



Launch of the Young Entrepreneurs in Silk and Honey, in Addis Ababa, Speech by Dr. Segenet Kelemu, Director General & CEO, icipe, 3 March 2016

Your Excellency, the Prime Minister of the Federal Democratic Republic of Ethiopia

Ambassadors and High Commissioners

Honourable Government officials

The MasterCard Foundation officials and staff

Our partnering organizations and stakeholders

Distinguished Guests; Ladies and Gentlemen, friends of Ethiopia:

We, the International Center of Insect Physiology and Ecology (in short *icipe*) community, warmly welcome you, Your Excellency, and all of our distinguished guests to this special event. We are most honored, Your Excellency, by your presence today to officially launch the *Young Entrepreneurs in Silk and Honey enterprise*.

Your Excellency; Ladies and gentlemen, allow me to briefly introduce icipe to you:

icipe was founded in Kenya in 1970 to focus on insect-based research that would respond to challenges in Africa. That specific focus was in recognition of the substantial challenges that insects and related arthropods pose for Africa and the tropics more generally, and the parallel recognition that these challenges would not be adequately addressed by scientists and research institutes elsewhere.

icipe's programmes are delivered via four major research themes which are defined by their intended outcomes — Human Health, Animal Health, Plant Health and Environmental Health. icipe is also fully engaged in developing well-trained and highly motivated human capability in biosciences, and strengthening the institutional and policy-making capacity required to respond to Africa's development challenges.

Our solid foundations in insect science are underpinned by the science disciplines of chemical ecology, molecular biology and biotechnology, insect pathology, taxonomy and systematics, ecology, biostatistics and bioinformatics, GIS and the social sciences. These skills are applied across the four research themes that *icipe* uses to focus its R4D portfolio. We currently operate in 30 African countries and Yemen. *icipe* has highly qualified scientists and technical staff from 35 countries of all continents, and we are all bound by our common desire and commitment to move Africa out of the shadow of food and nutrition insecurity and poor health.

Since its inception, *icipe* has delivered world-quality science, made crucial contributions to African food and health policy, made scientific breakthroughs and generated knowledge, delivered development outcomes to rural communities such as the 'push–pull' habitat management strategy, which combats multiple major constraints in cereal-livestock production systems; the development and scale-out of fruit fly integrated pest management (IPM) technologies in fruit production; the development of biopesticides; malaria management technologies; management of tsetse flies and much more.

icipe commenced its operations in Ethiopia in 1993, when a chartered agreement was signed between *icipe* and the then Transitional Government of Ethiopia. Since that time *icipe* has formed strong government and other partnerships through past and present research for development projects.

Insects pose major challenges to the human, environmental, livestock and crop well-being of Africa. Insects damage food, destroying significant amounts of all harvested food in storage and often causing the loss of entire crops. They transmit diseases in humans and animals. For example, malaria transmitted by mosquitoes, kills a child every 60 seconds. The recent outbreak of Zika virus transmitted by mosquitoes is causing havoc in Latin America and panic elsewhere. However, insects and arthropods also play significant beneficial roles; thanks to their rich biodiversity, including ecosystem services such as degradation of organic matter, control of pests and diseases, and pollination of crops. Insects also provide us with food, feed, textiles, waxes and numerous other products. Insects form part of the traditional diets of at least 2 billion people globally. They are the food, feed and protein source of the future.

Among these significant contributors to food security and ecosystem health are bees and other pollinators. Bees improve the environment and they do not prey on any other species. In addition to pollinating numerous important crops, bees also pollinate forage plants, therefore contributing indirectly to milk and meat production. Bees are one of the most important insects to mankind.

Generations of writers and philosophers have been inspired, enchanted and fascinated by bees. Society at large is fascinated by bees. Bees have sparkly clean and positive images in societies. Their significance to our livelihoods and well-being is beyond measure. There are also some significant lessons that we can learn from bees: they are excellent communicators among themselves; they are great team players; they are quick learners from their environments; they are effective with their assigned tasks; they generate several useful products; they are adaptable and evolving; they value experience (for example, they do not send out their young to gather food); they have a strong sense of responsibility and work ethics; and they value their strong leader: their productive queen.

Bees are hardworking unpaid laborers in agricultural systems. How hardworking: In order to produce one pound (slightly less than half a kilogram) of honey, worker bees fly a collective 89,000 kms (that is my frequent flyer miles with KLM for 6 months and I fly a lot) and tap some 2,000,000 flowers.

There are multiple reasons why mankind needs to nurture and protect bees.

Annual global food production related to pollinators is estimated between \$235 billion and \$577 billion. Our plans and strategies to feed the world in 2050 must include pollinators. Pollination services must be taken as crucial agricultural inputs that ensure crop production. Their well-being is linked to our own well-being and survival. We have to be kinder, gentler and caring to bees and other pollinators.

(Your Excellency, I have been informed very recently that the bee is the symbol of the political party. Excellent choice!)

Since its inception in Ethiopia, *icipe* has overseen particularly strong outcomes in the area of tsetse fly control; integrated vector management programmes to reduce the burden of malaria; the Push-Pull method of intercropping to control agricultural pests such as stemborers and the parasitic weed Striga for increased food production, soil fertility management, high quality livestock feed and other benefits; integrated pest management programs to reduce the losses associated with Fruit fly infestations; modern beekeeping to increase the yields and quality of honey and wax; silk farming; and maize and chickpea integrated pest management to help protect these important crops.

In 2011, *icipe* introduced a modern beekeeping programme in the Tolay catchment (in partnership with Biovision Foundation) and in the Tigray Region (through funding from the International Fund for Agricultural Development, IFAD) with remarkable impact. The Biovision Foundation for Ecological Development, based in Switzerland, is a long-standing and important partner for *icipe*. We acknowledge and are grateful for Biovision's long term commitment and support to Ethiopia and to *icipe*. (*The CEO of Biovision has travelled from Switzerland and he is in the audience today. Thanks Andy*). With the support of the European Union, *icipe* has also recently started research on bee health and pollination services, in Oromia, Southern, and Tigray Regions, - in addition to the establishment of a Bee Research Centre at Holetta as one of five regional satellite laboratories for bee health in Africa. We are very grateful and excited that the MasterCard Foundation has joined *icipe*'s investor list as the largest of the 15 new investors (I would like to call them as our development partners) who joined *icipe* in the last 24 months.

Silk farming on the other hand is an emerging agro-based enterprise that has been initiated at the Alage Technical and Vocational Training College with IFAD funds together with support through the Improving Productivity and Market Success of Ethiopian Farmers (IPMS) project funded by the Canadian International Development Agency (CIDA) and implemented by the International Livestock Research Institute (ILRI) on behalf of the Ethiopian Ministry of Agriculture (MoA). The IPMS project (now called LIVES) facilitated the provision of silk postharvest equipment at Alage, while the Government of Ethiopia provided the infrastructure. *icipe* on the other hand provided intensive technical training and know-how in silkworm rearing, cocoon production and silk postharvest techniques, as well as supply of silkworm eggs. This initiative is scaling out and a total of 100 farmers from the local community based in Arba Minch are now working together with the training institution in the rearing of silkworms and production of silk cocoons.

icipe therefore, has a proud history of serving the people of Ethiopia, and today we are here to launch a new endeavor to build on this history and take us forward into a new era of reaching youth on a scale that has not been possible before – Young Entrepreneurs in Silk and Honey, that I am sure will strengthen our partnerships and build on our combined goals. My gratitude goes to The MasterCard Foundation and its staff who worked so hard with us for more than a year to make this a reality. The various ministries and organizations in Ethiopia, particularly The Ministry of Livestock and Fisheries, have given us fantastic support in formulating this initiative.

Your Excellency: Your presence here today underpins your strong support to the remarkable opportunities for agricultural development and other enterprises in Ethiopia. The new *Young Entrepreneurs in Silk and Honey* enterprise that you will launch today targets a total of 12,500 youth in rural communities, with an additional 25, 000 beneficiaries engaged in the silk and honey value chains. This target group was selected as they represent the future of the country, and by ensuring they are nurtured and developed we also ensure the future of Ethiopia.

Beekeeping is an ancient tradition in Ethiopia, but despite its long history, beekeeping remains largely untapped as a formal industry in Ethiopia. Although Ethiopia is the leading producer of honey and beeswax in Africa, more than 90 percent of Ethiopia's honey is still produced using traditional hives at only 10% of the country's production potential. Many beekeepers lack modern technologies and operate on a small scale. Ethiopia produces dozens of unique honey varieties based on pollen source, season, and agroecological region of production. There are tremendous untapped opportunities in beekeeping. And so are in silk farming that can enrich Ethiopia's rich traditional textile industry.

With this context, the target beneficiaries will be equipped with modern technology skills related to the production of silk, honey, wax and hives. They will be trained with financial management and business skills. In addition to the existing sites, we will work at sites in East and West Gojjam zones in the Amhara Region; and Gomo Gofa zone in the Southern Nations, Nationalities and Peoples (SNNP) Region. One of the most interesting areas of training will be the domestication of stingless bees and stingless bee honey (tuazma mar in Amharic) production. When we achieve this, it will be the first such undertaking for Ethiopia.

We will support female participation, especially through the silk farming and honey value chains which can be integrated with existing roles that women hold in the community. We will explore to address challenges to existing attitudes and practices that perpetuate gender inequalities in the honey and beekeeping value chains. I have no doubt that we will make a difference in peoples' lives.

Your Excellency,

On behalf of the Governing Council of *icipe*, the staff of *icipe* and myself, I would like to express my gratitude to the Ethiopian Government for its interest and support of our work, as demonstrated by your very presence today amid your very busy schedule.

I thank our research for development partners around the globe who stand with us in this journey of making scientific breakthroughs and impact. My gratitude goes to *icipe*'s core financial investors namely, GIZ on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), the Government of Kenya, the Swedish International Development Cooperation (Sida), the Swiss Agency for Development and Cooperation (SDC), and Department for International Development (DFID), UK; and the more than 50 other investors (development partners) who financially support our various research for development projects.

Today, you will be viewing a number of our research outputs and interacting with some of our staff and the staff of the MasterCard Foundation. You will also meet and interact with some of our beneficiaries. Enjoy your day and thank you very much for coming. Once again welcome to the launch. Thank you!