

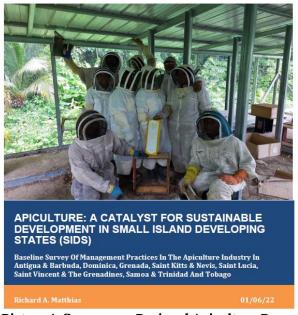




GEF SGP UNDP Regional Apiculture Project abuzz with exciting results!

In 2020, GEF SGP received funding in support of a regional apiculture project to be implemented in seven (7) countries in the Caribbean and one (1) in the Pacific namely Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Samoa and Trinidad and Tobago. Since its inception, the project has also been successful in adding Antigua and Barbuda to the list of partnering countries.

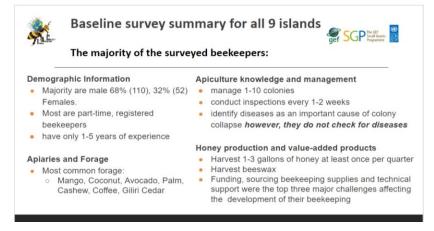
The first objective of the project was to complete a baseline survey of beekeepers' knowledge, attitudes and practices (KAPs). Despite the limitations of COVID-19, the project was able to survey 193 beekeepers from 9 islands.



Picture 1. Cover page, Regional Apiculture Report

The full report is available from: <u>Caribbean</u>
<u>Apiculture Baseline Study</u>. Interestingly, the

nine countries found similar behaviours, issues and solutions for example, diseases were identified as an important cause of colony collapse however, they admitted that they do not check for diseases (Picture 2). This report also identified training, equipment and technical support in the participating as major limiting factors, in all the countries.



Picture 2. Summary survey results for the nine participating countries.

The second objective of the regional project was to develop a training programme to meet the needs of beekeepers. This course was completed and is now offered twice a year to beekeepers. The seventeen (17) module course offers some unique course content relevant to beekeeping example health and safety, economics and gender and social inclusion, making it one of the most holistic beekeeping courses available online: First Caribbean Online







<u>Beekeeping Course</u>. So far, one hundred and eighty (180) participants have completed this course from the participating countries.

Disease testing was included under the training programme. Participants from two (2) Caribbean islands (St. Lucia and Trinidad and Tobago) volunteered samples for disease testing to the accredited laboratory of the North Carolina State University, under the esteemed guidance of Professor and Extension Apiculturist in the Department of Applied Ecology, Dr. David Tarpy.

A webinar was hosted on the 29th August 2022, to share with Caribbean beekeepers the findings of the disease testing which are outlined in Picture 3. According to these results, Trinidad and Tobago is now reporting eight (8) new diseases of honeybees, whilst St. Lucia is reporting seven (7), all of which are transmitted by one (1) major vector: the varroa mite. Mr. Richard Matthias, Master Beekeeper from St. Lucia, indicated that these new diseases will have major impacts on the productivity and survivorship of local honeybee populations. Dr. Lena Dempelwolf, Biodiversity Specialist with the Ministry of Planning and Development, stated that these diseases may also have negative impacts on local, indigenous pollinators such as stingless bees. If both stingless and honey bees are impacted by these diseases, then pollination services and local food security are at risk. Dr. David Tarpy advised that the diseases require proper and regular hive management and recommended that beekeepers test and treat regularly for the vector.

Viral diseases of honeybees in the Caribbean and USA

Pathogen	Country X	St. Lucia	USA
ABPV - Acute Bee Paralysis Virus	х	x	x
BQCV - Black Queen Cell Virus	x	x	x
CBPV - Chronic Bee Paralysis Virus	-		×
DWVA - Deformed Wing Virus Strain A	x	X	x
DWVB - Deformed Wing Virus Strain B	x	х	x
IAPV - Israeli Acute Paralysis Virus	x		x
LSV - Lake Sinai Virus	x	х	x
Trypanosomes	x	х	x
Nosema - Both N. apis and N. ceranae	x	x	x

Picture 3. Results for disease testing in Country X St. Lucia and The United States of America (USA, reference sample).

These results were also shared with the Inter-American Institute for Cooperation in Agriculture (IICA) and the Ministry of Agriculture, Land and Fisheries.

The Regional Project will be completed next year with a closing ceremony earmarked for June 2023 in St. Lucia. It is hoped that beekeepers and Ministry representatives from across the Caribbean will participate in an open discussion on the diseases found in each of the islands and the development of strategies to address their potential impacts.







Resident Representative visits Brasso Seco "Bee House"

On the 2nd September, just one (1) week after taking up office, the new Resident Representative for The United Nations Development Programme, Mr. Gerardo Noto, and the Chair of the National Steering Committee (NSC), Ms. Terry Ince, visited the Brasso Seco Morne La Croix Farmers' Association's apiary.

Mr. Noto, whose family are beekeepers, spent most of his youth in apiaries, tending to honey bees with his father and grandfather. He was extremely excited to visit the bees in Trinidad and Tobago to relive his childhood experiences as well as gain a better understanding of the local sector. Ms. Ince was extremely interested in visiting the new facility, as part of the NSC's efforts to valuate the impact of the work of the GEF SGP in communities.

The Brasso Seco Morne La Croix Farmers gave Mr. Noto and Ms. Ince a tour of their apiary as well as their "Bee House," which is the first community-owned queen rearing lab and learning center. The building, which is made from five tonnes (5 tonnes) of plastic lumber, will be used to make queens as well as teach the public on the importance of bees via tours. The tours will be made available in early 2023 and will be advertised widely through social media!



Picture 4. Beekeepers in Brasso Seco showing Mr. Gerardo Noto, Resident Representatives, their bees. Mr. Noto is seen in the picture on the right.