

GHANA HONEY FESTIVAL AND INTERNATIONAL BEE DAY CELEBRATION-

MAY 20, 2021

Report on the Maiden Edition of the Ghana Honey Festival and International Bee Day Celebration Held at the Council for Scientific and Industrial Research, Forestry Research Institute of Ghana (CSIR-FORIG) Fumesua, Near Ejisu, Ashanti Region.



GHANA HONEY FESTIVAL & INTERNATIONAL BEE DAY CELEBRATION 2021

THURSDAY 20 MAY 2021

THEME
SPOTLIGHT ON POLLINATORS, BEEKEEPING, AND HONEY SAFETY FOR SUSTAINABLE LIVELIHOOD AND BIODIVERSITY CONSERVATION

LOCATION
CSIR-FORESTRY RESEARCH INSTITUTE OF GHANA
FUMESUA-KUMASI

CONTACT
0246630512

MEETING INFO
Meeting ID: 98303844244 Passcode: 075970

COLLABORATORS
MoFA, FC, CAG, VORAB, GBA, NATBA, ISBC

REPORT ON THE MAIDEN EDITION OF THE GHANA HONEY FESTIVAL AND INTERNATIONAL BEE DAY CELEBRATION HELD AT THE COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH FORESTRY RESEARCH INSTITUTE (CSIR-FORIG) FUMESUA, NEAR EJISU, ASHANTI REGION-MAY 20, 2021

GHANA HONEY FESTIVAL & INTERNATIONAL BEE DAY CELEBRATION 2021

THEME
SPOTLIGHT ON POLLINATORS, BEEKEEPING, AND HONEY SAFETY FOR SUSTAINABLE LIVELIHOOD AND BIODIVERSITY CONSERVATION

COLLABORATORS
MoFA, FC, CAG, VORAB, GBA, NATBA, ISBC

DATE
THURSDAY
20 MAY 2021

TIME
10:00AM-1:00PM

LOCATION
CSIR-FORESTRY RESEARCH INSTITUTE OF GHANA
FUMESUA-KUMASI

CONTACT
✉ cbadanu@csir-forig.org.gh
☎ 0246630512

MEETING INFO
Meeting ID: 9830384424 Passcode: 075970

Background

In August, 2016, the African Union International Bureau for Animal Resources- AU-IBAR with the support of the Ministry of Food and Agriculture launched the Ghana National Apiculture Platform, **GHANAP**, with the main aim of creating a national vehicle to propel the beekeeping and honey industry in Ghana. Up until now, members of the platform, who are made up of selected experienced researchers, producers and processors in the honey industry, have been working around the clock to bring this dream to light.

Honey is mainly produced by the honey bees. Bees and pollinators are critical to human existence due to the role they play in our environment and food production, ecosystem functioning and biodiversity conservation. In spite of these essential roles however, bees and other pollinators have been under serious threat around the world. The threat is such that the United Nations has put in place a day for the whole world to pay attention to the various roles bees and other pollinators play in the life of man on the UN Bee Day which is 20th of May, every year.

This maiden event is being celebrated under the theme, " *Ghana Honey Festival and International Bee Day Celebration: A Spotlight on Pollinators, Beekeeping, and Honey Safety for Sustainable Livelihoods and Biodiversity Conservation*".

Opening Statement

In her opening remarks, Dr. Mrs. Beatrice Obiri Darko on behalf of the Director of CSIR-FORIG, Prof. Daniel A. Ofori, extended a warm welcome to all participants and invited guest to the honey festival. She stated that the festival is being celebrated under the theme "**A Spotlight on Pollinators, Beekeeping, and Honey Safety for Sustainable Livelihoods and Biodiversity Conservation**" with the aim of bringing together stakeholders along the honey value chain on a single platform to share knowledge and deliberate on pertinent issues for promoting innovation and sustaining the honey industry in Ghana.

She further stated that the meeting is of particular interest to CSIR-FORIG as the Institute has been at the forefront in Apiculture over decades, particular honey production and extension/capacity building in the country. She said, global natural honey export was US\$ 1.199 billion in 2019 with China leading whilst Africa's share of the global honey trade was 13% in 2016. The honey industry in Ghana is largely untapped and has remained a hidden yet an important income and livelihood source for many actors in the value chain especially rural producers across the country. However, the industry is notably bedeviled with many challenges especially quality standardized product with innovative packaging for both domestic and international markets.

Dr. Mrs. B. O. Darko entreated them to pay particular attention to addressing the challenges in the industry to harness the potential of apiculture for both livelihood and environment sustainability as they deliberate on strategies for innovation and sustenance of the honey industry in Ghana. In her conclusion, Dr. Mrs. Beatrice Obiri Darko encouraged all the participants to feel comfortable and enjoy the beautiful and fresh forest environment at CSIR-FORIG.

The welcome address was followed by chairman's response from Ps. Prof Peter Kwapong University of Cape Coast (Founder and Director of the International Stingless Bees Centre). He stressed the importance of Bees and the advantages of bee keeping. He further mentioned that bees are important pollinators of crops, vegetables, and natural vegetation that produce fruits, seeds and nuts. He expressed his delight for the festival and encourage all participants to pay attention to all parts of the program. With this he accepted the chair.

Purpose of Gathering

The purpose for the gathering on the day, was delivered by Dr. Courage Besah-Adanu, an Entomologist at CSIR-FORIG and the Coordinator of the Ghana National Apiculture Platform, **GHANAP**. In his presentation, he further elaborated on the honey festival the as a maiden event being celebrated under the theme, "**Ghana Honey Festival and International Bee Day Celebration: A Spotlight on Pollinators, Beekeeping, and Honey Safety for Sustainable Livelihoods and Biodiversity Conservation**".

He said, honey quality is influenced by a swarm of factors related to production, processing, storage, the environment as well as the pollen and nectar sources. However, he stated that the adulteration of honey is a serious issue in global honey trade with significant economic, nutritional and organoleptic consequences. He continued by saying honey quality is mainly determined using the physicochemical, sensorial and microbiological characteristics. While the sensorial properties are perhaps most important for consumers, the chemical properties and their compliance with honey standards are important for accessing national, regional and international markets. He further said, essential physicochemical qualities of honey accepted globally include measurement of ***sugar, moisture, electrical conductivity, free acidity, diastase activity and Hydroxymethylfurfural (HMF)*** with their acceptable limits. Honey adulteration is a real concern hence consumers should take advantage of such platforms to learn more about honey and the industry.

Dr. Adanu also said, honeys with correct parameters within international safety guidelines for instance, are described as 'Table **Honeys**' which means they can be eaten directly from the table as sweeteners while samples that fall outside the limits are termed as '**Industrial Honeys**', which means they can only be used as a commodity for industrial use in bakery and other confectionaries.

He continued that honey is mainly produced by the honey bees and that bees and other pollinators are critical to human existence due to the role they play in our environment, food production, and ecosystem functioning and biodiversity conservation. However, in spite of these essential roles bees and other pollinators have been under serious threat around the world. These he said has led to the United Nations putting in place a day for the whole world to pay attention to the various roles bees and pollinators play in the life of man on the UN Bee Day which is TODAY the, 20th of May, every year.

With these, he outlined the main Purpose of the Ghana Honey Festival:

- Provide a single platform for producers, processors, consumers and other relevant stakeholders to share knowledge and innovation for the growth of the industry

- Provide a national networking platform for the industry
- Rally stakeholders to deliberate on bees and other pollinators and their critical role to society to enhance awareness and production

With these aims, it expected that the festival hence- forth will

- Generate the needed buzz to drive the industry and
- That the energy generated would benefit all producers, processors and consumers along the value chain

He further said, the annual gathering would also generate the necessary awareness on Honey Safety and other relevant practices along the honey bee value chain in Ghana. In his concluding remarks, he acknowledges the Chairman and said it is exciting that on every 20th May, the Ghana beekeeping and Honey production industry and all relevant stakeholders and interests surrounding the operations of Bees and other important pollinators, now have a day, they can now call “our day”. He ended his address by thanking all participants and incited guest for making out time to participate in the meeting.

Key Notes Address

Ps Prof. Peter Kwapong University of Cape coast Founder and Director of the International Stingless Bee Centre in his key note address presented on BEES/FOOD/BIODIVERSITY CONSERVATION. He said Bess are insects with hairy bodies and two pairs of wings which number between 20, 000 - 30,000 species globally. He stated that bees are important pollinators of crops, vegetables, and natural vegetation that produce fruits, seeds and nuts. However, the honey festival was only focused on the honey bee- *Apis mellifera*. He noted that there two main groups of bees and these include the social bees that is Honey bees and stingless honey bees and Solitary bees which is Native wild bees. Bees together with other animals’ wasps, flies, beetles, butterflies and moths (insects), squirrels, bats, birds and monkeys pollinated the world food crops he narrated.

He also stated that pollination is a fundamental process for the survival of our ecosystems. He mentioned that nearly 90% of the world’s wild flowering plant species depend entirely or at least in part on animal pollination along with 75% of the world’s food crops and 35% of global agriculture land. Pollinators are key to conserving biodiversity and about three-quarters of the world’s crop species depend at least in part on bees and other pollinators he said.

This conforms to the major characteristics of the 2030 agenda for Sustainable Development, nourishing people and nurturing the planet. He said bees and pollinators play essential role in helping to feed the rising world population in a sustainable way (SDG 2) and they also help to maintain biodiversity and a vibrant ecosystem (SDG 15). They contribute to building resilient livelihoods and creating new jobs, for poor smallholder farmers satisfying the growing demand for healthy food as well as non-food products (SDG1 and SDG9). However, he noted that pesticides, intensive farming practices, land-use change, habitat destruction that is galamsay in Ghana, sand winning, bush burning, logging, mono-cropping, diseases and pests, higher temperatures with associated climate change are threats to beekeeping.

To encourage Beekeeping, he said there is the need for reducing or changing the usage of pesticides, Creating public awareness through WORLD BEE DAY CELEBRATIONS, planting of bee loving trees in open urban areas, encourage home gardening with bee loving plants, Changing land-use practices and adopting pollinator-friendly practices and also engaging policy makers.

Other Presentations during the Festival

History of Beekeeping as well as Challenges and Opportunities in the industry: Mr.

Patrick Addo Newman-President of the Ghana Beekeepers Association-GBA

His introductory statement was the history of beekeeping in Ghana. He said, Ghanaians started with local pots in the Northern parts of the Country, tree trunks adopted as bee hives at Adaklu in the Volta Region and bee killing/wild honey hunting in forest belts by peasant farmers. He said, in 1956, the late Dr. Kwame Nkrumah initiated a bee house project at Pokuase Agriculture station in the Greater Accra Region. Also, in 1982, Dr. Powel of Technology Consultancy Centre at KNUST revived it with MR. S. O. Adjare, coming out with the Golden Insects on Africanized bee.

In 1983 there was the Formation of Ghana Beekeepers Association (GBA News). He continued by saying in 1990 Individuals, Churches, NGO'S also joined in the beekeeping agenda. World Vision, Plan, EP Church were some of the organizations that join in the crusade. In 1991 the Government through GRATIS project supported beekeeping. Local Beekeepers were also forming themselves into Associations and 2007 saw the Rural Enterprises project HPI, SNV, and Formation of GHPA 2013 and Revival of GBA meetings. In 2014 there was AU-IBAR Intervention, FGBA, GNBA and MOFA-Animal Production. Veterinary also joined in the beekeeping project. Over 5000 trained by Individuals, and other institutions like the Rural Enterprise Project-REP, NGO's and some Beekeeping Associations Equipment-Importation, Local Production Honey in 2016. After the training,

there has been an increase in production- 10 tons to 80 tons. Again, in 2016 there has been an increase in wax production from 2 tons to 15 tons and Hives from 200 – 6000 Associations and 200 Districts.

He stated that the Ghanaian environment is suitable for beekeeping in virtually all the 10 regions of Ghana even in the urban areas like the Greater Accra Region. Currently these regions have the beekeeping ongoing; Volta, Greater Accra, Brong Ahafo, Northern, Western, Eastern, Ashanti, Upper East, Upper West and Central. Further he said, so far efforts have been undertaken to harmonize data on beekeeping in Ghana. So far, they have registered 20 Bee Farms, 40 Non-Registered farms and 100 Women in Beekeeping.

GBA has also been collaborating with other institutions such as University of Ghana (Legon), Kwame Nkrumah University of Science and Technology KNUST, University of Development Studies UDS, Evangelical Presbyterian University College-EPUC and currently Bunso Agricultural College is under consideration. Also, some of the members are currently in value addition practice; the Honey Centre in Salt Pond, Honey Tree Bee Farms, HTBF in Somanya and Bee Laboratory in Pong Temale Veterinary.

Mr. Newman said there are many opportunities for Beekeepers in Ghana. He said, Transition Zones are good for production of organic poly flora honey, Turkey orders 150,000 tons a month, the Industries also consume 10,000 tons per annum and the local market also consume large tons of honey every year. There have also been over 5000 trained beekeepers with less than 20 hives each. He said there markets in USA, Israel. There are also wax contracts from 5 companies. Other opportunities include equipment over 10,000 hives Langstroth, bee laboratory for checking bee's health, branded honey, cashew, mango, pollination and natural bees available in all locations. The industry also create employment for the youths. There are also value addition markets such as international beekeepers and Researchers headed Dr. Kwame Aidoo of the Honey center-Salt Pond and Prof. Kwapomg of the International Stingless Bee Center (ISBC) Cape Coast.

He said despite the numerous opportunities, there has been some few challenges that the industry has encountered. HE stated that there is no Beekeeping policy, no beekeeping Institute, common beekeeping associations fighting for the same turf, Standards of our honey, price control of honey and wax, no support for equipment suppliers, no funding for expansion and Trainers & NGO's supply of Inferior equipment and no packaging equipment's .

In his concluding words, he stated that there is need to actualize the opportunities that the suitable environment provides. He also acknowledges the efforts of the AU-IBAR and their commitment to assist Beekeepers Ghana in their own small way. The first step that they have taken, for Dr. Norber Mbahin to have come down to Ghana for the second time in relation to the Beekeeping industry in Ghana is an effort worth commending. He also recommended that as an aspect of Agriculture, practitioners must endeavor to unite and stop the fragmented National Associations so that they can project a common voice to articulate their concerns. He also stated that there is the need as a matter of urgency to coordinate data collection so that they can confidently know who is doing what and where when it comes to beekeeping and sourcing hive products from Ghana

Finally, he said as the current Chairman of the GBA, he wish to state on behalf of all members that the conference has been fruitful. It has come to greatly rejuvenate the passion for beekeeping among members and that the AU-IBAR should continue with them on individual and collective efforts to keep the rekindled flame and passion perpetually burning. He also asked other institutions should come on board to help make beekeeping in Ghana a real force to recon with.

Mr. Divine Odonkor, Chairman of the Volta Regional Association of Beekeepers (**VORAB**) also gave his address on the **GHANA BEEKEEPING IN PERSPECTIVE-CURRENT ISSUES OF CONCERN**.

He started his address by acknowledging the chairman, invited guest participants and by observing all other protocols. He expressed his appreciation for the opportunity to make the presentation. His presentation focuses on discussing beekeeping development in Ghana since 1957 and how they have performed, where they stand, and the way forward. He said, efforts since independence included beekeeping and sustainable livelihoods, beekeeping and biodiversity conservation, beekeeping for food security and health, bee products value addition & Standardization, Institutional efforts and collaboration, policy issues, technological development have been influenced by beekeeping development.

He also mentioned some of the beekeeping developments efforts since 1957. He said, there was government attempt at importation of docile Caucasian and Italian strains for breeding to replace aggressive local breeds at Pokuase in 1965. Some government agencies distributing beekeeping equipment as part of other programmes. Privates' efforts include KNUST TCC piloting beekeeping centres in 1970 and influx of Local & International NGOs implementing donor funded beekeeping programmes in 1980.

He said, beekeeping is an alternative livelihood and several beekeeping projects implemented by various organizations have alternative livelihood and poverty alleviation as their main aim. However, he said the current concern is if all this has been achieved as a national strategy since independence and if there are any national accounting on beekeeping for this. He also said if the contribution of beekeeping to biodiversity conservation at the national level since independence can be accounted for and how much of our biodiversity is conserved through beekeeping. He said there are also concerns about the declining bee population as a nation as reported all over by beekeepers. He said there is the need for effective collaboration between the institutions and the beekeeping associations. They should not see themselves as rivals since these will not promote the development of the industry.

He also said the evolution of beekeeping requires building capacities on empirical findings guiding the art and science of beekeeping. He mentioned that many on the field lack the required scientific capacity for production to bring Ghana to any recognition on the beekeeping map of the world. For that matter, bbeekeepers are still looking for sustainable and cost-effective methodologies to equip their beekeeping ventures. These are of much concern to the industry.

In his concluding statement, Mr. Divine Odonkor stated that there is the need for an effective national policy on beekeeping. He said even though there is lack of full institutional collaboration several organizations promoting beekeeping came together and attempted to draft a national policy on beekeeping for Ghana however, to his knowledge this has not gone through the policy cycle. He said this has made national accounting a difficult task and should be addressed.

Other Partners who graced the occasion

- Mr. Arne Duebecke-Quality Services International Laboratories, Bremen, Germany
- Mr. Richard Okoe – (President, the National Beekeepers Association (NATBA), Member, GHANAP)
- Dr. Rofela Combey-University of Cape Coast (Head, Department of Conservation Biology and Entomology)
- Dr. Charles Dwamena, FMR Ambassador to Asia (China, North Korea, Mongolia and Vietnam) also gave his remarks.
- The Former Chairman of the Danish Alumni Network-Ghana, **DAN-G**, Mr. Enoch Agyapong
- Dr. David Anabam-MoFA the Ejisu District Director of Agriculture
- A representative from FDA

- A representative from Veterinary Council

Adhoc Planning Committee Members from CSIR-FORIG

- | | |
|-------------------------------|-------------------------------------|
| 1. Dr. Courage B. Adanu | Research Scientist |
| 2. Mr. Emmanuel Minkah- | Scientific Secretary |
| 3. Mr. Kester Mensah- | Senior Administrative Assistance |
| 4. Madam Naomi Appiah- | Head of Commercialization |
| 5. Mr. Alexander A. Obeng- | Marketing Officer |
| 6. Mr. Ebenezer Frans Mensah- | Chief Technical Officer |
| 7. Mr. Daniel Ofori Oppong- | Senior Technical Officer |
| 8. Miss Patience M. Gakpetor- | Principal Technologist (Rapporteur) |

Media Publication Links for the Honey Festival.

1. **Ghana to host her maiden honey festival and international bee day celebration (Published on May 8, 2021).** Available online at: <https://www.ghanaweb.com/GhanaHomePage/business/Ghana-to-host-her-maiden-honey-festival-and-international-bee-day-celebration-1255174>
2. **Ghana Celebrates her Maiden Honey Festival on the International Bee Day 20th May 2021. (Published on May 27, 2012).** Available online at: <https://agrictoday.com.gh/2021/05/27/ghana-celebrates-her-maiden-honey-festival-on-the-international-bee-day-20th-may-2021/>
3. **Ghana to host her maiden honey festival and international bee day celebration. (Published on May 12, 2021).** Available online at: <https://agrighanaonline.com/ghana-to-host-her-maiden-honey-festival-and-international-bee-day-celebration/>
4. **Ghana's Maiden Honey Festival comes off on May 20, 2021. (Published on May 18, 2012).** Available online at: <https://thevaultznews.com/business/agribusiness/ghanas-maiden-honey-festival-comes-off-on-20-may/>
5. **FORIG organises maiden honey festival.** Available online at <https://www.myjoyonline.com/forig-organises-maiden-honey-festival/>
6. **Ghana set to celebrate her maiden Honey Festival and International Bee Day.** Available online at: <https://myaimreport.com/2021/05/08/ghana-set-to-celebrate-her-maiden-honey-festival-and-international-bee-day/>

Online Video links

Honey Festival: Initiative by Forestry Institute of Ghana expected to enhance production (26-5-21). Available online at: <https://www.youtube.com/watch?v=nXinNzeFBMI>

Appendix A; Program Outline
Ghana Honey Festival 2021:
A Spotlight on Pollinators, Beekeeping and Honey Safety for Sustainable Livelihoods and Biodiversity Conservation

Date: Thursday May 20, 2021 Time: 10:00 AM- 1:00 PM Venue: CSIR-FORIG FUMESUA EJISU-KUMASI.

FESTIVAL PROGRAM OUTLINE

TIME	ACTIVITY	RESPONSIBILITY
OPENING CEREMONY		
9:00 am- 10:00 am	Arrival/Registration	Protocol
10:00am -10:05am	Introduction of Dignitaries	M. C
10:05am -10:15am	Welcome Address by Host Institution	Representative of the CSIR-FORIG Director, DR. MRS Beatrice Obiri Darko
10:15am -10:20am	Opening Remarks Chairman	Ps. Prof. Peter Kwapong University of Cape Coast (Founder and Director of the International Stingless Bee Centre)
10:20am -10:30am	Purpose of the Honey Festival and UN Bee Day Celebration	Dr. Courage Besah-Adanu (Entomologist-CSIR-FORIG and Coordinator, GHANAP)
10:30am -10:35am	Remarks Guest speaker	Dr. Charles Dwamena, FMR Ambassador to Asia (China, North Korea, Mongolia and Vietnam)
10:35am -10:40am	Remarks Danida Alumni Network- Ghana	DAN-G Chairman
10:40am -10:50am	Remarks - MoFA	Dr. David Anabam-MoFA The Ejisu District Director of Agric
PRESENTATIONS		
11:30am -11:50am	Key Note Address Bees/Food/Biodiversity Conservation	Ps. Prof. Peter Kwapong University of Cape Coast (Founder and Director of the International Stingless Bee Centre)
11:50am -12:00pm	History of Beekeeping in Ghana	Mr. Patrick Addo Newman-(President Ghana Beekeepers Association (GBA), Member GHANAP)
12:00pm -12:10pm	The Beekeeping Industry and the SDGs	Mr. Richard Okoe- (President, the National Beekeepers Association (NATBA) Member, GHANAP)
12:10pm -12:20pm	Ghana Beekeeping in Perspective: Current issues of Concern	Mr. Divine Odonkor- (Chairman, Volta Regional Association of Beekeepers (VORAB))
12:20pm -12:30pm	Remarks on Ghanaian Honey Quality	Arne Duebecke: Quality Services International Laboratories, Bremen, Germany.
12:30pm -12:40pm	Remarks on Ghanaian Honey Quality	Dr. Rofela Combey –University of Cape Coast (Head, Department of Conservation Biology and Entomology)
12:40pm -13:00pm	Remarks on Honey quality by FDA	FDA Rep.
13:00pm -13:20pm	Honey Quality Implications for the Ghanaian Consumer -Sensory Quality Evaluation	Dr. Courage Besah-Adanu (Entomologist-CSIR-FORIG & Coordinator of the Ghana National Apiculture Platform- GHANAP)
Open Forum: Discussions on the Festival and Way forward for Ghana Beekeeping Industry		
13:20pm- 13:55pm	Ghana Beekeepers Forum	Beekeepers Present
13:55pm -14:00pm	Vote of Thanks	Miss Patience Gakpetor
Exhibition and Interactions		

M.C:

Appendix B: Picture Gallery

Ghana Honey Festival and International Bee Day Celebration Participants in Pictures



Some Participants in



Sensorial Analysis Section of Honeys from selected Regions by Producers and Consumers





Exhibition Stands at the Festival