

***Jobenomics* specializes in startup business and job creation.**



***Jobenomics Ghana* is a proposed ECOWAS* pilot program to mass-produce micro-businesses in underserved and under-resourced communities.**

** Economic Community of West African States*

By: Asuquo Udofia (Ghana), Joyce Williams (Ghana Diaspora); Dr. Hind Kassir (Dubai); Dr. Sam Hancock, Eddie Othon & Chuck Vollmer (USA)

9 October 2020

Jobenomics Ghana-ECOWAS Evolution



- The Jobenomics National Grassroots Movement started during the 2008-09 Great Recession and grew rapidly in underserved and under-resourced communities in dozens of U.S. cities, states, and regions.
- In 2016, Jobenomics became an International Grassroots Movement with chapters in Canada, Colombia, and Rwanda.
- In 2020, in partnership with Seeds Arabia (a Dubai headquartered firm sponsored by the UAE Government) launched Jobenomics Arabia.
 - Jobenomics Arabia is designed to help the Arab world grow economically and culturally while finding solutions to resolve conflicts both within and outside (with an emphasis on the Middle East and Africa) the league of 21 Arab nations.
 - Members of AfCFTA (African Continent Free Trade Area) Policy Network-Ghana & Diaspora approached Seeds Arabia to launch a complementary program for the 15 West African nations in ECOWAS, starting with Ghana.

Borne during the last global recession, Jobenomics is poised to be a unique economic development solution to today's financial crisis.

Presentation Outline

- **Our Organizational Team**
- **Jobenomics Concept**
- **ECOWAS & Ghana Economic Situation**
- **Initial Jobenomics Ghana-ECOWAS Programs**
 - **Circular Agrarian Economy**
 - **Improved & Potable Water**
 - **Post Pandemic Healthcare**
 - **Digital Economy**
 - **Waste-To-Value**
 - **Experiential Tourism**
- **Conclusion**

Jobenomics



Grassroots Movement

- Since 2010, estimated audience of 30 million
- Website averages 30,000 monthly page views
- Jobenomics America TV launched in 2018



Chuck Vollmer

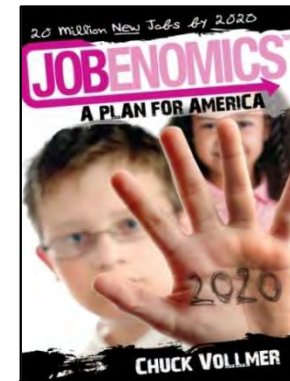


Books, Research & Special Reports

- Eleven books and ninety special reports on economic, community, small business and workforce development
- Free library at Jobenomics.com

Country, Regional & City Programs

- USA: Twenty city, county & regional chapters
- International: Jobenomics Alberta (Canada), Colombia (South America) and Rwanda (Africa)



Jobenomics.com

Primary focus: economic, community, small business and workforce development for underserved and under-resourced communities.

SEEDS Arab



“We need to equip all the country sectors’ in the knowledge-based economy that is built on innovation, creativity and modern science and put our fingerprints to construct solid sustainable foundations for our new generation.” HH Sheikh Mohammed bin Zayed, UAE Crown Prince



SEEDS Arab

- Supports the Sheikh’s vision of sustainable foundations for a new generation across Arabia, the Ummah and world.
- Offers personal value-based human and business development programs.
- Builds unique content for lifelong learning.
- Headquartered in Dubai, UAE



Dr. Kassir, CEO

Sustainable Engineering Experts for Development
خبراء الهندسة المستدامة للتنمية

SEEDS partnered with Jobenomics to mass-produce startup enterprises in Arabia and Africa—priority regions for the United Arab Emirates.

EmeraldPlanet

JOBENOMICS™
Ghana-ECOWAS



Dr. Sam Hancock

- **EmeraldPlanet International Foundation** enhances “world peace” by linking thought-leaders and innovators in the field of sustainable and resilient development.
- **EmeraldPlanet Trek** identifies and shares the globe’s best green business practices. To date, the “Trek” has visited 97 countries and interviewed senior government and industry officials from 103 countries. Over 2,600 green best practices are on the EmeraldPlanet.org website.
- **EmeraldPlanet TV** is a weekly 1-hour green practices TV show that airs on or is available to every (214) country and territory on earth. To date, 2,800 shows have been recorded. Via the PEG (Public, Education, Government) Media network, these shows are sent to 228,000 worldwide outlets.

EmeraldPlanet TV will record and broadcast worldwide the progress of Jobenomics Ghana-ECOWAS program.

Yalley Enterprises



Nana Yalley

Nana Yalley is a dual Ghanaian and US citizen, Jobenomics Board Member, and a Jobenomics partner for three business startup initiatives including:

- **Jobenomics-Diagnostix** initiative imports leading, CE & FDA approved diagnostic equipment and test kits to combat the ravaging effects of the coronavirus and other diseases.
- **EVP Technology** (<https://evptechnology.com>, Taiwan) produces new technologies related to green/renewable energy and environmental protection for future generations.
- **Agrobrasil** (<https://agrobrasil.com>, Brazil) is a biotech company that promotes biomass solutions to produce energy, renewable products, such as bioethanol, nanomaterials, and organic nutrients for animal and crop feed.

In 2016, Nana Yalley's address to the 1st ECOWAS Industrial Summit was entitled "Modern **Agricultural** Economic Development" for Ghana.

AfCFTA Policy Network-Ghana & Diaspora



- **Joyce Williams, Esq.**, Head of Advisory, Diaspora Office, AfCFTA Policy Network-Ghana & Diaspora, Washington DC

- The Assembly of Heads of State and Government of the African Union (AU) selected Ghana as the host country for the Secretariat of the **African Continental Free Trade Area** (AfCFTA) .
- AfCFTA enhances Intra-Africa trade with its pillars of trade partnerships, economies of scale, linkages, food security, accelerated economic activity and infrastructure development.
- **AfCFTA Policy Network-Ghana & Diaspora** is a membership-based international NGO that seeks to become a world-class center of excellence on education & training on AfCFTA for Ghana (population 31 million), the Diaspora (4 million), and ECOWAS.

AfCFTA Policy Network-Ghana & Diaspora was established in 2019 as the lead and largest NGO think tank on AfCFTA implementation.

Jobenomics Ghana



- Jobenomics Ghana's business and job creation programs focus on some of the most vexing challenges facing Ghana and ECOWAS:
 - Underserved and under-resourced areas of chronic poverty
 - Creating rural opportunities via a circular agrarian economy
 - Developing the digital infrastructure and digital economy
 - Mitigating pollution and effects of climate change
 - Increasing international travel, tourism and trade



- **Asuquo Udofia**, Managing Partner/CEO Quality Trust Limited, is the domestic coordinator for Jobenomics Ghana programs.

- **Eddie Othon**, Director Jobenomics Emerging Markets, will be the lead coordinator for international efforts.



Our bottom-up economic development approach will help restore economies upended by a pandemically-induced global recession.

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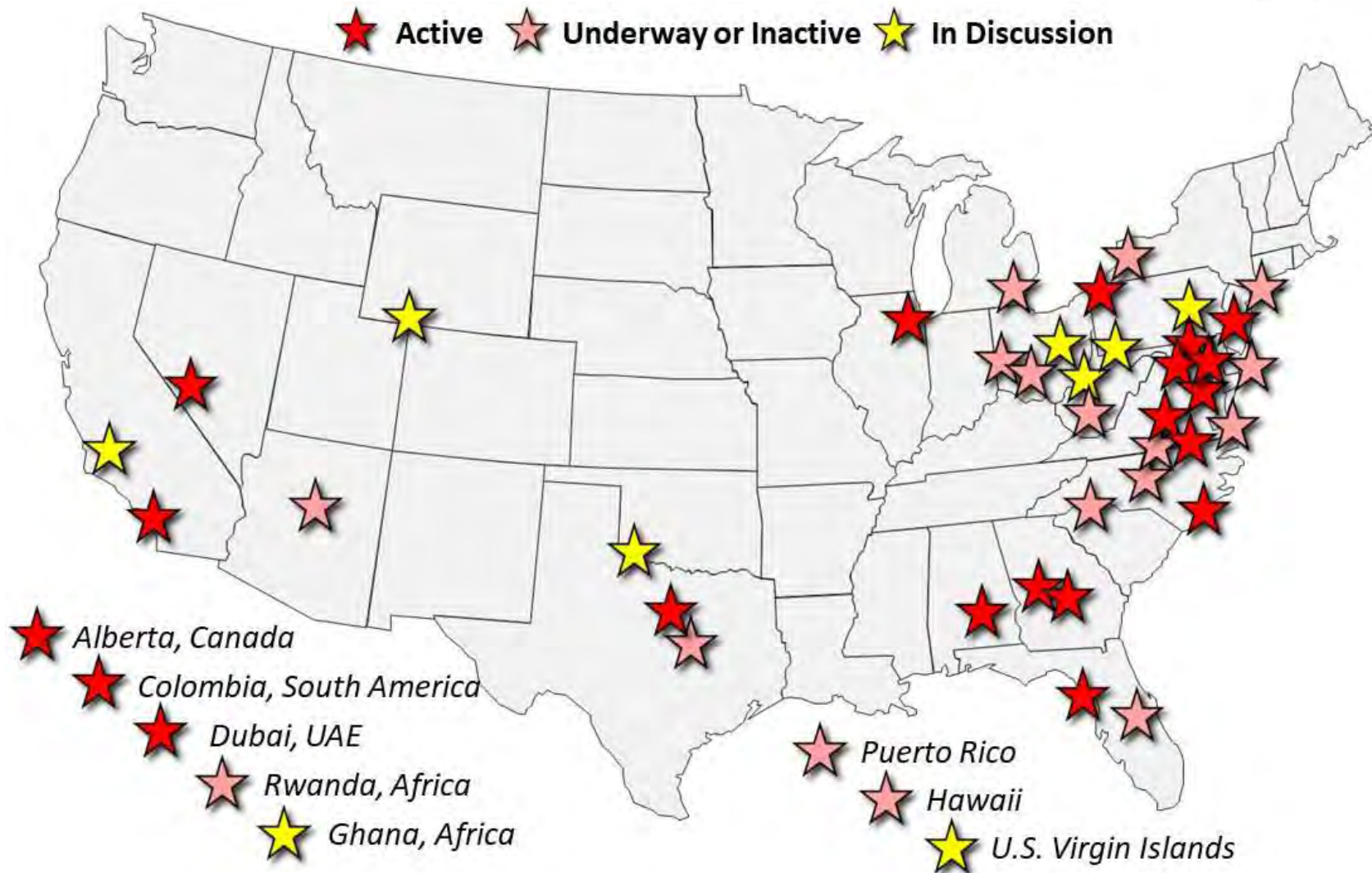
Jobenomics Intellectual Capital

JOBENOMICS™
Ghana-ECOWAS



Extensive research on the economic, community, business and workforce development.

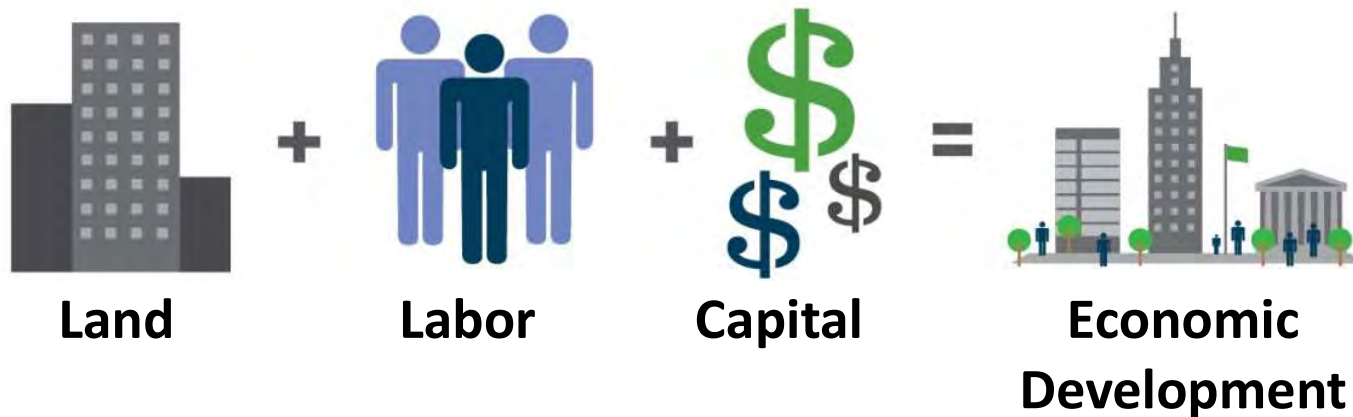
Jobenomics Chapters



Since 2016, dozens of communities started Jobenomics chapters that are in various stages of development.

A Different Approach To Economic And Community Development

Traditional **Top-Down** Approach



Jobenomics **Bottom-Up** Approach

Economic Development Conundrum

Traditional **Top-Down** Approach

Attract 1 Large
\$100,000,000/year
Enterprise



Jobenomics **Bottom-Up** Approach

Start 1,000
\$100,000/year
Micro Businesses



Under-resourced communities have difficulty attracting big companies
but can mass-produce micro and nonemployer businesses.

Jobenomics Community-Based Business Generator (JCBBG) Concept



A JCBBG **mass-produces** startup businesses by:

- Working with community leaders to identify high-potential business owners and employees,
- Executing a due diligence process to identify and assess work and social skills and aptitudes,
- Training and certifying participants in targeted occupations,
- Incorporating highly-scalable small and self-employed businesses,
- Establishing sources of funding and contracts to provide a consistent source of revenue for new businesses, and
- Providing mentoring and back-office support services to extend the life span and profitability of new businesses.

Most cities have Business Incubators and Business Accelerators, but not Business Generators for low-income citizens.

Micro & Nonemployer Businesses



- A **micro-business** (1 to 19 employees) employ 32 million Americans.
- A **nonemployer** is a small business with no “paid” employees.
 - 80% of all U.S. businesses with 25 million single-person owners.
 - Growing significantly faster than traditional businesses
 - Owners make substantially more than wage or salaried jobs.

Mass-producing micro and nonemployer businesses is the answer to beleaguered urban communities lacking good-paying jobs.

Startup Businesses

WSJ “If the U.S. were creating new firms at the same rate as in the 1980s that would be the equivalent of more than **200,000 companies and 1.8 million jobs a year.**”

Source: Wall Street Journal analysis of U.S. Bureau Labor Statistics data



“**Most city and state government policies that look to big business for job creation are doomed to failure** because they are based on unrealistic employment growth models. It's not just net job creation that startups dominate. On average, **one-year-old firms create nearly 1,000,000 jobs, while ten-year-old firms generate 300,000.** The notion that firms bulk up as they age is, in the aggregate, not supported by data.”

Source: Kauffman Foundation analysis of U.S. Bureau Labor Statistics data

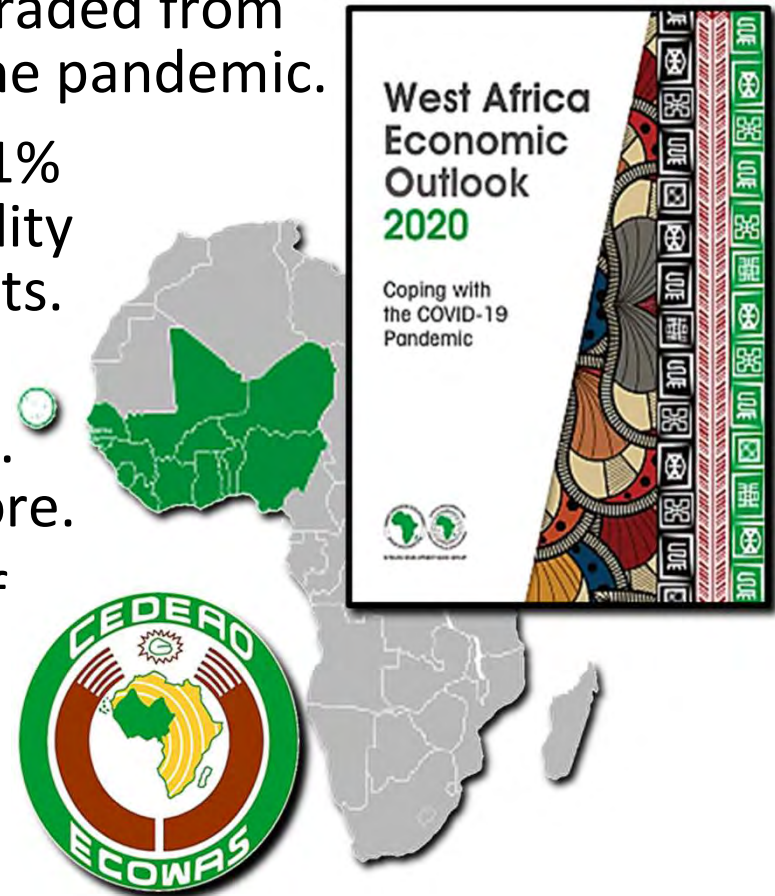
Startup businesses are the seed corn for local economies. Left unattended, these economies will remain fallow or wither.

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ECOWAS Economic Situation

- ECOWAS is a West African political, **economic** and peacekeeping union of 15 countries with a population of 350 million.
- West Africa 2020 GDP growth downgraded from +4.0% to -4.3% (worse case) due to the pandemic.
- Inflation is projected to increase to 11% with sharp declines in trade, commodity prices, tourism and agricultural exports.
- Labor force participation decreasing from 64.2% in 2000, to 58.5% in 2019. 2020, and 2021, expected to drop more.
- A 2020 per capita income decrease of 4.3% will cause regional unrest.
- Due to COVID-19, ECOWAS countries must bolster healthcare systems and train and equip frontline workers.



The pandemic presents a unique opportunity for ECOWAS to implement new economic and community development approaches.



Ghana Economic Situation

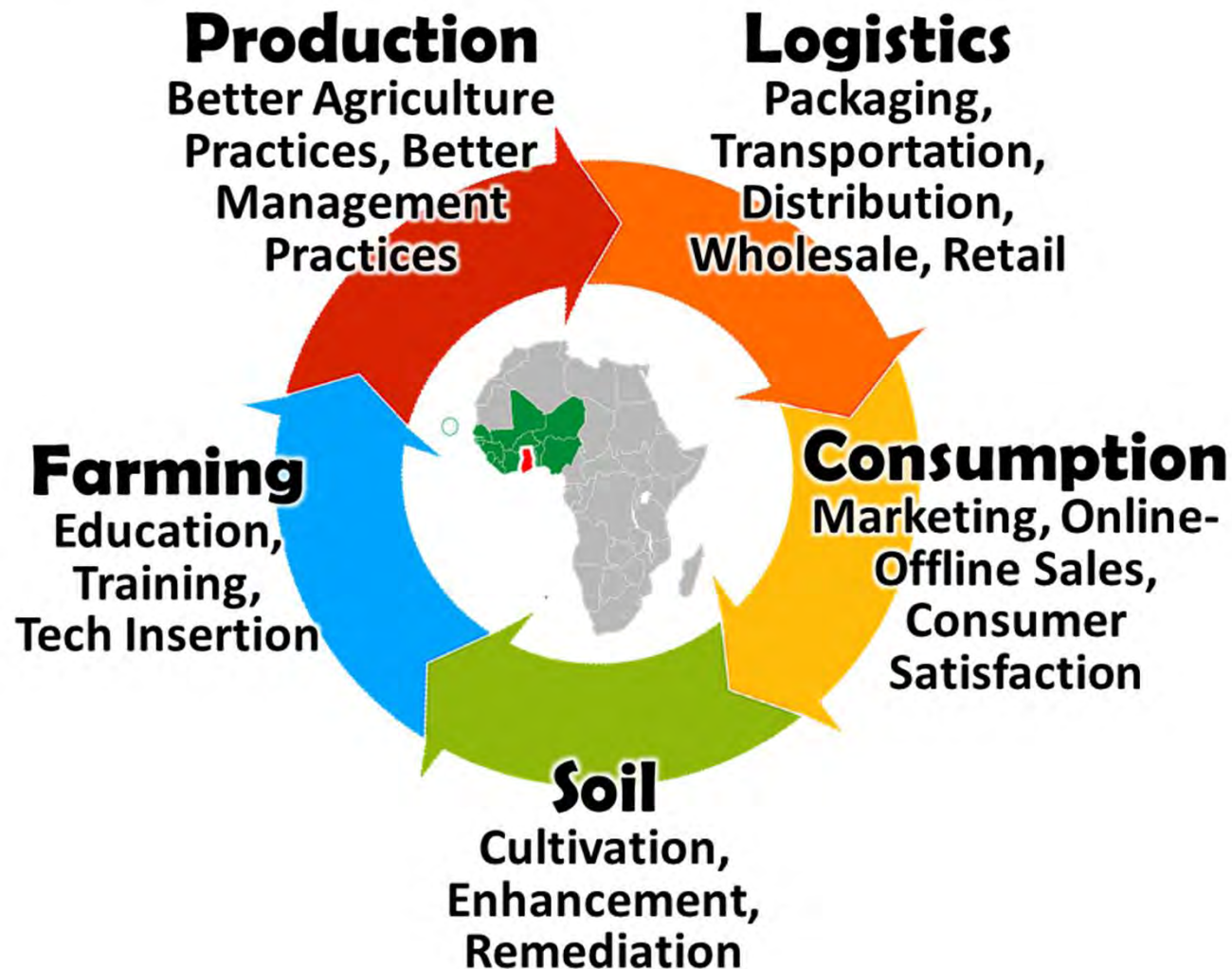
- The **IMF** estimates Ghana's 1.5% economic growth in 2020 and 5.9% in 2021 **if** the global pandemic subsides and trade resumes.
- Jobenomics Ghana asserts that 5.9% GDP growth requires mass-production of startup micro and nonemployer businesses:
 - Regenerating Ghana's agricultural economy, responsible for 30% of GDP and 50% of the working population (IMF), is paramount. 80% of agrarian output is from small farms averaging 1.2 hectares.
 - Ghana has one of Africa's most advanced healthcare systems, but more is needed to attract investment, trade, and business.
 - The digital economy is growing 5-times faster than the traditional economy and offers millions of new job opportunities for Gen Y/Z.
 - Pollution and urbanization offer new business opportunities.
 - To attract travelers and tourists (formerly 10% of GDP), Ghana needs to shift from sightseeing to experiential tourism.

Jobenomics Ghana leverages entrepreneurial skills and resources of all Ghanaians—citizens, diaspora, and expatriates.

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Circular Agrarian Economy



Jobenomics circular agrarian creates a closed-loop system for more efficient and profitable agriculture with emphasis on mass-producing agriculture-related startup businesses and jobs.

Typical Rural Farming Village

Most Urgent Needs To Become More Productive

- More indoor growing operations
- Higher value crops
- More potable water
- Irrigation systems
- Reliable power
- Internet connectivity
- Certified skills-based training
- Soil enhancement & remediation



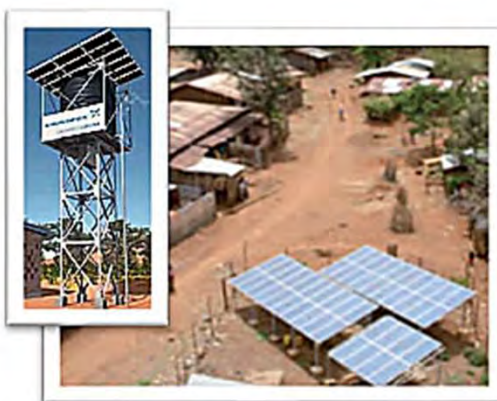
Jobenomics Ghana will upgrade and connect farming villages to modern regional/ECOWAS/international agrarian communities.

Affordable Village & Small Farm Upgrades: Power, Telecom and Internet

Tower Up Consulting, Jobenomics Partner



**Rural cellular and
Wi-Fi networks**



**PV solar electrified village
center with water tower**



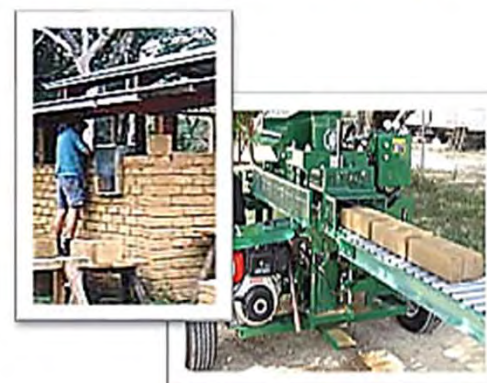
**2,500 to 40,000 gallon/day water
pumping & purification systems**



**Solar & wind
powered lighting**



**Security and
surveillance systems**



**Brick-making
Machine**

Only 66% of rural Ghana is electrified. Rural population is 47% of the total population. 29% live on less than \$1.25/day (PPP).

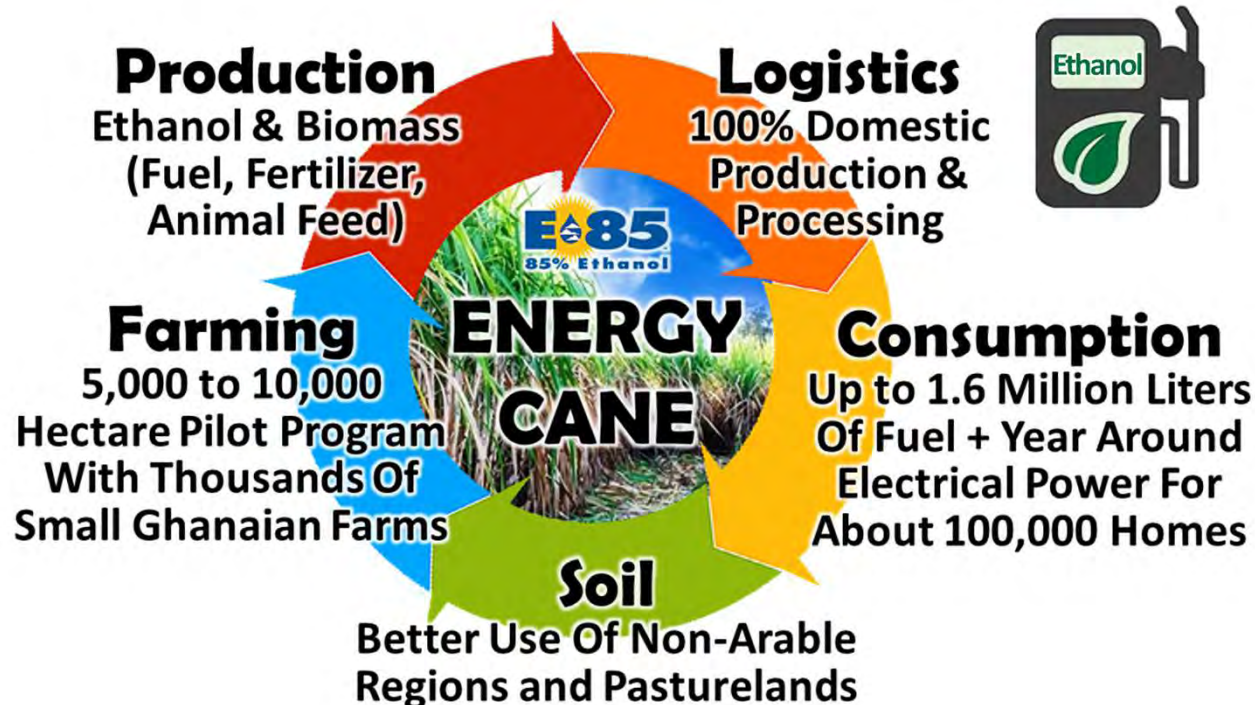
Proven **Energy Cane**-To-Ethanol Program

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Ghana-ECOWAS

Part 1: The Yalley Story
<https://www.youtube.com/watch?v=jafzJpaFKn0&list=PLPtFFpLJkv9-jhlm1IDXkKScZ7ptoOpqv&index=16>



Part 2: Energy Cane
<https://www.youtube.com/watch?v=RUR1E2m6p8g&list=PLPtFFpLJkv9-jhlm1IDXkKScZ7ptoOpqv&index=16&t=0s>



Energy cane is a hybrid non-edible cane for biofuels.

Brazilian Energy Cane



- Agrobrasilia has already offered ECOWAS this technology.
- A Ghana pilot program would mobilize thousands of small farms to participate in this high-value crop program.
- Agrobrasilia would help with biomass energy processing facility implementation, training, and establishing regional and international distribution and supply chains.



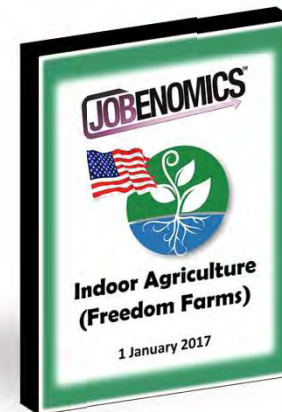
Agrobrasilia proposes a 5,000 to 10,000-hectare energy cane pilot program in Ghana to locally produce **biofuel and **electricity**.**

Controlled Environment Agriculture (CEA)

JOBENOMICS™
Ghana-ECOWAS

- CEA is the process of growing high-value plants and crops inside a grow room or greenhouse.
- CEA allows a grower to maintain temperature, light, carbon dioxide, humidity, water, pH levels, and nutrients to produce crops in ideal growing conditions with maximum yields.
- Jobenomics' CEA program is focused on mass-producing agribusinesses, micro-farms and agricultural-related jobs.

Regional Growing, Processing, Manufacturing, Distribution & Delivery Centers



Global CEA market is projected to grow to **\$15.3 billion by 2024**, up from **\$6.5 billion in 2017**, potentially creating thousands of businesses and several million jobs in underserved rural and urban communities.

AG Core & Local CEA-Farms

- AG Core is the National Center that manages, trains, and implements Local Centers. AG Core processes and ships locally-grown food to Ghanaian, regional and international outlets.



**Large Grow Center
(AG Core)
With Controlled
Environment & Vertical
Farming Systems**



ACTS Freedom Farms of America, Jobenomics Partner, www.ACTSFFA.com

- Local CEA-farms will first satisfy local needs and then ship remaining produce to AG Core.



**Produce On Demand
(POD) Greenhouse**



**GAP, GHP, FSMA
Compliant Greenhouses**



Goal: Establish new agrarian businesses and jobs within large grow centers and numerous smaller agrarian communities in Ghana.

Pilot Ghanaian Agrarian Community

500-Hectare Freedom Farm Complex In California Desert



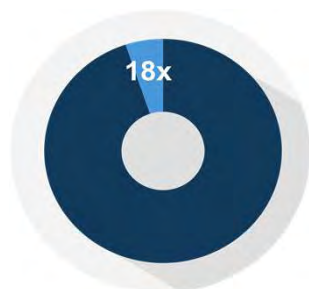
Jobenomics Partner, www.oculusarchitects.com/mies_portfolio/acts-freedom-farm/



15 hectares of indoor controlled environment agriculture, village, production and distribution facilities, commercial/community/ education/worship centers, and homes and apartments.

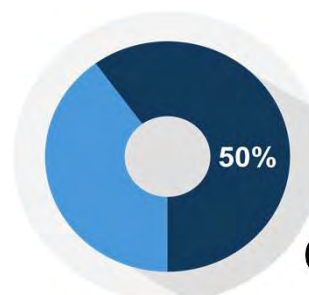
Indoor Versus Outdoor Productivity

5 Acre Comparison



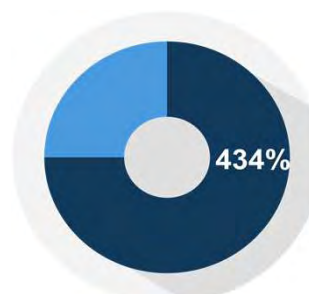
Acre Comparison

Indoor: 5
Outdoor: 93



Revenue Comparison

Indoor: \$3,389,829
Outdoor: \$2,259,886



EBIT Comparison

Indoor: \$874,822
Outdoors: \$201,322

Performance Categories	5 Acre High-Tech Greenhouse Grape Tomatoes
Acreage Under Glass	5
Growing Area (% actually planted)	95%
Growing Area in Square Footage	206,910
Yield per Square Foot	0.71
Total Yield per planting	146,906
Number of Plantings per year	10
Waste factor for transport and processing	94%
Estimated Yield to Market:	1,377,979
Estimated Market Price Per Pound	\$2.46
Estimated Gross Revenue	\$ 3,389,829
Cost of Labor, Seed, Water, Chemicals/Fertilizer	\$ 1,394,573
Cost of Lease and Power	\$ 1,046,980
Total Cost to Grow	\$ 2,441,553
Net income before shipping:	\$ 948,275
Cost of Shipping	\$ 73,453
EBIT	\$ 874,822

Significantly more efficient and cost effective than outdoor farming.

High \$ Value CEA Products

Common Crops

- Culinary Herbs
- Lettuce
- Spinach
- Tomatoes
- Strawberries
- Peppers
- Cucumbers



Specialty Crops

- Medicinal Herbs
- Flowers
- Mushrooms
- Ground Covers
- Ornamental Grasses
- Bamboo
- Hemp

Herbs are highest value produce. Hemp is the fastest growing and most profitable agricultural industry.

Industrial Hemp Products



Body-Care Products



CBD Oil



Food Supplements



Apparel



Fertilizer



Capacitors



Biofuels



Paper



Rope



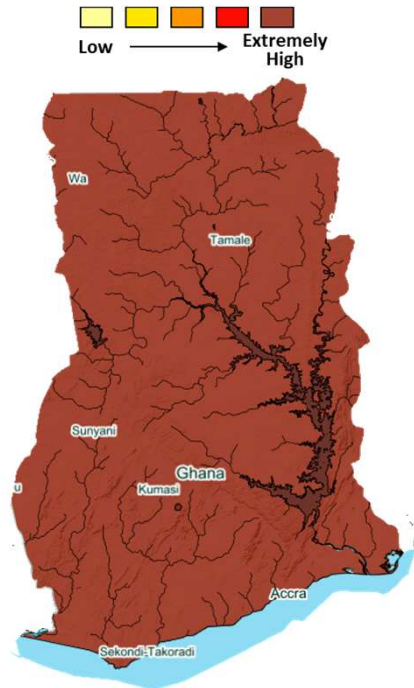
Hempcrete

Ghana has passed legislation allowing hemp to be grown for industrial or medicinal purposes.

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Potable Water



Untreated Connected Wastewater

Untreated domestic wastewater connected to a sewage system.

Source: World Resources Institute Aqueduct Alliance

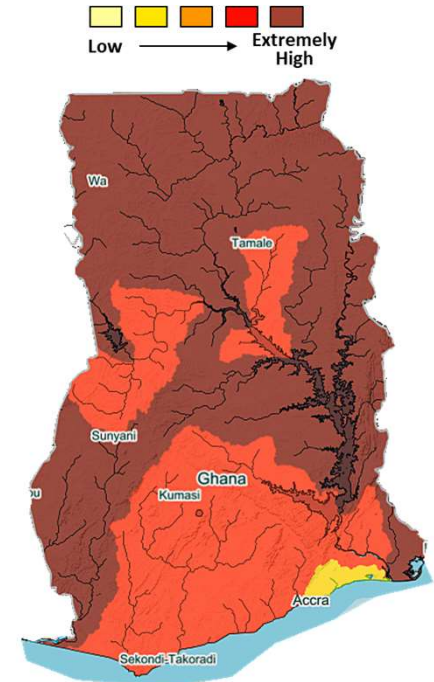


**Desertification Moving South
5 Kilometers/Year**



Candidate Solar Powered Water Pumping & Purification System

Up to 40,000 gallons purified water a day.
Source: Tower Up Consulting (Jobenomics partner)



Unimproved or No Drinking Water

percentage of the population collecting drinking water from an unprotected water source.

Source: World Resources Institute Aqueduct Alliance

Ghana needs copious amounts of clean water.

Florida Bottling Plant

Jobenomics Partner, www.superwaterhyox.com



Dr. Linares, CEO



SuperWater HyOx increases water's dissolved oxygen content by 300%, which is essential for healthy organisms (human, animals, agriculture),³⁴

HyOx Agriculture Applications

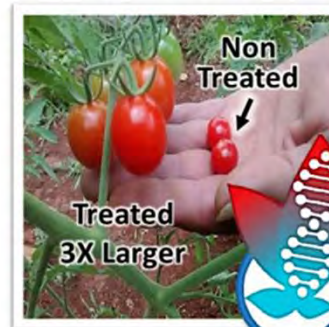
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Soil Improvement



Cherry Tomatoes



HyOx +
SUPER WATER
TERRE HyOx
ORGANICS

Sugar Cane



Limes



Coffee



Avocado



Doubling growth of traditional agriculture in South America.

HyOx Sugar Cane Results

- 1 to 20-hectare sugar cane pilots at Ingenio La Cabaña.
- No chemical fertilizers used. Clean sustainable production.
- ✓ **Organic production output equal to chemically-fertilized cane.**
- ✓ **Reduced need for irrigation water by 70% to 80%.**
- ✓ **Savings in total production cost estimated at 30%.**
- Improved in root system germination.
- Acceleration of compost maturation.
- Reduction of compost smell.
- Significant reduction in chemical traces.
- Remediation and recovery of the soil.

Small Farm System



A HyOx Ghana program could significantly improve livelihoods of poor Ghanaian farmers and local economies.

Coffee and Cocoa



- Jobenomics and HyOx Superwater Inc. are working with small Colombian farmers to increase coffee yield and quality.
- HyOx Superwater is now exporting coffee to premium European coffee companies.



- **800,000 small scale cocoa farmers make up 60% of Ghana's agricultural base.**



- Ghana processes only 20% of its cocoa (80% exported raw). Ghana Cocoa Board plans to process locally 50% of cocoa production.
- Multinational firms, like Nestle, committed to help Ghana process more local products.

HyOx is also improving **Colombian cocoa** farming and processing.

Colombian Cocoa with HyOx SuperWater



This cocoa tree had not produced fruit in the 5-years prior to applying HyOx products.



Artisanal production of Cocoa beans in Caldas Colombia using HyOx technology.



Cocoa seeds preserved in HyOx Superwater for about 1 year to prevent spoilage.

Use of HyOx Superwater and TerreHyOx Organics nutrients greatly increases **organic cocoa production, quality, savings and transport.**

HyOx Environmental Remediation



**HyOx Floating
Oxygenator GPS
Solar Powered
Drone**



Waterways, Lakes And Ponds



Toxic Waste Remediation



SuperWater HyOx is mitigating many forms of pollution.

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Jobenomics Direct-Care Program

Direct-Care Services

- Healthcare
- Social assistance
- Behavioral-care
- Elder-care
- Child-care



Direct-Care Center

- Information & Call Center
- Training & Certification Center
- Management and Quality Control



Former women head-of-households are ideal for direct-care jobs.

Direct-Care Telehealth Platforms

- **MHealth4Africa** (MH4A, a Jobenomics partner) is a Ghana-developed telehealth platform that provides health access via tablets, computers and smart phones.
- **MH4A**'s founders and co-CEOs are Patience and Richard Emeni who are leading the Jobenomics Rwanda effort.



L-R: Chuck Vollmer (Jobenomics Founder), Bonny Musefano (Rwandan Embassy Commercial Attaché), **Richard and Patience Emeni (Jobenomics Rwanda)**, and Dr. Sam Hancock (Jobenomics Board Member and CEO EmeraldPlanet.org)



MHealth4Africa provides telehealth access to rural, urban, and under-resourced communities in Ghana and Africa.

Interim Jobenomics Ghana Telehealth Center



Accra Specialty Surgical Training Hospital

<https://www.foundationforspecialsurgery.org/>



Dr. Ife Sofola,

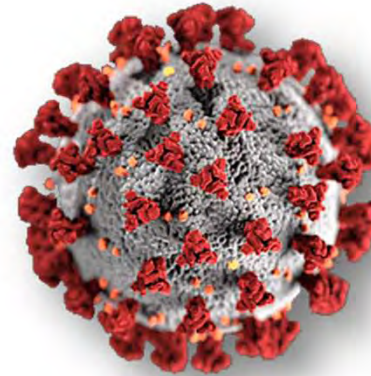
Foundation for Special Surgery Cofounder
& Jobenomics Advisory Board Member

- The Foundation for Special Surgery is a Jobenomics partner and the cofounder, Dr. Sofola, is a Jobenomics Board Member.
- The Foundation is breaking ground in Accra in October 2020.

The global telehealth market is expected to reach \$40 billion, growing at a combined average growth rate of 25%.

Healthcare & Pandemic Businesses and Jobs

COVID-19 Rapid Point Of Care Test Kit *IgM, IgG Tests*

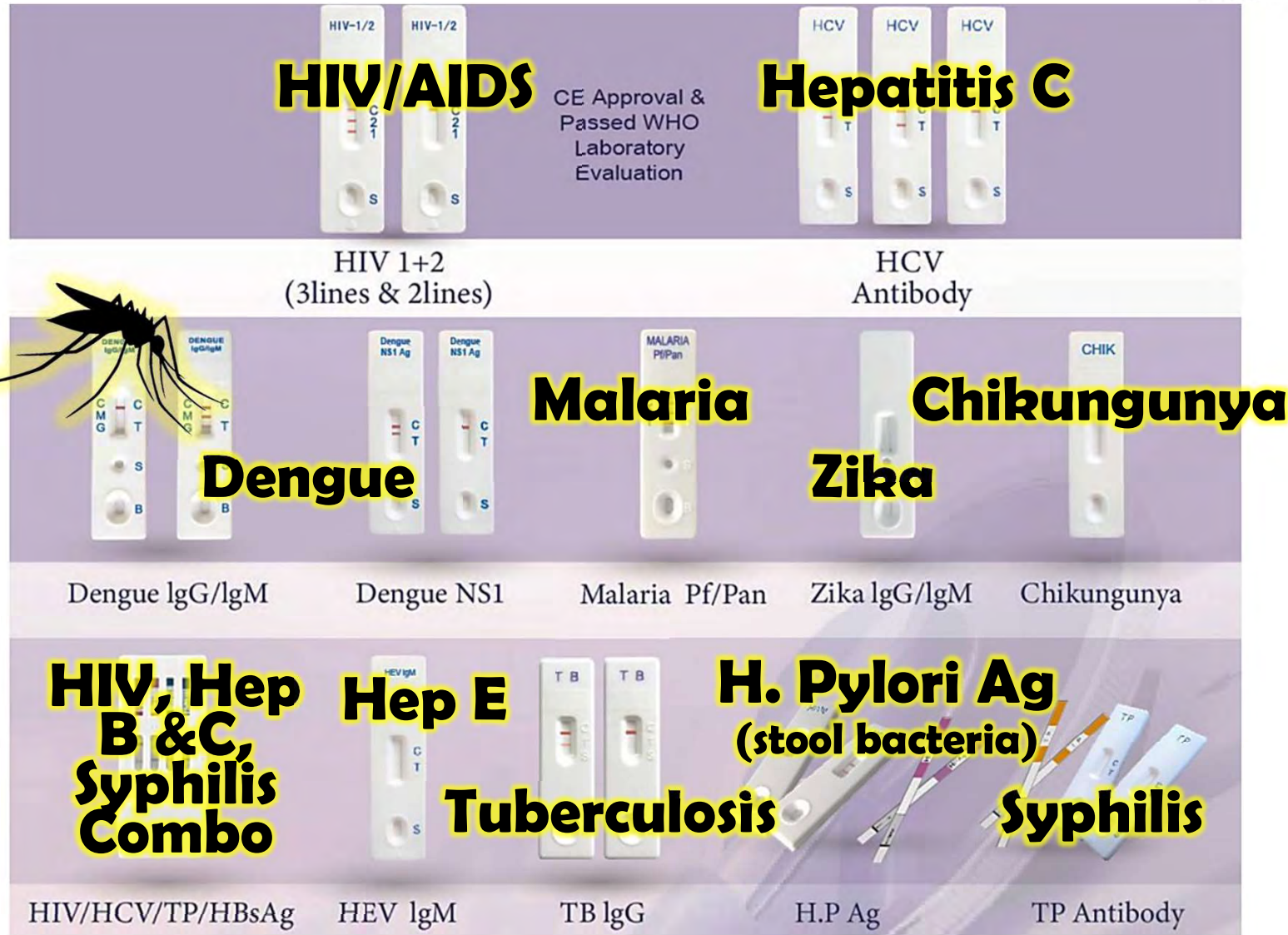


Microfluidic Lab-On-A-Chip Test Kit *IgM, IgG, CRP, SAA Tests*



The Jobenomics team has the world's leading COVID-19 diagnostics and test kits for new busines and job creation.

Other Tests For Viruses & Infections In Africa



HIV/AIDS
CE Approval & Passed WHO Laboratory Evaluation
HIV-1/2 (3lines & 2lines)

Hepatitis C
HCV Antibody

Dengue
Dengue IgG/IgM
Dengue NS1 Ag

Malaria
Malaria Pf/Pan

Chikungunya
CHIK

Zika
Zika IgG/IgM

HIV, Hep B & C, Syphilis Combo
HIV/HCV/TP/HBsAg

Hep E
HEV IgM

Tuberculosis
TB IgG

H. Pylori Ag (stool bacteria)
H.P Ag

Syphilis
TP Antibody

Our mobile lab can be equipped (powered, internet, mobile-health, telehealth) in very remote areas at half the cost of one MRI machine.

Mobile Level-2 Biosafety Lab



BSL-2 labs mitigate infectious agents or toxins that pose a threat to critical enterprises (government, schools, businesses, airports), dealing with COVID hotspots, returning people back to work. It also provides a new source of revenue for local communities.

CLINICSTOP Micro Clinic for Diagnosis, Counseling and Remote Care

Jobenomics Partner
www.clinicstop.com

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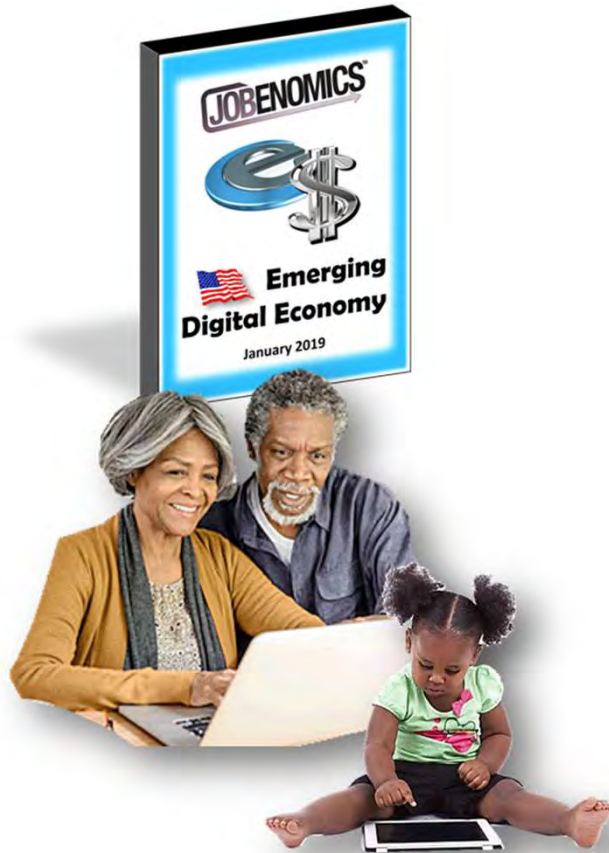


Ideal for pharmacies, churches, community centers that provide healthcare, social assistance, and behavioral care.

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Digital Economy



- Digital economy (called the Internet Economy and the New Economy) is based on digital computing technologies
- Digital Economy is growing 5-times faster than the traditional economy.
- Potential of millions of new Ghanaian jobs and businesses
- China is attempting to raise 500 million rural citizens out of poverty via the digital economy.

Traditional retail shopping is growing at 2% per versus eCommerce growth of 15% per year. Jobenomics' team of eCommerce experts help set up websites to selling on all major U.S. platforms; Amazon, Google, Facebook, eBay and Shopify.

Digital Economy Categories

- Platform Economy
- Electronic Commerce
 - Mobile Commerce, M-Health, E-Sports, etc.
- Sharing Economy
- On-Demand Economy
- Apps/Bots/Artificial Intelligence Economy
- Gig Economy
- Internet of Things Economy

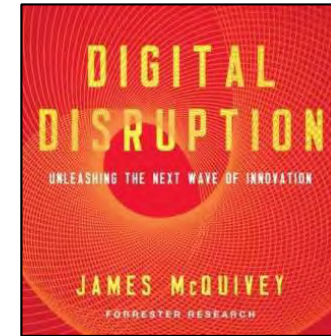


Jack Ma, Founder

Alibaba was founded “to champion small businesses, in the belief that the Internet would level the playing field by enabling small enterprises.”

Digital Startups

- “Digital startups are at least **100-times easier to create** and have 10-times the number of innovators that can innovate at one-tenth the cost than traditional startups.” (McQuivey)
- Top digital startup platforms:



Tencent
腾讯

Alibaba Group
阿里巴巴集团

Baidu

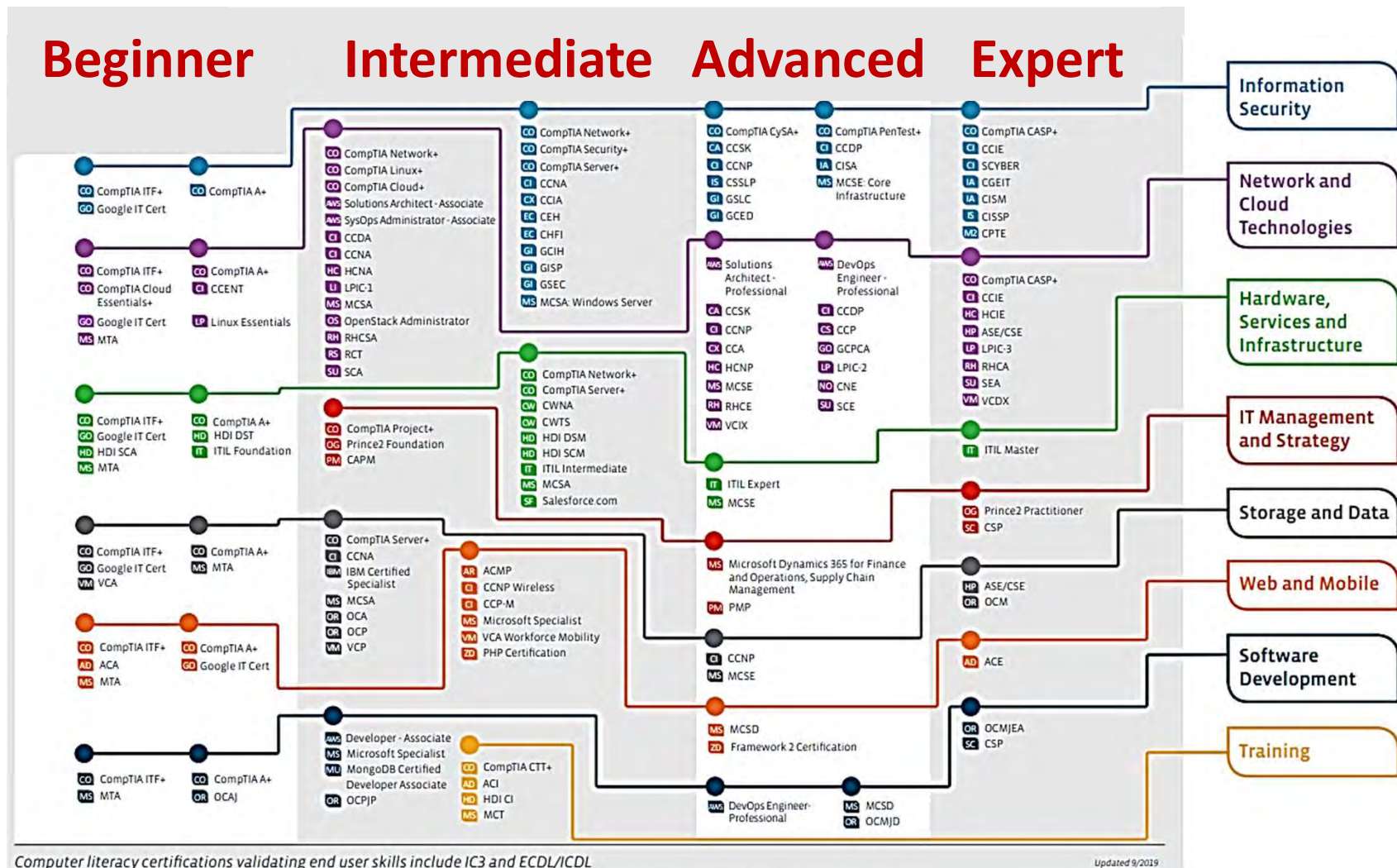
- Jobenomics study on leading Chinese and America digital economy strategies and practices.



Ghana needs a digital economy strategy to raise millions of Ghanaian citizens out of poverty.

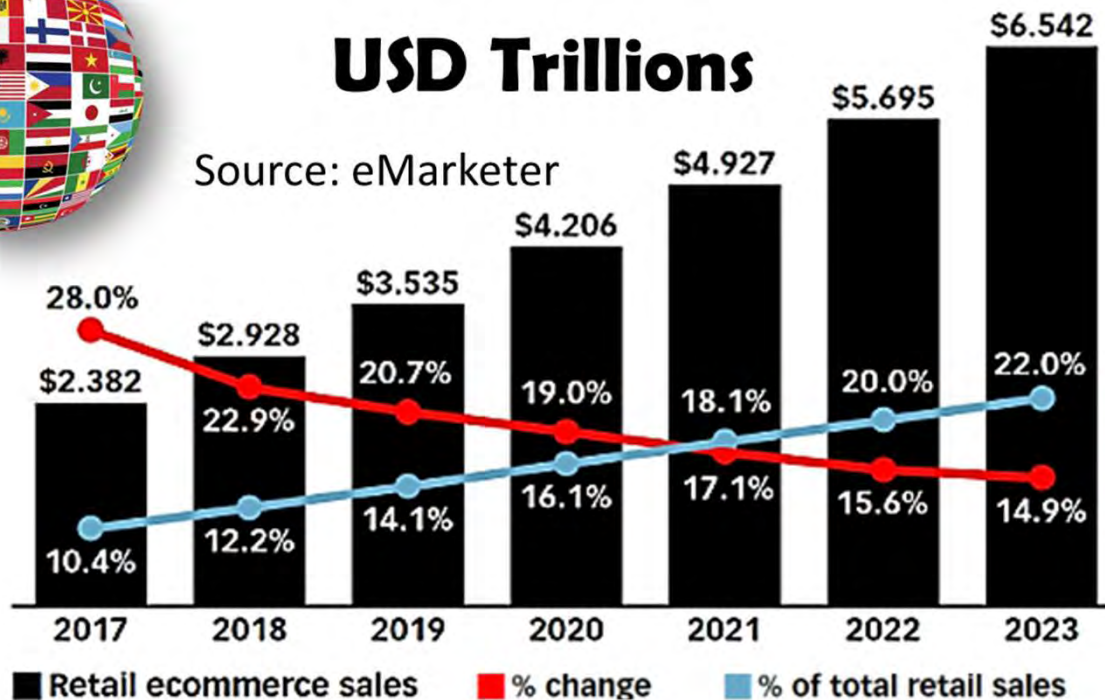
Digital Certification Career Roadmap

Source: www.comptia.org/content/comptia-career-roadmap



Within months (not years) certified training programs are the gateway into entry-level information technology jobs without a college degree.

E-Commerce Sales Worldwide





eCommerce is new in Ghana but growing rapidly as local tech start-ups and international players enter Ghana's market.

Of Ghana's 31 million population, only 39% have access to the internet (130th out of 195 nations), mostly via mobile phone.

Women-Owned Businesses



Awamary Khan

- **Awamary Khan** is the Founder, CEO of Innovate Gambia and The Woman Boss—initiatives created to help revitalize economic development in The Gambia and ECOWAS and be an innovation catalyst for young girls and women.
- **The Woman Boss** (<https://www.thewomanboss.com>) provides an ecosystem of support for women that fosters intellectual capital development and allows entrepreneurs to leverage learning platforms. 
- **Innovate Gambia** (<https://innovategambia.com>) fosters economic development by increasing entrepreneurship, innovation, technology, and workforce development. Digitalize Gambia focuses on exploiting network and digital opportunities. 

Awamary Khan will take lessons-learned from these enterprises and apply them to the Ghana pilot program and ECOWAS.

Digital Economy Entrepreneur Clubs

- Jobenomics helped start Club-E Atlanta, an entrepreneur empowerment center.
 - Public/private partnership with the City of College Park
 - Training , certification and startup business center
 - Co-working facility (hi-tech, offices, conference center, café)



■ Typical Club-E Startups:

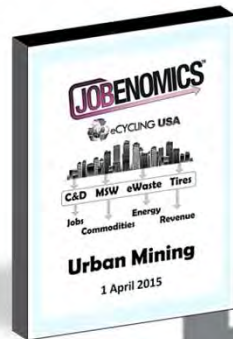


Club-E lessons learned will be incorporated in Jobenomics Ghana.

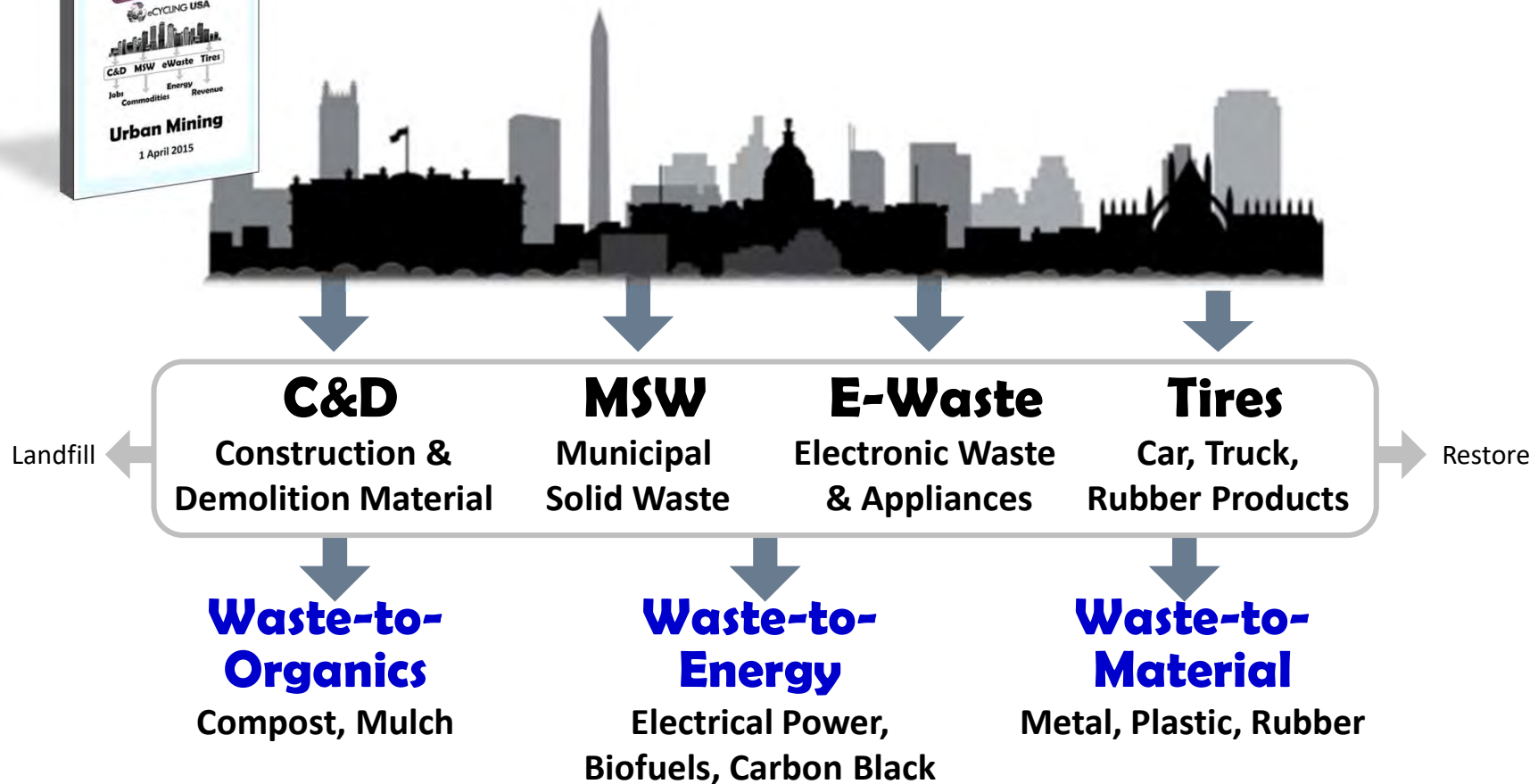
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- **Initial Jobenomics Ghana-ECOWAS Programs**
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 - **Waste-To-Value**
 - **Experiential Tourism**
- **Conclusion**

Waste-to-Value & Urban Mining



Reclamation of valuable raw materials and metals from urban waste streams.



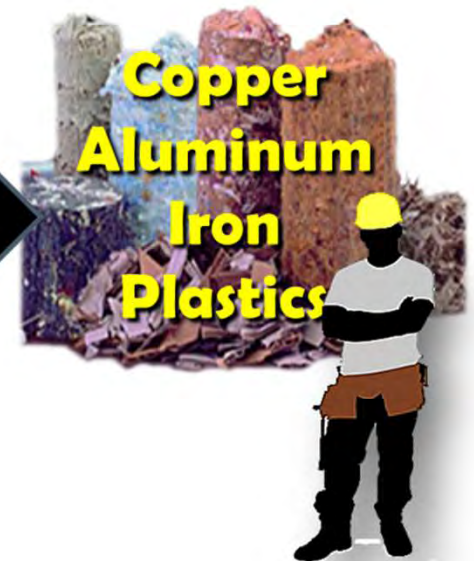
Waste-to-Value Goal: Monetize urban and rural waste streams to produce businesses, jobs and revenues for workforce development.

eWaste Materials Reclamation Facility

JOBENOMICS™
Ghana-ECOWAS



eCYCLING USA



100 Operational Sites Worldwide

Jobenomics Partner, www.urt-recycling.com

End-of-life appliances and electronics is the world's fastest growing waste stream. Our system can be operational within 12-months.

Modern Plastics-to-Fuel Complex

EVP R-One Facility

Jobenomics Partner, www.evptechnology.com

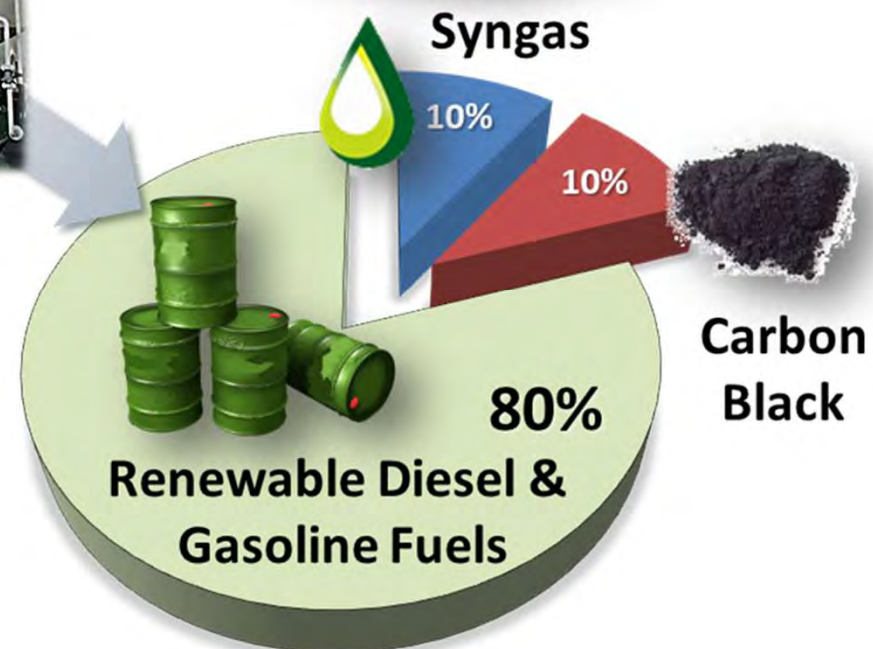


Growing Ghanaian Plastics Waste Problem



Imported Plastics Waste

China no longer accepting baled plastic waste



Suppling Ghana with high-quality, low-sulfur fuels.

Micro Plastics-to-Fuel Technology



Annually, Ghana produces, imports or washes ashore over **3 million tons of raw plastics**. Less than 1% is recycled.



Most of rural Ghana relies on costly diesel fuel or gasoline generators.



This pickup truck-sized Echo Fuel system produces 20 gallons of fuel from 200 pounds of waste plastics.



Dr. S. Ramesh
Inventor and CEO

1,000 gallons/day systems are also available that can process 10,000 pounds of plastics per day.

These micro systems could provide low-cost (or free) fuel, jobs and revenue for remote villages and farms.

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Ghana Travel & Tourism

- Ghana's travel and tourism industry contributed 10% to GDP in 2006, dropping to near 0% today due to pandemic travel restrictions.
- International visitors spend six times more than local visitors.
- International visitors to Ghana peaked around 1 million in 2019, largely due to the Year of Return.
- Global travel and tourism should resume in 2021. Competition for this revenue will be fierce. A business-as-usual approach will not produce historical GDP returns.

Travel & Tourism % of GDP

Source: Knoema



The global travel and tourist industry was \$2.8 trillion in 2018. Ghana's \$3.5 billion (2018) represents about 0.1% of the total. **Experiential tourism is key to growth.**

Internet-Based Experiential Tourism

Millennials use social media (Tik Tok, Instagram, Facebook) to share experiences:

- **Digitally**
 - Social media-driven approach
 - Omni-channel content strategy
 - Off-grid & satellite internet
- **Socialistically**
 - Heritage & Cultural insights
 - Environmental interests
 - Transcendental experiences
- **Logistically**
 - Air/ground transportation
 - Accommodation/supplies
 - Emergency assistance
 - Concierge/guide services



Sharing Ghanaian tourism experiences is the newest and most economical way to attract tourists, businesses and trading partners.

Types Of Experiential Tourism

Millennials prefer exciting junkets over sightseeing.



Adventure travel involves includes a “physical activity, a cultural exchange, or activities in nature.” *Adventure Travel Association*



Eco-Tourism entails “responsible travel to natural areas that conserves the environment and sustains the wellbeing of local people.” *The International Eco-Tourism Society*



Cultural Tourism entails a traveler's engagement with a region's culture, including the history, lifestyles and art of the indigenous and aboriginal people.

Glamping (glamorous camping) is an outdoor hospitality industry often associated with festivals, nature preserves and sports.



Cabins



Tents



Domes

Experiential tourism is a viable and affordable way to boost tourist visitations to Ghana’s “**must see**” natural wonders and “**must experience**” Western, indigenous and aboriginal lifestyles.

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Conclusion

- **Jobenomics Ghana-ECOWAS programs can be:**
 - Implemented quickly (often within one year).
 - Thousands of new businesses and jobs would be created within five years.
 - These programs (plus new programs) are highly-scalable and repeatable across the entire nation/region, thereby transforming the labor force and economy.
- **Next steps:**
 - Ghanaian and ECOWAS decision-leaders need to decide if a Jobenomics Ghana initiative is of interest.
 - If yes, host the Jobenomics Ghana team members to come to Dubai to conduct a conference with key UAE and African government, business and investment decision-makers.

Ghana Pilot Project Implementation Team



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