



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

SwedBio

A programme at Stockholm Resilience Centre



Preparedness for
Resilient Nations

What are the multiple values of pollinators and pollination services? Who holds the knowledge?

Ghana's Experience

Pas. Prof. Peter Kwapong
International Stingless Bee Center
University of Cape Coast, GHANA

Anglophone Africa Regional Triologue:

Bright Spots for Land Degradation,
Neutrality, Pollinators,
and Food Security



28-30 May 2019
Nairobi, Kenya



Multiple Values of Pollination and Pollinators

- Bees and other pollinators are important
 - Increasing food security
 - Improving nutrition
 - Fighting hunger
 - Providing ecosystem services of pollination for agriculture
 - Contribute US\$235-577 billion in global crops per year
 - Far beyond human food
 - With the increasing commercial value of honey, bees are becoming a growing generator of income, livelihoods strategy and means of food security along the value chain.
 - Provide diverse forage for Farm animal and wild animal
 - Medicine, biofuel, fibre, construction material
 - Bees wax for candles, and musical instruments
 - Long inspired art, music and sacred passages

Overview of activities

- Pollination work started from Arizona in 2001 (**THE BEE COURSE**)
- Research in Ghana – African Pollinator Initiative (API) and then International Pollinator Initiative (IPI)
- Indigenous knowledge on Stingless bees
- Studies to generate Scientific knowledge through research with students at all levels (B.Sc, M.Phil and PhD).
- Setting up of the stingless bee center 2005 – the Brazilian model and training beekeepers in Ghana and from 4 neighboring countries and organizations and international students.
- In collaboration with IPI and FAO Pollination need assessment was carried out 2003 in Ghana.
- Farmers and Agricultural Extension Agents were trained from selected areas
- Global pollination project – GEF/ UNEP/ FAO project in 7 countries 2009-2014
- IPBES assessment in 2014 as Coordination Lead Author(CLA) in Chapter 6

Pollination work in Ghana

- Setting up the International Stingless Bee Center (ISBC)
- Setting up a Bee and insect museum at the University of Cape Coast
- Cashew pollination
- Cocoa pollination
- Water melon pollination
- Shea butter pollination
- Mango pollination
- Egg plant (garden egg) other vegetable pollination
- Coconut pollination
- Cucumber pollination
- Inventory of Bees of Ghana
- Bee status and trend in the Forest-Savanna transition zone of Ghana
- Beekeeping for pollination and alternate livelihoods in Northern and coastal areas of Ghana.
- Beekeeping projects all over Ghana
- Working with researchers both local and international on Bees, pollination and medicinal properties of bee products
- Development of bee products
- Conservation and Ecotourism ventures.
- International students from USA, UK and South Africa running internship with me.
- Collaboration with many bee and pollination experts from across Africa and the world including Kenya and SA



The Stingless Bees

- Bees which do not sting but produce medicinal honey and pollen stored in pots instead of combs and propolis are the major hive products.
- Center of excellence and sanctuary of bees which do not sting.
 - Environmental conservation Education
 - Ecotourism
 - Hive product development and marketing
 - Research and development



Natural Energy Boost
General Wellness
Lowers Blood Pressure
Anaemia
Reduce Cholesterol
Wound Healing
Anti Bleeding
Tissue Regeneration
Heals Skin Infections
UV Protection
Burns
Clears your Skin

Anti Microbial
Anti Fungal
Anti Viral
Anti Protozoan
Anti Ulcer
Anti Inflammatory
Anti oxidant
Bacteriacidal
Fertility Endometriosis
Improves Vaginal Health
Candidiasis Treatment
Urinary Tract Infections (UTI's)

Gout
Herpes
Colds and Flu
Anti Cancer
- Prostate
- Breast
- Cervical
- Kidney
Loukemia
Seasonal Allergies
Headache
Ear Infection
Oral Bacteria



Who Holds the knowledge ???

- Indigenous people
 - Not all insects are pests!!!
 - Stingless bee honey cures many diseases
- Students, researchers, farmers, beekeepers, policy? General public ??
 - Scientific knowledge
 - Need for awareness
- Are bees and other pollinators declining?
 - Yes, due to our activities No, because no research to back it??
- Can we reverse the trend?
 - Yes !!! Awareness that our lives depend Bees and other pollinators, Some SDG depend on it (zero hunger,
- How ???
 - Pollination-friendly practices, awareness and serious approach to enhance urban beekeeping and ecosystem conservation of pollinator habitats.





THANK YOU