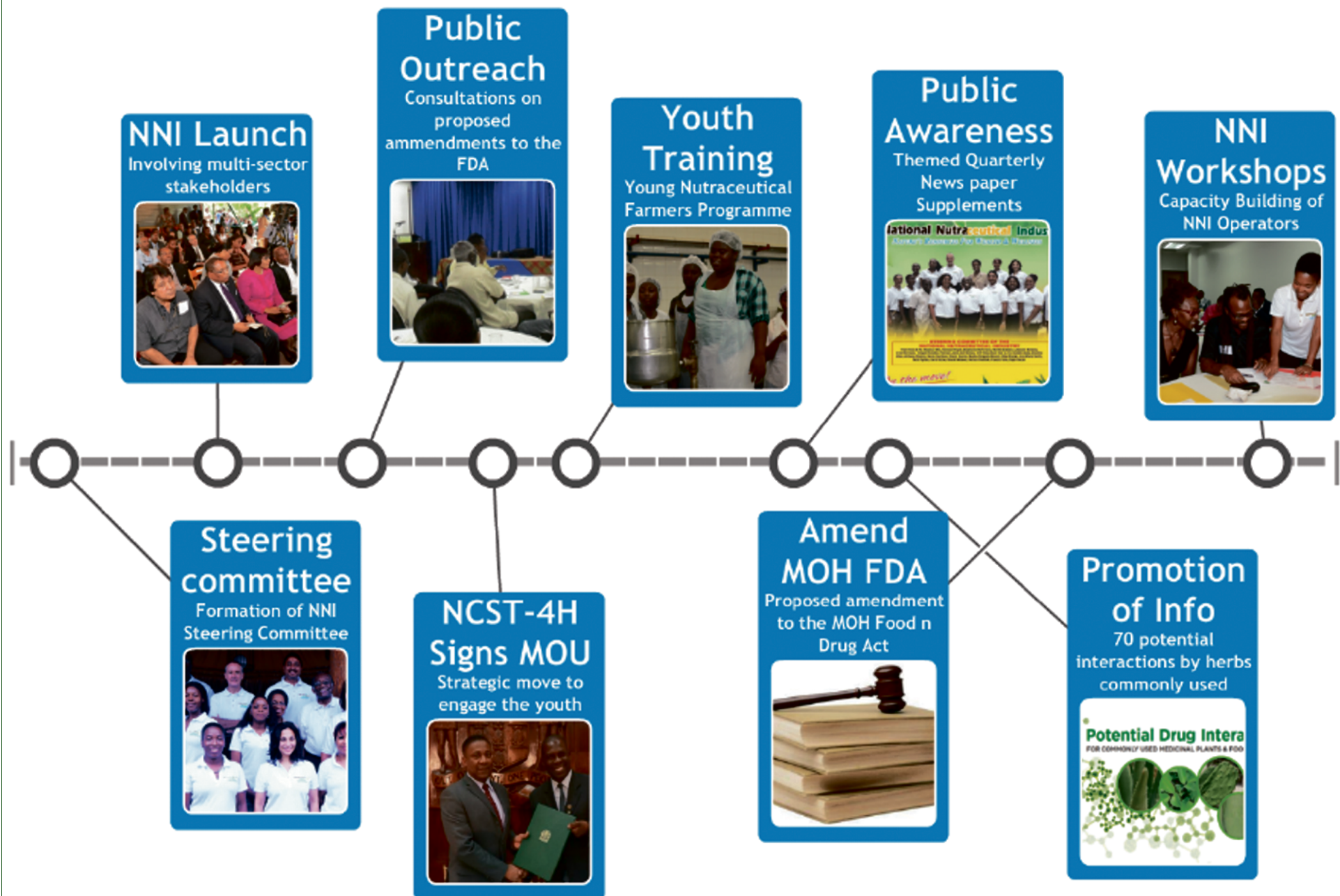


The Business of Nutraceuticals



National Nutraceutical Industry (NNI) Update

National Nutraceutical Industry
NATURE'S RESOURCES FOR WEALTH & WELLNESS

A Special Advertising Feature

National Nutraceutical Industry update

IT'S BEEN just over a year since the launch of the National Nutraceutical Industry (NNI) to undertake the establishment of a framework that would provide guidance on standardisation, testing, monitoring and quality assurance for greater public safety and to meet international standards for exports.

The National Commission on Science and Technology (NCST) has led a steering committee that has been working to develop the industry to meet global market standards and demands and has involved a multi-sectoral approach which includes various ministries, public and private-sector entities.

The steering committee has and will continue to develop plans to bring the needs and demands of those involved in the industry under one umbrella until appropriate regulations take effect.

STEERING COMMITTEE

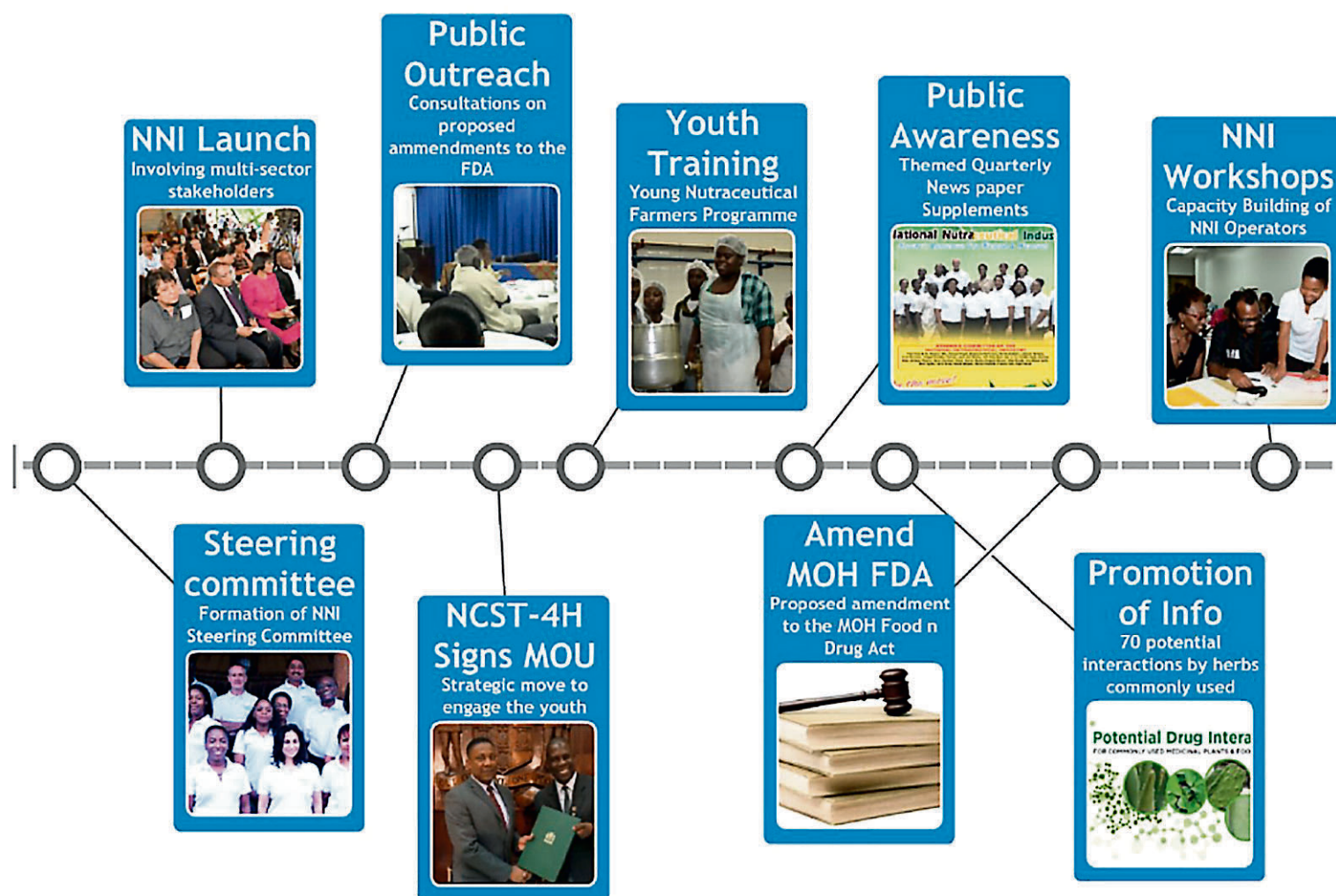
This committee is made up of individuals representing a cross section of the nutraceutical industry. They have been involved in the planning of drafting of guidelines for the industry.

NNI LAUNCH

The launch marks the start of a process towards regulating and monitoring products, persons and facilities to ensure adherence to national and international industry best practices and standards.

STAKEHOLDER OUTREACH

Stakeholder consultations on the proposed governance structure, NNI segmentation, TOR of NNI Council, legislative changes, situational analysis and forecasting were presented at a public consultation.



NCST-JAMAICA 4H CLUBS MOU

To promote the sustainable development of the NNI, a major activity under the NCST-4H MOU involves the training of youth and 4-H clubbites in various aspects of the nutraceutical industry.

YOUTH TRAINING

To promote the sustainable development of the NNI, a major activity under the NCST-4H

MOU involves the training of youth and 4H clubbites in various aspects of the nutraceutical industry.

PUBLIC SENSITISATION

Supplements include editorial content, adverts from individuals and institutions, aimed at sensitising the general public and those involved in the industry activities and developments.

PROMOTION OF RESEARCH INFORMATION

Member of the Steering Committee with research team produced a handbook which guides medical practitioners on the potential drug interactions between natural products and conventional medicines.

AMENDMENT TO THE FOOD AND DRUG ACT (MOH)

Amend the National FDA of MOH

and its regulations to effect new changes for inclusion of nutraceuticals as a special class of products and enact the new Complementary and Alternative Practitioners Act.

NNI WORKSHOPS

Through the subgroup of the NNI Steering Committee, workshops were hosted under the theme 'Nutraceutical Business Opportunity – Expanding Locally and Abroad'.

CREATING OPPORTUNITIES FOR OUR YOUTH

ONE OF the main aims of this Government is to get more of our youths employed through agriculture. I am, therefore, very pleased to welcome and congratulate today the second batch of nutraceutical farmers under the training programme initiated by the Jamaica 4-H Clubs to address the problem of youth unemployment,



through access to entrepreneurial opportunities.

After two weeks of intense entrepreneurial training we now have, from across the island, some 22 ambitious individuals between 18 and 35 years old, who are ready to do business in the area of nutraceuticals. This could not have come at a better time.

The nutraceutical industry is a source of

huge opportunities for Jamaica, and especially for you as graduates. We certainly have the raw material.

Of the 160 plants declared worldwide as having medicinal properties, over 80 are endemic to Jamaica. In other words, we have 50 per cent – half – of the plants in the world that have been declared to have medicinal properties.

While we continue to import a wide range

of nutraceutical products, including cosmetics, skincare products, anti-ageing products, oils (aromatherapy), functional foods, dietary supplements, and red clover, the total estimated value of nutraceuticals exported from Jamaica in 2014 was US\$12,671,942.

We need to change that situation, with urgency.

Locally, a number of nutraceutical products are being produced, ranging from

PLEASE SEE **YOUTH**, 11

Taking on an awesome responsibility

THE JAMAICA 4-H Clubs is extremely pleased to conclude the second batch of nutraceutical farmers to be trained under the partnership agreement established between the participating agencies as acknowledged before. These 22 graduants added to the approximately 400 young people who were empowered to create their own employment opportunities during this financial year.

The 4-H Clubs has added 350 new farmers to the agriculture sector, and for us this represents our focus on youth entrepreneurship as

we create small and micro enterprises in agriculture, agro-processing, catering and small equipment repairs.

Approximately 30,000 of our members are young people between the ages of 18 and 25. They represent a tremendous opportunity for employment creation. These youngsters are overly represented in our unemployment



statistics as youth employment in Jamaica presently stand at 39 per cent, when compared to the national employment rate of 13.4 per cent.

We are very mindful as an organisation that there is a correlation between unemployment and crime. Sadly, youth accounts for approximately 80 per cent of the crime and violence committed in Jamaica.

We recognise that our responsibility is indeed an awesome one. However, with adequate resources the Jamaica 4-H Clubs is well placed to create thousands of employment opportunities, and through our stimulation programme establish the right values and attitude that are necessary to underpin Jamaica's growth agenda and reverse the high crime rate.

Dr Ronald Blake
Executive Director
Jamaica 4-H Clubs

YOUTH

CONTINUED FROM 10

energy/roots drinks, herbal teas, to cosmetics. Indeed, we have the outstanding example of Eden Gardens Nutraceuticals with Dr Henry Lowe, which has been creating value through the development and commercialisation of nutraceuticals. Indeed, Jamaica's nutraceutical industry gained prominence in 2012, with the introduction of seven products by Dr Lowe.

However, there is a clear need for us to do more to take full advantage of this industry, which according to the National Commission on Science & Technology, can bring

in up to US\$2 billion and capture around five per cent of the world market.

We are in a very good position to establish an avenue for long-term foreign exchange earnings by producing and exporting more nutraceutical products, and also with more of our entrepreneurs entering the industry, this is undoubtedly achievable. There is real long term value to be derived from the growth of this market, which is expected to exceed \$250 billion globally by 2018.

Studies also suggest that by 2020, world population will include some one billion people aged 60 and over, especially in developed nations. What does this mean?

It means increased demand for anti-ageing and age-defying products.

It means that, increasingly, more people will be turning to preventative care in managing health issues.

As graduates, you have a role to play in this process. I therefore urge you to put the training that you have received to good use to grow this industry, so that we can:

- Decrease the volume of imported pharmaceutical products
- Earn more foreign exchange, and most important
- Increase the number of persons employed, or who have their own businesses through the manufacturing of nutraceuticals

Karl Samuda

Minister of Industry, Commerce, Agriculture & Fisheries

SUN SPICE

Seasonings

All Natural Jamaican Line of Seasonings

JerK seasoning
Natural Ingredients: Celery, Pimento, Thyme Leaves, Onion, Ginger, Pepper Seed, Cane Sugar, Seas Salt.
Manufactured By: SUN SPICE SEASONINGS CO. LTD., Garmex Freezone, 76 Marcus Garvey Drive, Kingston 13. Tel: 1-876-898-7547. sunspiceseasonings@gmail.com
Product of Jamaica Net Weight 4oz

MORINGA Seeds
Manufactured By: SUN SPICE SEASONINGS CO. LTD., Garmex Freezone, 76 Marcus Garvey Drive, Kingston 13. Tel: 1-876-898-7547. sunspiceseasonings@gmail.com
Product of Jamaica Net Weight 4oz

100% Jamaican Landrace Cannabis
Manufactured By: SUN SPICE SEASONINGS CO. LTD., Garmex Freezone, 76 Marcus Garvey Drive, Kingston 13. Tel: 1-876-898-7547. sunspiceseasonings@gmail.com
Product of Jamaica Net Weight

Dried Pepper Mash seasoning
Natural Ingredients: Sun Dried Peppers.
Manufactured By: SUN SPICE SEASONINGS CO. LTD., Garmex Freezone, 76 Marcus Garvey Drive, Kingston 13. Tel: 1-876-898-7547. sunspiceseasonings@gmail.com
Product of Jamaica Net Weight 4oz

Fish seasoning
Natural Ingredients: Garlic Powder, Pimento, Pepper, Cinnamon, Thyme, Onion Powder, Sea Salt, Cane Sugar.
Manufactured By: SUN SPICE SEASONINGS CO. LTD., Garmex Freezone, 76 Marcus Garvey Drive, Kingston 13. Tel: 1-876-898-7547. sunspiceseasonings@gmail.com
Product of Jamaica Net Weight 4oz

Spicy PIMENT SAUCE
NET/NETO 5FL OZ / 149ML

DOOBIE Igadi
TASTE THE STRAIN
NO TAR
NO ASH
NO GAY
NO SMOKE
NO TOXIC
NO SWEET
WARNING: Ensure battery is dry before use or charging. When using, draw gently, do not suck.

***PROTOTYPE NOT YET AVAILABLE FOR SALE**

Garmex Free Zone, 76 Marcus Garvey Drive, Kingston

Tel: (876) 898-7547 • Email: info@sunspiceco.com

Valedictorian speech

By Georgian Gorge and Christopher Pinnock

IT SEEMS like yesterday we were hauling our bags through the 4-H offices in Linstead, while awaiting information on what was to come. Our first observation was the noticeably large turnout of males (16 males: six females) a commendable surprise.

We stand here now ready to graduate and go forth and play our part in the world. While moving forward, let us reflect on those special moments that define the sentiments that we will savour from this experience.

We all agree that the journey was worth it though, as it brought us to a seemingly intimidating Scientific Research Council (SRC). We thought we were about to suffer through hours of torture in the vast and vigorous world of science. So you can imagine we were anxious and a bit hesitant. However, from the very first instance we went to the compound the staff saw our apprehension and made us feel welcomed.

Then there were the vibrant, energetic, and enthusiastic presenters who seemed almost desperate to impart their expertise and knowledge unto us. They delivered the topics in such a simple way that we could comprehend and were more eager and interactive.

We have come a far way in just two weeks. We have grown. We are



Participants in the Young Nutraceutical Farmers Programme participating in a training exercise at the Scientific Research Council.

now more business-oriented. Thanks to the presenters both at the SRC and at the Jamaica 4-H Clubs. Their patience and wisdom have put us on a sustainable path. It is greatly appreciated.

Now we have completed a course of training which will be the catalyst and impetus that propel us into the nutraceutical world or make us viable entrepreneurs.

Wherever we go, or whatever we do, we can expect challenges. However, the mere fact that we can stand here, with our knees buckling, hands shaking and hearts racing to read this speech, it is a testament to the confidence that our

trainers, over these two short weeks, have instilled in each and every one of us.

With such confidence, we can only achieve the excellence for which we now strive. A confidence born of the knowledge, that in each of us there is awesome potential. And that only we can stand in the way of us unlocking and unleashing that potential.

We, therefore, implore each of the 22 members of this graduating class to use this renewed confidence to take what we have learned to not only advance ourselves, but play our part in advancing the whole human race.

Nutraceutical industry needs amendment to Food and Drug Act

IT IS interesting to note that there are changes for the Amendment of the Food and Drug 1964 to include a request for a new legislation (The Complementary and Alternative Practitioners Act'). It

is hoped to be enacted for the regulation of persons/practitioners, including the functions of a Council for the Complementary Alternative Medicine and Naturopathic Practitioners).

The Traditional Healers Act should be included. Unfortunately, most of these healers were the 'original practitioners' of health, and wellness knowledge through trial and errors developed the skills for these practices.

Today, they have been looked upon as dysfunctional quacks of our culture and society as they are thought to be aligned to the practice of witchcraft and cultism. This stigma has led to the erosion of traditional practices, some of which are of benefit to healthy lifestyles.

However, in places such as

Ghana, herbal healers were allowed to put up their signage as a traditional healers with their working hours. There is an agency and there are laws with which they ought to comply.

The Kingston Public Hospital has been the *grand dame* as a training hospital for Caribbean interns, doctors, nurses and druggists.

Tinctures, along with pharmaceutical powders, made up the bulk of mixtures for this hospital and clinics up to the late '60s until drugstores and dispensaries evolved into the practice of pharmacies/pharmacists with imported pharmaceuticals. We could have built on this and develop our capacity to respond to the growing needs in Jamaica.

The minister of health needs to have in place naturopathic specialists as regulatory officers for the natural health products and cosmoceuticals under a 'natural product directorate'.

Diane Robertson [BH (M)]
Honorary Doctorate CAM,
Rph



Producing high-quality, value-added products

SUN SPICE Seasoning Company Ltd (SSSCL) may be the only free zone facility in the world that is legally licensed to pursue through Research & Development into a variety of cannabis products.

In 2010, SSSCL made the fortuitous step of acquiring a factory facility to package raw goods within the Garmex Free Zone in Kingston. Today, we have the capability to manufacture numerous products from ganja and other plants of nutraceutical value, such as ginger, moringa and lemon grass. However, regulations have become more onerous with the birth of the cannabis industry. The company recognises that Brand Jamaica has the potential to facilitate far-reaching success in the global cannabis marketplace and, as such, we have made solid investments in the area of research and development. We have a

dedicated department, led by our young but experienced team of scientific researchers.

While the industry was still in its infancy, we signed an MOU with the Scientific Research Council to bolster our R&D efforts to stabilise Jamaica's indigenous cannabis strains with proven medicinal and therapeutic qualities, which have been harnessed for generations via non-traditional medicine. Much of the research pursued through this relationship will be made publicly available as they will be submitted for publishing in the relevant scholastic journals.

The diversity of what can be termed a nutraceutical makes it imperative that we as

an industry, ensure that there is a healthy collaborative relationship with our local governing and supportive entities such as the

Ministry of Health, MIIC, Jamaica Exporters' Association, National Commission on Science and Technology, Bureau of Standards Jamaica, GGPA, Jamaica Intellectual Property Office, and JAMPRO, just to name a few. As a participant in this emerging industry, Sun Spice Seasonings Company Limited sees the adherence to strict standards, particularly as it relates to data collection and quality control, as being tantamount to successfully

bringing products to market. Our goal is to produce and market an effective, standout

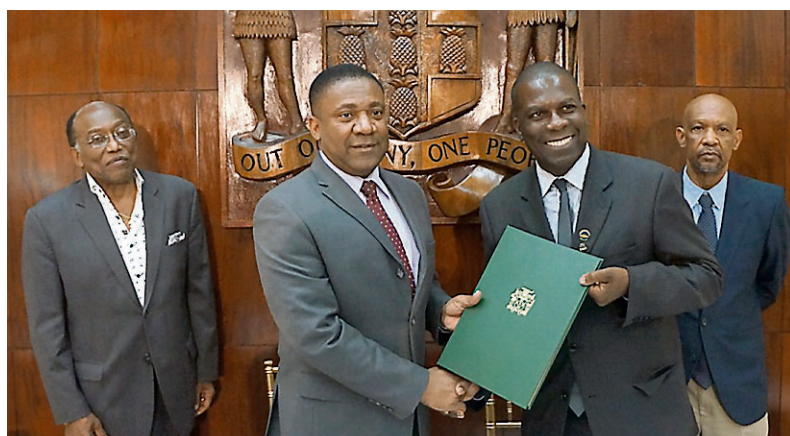


Jamaican nutraceutical product that will be among the world's best in this billion-dollar industry.

Our facility represents a significant investment and has given SSSCL the capability to produce high-quality value-added products such as concentrates, wax, oils and edibles. Locally, some of these products will be available through cultivation and retail partners Tranquillity Healing Club Ltd. This nutraceutical non-overlapping union of R&D with retail will enable SSSCL to be a major catalyst as the island assimilates the global standards and regulations governing the budding global cannabis industry 'from seed to seller'.

Maurice Ellis
Executive Chairman/CEO
Sun Spice Seasoning Limited

NNI HIGHLIGHTS



Phillip Paulwell (second left), deputy chair of the 2014-2016 NCST, and Senator Norman Grant (second right) of the 4-H Clubs sign an MOU to involve youth in the National Nutraceutical Industry. They are flanked by Prof Errol Morrison (left) and Lloyd Robinson.



Booth Holder from UWI, Mona, speaking with students at the launch of the National Nutraceutical Industry, March 5, 2015.



Members of the National Nutraceutical Industry Steering Committee carrying out a site visit of the Bath Mineral Spa facilities in St Thomas.



Students from the Young Nutraceutical Farmers Programme in a production session at the Scientific Research Council.



Former Prime Minister Portia Simpson Miller being greeted by permanent secretary in the Ministry of Health, Dr Kevin Harvey, at the launch of the National Nutraceutical Industry, on March 5, 2015.



Participants at a recent Nutraceutical Business Opportunity Workshop in Montego Bay.



Prof Errol Morrison (left) moderating the session at the recent Nutraceutical Business Opportunity Workshop in Montego Bay with members of a panel (seated from left): Maurice Ellis (Sun Spice Seasoning Ltd); Claudia Andrews (DBJ); Lilyclaire Bellamy (JIPO); Dr Cliff Riley (SRC); and Norman Wright (Perishables Jamaica).



Members of the NNI Steering Committee carrying out a site visit of the Rockfort Mineral Bath facilities.



Karl Samuda (left), minister of industry, investment, commerce, agriculture and fisheries, being warmly greeted by Dr Cliff Riley, executive director of the Scientific Research Council, as Senator Norman Grant, chairman of the Jamaica Agricultural Society, looks on at a graduation exercise of Young Nutraceutical Farmers.



Conrad Robinson, JAMPRO (Montego Bay) addresses participants at a recent Nutraceutical Business Opportunity Workshop in Montego Bay.



Professor Anthony Clayton, a member of the NNI Steering Committee, addressing stakeholders at a consultation.

The DBJ – supporting business development

AS THE government agency charged with facilitating the economic growth and development of Jamaica, the Development Bank of Jamaica (DBJ) is fully resourced to assist all entrepreneurial activities.

The DBJ is particularly supportive of new and innovative businesses such as the nutraceutical industry with assistance that covers capital, collateral and capacity support.

However, we have recognised



Development Bank of Jamaica Limited

that many businesses, especially micro, small and medium-sized enterprises (MSME), face peculiar problems in getting started, growing and remaining sustainable in the local market. These problems include access to affordable capital and lack of technical capacity.

The DBJ is aggressively address-

ing these issues and has assumed a leading role in providing assistance to MSMEs to overcome these challenges.

In terms of capital (funding), DBJ loans are available at commercial and merchant banks, credit unions, the EXIM Bank, and other financial institutions. For collateral, our Credit Enhancement Facility offers partial guarantees to lenders so that MSMEs can get financing, and for capacity

development, the DBJ's Voucher for Technical Assistance gives entrepreneurs access to technical services.

"We are providing these programmes in a strategic and targeted way by offering incentives to businesses and collaborating with local financial institutions to respond to the needs of entrepreneurs in the MSME sector," said DBJ's Managing Director Milverton Reynolds. "And, so far, we

have seen tremendous success from our collaboration."

The DBJ invites entrepreneurs in the nutraceutical industry to explore how the DBJ can assist in helping your business overcome the obstacles of sustainable development and growth by giving us a call at 929-4000 or 619-4000, or visiting our website at www.dbankjm.com for additional information.

Let us get this one right

REPORTS AS recent as 2015 have placed the value of the global nutraceutical industry at US\$180 billion with a projected growth of 7.3 per cent annually.

By 2021, the industry is expected to value over US\$270 billion. With a captive market in North America and the strategic geography of Jamaica, we are poised to benefit tremendously from this industry, if done properly. This, coupled with the fact that Jamaica has over 81 of the 160 medicinal plants with proven (scientifically validated) medical benefits, our opportunities are limitless; actually, we are only limited by our creativity, innovativeness and honesty.

Despite the grand appeal and endless possibilities, we must consider the fact that establishing/penetrating new markets, creating linkages, meeting existing and growing demands and, most important, maintaining and observing standards are all critical to the success, growth and development of a robust local industry. It is a known fact that Jamaica is one of the most highly ranked biodiverse countries globally due to its assortment of endemic plant and marine ecosystems.

In order for us as a country to take our rightful place in this vibrant, profitable and globally competitive industry, we must take an evidence-based approach to product development and marketing. One cannot use only folklore/traditional knowledge to support or predict health benefits, but rather, should exploit modern technological advancements and the research output of our scientists to guide product development, standardisation and health claims.



Science must be the cornerstone used to support and develop the kind of industry that we all envision. An industry where the activity of products are verified, products are stable, safe for human use, active, and manufactured according to best practices and globally accepted standards. Let us learn to 'dance a yard before we dance abroad'. As a country and manufacturers, we must seek to ensure that our products are registered through our local authorities, as this is the entry point to the global market.

Let us get this one right, because if we don't someone else will. I am sure we are all fully aware of the frightening tales of periwinkle saga and the loss of our birthright. Let us not allow history to repeat itself, utilise the local knowledge base and expertise among our universities and research institutes to ensure that our products match their intended purpose, which is to improve the quality of life of all people while generating wealth for ourselves, our families and our country.

Dr Cliff Riley
Executive Director
Scientific Research Council,
Jamaica



Some members of the NNI Steering Committee.

The Nutraceutical Industry and the SBAJ

THE GLOBAL nutraceutical industry is considered one of the fastest-growing sectors worldwide. It is projected that by 2018, the sector will be worth US\$600 billion with the opening of the Asian markets. With the recent launch of the National Nutraceutical Industry (NNI), Jamaica must now seek to aggressively monetise the more than 80 plants with medicinal properties endemic to Jamaica.

Jamaicans have a collective role to play by ensuring that the industry must begin to operate at a level where testing, quality measures and standardisation become basic to the process of product delivery, which will position us to capitalise on the global marketplace.

The Small Business Association of Jamaica (SBAJ) is of the firm opinion that Jamaica's nutraceutical industry is an opportunity through which the small business sector can enjoy greater, more sustainable growth which, when supported by legislative framework and processes, will provide great economic benefit for Jamaica.

Furthermore, the SBAJ is encouraging practitioners and persons interested in entering the industry to formalise their operations and organisational practices. Begin to think business and livelihoods. Decide on the business name and thereafter ensure that the business is registered with the Companies Office of Jamaica.

BUSINESS PLAN

Consider, also, obtaining a business plan which outlines the market, strategies, technology and people. Seek knowledge about your product and your industry, determine the potential for success, identify the resources required for conversion and ongoing operation and ensure that the essence of the plan is communicated and understood throughout the business. Implement and execute the plan decisively and revise the plan when needed.

The SBAJ will continue to support the revolutionising of the small-business sector, one industry at a time, and we stand ready to assist small business owners to develop their products and thereby benefiting from the expansion.

Nutraceuticals and intellectual property rights

INTELLECTUAL PROPERTY (IP) refers to the legal rights relating to literary, artistic and scientific works, performances, broadcasts, inventions in all fields of human endeavour, scientific discoveries, industrial designs, trademarks, service marks, and commercial names.

National Nutraceutical Industry (NNI), which would bring under one umbrella stakeholders involved in products and process derived from plants, animals and minerals, which claim or are believed to have health benefits, and to ensure as far as possible that their practices conform to international standards.

IP protection is critical for the nutraceutical industry, and the following forms of protection are available: patents, designs, trademarks, and geographical indications. A patent is given for an invention which is a solution to a technical



problem; a design protects the aesthetic creations determining the appearance of an industrial product; a trademark is a sign that can distinguish the goods and services of one trader from those of another, it is used to differentiate certain goods and services as those produced by a certain person or enterprise; and a geographical indication is a sign used on goods that have a specific geographical origin and possess

qualities or a reputation that are due to that place of origin. Another avenue of protection available to the industry is in the area of trade secrets, which allows for the protection of any valuable commercial information that provides a business with an advantage over competitors who do not have that information. A trade secret facilitates protection by a producer of his invention or idea, or compila-

tion of data that has been used to make the business successful and may include any useful formula, plan, pattern, process, programme, tool, technique, mechanism, compound, or device that is not known or readily ascertainable by the public. The critical thing is that the information must be kept secret and the owner must take the necessary steps to protect it from disclosure.

The SRU – Regulating the herbal industry in Jamaica

THE OBJECTIVE of the Standards and Regulations Unit (SRU) in the Ministry of Health is to provide the legislative and regulatory framework which govern the registration of herbal and natural products in Jamaica.

Regulations are necessary for mutual reinforcement of numerous activities, all directed at promoting and protecting health. We regulate for public health promotion and protection, state responsibility, scope of public role/responsibility, integrity of individual choice and access to safe goods and services.

The scope of regulation focuses on who is regulated, such as health practitioners, manufacturers and consumers. Products regulated are drugs, foods, herbal preparations, devices, etc. These are regulated at manufacturing facilities/retailer institutions and ports of entry.

The legislative framework is structured based upon the following:

- Food & Drugs Act Regulations 1964/1975 – product registration/ approval;
- Pharmacy Act and Regulations 1975 – sale of products, regulation of personnel, pharmacies, other shops;
- Dangerous Drugs Act and Regulations 1948 – Ganja, opioid analgesics, other controlled substances;
- Relevant International Conventions to which Jamaica is signatory – control of storage, sale use, movement, import/export.

The Standards and Regulations Division carries out full registration of all drugs and a certificate is issued following licensing and a permit approval for importation.

The process entails submission of documentation, conforming to the requirements prescribed in the Food and Drugs Act and Regulations. The initial details are reviewed by assessors and then a presentation is made to the Product Registration Committee with recommendations if the requirements are satisfactory.

WHY REGULATE PRODUCTS OF NATURAL ORIGIN?

Regulation is necessary to ensure safety, efficacy, and quality of herbal medicinal products; to protect product integrity, ensuring that products conform to established standards and are maintained. For example, batch-to-batch consistency, proper labelling that includes health claims, safety and efficacy. Protecting consumers' interest by confirming legitimate product claims and ensuring that practices lead to positive clinical outcomes, improve quality of life, effective, beneficial.

LABELLING REQUIREMENTS – BUREAU OF STANDARDS JAMAICA

ALL NUTRACEUTICAL items intended for sale MUST meet the compulsory standard for labelling as outlined in the Jamaican Standard Specification for the Labelling of Pre-packaged Foods JS CRS 5: 2010.

A satisfactory label will require more than just the company brand, logo and attractive appearance. The information on the label shall accurately include:

■ Name and identifiable address of the processor, manufacturer, packer, importer or distributor, e.g., Manufactured by J. Brown and Associates.

■ Country of origin – country where the primary input material was grown, etc. This is a useful mark which supports the

'Buy Jamaica Build Jamaica' campaign, e.g., Product of Jamaica.

■ Listing of ingredients in the product. Special attention to preservatives and any additive which may cause allergic reaction, e.g., MSG, sodium benzoate, sulfites.

■ Net weight declaration in metric units, e.g., for solids g or kg, for liquids ml or L., e.g., 'Net weight 240g'.

■ Date marks are important and should show day, month, year for items to be consumed in three months, e.g., Best Before 2016 May 15. Items with shelf life of beyond three months will show month and year in a clear format, e.g., Best Before May 2016. Avoid format where

months are not distinguishable from year, e.g., 09 10.

■ Batch code is a unique marker which separates a batch from the others. This is critical when you have to do a recall.

■ Warning statements used to alert consumer, e.g., allergic reaction to shellfish or MSG ingredients.

■ English language must be used on all local labels. Items for export to non-English-speaking countries can have two languages or be translated.

■ Health claims are allowed but have to be endorsed by the Ministry of Health.

Labels are to be submitted the Bureau of Standards for assessment and approval before use.

Unleashing Jamaica's MSMEs' potential in the nutraceutical industry

THE BUSINESS landscape is characterised by small and agile firms in the micro, small and medium-sized enterprises (MSME) sector that contributes to over 90 per cent of employment. The sector is therefore indispensable to inclusive growth and private sector expansion.

The Ministry of Industry, Commerce, Agriculture and Fisheries fully endorses the development of a viable nutraceutical industry. Most enterprises in the nutraceutical industry are classified as MSMEs. Unlike other forms of production, the nutraceutical industry focuses on efficacy, plant variability, non-toxic environments and health and wellness. Safeguarding the quality

and safety of products are essential and form the basis of supplements, herbal medicines and functional foods. This complexity and delicacy of the industry requires particular care and tenacity and, therefore, the framework and support structures are essential for the sector to perform against globally accepted standards and achieve its potential.

The MSME and Entrepreneurship Policy of 2013 is a central plank in the effort to address the major impediments facing the sectors; development. While primarily focusing on policy development, the ministry interfaces through its business supporting agencies, such as the JBDC, along with partnerships with the Development Bank

of Jamaica. Initiatives such as the Small Business Development Centre, Secured Interest in Personal Property Act, and the Bankruptcy and Insolvency Act are some of the recent focuses of the ministry.

REGIONAL MSME INTERVENTION

CARICOM also has a significant role to play in driving the MSME sector at the regional level. Work is also being done to improve the systems for accessing loan guarantee; joint ventures; transportation and production of raw material. Creating the environment for MSMEs and nutraceutical businesses to sell products and access raw materials regionally is essential to drive the sector.

Effective treatments for diabetes mellitus and hypertension isolated from eucalyptus

By Dr Lisa Lindo

EUCALYPTUS HAS long been used as a folkloric plant in many parts of the island. The tea is consumed in Jamaica to lower the blood sugar of persons with diabetes, and also to lower the blood pressure in other countries. This multipurpose medicinal plant was investigated for its anti-diabetic and hypotensive properties, as there has been an exponential increase in the number of persons diagnosed with the lifestyle diseases – diabetes and hypertension.

In Jamaica, diabetes mellitus is one of the leading causes of death while the number of persons with high blood pressure is approximately 40 per cent of the world adult population. As a result, the drive to investigate folkloric plants to aid in validating the use of eucalyptus and possibly establish new oral adjuncts for these ailments was carried out by a team of researchers (Dr Denise Daley-Beckford, Dr Lisa Lindo, Dr Trevor Yee and Prof Paul Reese) at the University of the West Indies.

Crude extracts of the eucalyptus were prepared and tested via the

oral glucose tolerance test using animals in order to determine their efficacy on the lowering of the blood sugar level; and via the Non-invasive Coda machine for determining the effect on the blood pressure. The active extract was purified by a series of chromatographic techniques to obtain the bioactive principle(s) within eucalyptus for these ailments. Three bioactive compounds were isolated and activities compared with known pharmaceuticals for diabetes and hypertension, metformin and captopril, respectively. The experiments confirmed that eucalyptus was indeed effective at lowering both the blood sugar and blood pressure and was comparable to the known, commercially available oral hypoglycaemic and hypotensive agents.

As a result, these naturally, isolated compounds from eucalyptus may be used as new alternatives for diabetes and hypertension treatments and may be taken as nutraceuticals in the form of a tea, capsules or tablets, functional foods such as cooking additives, or as pharmaceutical agents.

Are You A Small or Medium-Sized Business?

**Do you need a business loan?
Do you have insufficient collateral?
Do you need support services for your business?**

The DBJ can help!

We provide

- 90% financing of your project cost
- Grants for energy audits and
- Vouchers for business services

Talk to the loan officer at your institution or contact the DBJ



**Development Bank
of Jamaica Limited**

Facilitating Economic Growth & Development

11a-15 Oxford Road Kgn 5
Tel. 929.4000
www.dbankjm.com

