional sorting and demand fluctuations. Based on Plant needs.	Storage facility required to supply plant for operational period with variability both raw material and finished good.	Storage facility required to supply plant for operational period with variability both raw material and finished good.
Value Provided?	Gathers raw materials and transports last mile to collection site.	Collects raw materials and sorts them. Compacts them for better transport. Pays Gatherers. Multiple employees.	Additional raw materials sorting and processing. Increases efficiency of shipments and lowers transport costs.	Consistent supply of raw materials in an efficient package at negotiated process for stability.	Offers long term stable demand for raw materials. Create job demand and growth.
Value Received?	Gets paid immediately and increases ability to buy food, clothing, goods	Gets paid premium for collecting, sorting and bundling. Has dedicated relationship with buyer(s).	Has established relationship with plant and long-term contracts with consistent pricing.	Has agreements in place for long term contracts at stable pricing.	Receives quality and consistent recycled raw materials at stable price. Generates good will and received govt support.



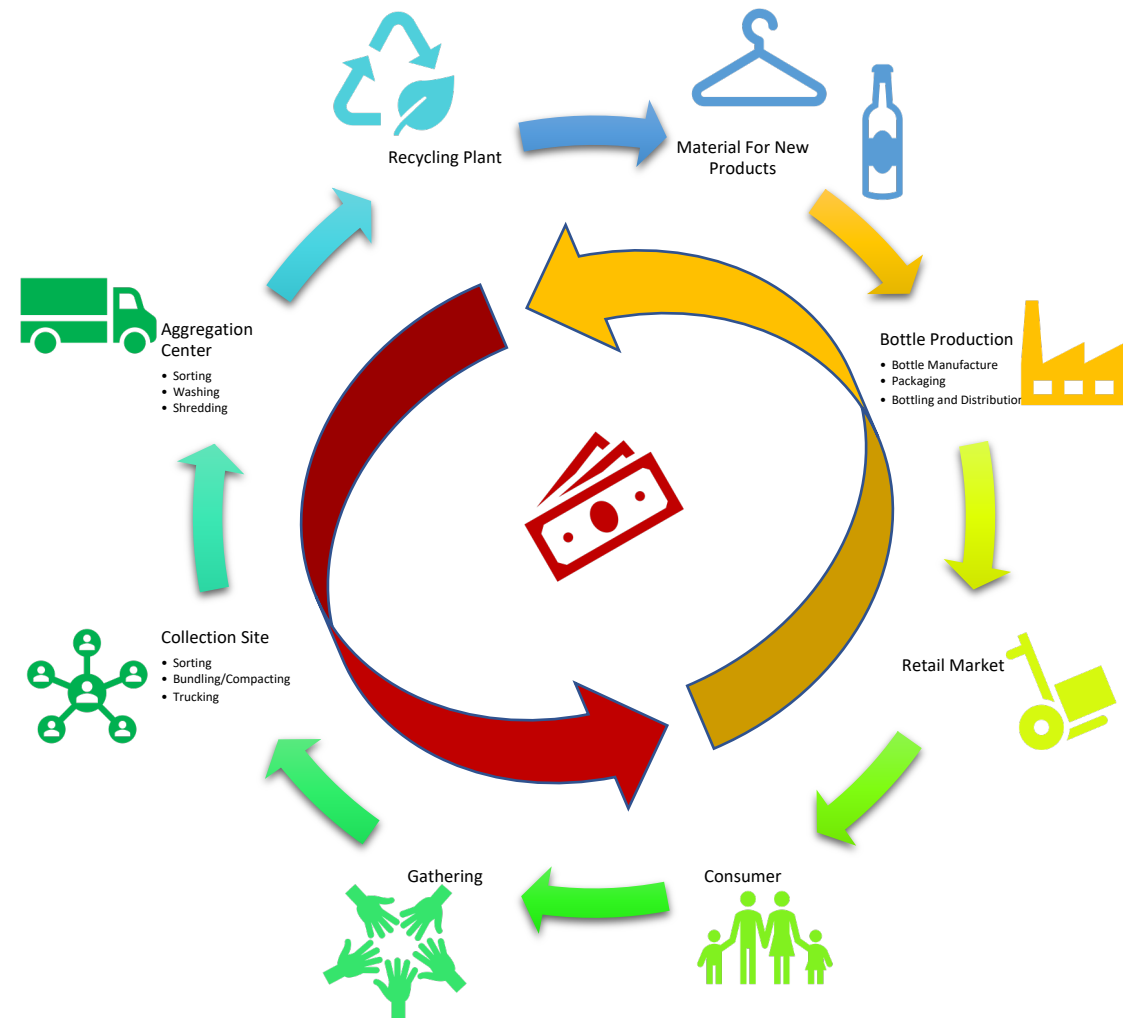


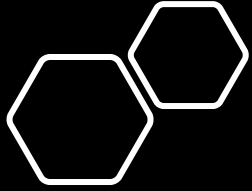
Challenges to Expanding Current Model

- COVID-19
- Price of virgin material is lower than recycled material (oil driven)
- Collection is labor and equipment intensive
- Ability to collect revenues and disperse to collectors severely diminished
- Single use safer than reused perception issue (possible)



Bottle Product Lifecycle & Circular Economic Impact

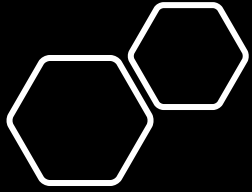




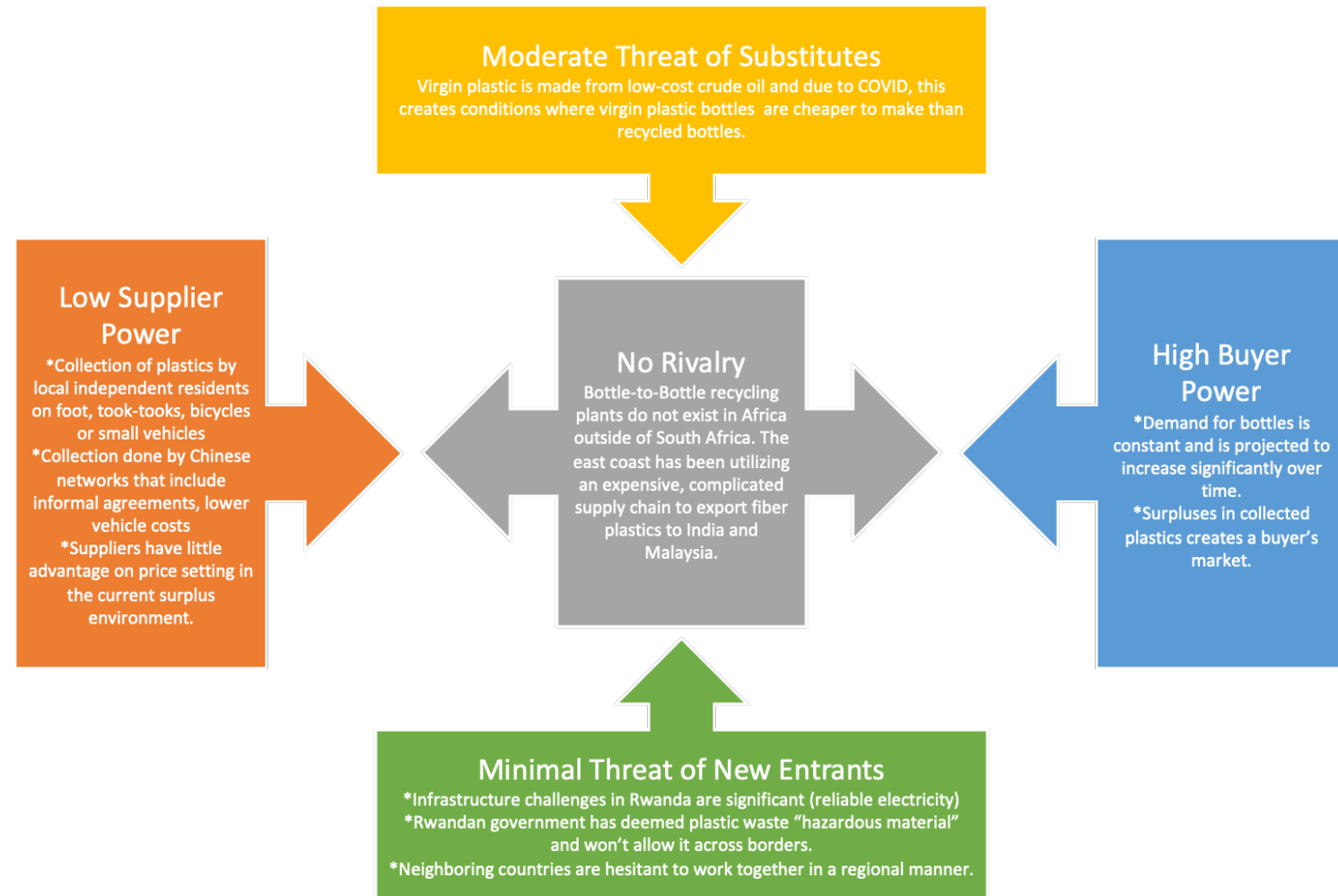
PET to rPET Recycling Facility

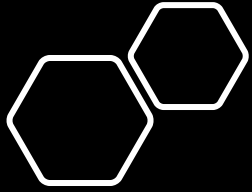
South Africa's PETCO Model:

- Take advantage of current (and expanded) collection networks.
- Centrally locate a rPET Recycling plant (bottle to bottle) amongst the countries of Uganda, Burundi, Kenya, Tanzania and Zambia.
- Market for rPET is growing and is not being filled.
- Take advantage of a nation's development initiative to be a regional and international economy leader (growth).



Market Forces

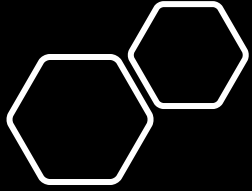




Financial Feasibility

Income Statement			
Revenue	26,000,000		
COGS	20,800,000		80%
Gross Profit		\$ 5,200,000	
SG&A	1,040,000		20%
Net Profit		\$ 4,160,000	
Net Profit % Direct Sales			16%

Notes: This assumes 20,00 tons of rPET produced annually at \$.65/lb. COGS is 80% of Revenue. SG&A is 20% of Gross Profit.



DU Team Recommendations

- Address UN Sustainable Development Goals to build a regional collation of UN, NGO, Global Bottlers and Local Governments to invest in an rPET facility.
- Work with local and national governments to require use of rPET in all bottles sold in a country/area (East Africa).
- Help hire and staff rPET facility.
- Support facility to adopt collection network that has access to bailers, transportation and financial disbursement.