INCUBATED WORLDS

International Livestock Research Institute,
Addis Ababa, Ethiopia, May 2018

Artist	Koen Vanmechelen
Scientific partner	International Livestock Research Institute (ILRI)
Foundation	MOUTH

INCUBATED WORLDS
BY KOEN VANMECHELEN

Incubated Worlds presents the story of an evolution, an enquiry into how societies co-exist and evolve. It is also a much needed scientific research project to help build a pathway out of poverty, empower women and enhance social cohesion through poultry.

Koen Vanmechelen's installation at ILRI's latest research center is a tribute to, and a live example of, cross disciplinary collaboration in solving some of the world's toughest challenges. Art and Science find each other in their quest to understand evolution, imagine the future and advance society. Both are inspired by the power of imagination and fueled by the ever-inquiring mind. Art, as science, is a way to discover new things. Art is expected to 'tear up the rule books'. In this way, it has the ability and the responsibility to trigger innovation – also in science.

Located at the ILRI center in Addis Ababa, Ethiopia, Incubated Worlds is also home to the laboratory and field research facility of the African Chicken Genetics Gains (ACGG) Project. At the facility, the Cosmopolitan Chickens, Vanmechelen's ongoing artistic project that encompasses the genetic diversity of over 20 different strains of purebred chickens from all over the world, are being crossbred with chicken strains selected according to productivity and farmer preference in Sub-Saharan Africa.

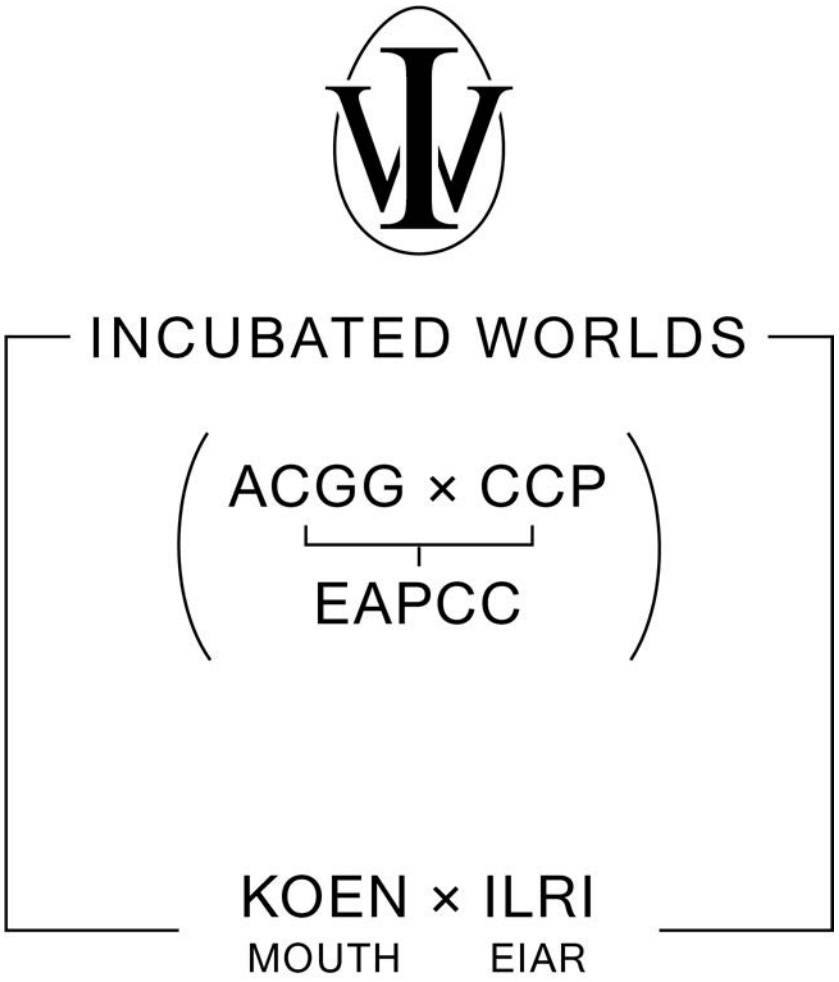
The resulting crossbred chicks will be known as Ethiopian African Planetary Community Chickens (EAPCC). They represent the uniting of the global with the local. And they are part of a quest to optimise the balance between diversity and productivity.

The EAPCC combines the greater resilience of the genetically diverse Cosmopolitan Chicken with the productivity and familiarity of the ACGG-selected local strain. A reminder that diversity and productivity must work together for greater biological sustainability and social cohesion.

The ultimate aim is to identify sustainable, high productivity poultry stock able to help communities in developing countries and low-resource settings, where the chicken remains an important source of nutrition and income. In many of these countries, women are primarily responsible for keeping chickens. So the findings also become a tool for the empowerment of women, and a means to greater social cohesion.

It is significant that Ethiopia is at the heart of Incubated Worlds. Ethiopia is the cradle of civilization. Through Incubated Worlds, it becomes the laboratory for a new balance. An exploration into the diversity of species is returning to the source of life, from where man stepped out into the world and began to interact with the other.

INCUBATED WORLDS
LOGO



Incubated Worlds, the project name and logo, were designed by Belgian artist Koen Vanmechelen to underscore the cross-functional collaboration between the International Livestock Research Institute, the Ethiopian Institute for Agricultural Research, the artist Koen Vanmechelen and the MOUTH Foundation.

The initiative's logo incorporates an egg, a source of energy and symbol of the potential of the future, cracking open to reveal a new trajectory. The equation represents this initiative's crossing of an Ethiopian chicken strain selected by the collaborative and ILRI-led African Chicken Genetic Gains project being conducted in Ethiopia, Tanzania and Nigeria with a chicken crossbred by Vanmechelen over many years as part of his artistic Cosmopolitan Chicken Project. The offspring of this new poultry crossbreeding, known as the Ethiopian African Planetary Community Chicken, will be developed for use by communities in the region.

ACGG = African Chicken Genetic Gains project
CCP = Cosmopolitan Chicken Project
EAPCC = Ethiopian African Planetary Community Chicken

KOEN = Artist Koen Vanmechelen
MOUTH = MOUTH Foundation
ILRI = International Livestock Research Institute
EIAR = Ethiopian Institute of Agricultural Research

INCUBATED WORLDS
INSTALLATION - OUTSIDE

Cosmopolitan Chicken Project, photo print on banner, part of the collection of ZKM | Center for Art and Media, Karlsruhe, Germany
Planetary Community Chicken Project, photo print on banner
Statement 'Global exists only by the generosity of the local', print on banner. All artwork © Koen Vanmechelen, 2018

INCUBATED WORLDS
INSTALLATION - OUTSIDE

Above: Tadelle Dessie, Koen Vanmechelen and Olivier Hanotte
Below: Launch Incubated Worlds, April 26, 2018

INCUBATED WORLDS
COSMOPOLITAN CHICKEN

Above: Cosmopolitan Chickens at Vanmechelen's breeding farm in Belgium
Below: Chickens at Incubated Worlds, ACGG research center, ILRI in Ethiopia

BOOK OF GENOME
DE-CODE

The two ‘Book of Genome’ artworks, developed using state-of-the-art DNA mapping technologies, present the diversity of the Mechelse Wyandotte and the indigenous Ethiopian chicken. The letters in the books indicate every place where the genetic makeup differs from that of a reference chicken considered as standard, while the numerals indicate the number of DNA bases that are identical to those of the standard reference genome.

For instance, the following segment from a DNA sequence, ‘125AC86GG237’, indicates that there are 125 base letters identical to those of the standard chicken. This is followed by a point in which the chick inherited an ‘A’ and a ‘C’ from its parents. Then there are again 86 base positions identical to that of the standard chicken, followed by a position where both father and mother passed a ‘G’ to its progeny.

In the accompanying videos, entitled ‘DECODE’, people read a segment of Vanmechelen’s Book of Genome. In the video presenting the genetic diversity of the Mechelse Wyandotte, people from throughout the world, reflecting global nature of the Cosmopolitan Chicken Project, read from the Book of Genome, each in their own language. In the video presenting the genetic diversity of the indigenous Ethiopian chicken, people representing the diversity of Ethiopia read from the book in Amharic. A mantra for an ongoing process.

Book of Genome — Planetary Community Chicken, leather-bound books, comparative DNA sequence analysis of the indigenous Ethiopian chicken, 8 x 35 x 31 cm, limited edition.

INCUBATED WORLDS
INSTALLATION - INSIDE

Book of Genome — Planetary Community Chicken, leather-bound books, comparative DNA sequence analysis of the indigenous Ethiopian chicken, 8 x 35 x 31 cm, limited edition.
DECODE — PCC, Video, colour, sound, 1h26min

INCUBATED WORLDS
INSTALLATION - INSIDE

Book of Genome—Planetary Community Chicken, leather-bound books, comparative DNA sequence analysis of the Mechelse Wyandotte, 8 x 35 x 31 cm, limited edition.
DECODE—PCC, video, colour, sound, 1h40min

INCUBATED WORLDS
DE-CODE

In the De-Code video, people from throughout the wolrd and from the different Ethiopian communities read a segment of the Book of Genome.

INCUBATED WORLDS
INAUGURATION CEREMONY

Above: Elsa Murano (ILRI board), Didier Nagant de Deuxchaisnes (Belgium Ambassador to Ethiopia), Koen Vanmechelen (artist), Gebregziabher Gebreyohannes (State minister at the Ethiopian Ministry of Agriculture and Livestock)

Below: Siboniso Moyo (ILRI director general's representative in Ethiopia) and Shirley Tarawali (assistant director general at ILRI) at the opening ceremony

INCUBATED WORLDS
INAUGURATION CEREMONY

Above: Simon Lillico, The Roslin Institue reveils the corner stone
Below: Inauguration Incubated Worlds, April 26, 2018

INCUBATED WORLDS
NATIONAL MUSEUM

Above: Incubated Worlds at the National Museum, Ethiopia © Koen Vanmechelen
Below: Hand over Book of Genomes, National Museum, Ethiopia

INCUBATED WORLDS
PRESS RELEASE

Art and science unite to serve Ethiopian farmers— "Incubated Worlds" explores genetic diversity of poultry to boost nutrition and incomes

Ethiopia joins forces with the International Livestock Research Institute through state-of-the-art poultry breeding facility, together with Belgian artist Koen Vanmechelen, whose unusual Cosmopolitan Chicken combines the genetic traits of birds from 22 countries

ADDIS ABABA (26 April 2018)—Scientists and government officials, who are committed to developing healthy, productive chickens for Ethiopian farmers and consumers, joined forces today with an artist dedicated to developing biocultural diversity, to launch "Incubated Worlds," a unique combination of art and science that aims to improve nutrition and incomes in East Africa with disease-resistant, climate-resilient poultry.

Enhancing Africa's rich genetic diversity with 20 generations of chicken breeds from around the world
Incubated Worlds is first and foremost an advanced poultry research and breeding facility that emerged from the African Chicken Genetic Gains (ACGG) project, an initiative that is tapping the rich genetic diversity found in poultry to provide more opportunities for rural poultry producers—the majority of whom are women—to earn a decent living and raise healthy, well-nourished families. Partners in Ethiopia include the Ethiopian Institute of Agricultural Research (EIAR), Ethiopia's Haramaya University, and the International Livestock Research Institute (ILRI), the latter of which is part of the CGIAR global research partnership.

Adding a new dimension to the project is Belgian artist Koen Vanmechelen. His 20-year-long artistic odyssey has involved creating some 20 generations of chickens that combine traits from breeds from around the world, including several from across Europe and the Americas, in addition to indigenous chickens from China, Egypt, Senegal, Indonesia and Cuba. Vanmechelen's artistic crossbreeding project has culminated in an exceptional bird he calls the Cosmopolitan Chicken, which livestock experts say is also a potential treasure trove of valuable genetic traits.

"We wanted to combine Ethiopia's new poultry research facility with Vanmechelen's fascinating art installation because he conveys the importance of the genetic diversity in livestock in ways that science alone simply cannot," said ILRI Director General Jimmy Smith. "By undertaking this work, we aim to develop productive, resilient poultry for a part of the world where demand for livestock products is rising rapidly and climate change is undermining agricultural productivity."

Debuting the world's "most intriguing" poultry facility, rich in culture and science
The opening of Incubated Worlds will feature an address by HE Professor Fekadu Beyene, Ethiopia's Minister for Livestock and Fisheries, in addition to remarks from artist Vanmechelen and ILRI Director General Smith. The art installation component of Incubated Worlds includes photographs, videos and books that provide insights into the complex genetics of both Vanmechelen's many generations of poultry and an indigenous Ethiopian village chicken. The genomes of both birds have been sequenced by scientists to study their wide variety of genetic traits. The scientists and artist say they want to give the public a greater appreciation of the importance of genetic diversity to the economy and well-being of the country.

"This is going to be the most intriguing poultry facility in the world," Vanmechelen said. "I see it as a place where people can immediately understand that this very global farm animal—one found in almost every country in the world and acceptable as food in every religion—is the product of many, many local communities. And if we don't maintain and value this cosmopolitan heritage, then we could lose it."

INCUBATED WORLDS
PRESS RELEASE

Vanmechelen's Cosmopolitan Chicken installations have been featured in major exhibitions in galleries from New York to London. As part of the Incubated Worlds facility in Addis, Vanmechelen has installed large chicken portraits representing the diversity and heritage of his Cosmopolitan Chicken. Just inside the entrance, visitors will find two of Vanmechelen's *Book of Genomes*. They include the genetic code, produced both in English and transcribed into Ethiopia's Amharic language, of the first Ethiopian chicken to have its genome sequenced and the DNA code of the 20th generation of the Cosmopolitan Chicken. The book displays are enhanced by two accompanying video installations at the facility depicting a multitude of people reading the Ethiopian chicken's genetic code in Amharic and that of the Cosmopolitan Chicken in a variety of other languages.

Breeding the Ethiopian African Planetary Community Chicken
In preparation for the Incubated Worlds installation, ILRI livestock geneticists Tadelle Dessie and Olivier Hanotte worked with the EIAR to import and hatch several of Vanmechelen's Cosmopolitan Chickens. These chickens will be crossed with indigenous breeds of chickens preferred by farmers in Ethiopia to create what Vanmechelen and his scientist partners are calling the Ethiopian African Planetary Community Chicken. Crossbreeding enriches the diversity of the local flock, helping strengthen poultry resilience and local food systems. This approach seeks to to broaden, replenish and conserve the genetic base of Ethiopian chickens.

"What we ultimately want through Incubated Worlds are chickens that have the genetic diversity they need both to survive devastating poultry diseases and to adapt to a changing climate all while still producing a lot of food for farmers," Dessie said.

"Every generation of his chickens seems to be healthier than the last, but they haven't been selected for productivity," Hanotte said. "Our challenge is now to incorporate this diversity in a chicken for Ethiopians that is also very productive."

Growing incomes and improving nutrition in Ethiopia
While ILRI hopes Incubated Worlds makes the subject of livestock diversity engaging and stimulating, the Ethiopian facility is also a response to food insecurity in the region. With new research demonstrating that just one egg a day can prevent stunting and enhance the brain development of young children, the poultry facility is a great opportunity to improve nutrition in Ethiopia. The work of this facility will support Ethiopia's ongoing fight to prevent childhood stunting, which has already been reduced by a third since 2010.

Meanwhile, in Ethiopia, Africa's second most populous state with one of the region's largest livestock sector, demand for milk, meat and eggs—for domestic consumption and export—is rising rapidly.

Part of the work at Incubated Worlds will involve bringing in farmer associations to study more efficient breeding practices and to learn about the latest improvements in feeding and raising chickens to help them develop and grow viable poultry businesses.

"Of all livestock, poultry production can be scaled up to meet household nutritional needs far more affordably and sustainably than other types of farm animals," said ILRI's Smith. "We want our poultry work in Ethiopia to serve as a model for how livestock can be a source of economic growth and propersity and a way to improve household incomes and nutrition that can be particularly beneficial for women farmers, who typically invest their earnings from poultry in feeding their families and educating their children."

INCUBATED WORLDS
SPEECH - JIMMY SMITH

Speech at the inauguration of the ILRI poultry research facility

26 April 2018, Addis Ababa, Ethiopia

Jimmy Smith, Director General of ILRI

State Minister
Excellencies
Esteemed heads of CGIAR research centres
Esteemed partners and colleagues
Distinguished members of the press,
Ladies and gentlemen
All protocol observed.

Thank you all for taking the time out of your busy schedules to be here today. We are honoured by the presence of so many dignitaries—including the members of the ILRI Board of Trustees—colleagues and close partners.

On behalf of ILRI Board, represented here today by the vice chair Elsa Murano, of ILRI management, scientists and myself personally, I would like to express our deepest gratitude to the government of Ethiopia and the senior government ministers and their representatives here today, and of course to the many dignitaries and officials of partner organizations. I would like to thank all of our partners and investors whose support has made this exciting new endeavour possible. I would also like to thank the Bill & Melinda Foundation, and all the donors and organizations globally finance our work through their contributions to the CGIAR system, whose investments will support much of the exciting work to be undertaken here.

ILRI is a CGIAR research centre, part of a global research partnership for a food-secure future. CGIAR science is dedicated to reducing poverty, enhancing food and nutrition security and improving natural resources and ecosystem services. Its research is carried out by 15 CGIAR centres—11 of which have offices here on this campus—in close collaboration with hundreds of partners, including national and regional research institutes, civil society organizations, academia, development organizations and the private sector. Each centre has its specific agricultural mandate. ILRI is the only CGIAR centre dedicated to livestock research for development.

INCUBATED WORLDS
SPEECH - JIMMY SMITH

Our poultry research is integral to ILRI's approach to developing and scaling up interventions to help millions of people across Africa and Asia secure better lives through livestock. We recognize the value of poultry diversity to enhance the supply of nutritious food and the need to conserve this diversity for future generations. We wish to help use, conserve and share the benefits of this diversity with Ethiopia and other countries across Africa and Asia to improve their poultry production and marketing in profitable and sustainable ways, strengthen their value chains and markets and reduce their risks to climate change and other shocks.

Demand for poultry products in Ethiopia, and indeed across Africa is rapidly rising. Increasing family poultry production, a cornerstone of Ethiopia's Livestock Sector Analysis, is a key to meeting this demand. Improved poultry genetics, breeding and feeding offer Ethiopia huge opportunities to transform backyard poultry farming into a thriving market-orientated businesses, providing nutritious food, raising incomes, generating employment and foreign exchange earnings.

Poultry is an excellent investment opportunity for Africa and in particular Ethiopia. More than 60% of the country's households already keep poultry. Chickens are relatively inexpensive to breed as they require little start-up capital and they grow quickly. The rapidly expanding poultry sector has the potential to strengthen the empowerment of Africa's women who are already heavily involved in these businesses. Poultry meat and eggs also directly supply nutrients essential for human diets, particularly for infants. Poultry litter is used to fertilize soils, increasing crop production and indirectly the well-being of households.

Our facility will help scientists in Ethiopia and elsewhere monitor, understand and apply genetic technologies to improve chicken breeds smartly and quickly. The research done here will complement our existing capacity to undertake genetic sequencing with a capacity to compare the performance and adaptability of chicken breeds in controlled environments and help the development of solutions for local farmers to overcome their production challenges.

The Incubated Worlds art exhibition clearly communicates the importance of poultry production, genetic diversity and the interdependence of communities worldwide. The facility contributes to the opportunity for Ethiopia to improve the productivity of local breeds and contribute to the global body of knowledge on genetic diversity to help communities elsewhere striving for sustainability. It will be a place of research, but also of learning and innovation for farmers, poultry businesses, associations, cooperatives and communities.

With that note in mind, ILRI is pleased to welcome you to the inauguration of this new ILRI poultry research facility on the occasion of the 49th ILRI Board of Trustees Meeting.

Statement at the inauguration of the ILRI poultry facility

Gebregziabher Gebreyohannes, representative of the government of Ethiopia

26 April 2018, Addis Ababa, Ethiopia

Excellencies
Distinguished partners
Ladies and gentlemen
Members of the press
All protocol observed,

I am pleased to participate in today's official inauguration of this distinctive new poultry research facility and thank you for the invitation.

This facility represents an important step in enhancing the fruitful collaboration between ILRI and research institutes in Ethiopia. Our work together has brought many positive benefits for the scientific community here in Ethiopia as well as globally and, importantly, for our farmers. For instance, the selective breeding of Horro chickens in Debre Zeit by scientists from ILRI and Ethiopian Institute of Agricultural Research (EIAR) helped more than double their productivity.

This facility will take this collaboration to a new level through its proposed engagement with poultry farmers. It provides a unique space for men and women poultry farmers to contribute to the breeding of improved chickens, and for them to learn about new technologies that will help improve their poultry productivity.

We are proud that the facility will not only host Ethiopian chickens and provide a quality research facility but that it also displays the first DNA sequencing undertaken of one of Ethiopia's indigenous birds; a wonderful illustration of collaboration between EIAR and ILRI. Being able to unpack the genetic code of indigenous chickens will significantly improve understanding and use of their genetic diversity to the benefit of our country. This knowledge will provide unique opportunities to understand, monitor and strengthen the resilience and productivity of these chickens in a sustainable manner. Smart genetics and breeding are key to unlocking the potential of the vast indigenous genetic diversity in Ethiopia.

The Ethiopia livestock master plan identified huge untapped potential in the poultry sector. With the improvements we are introducing in genetics, feed and animal health services, we project that poultry and egg production will grow by approximately 200% and 800% respectively over the next five years. This will take place, we believe, through the expansion of commercial and family poultry farming, in part through the introduction of improved chickens, like the Ethiopian African Planetary Community Chicken, which will be selected with farmers and scientists based on their knowledge and understanding of their circumstances.

Ethiopia has one of the largest livestock populations in Africa, contributing 40% to agricultural GDP. We have more than 55 million chickens and this figure is growing fast. Small-scale chicken production is an integral component of the livelihoods of most rural households in Ethiopia. Expanding poultry production is easier than for other livestock; poultry businesses requires little start-up capital and chickens grow more quickly than most other farm animals. And a more productive and dynamic poultry sector could be a source of economic growth and prosperity, particularly for women who are the principal owners of these businesses. More

nutritious and affordable poultry meat and eggs will also help our children improve their physical growth, micronutrient status and cognitive performance. We have made huge progress in reducing malnutrition in recent years and increased chicken and eggs consumption could play a crucial role in eliminating it altogether.

The poultry sector is also well positioned to contribute to Ethiopia's commitment to meeting the United Nations Sustainable Development Goals (SDGs), particularly eliminating poverty (SDG 1) and hunger (SDG 2), promoting health and well-being (SDG 3), achieving gender equity (SDG 5) and generating decent work and economic growth (SDG 8).

Crucial to achieving all these goals is the development of individual and institutional capacities in Ethiopia and the development of partnerships, particularly public-private partnerships (SDG 17).

Mindful that Ethiopia has also benefitted from the many capacity development activities provided by ILRI and its predecessor ILCA for many years, we are pleased to hear ILRI confirm its commitment to extending their training programs by using this facility to support the capacity development of the next generation of poultry scientists and farmers. With this new poultry facility and the ILRI-EIAR-Haramaya University partnership in the Bill and Melinda Gates Foundation-funded project, African Chicken Genetic Gains, which brings our scientists, farmers and business community together, I'm confident it is well positioned to help drive the realization of many SDGs not only in Ethiopia, but also in other countries in Africa and Asia.

INCUBATED WORLDS
SPEECH - KOEN VANMECHELEN

Statement at the inauguration of the ILRI poultry facility

Koen Vanmechelen, artist of Incubated Worlds

26 April 2018, Addis Ababa, Ethiopia

Incubated Worlds represents an ongoing artistic enquiry into co-existence of societies and species. It is also a much-needed scientific research project seeking to improve the livelihoods and nutritional outcomes of women and men smallholder farmers through the introduction of more sustainable poultry farming and business practices.

For nearly twenty years, I have crossbred iconic chickens of different breeds around the world to create a living work of art. My Cosmopolitan Chicken Project is a quest to increase diversity and to highlight the need for a balance between the local and the global. Today Incubated Worlds celebrates the next stage in the development of the Cosmopolitan Chicken Project.

In Ethiopia, it explores the ways in which biocultural diversity can contribute to the development of small-scale sustainable food systems in sub-Saharan Africa. The project will combine the greater resilience and artistic origin of the genetically diverse Cosmopolitan Chicken with the productivity and familiarity of the scientifically selected local strain. Together, these represent the merging of the global with the local, and the important balance between diversity and productivity. The resulting crossbred chicks will be known as Ethiopian African Planetary Community Chickens.

The ultimate aim of Incubated Worlds is to breed sustainable highly productive poultry stock able to help local communities in low-resource settings where the chicken is an important source of nutrition and income, but where disease-related and climatic challenges are commonplace. As women are primarily responsible for keeping chickens, the initiative is intended as a means of economically empowering women, a way of promoting greater gender equity.

This new facility honours the generosity of the local as a prerequisite for the existence of global diversity. It is a tribute to cross-disciplinary collaboration in solving some of the world's toughest challenges. In the service of Ethiopian farmers, Incubated Worlds combines art and science in pursuit of greater understanding of evolution, space to imagine the future and the capacity to realize the advancement of society.

INCUBATED WORLDS
SPEECH - KOEN VANMECHELEN

It is significant that Ethiopia is at the heart of Incubated Worlds, being the cradle of human civilization. Through Incubated Worlds, Ethiopia becomes the laboratory for a new balance. It is very apt that this exploration into the 'diversity of species' has returned to the 'source of human life', from where we left our nest and began to interact with the other.

Patron: Professor Peter C Doherty AC, FAA, FRS
Animal scientist, Nobel Prize Laureate for Physiology or Medicine–1996

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PRESS RELEASE

Honoring the beauty and value of diversity. Artist Koen Vanmechelen's Book of Genome added to the collection of the National Museum of Ethiopia.

ADDIS ABABA - Belgian artist Koen Vanmechelen and the International Livestock Research Institute presented 'The Book of Genome', to the National Museum of Ethiopia. Vanmechelen's artwork is part of the larger art-science installation "Incubated Worlds" that was inaugurated at the Addis Ababa campus of the International Livestock Research Institute on the 26th of April.

'Incubated Worlds' is an ongoing inquiry into co-existence of societies and species and a scientific research project that explores the genetic diversity of poultry in the service of Ethiopian farmers. Through Incubated Worlds, Ethiopia becomes a laboratory for a new balance. An exploration into the diversity of species is returning to the source of human life, from where we left our nest and began to interact with the other.

Vanmechelen: '*We are honored to present these artworks to the National Museum of Ethiopia. The Books of Genome celebrate the beauty of diversity, that originated here, in this part of the world. It honors the generosity of the local as a prerequisite for the existence of global diversity. It is also a tribute to cross-disciplinary and cross-cultural collaboration in solving some of the world's toughest challenges.'*

The two 'Book of Genome' artworks, developed using state of the art DNA-mapping technologies, present the diversity of artist Koen Vanmechelen's Cosmopolitan Chicken, carrying genetic diversity from more than 20 regions worldwide on one hand and the Indigenous Ethiopian Chicken on the other. They include the genetic code, transcribed into Ethiopia's Amharic language, of the first Ethiopian chicken to have its genome sequenced and the DNA code of the 20th generation of the Cosmopolitan Chicken. The letters in the book indicate every place where the genetic makeup differs from the reference chicken considered as standard, while the numeral indicate the number of DNA basis that are identical to those of the standard reference genome. The two artworks are always presented together, indicating the importance and interrelation of global and local.

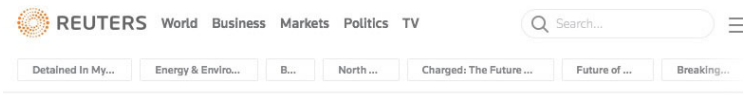
ILRI Scientific advisor Prof. Olivier Hanotte explains: *"These books are not simply a succession of letters, they are an encyclopedia of stories, they link Ethiopia, the cradle of civilization, visually and scientifically with the diversity that has developed throughout the world, they connect past and present and hold the potential for the future."*

Dr. Siboniso Moyo, ILRI's director general's representative in Ethiopia, highlights the importance of art and science coming together in this development: "*We hope that with this work, that is both art and science, we can contribute to understanding the history of diversity in Ethiopia. Art will help our people understand the true importance of indigenous diversity in Ethiopia. We believe that it is through art that the importance and potential of diversity can be brought to a larger audience. We hope that this work of art is an important contribution to raising awareness that we have to do what we can to maintain our diversity as we build the future".*

It is significant that these books find a home in the National Museum of Ethiopia, being the cradle of civilization and the home of Lucy; the world's most well-known fossil from the early hominids. Similar 'Book of Genomes' of the artist are currently on show at ZKM; center for Art and Media in Karlsruhe, Germany as part of the group exhibition 'Open Codes'.

Detail, Book of Genome, 2018 © Koen Vanmechelen

INCUBATED WORLDS
PRESS CLIPPINGS



BIG STORY 10 APRIL 26, 2018 / 4:02 PM / A MONTH AGO

Art and science marry in Ethiopia's quest for the perfect chicken

Thin Lei Win 3 MIN READ

ROME (Thomson Reuters Foundation) -

Source: af.reuters.com
Date: 04/26/2018 03:09:00 pm
Author: Thin Lei Win

Source: Hyperallergic
Date: 05/08/2018
Author: Sarah Rose Sharp

Source: The Daily Monitor
Date: 04/27/2018

Source: Hyperallergic
Date: 05/08/2018
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INCUBATED WORLDS
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NEWS

Nairobi scientists join partners in Ethiopia in quest for Africa's perfect chicken

FRIDAY, APRIL 27, 2018 17:05 BY REUTERS

A CHICKEN VENDOR IN KISII TOWN ON WEDNESDAY APRIL 25, 2018. FILE PHOTO | NMG

Rome

Researchers in Ethiopia are embarking on a quest to create the perfect chicken for African farmers.

They are with an unlikely ally - a Belgian conceptual artist who has spent 20 years crossbreeding indigenous chickens, from China and Egypt to Senegal and Cuba.

Incubated Worlds, a research and breeding centre in the capital Addis Ababa, will also house a permanent art installation showcasing the work of Koen Vanmechelen, including photographs, videos and books of chickens' genetic codes.

Source: www.businessdailyafrica.com
Date: 04/27/2018 08:05:00 pm

POULTRY WORLD

Menu

Genetics

News | Apr 30, 2018 | 1888 views | 3 comments

Art and science join forces to launch new poultry project

Scientists and artists are coming together in a unique initiative to launch a new poultry research project, breeding facility and arts installation in the Horn of Africa.

The new facility is bringing together art and science in a bid to develop disease-resistant, climate-resilient chickens to improve nutrition and boost income for farmers in East Africa.

It involves geneticist Dr Olivier Hanotte, from the University of Nottingham's School of Live Science in the UK working with Belgian artist Koen Vanmechelen on *Incubated Worlds*, an advanced facility based at Addis Ababa, Ethiopia.

Mr Vanmechelen has created over the past 2 decades 20 generations of chickens that combine traits from breeds around the world, including several from across Europe and the Americas, in addition to indigenous chickens from China, Egypt, Senegal, Indonesia and Cuba.

Source: www.poultryworld.net
Date: 04/30/2018 12:40:00 pm
Author: Tony McDougal

MENU Feedstuffs SEARCH LOG IN REGISTER

NEWS

New poultry facility in Ethiopia explores genetic diversity

Incubated Worlds in Ethiophia

Incubated Worlds poultry research and breeding facility explores genetic diversity of poultry to boost nutrition and incomes in Ethiopia.

May 01, 2018

Source: www.feedstuffs.com
Date: 05/01/2018 06:48:00 pm

WATTAgNet.com

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Mark Clements' view of the world poultry industry with a British twist.

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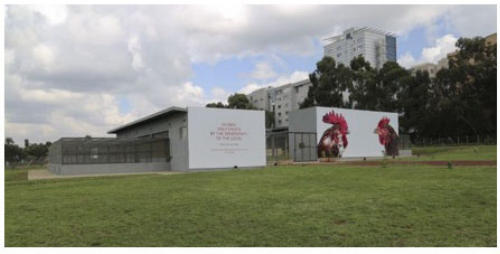
Poultry breeding center combines science and art



Courtesy of ILRI

Facility aims to respond to food insecurity and engage and stimulate local chicken farmers

Source: www.wattagnet.com
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Author: Mark Clements

KOEN VANMECHELEN
BIOGRAPHY

The Belgian artist Koen Vanmechelen (1965) is an internationally acclaimed conceptual artist. His work explores the importance of bio-cultural diversity, identity and community.

As a young boy, Vanmechelen had two unusual passions. Inspired by the local pastry chef, he took up cooking, and quickly came to see it as a form of alchemy and art. His other fascination was chickens. From the age of five, he continually kept a flock in his backyard. Vanmechelen later trained and qualified as a pastry chef himself, working in numerous Michelin star restaurants. But he never stopped working on his art. During this period, his early exhibitions comprised mainly figurative expressionist paintings and constructivist wooden sculptures of birds created in the basement of the restaurant where he worked.

Vanmechelen's art first gained worldwide recognition in the late nineties, with the launch of his Cosmopolitan Chicken Project (CCP) in which he cross-breeds domesticated chickens from different countries as an allegorical and aesthetic statement about the way in which diversity can shape the global cultural and genetic mix.

Twenty years on, Vanmechelen has presented his work on almost every continent and is a regular contributor to the Venice Biennale. He was a guest speaker at the World Economic Forum, the WHO and the World Expo in Shanghai. The artist's scientific collaborations have earned him numerous awards including the Golden Nica Hybrid Art award in 2013. His focus on social engagement has led to the establishment of several community-focused foundations. These foundations and projects are based in the artist's studio in Belgium, LABIOMISTA, meaning literally 'mix of life'. The 24-ha site, which includes an animal park, urban farming lots and an educational and research center alongside the studio, is a living laboratory exploring how culture, nature and humanity might achieve a more sustainable balance.

Vanmechelen's latest Planetary Community Chicken project, supported by the MOUTH Foundation, promotes art, story-telling, entrepreneurship and 'beyond the lab' research into the impact of bio-cultural diversity on food, health, society, livelihoods, and the environment.

The project centers around the introduction of the CCP chicken to local flocks. The coupling of the genetic diversity of the CCP with the productivity and familiarity of the local commercial chicken seeks to create a resilient, adaptable and productive chicken better able to support the communities of our planet. The aim is to question one of the main outcomes of modern poultry farming whereby flocks have become genetically impoverished and susceptible to disease due to industrialization and inbreeding.

With his projects, Koen Vanmechelen brings together art, science and communities in the search for a more sustainable balance. In Zimbabwe and Detroit, a series of urban art exhibitions by Vanmechelen preceded the introduction of the Planetary Community Chicken to farms in rural and peri-urban communities. During the exhibitions, communities, village leaders, city dwellers, artists and academics alike were all encouraged to work together to explore the themes of diversity and sustainability in both food systems and society.

In Ethiopia, Vanmechelen's work is supporting the African Chicken Genetics Gains Project (ACGG), a three year collaboration with the International Livestock Research Institute (ILRI), backed by the Bill & Melinda Gates Foundation. As part of its research into identifying a sustainable, high productivity, low-input chicken strain for Sub-Saharan Africa, an ACGG selected strain is being cross-bred with the CCP. Over 2500 household farms are included in ILRI's research, where families benefit from being able to eat and sell the resulting eggs and meat.

For more information
www.koenvanmechelen.com

CCPPCC

Belgian artist Koen Vanmechelen (b. 1965) believes that art is a vital aspect of society and core to creating vibrant and healthy communities. His wide-ranging creative practice marries exceptional artistry, technological experimentation, and scientific research. Internationally renowned, Vanmechelen is best known for his ongoing Cosmopolitan Chicken Project (CCP), which he first launched in 1999 to explore cultural and biological diversity. A crossbreeding program – through which the artist breeds chickens from around the world – CCP fosters a dialogue on national identity and the interdependence of different cultures, species, and the environment.

WHY THE CHICKEN?
It is little known that the world's many chicken species are descended from the Red Junglefowl, a bird that lives at the foot of the Himalayas. Humans took this bird and bred it around the world, creating different indigenous breeds that reflect the cultural characteristics of their regions and communities. Over time, though, these breeds risk becoming too isolated, and their gene pools too narrow to remain sustainable. This may lead to some birds becoming entirely infertile. CCP asked a simple question: What would happen if these regional birds were crossbred? Today, the Cosmopolitan Chicken carries aspects of DNA from 23 different international breeds. With each successive generation, the Cosmopolitan Chicken has become more resilient. It lives longer; is more fertile; is less susceptible to disease; and exhibits less aggressive behavior.

COMMUNITY ENGAGEMENT
In 2016, Vanmechelen launched the Planetary Community Chicken (PCC) as a response to the positive outcomes of the CCP and as a means of activating his art in the community. The project focuses on bringing new, healthier chickens to the world's communities, and emphasizes the importance of local, small-scale community farming for long-term sustainability.

Modern poultry flocks have become genetically impoverished due to industrial farming practices. PCC couples the genetic information of local chickens with the newest Cosmopolitan Chicken. The introduction of a new 'global gene' to the local flocks breaks the cycle of genetic erosion that can result from local inbreeding and industrial monocultural production. The desired outcome is to breed a stronger chicken that lives longer, and that, as a result, could offer longer-term economic and social stability to farmers. Through this process, Vanmechelen connects the global aspects of CCP with local heritage and experience, underscoring that to achieve success – both in terms of biologic sustainability and social understanding – the local and the global must work together. Partnerships are active in Genk (Belgium), Harare (Zimbabwe), Detroit (USA) and Addis Ababa (Ethiopia).

THE BIG PICTURE
CCP is a lens into human culture. It offers new perspectives on ideas of individuality and globalization. Vanmechelen explores these broader philosophical concepts through his photography, painting, sculpture, and mixed-media installations, questioning the future of our communities and ourrelationships to the world around us. By bringing together art and science, and considering both past and present, Vanmechelen introduces a remedy against a future cultural and biological bottleneck.

The incredible results from CCP have also sparked new explorations into biocultural diversity. In 2019, Vanmechelen opens LABIOMISTA, a 24ha evolving artwork, in the citu of Genk, which will support the continued study of the relationships between animal, human, and environment.

Open Global Farm, PCC, Harare (ZW)

PCC eggs from the Open Global Farm, Detroit (USA)

Playing Chicken With the Art World

A Belgian artist crossbreeds fowl to explore ideas of globalization and identity. And for the eggs.

By HILARIE M. SHEETS

Visit the exhibition by the Belgian artist Koen Vanmechelen in Detroit this fall and you may never think about chickens the same way again — if you think about them much at all.

You may never think about art the same way, either.

During the past 20 years, Mr. Vanmechelen has gained attention with his Cosmopolitan Chicken Project. He has continually crossbred chickens from different nations to create a hybrid that is ever more robust in health and spectacular in physical attributes. This was not just for the sake of the chickens, though they do roam on a farm in Meeuwen, near the artist's studio in Hasselt, Belgium. He shows his chickens in museums and galleries as living art, alongside paintings, photographs, sculpture, video and installations that explore ideas of cultural, biological and aesthetic diversity.

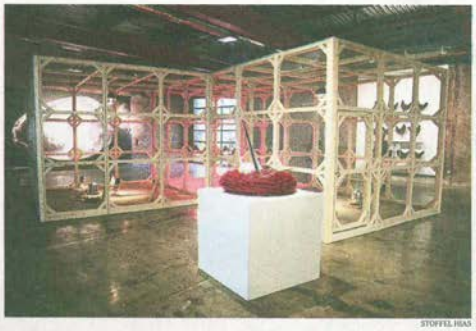
His chicken art project has been seen worldwide, including in Shanghai, Beirut and Havana; he has participated in three Venice Biennales, most recently in 2015.

Now, in his largest exhibition in the United States, Mr. Vanmechelen has teamed with Wasserman Projects in Detroit to showcase his art and also to take the concept much further (in a way that will become clear in just a moment). In the high-end world of fine art, this is definitely fringe. But he and his admirers view it as a crucial crossroads where art meets life.

"The chicken is such a strong metaphor," said Mr. Vanmechelen, 51, who developed a rapport with the bird at 5, when his uncle gave him chicks and an incubator. "Anthropologically, it tells something about humans and mirrors how humans spread all over the world," he said. "This work opens up discussions about globalization, multiculturalism and genetics."

In "Energy/Mass," on view through Dec. 17, a chicken coop installation hosts a Mechelse Cemani rooster — what the artist calls the 19th generation of his Cosmopolitan Chicken, and that he created by sequential matings of 18 international breeds. The Mechelse Cemani is commingling in one section with American Wyandotte hens, named for a Native American tribe that once populated the lower Great Lakes.

Their offspring make up the 20th generation of the Cosmopolitan Chicken, what Mr. Vanmechelen calls the Mechelse Wyandotte, on view in another part of the coop. Surrounding the animals are mixed-media works by the artist, including a family tree of the Cosmopolitan Chicken.



STOFFEL HAS

Until now, Mr. Vanmechelen's chickens have been raised solely as art. They die natural deaths, and then some are transformed by taxidermy into sculptural objects, as in the rooster poised at the hilt of a 12-foot-long steel sword at the entrance to the Detroit show. But the artist and the gallery's founder, Gary Wasserman, wondered how they could justify taking chickens only as art to Detroit, a city of such enormous economic and nutritional need.

Addressing these real-life issues, they have started a collaboration, the Planetary Community Chicken, a mating of the 20th-generation Cosmopolitan Chicken with an industrial hen to produce food for sale.

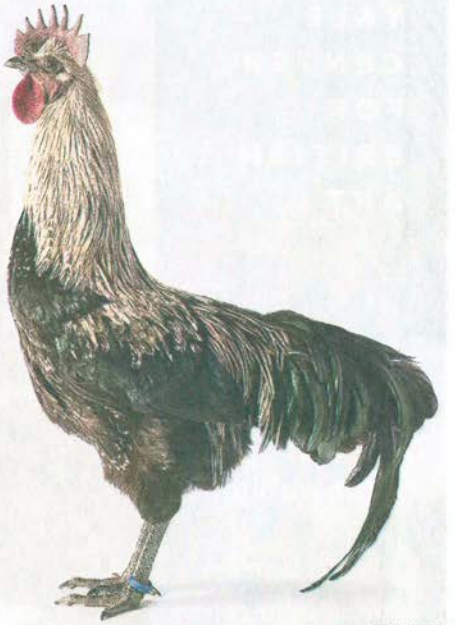
Some of their chicks are running around a pen in the backroom of the gallery and will start producing eggs next spring in their future home at the nearby Oakland Avenue Urban Farm. It is one of some 1,400 agricultural ventures that have sprung up in the empty lots of Detroit, where foreclosed homes have been torn down. "We're taking the installation project and delivering it into the hands of the community, where we're actually doing something that is not a token activity," Mr. Wasserman said. "It is art meeting agriculture meeting science meeting social science meeting economy."

William and Jerry Hebron, the married couple who run the farm and sell food to their neighbors from their backyard, as well as at farmers' markets, have never dealt with livestock but were game to try. "It's another way of making money for us, and the community is going to love it," said Mr. Hebron, who helped his wife start the farm in 2008 because the area "didn't have a place to buy a tomato or cucumber."

Will the Planetary Chicken lay good eggs? Olivier Hanotte, a livestock geneticist and professor at the University of Nottingham in England, said, "It will, of course, and I hope Koen will give me some to taste."

For several years, Mr. Hanotte has used genetic samples from the artist's birds for his research into the diversity of local chickens versus wild ones. With the Cosmopolitan Chicken's more diverse immune system, "we can predict they will be better fit to respond to a large spectrum of pathogens," he said. "Inbreeding is never good when you're talking about disease resistance."

Mr. Vanmechelen has achieved what scientists have not, he added. "This continuous experiment, doing years and years of breeding, would have been impossible to put into practice in a world where scientific grants run from three to five years at the most," he said. "Koen wasn't constrained by those things." In 2011, Mr. Vanmechelen founded the Open University of Diversity, which invites specialists from different fields to exchange ideas.



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Jill Silverman van Coenegrachts, former managing director of the Lisson Gallery in London, discovered Mr. Vanmechelen during his first living art installation in 2000 at Storm Centers in Watou, Belgium, for which he crossbred the Mechelse Koekoek, native to Belgium, with the French Poulet de Bresse. She then arranged for him to breed this first-generation Cosmopolitan Chicken with the English Redcap in an exhibition at her gallery that year. "Koen doesn't see the borders between anything," she said.

In 2014, Ms. van Coenegrachts, now an independent curator, took Mr. Vanmechelen's work back to London in "Darwin's Dream" at St. Pancras Church. There, along one corridor, she installed a kind of fashion show of blown-up portraits of generations of the Cosmopolitan Chicken. "You were confronted with very beautiful six-foot-tall chickens looking at you in the eye, the way a chicken looks at another chicken," she said. "Koen's work creates a big shift in your head, in how we position ourselves with other things that are alive around us."

A Metaphor!

Above left, an installation view of the Belgian artist Koen Vanmechelen's "Energy/Mass," at Wasserman Projects in Detroit. Above, one of his special chickens and clucking metaphors, a Mechelse Wyandotte.

Article in the New York Times on the Cosmopolitan Chicken Project, OCT 30, 2016 p. 26. Read online; https://www.nytimes.com/2016/10/30/arts/design/playing-chicken-with-the-art-world.html