

## **Inga Foundation Awards & Recognition**

2020 Winner of World Economic Forum Sustainable Development Summit—Trillion Tree Challenge—1 of 3 worldwide:

<https://www.weforum.org/agenda/2020/09/3-innovations-leading-the-fight-to-save-our-forests/>

2019 Ray C. Anderson Foundation's NextGen Committee Award for Sustainability--\$100K Award [https://www.csrwire.com/press\\_releases/43208-Ray-C-Anderson-Foundation-s-NextGen-Committee-Awards-100-000-Grant-to-Inga-Foundation](https://www.csrwire.com/press_releases/43208-Ray-C-Anderson-Foundation-s-NextGen-Committee-Awards-100-000-Grant-to-Inga-Foundation)

Speaker at Royal Botanic Gardens, Kew--State of the World's Plants and Fungi Symposium-panel of international experts begins at hour 1- (October 15, 2020)

<https://www.youtube.com/watch?v=pgtanYpAfz0&feature=youtu.be>

Semifinalist for May 2020, Vittel and Ashoka's Act for Biodiversity Challenge

MIT 2018 contest finalist in "Exploring Synergistic Solutions for Sustainable Development 2018." <https://www.climatecolab.org/contests/2017/exploring-synergistic-solutions-for-sustainable-development/c/proposal/1334315>

2018 Top 100 Finalists for Katerva Award



<http://www.katerva.net/assets/images/2018%20Award%20Press%20Release%2007.06.18.pdf>

October, 2016--Inga was selected as one of three finalists for the Energy Globe Awards in the Earth Category <https://www.energyglobe.info/en/2196/>

Global Landscapes Forum—2018 Landscape Hero Competition-Mike Hands selected as 1 of 22 world-wide <https://events.globallandscapesforum.org/bonn-2018/landscape-heroes/entry/661/>

IFOAM Grand Prize winner 2017-The OFIA Grand Prize (\$10,000 US) was awarded to Mike Hands, the Founder and Director of the Inga Foundation for Inga Alley Cropping <https://www.organicwithoutboundaries.bio/2018/04/19/innovation-burn-agriculture/>

Finalist in 2018 WAF (Water Air Food Award) competition (1 of 5 in world-wide competition) <http://wafaward.org/polling/>

Finalist for the Mohammad Bin Rashid Initiative for Global Prosperity-Dubai, 2019 <https://makingprosperity.com/news-updates/MTg%253D>

Presenter at Harvard University's 2<sup>nd</sup> annual 2018 Planetary Health Annual Meeting in Edinburgh, June 2018. <https://planetaryhealthannualmeeting.org/side-sessions-registration/>

MIT Climate Co-lab finalist (1 of 6 in world-wide competition) for Carbon Reduction, 2017 [https://solve.mit.edu/articles/meet-a-solver-michael-hands-inga-foundation?utm\\_source=Solve+at+MIT&utm\\_campaign=64fbc7000-EMAIL\\_CAMPAIGN\\_2017\\_06\\_13&utm\\_medium=email&utm\\_term=0\\_4666f81b4b-64fbc7000-154481093](https://solve.mit.edu/articles/meet-a-solver-michael-hands-inga-foundation?utm_source=Solve+at+MIT&utm_campaign=64fbc7000-EMAIL_CAMPAIGN_2017_06_13&utm_medium=email&utm_term=0_4666f81b4b-64fbc7000-154481093)

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Mike Hands, Finalist, 2014, The St. Andrews Prize for the Environment from ConocoPhillips: [www.youtube.com/watch?v=ytP8upvPASs](http://www.youtube.com/watch?v=ytP8upvPASs)

*Permaculture Magazine UK*--Inga Foundation shortlisted in Top 20 in their first 2018 World Competition of programs that clearly demonstrate how the practical application of permaculture can change lives/alleviate poverty/regenerate landscapes and communities-Oct. 2018 edition.

Lush Fresh Handmade Cosmetics 2018 Prize Finalist (one of 53 world-wide) - [www.treehugger.com](http://www.treehugger.com)

Selected to participate in the Innovators' Exhibition at the Science, Technology, Innovation Forum (STI Forum) and related events at the United Nations, 4-7, June 2018 (interview at our kiosk in the UN Visitor Lobby is on our Facebook page-Inga Foundation USA)

Food Tank article.-118 Organizations to Watch in 2018 (Working toward a More Sustainable Food System) <https://foodtank.com/news/2017/12/118-organizations-to-watch-in-2018/>

The UN Committee on World Food Security Conference (CFS 44) held at FAO in Rome in October, 2017. Mike Hands invited to speak at side session.

Mike Hands' assistance with planning/seed sourcing/installations with Eden Project (Horticultural Specialist Lucy Wenger- [Lwenger@edenproject.com](mailto:Lwenger@edenproject.com)) facilitating a million visitors a year to appreciate the rich diversity of a rainforest biome.

In January 2013 Inga was honored to receive special, consultative status from the United Nations to attend meetings of the Economic and Social Council and issue statements. <https://www.un.org/press/en/2013/ecosoc6552.doc.htm>

Regeneration International fall newsletter—interview with Mike Hands [https://regenerationinternational.org/2019/09/11/the-inga-foundation-changing-lives-in-a-revolutionaryway/?utm\\_medium=email&utm\\_source=engagingnetworks&utm\\_campaign=RI+Sept+Newsletter+&utm\\_content=RI+September+Newsletter+11:10:57](https://regenerationinternational.org/2019/09/11/the-inga-foundation-changing-lives-in-a-revolutionaryway/?utm_medium=email&utm_source=engagingnetworks&utm_campaign=RI+Sept+Newsletter+&utm_content=RI+September+Newsletter+11:10:57)

The Women and Gender Constituency shortlisted Inga Foundation as a nominee for the Gender Just Solutions Award-showcased in their Gender Just Climate Solutions Publication, disseminated during the COP24 in Katowice, Poland in December 2018, and published on the websites of the Women and Gender Constituency ([www.womengenderclimate.org](http://www.womengenderclimate.org))

### **Recognized by regional governments for specific policy inclusion:**

1. At its session in Guatemala City in February, 2016, the Central American Parliament (PARLACEN) debated and passed a resolution recognizing the work Mike Hands and the Inga Foundation, together with the underlying Research and Development carried by the University of Cambridge and CURLA. Resolución AP/3-CCLXXV-2016.
2. Inga Foundation's Guama Model has been included in the strategic plan drawn up for the Honduran Government by the President's Commissioner for Climate Change policy, Dr. Marlon Escoto: Forests, Soil and Water. 2017.

## **Inga Foundation Awards & Recognition**

3. Inga Foundation's Guama Model (Inga Alley Cropping) cited in the World Conservation Congress Resolution: WCC-2012-Res-104-EN: Food Security, Ecosystem Restoration and Climate Change. WCC-Jeju South Korea. September 2012.

CALLS ON the Director General, the IUCN Commissions, Members and Council; especially within the equatorial belt, to use available resources as well as any others that can be raised, to strengthen the work on food security, ecosystem restoration and the promotion of traditional, indigenous practices for managing natural resources, as follows:

- a. Establishing the current situation and trends for expansion of the agricultural and logging frontier in countries of the equatorial belt, using satellite technology and other available technologies to create the corresponding maps, to reveal the seriousness of the deforestation and environmental degradation is; and
- b. Defining the impact of the expansion of deforestation on indigenous peoples territories, with special focus on their land rights;

2. RECOMMENDS that the Director General and the IUCN Commissions, Members and Council, especially within the equatorial belt, begin to take action on a community level with a global vision regarding:

- a. The establishment of land-use planning in areas where deforestation is expanding, defining the potential use of the land and the integrated management of micro-basins;
- b. The establishment of initiatives for food security and land and ecosystem restoration bearing in mind the Guama Model, and other similar models; and
- c. To establish the management of water-supplying micro-basins; and

3. URGES the Director General and the IUCN Commissions, Members and Council, especially within the equatorial belt, to establish alliances with governmental and non-governmental institutions, and with international cooperation, to become more effective in terms of results, using impact indicators in the drive for sustainable food security, the restoration of natural ecosystems and the use of traditional practices for managing natural resources and the protection of the lands inhabited by indigenous peoples.

Sponsor:

La Asociación para el Desarrollo de la Mosquitia- Moskitia Pawisa Apiska- MOPAWI, Honduras

Co-sponsors:

Centro para la Investigación y Planificación del Desarrollo Maya SOTZ'IL, Guatemala

Fundación Hondureña de ambiente y desarrollo- Vida, Honduras

Comité para la Defensa y Desarrollo de la Flora y Fauna del Golfo de Fonseca, Honduras

Fundación para el Desarrollo Integral del Hombre y su Entorno- CALMECAC, Guatemala

Asociación Conservacionista de Monteverde- ACM, Costa Rica

### **Videos/Articles**

<https://vimeo.com/312129881> 2-MINUTE Vimeo-Transforming Lives & Landscapes-The Inga Tree Model

<https://vimeo.com/358993031> 10-MINUTE Vimeo-Transforming Lives & Landscapes-The Inga Tree Model

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<https://royalsocietypublishing.org/doi/10.1098/rsos.201204> The search for a sustainable alternative to slash-and-burn agriculture in the World's rain forests: the Guama Model and its implementation Published:17 February 2021

<https://www.youtube.com/watch?v=EYGWwz23oUU> Inga Alley Cropping Training manual created and made available online

<https://www.ecowatch.com/save-rainforests-2646374638.html?rebelltitem=3#rebelltitem3>  
EcoWatch by Yale Climate Connections July 9, 2020

Mike Hands /Inga Foundation article in Regeneration International newsletter  
[https://regenerationinternational.org/2019/09/11/the-inga-foundation-changing-lives-in-a-revolutionary-way/?utm\\_medium=email&utm\\_source=engagingnetworks&utm\\_campaign=RI+Sept+Newsletter+&utm\\_content=RI+September+Newsletter+11:10:57](https://regenerationinternational.org/2019/09/11/the-inga-foundation-changing-lives-in-a-revolutionary-way/?utm_medium=email&utm_source=engagingnetworks&utm_campaign=RI+Sept+Newsletter+&utm_content=RI+September+Newsletter+11:10:57)

<https://thehill.com/changing-america/sustainability/environment/477607-what-if-you-could-rescue-landscapes-that-haveen>

<https://www.resilience.org/stories/2020-05-12/agroforestry-land-restoration-technique-improves-food-security-in-honduras/> May 12, 2020

<https://forestsnews.cifor.org/64178/agroforestry-land-restoration-technique-improves-food-security-in-honduras?fnl=en> CIFOR Feb. 20, 2020

<https://www.foodnavigator-latam.com/Article/2020/04/06/Planting-trees-to-grow-food-Inga-cropping-provides-food-security-for-farmers-and-organic-crops-for-industry> April 6, 2020

<https://revitalization.org/article/seeking-to-leave-honduras-a-desperate-man-instead-learns-how-to-revitalize-his-farm-restore-the-environment/> Feb.15, 2020

<https://www.greenmatters.com/p/what-is-alley-cropping> Nov. 6, 2020

# Meet a Solver: Michael Hands, Inga Foundation

June 13, 2017



**DR. ALEXANDER DALE**

Senior Officer, Sustainability Community



**FRANCESCA EREMEEVA**

Solve Intern



You've probably heard of slash-and-burn agriculture and its impact on the world's tropics. The Solver we're profiling this week is working toward a more sustainable solution for tropical family farms.

Michael Hands and the Inga Foundation are providing an alternative to slash-and-burn that keeps each family's land healthy, produces higher-value crops every year, and helps keep significant amounts of carbon stored in tropical soils in Latin America and Africa.

or someone you know can apply to help solve our global challenges on [Sustainable Urban Communities](#); [Brain Health](#); [Women and Technology](#); or [Youth, Skills, and the Workforce of the Future](#).

## MICHAEL HANDS'S STORY

### **Q: Tell us your story: How did you first become interested in the work you do?**

I was dismayed by the devastating impact that centuries of slash-and-burn subsistence agriculture has had in the world's tropics. I was in near-disbelief while a Researcher at the University of Cambridge when I found that science could not fully explain the underlying ecology of the process—nor could it indicate a way out of the problem.

### **Q: Did you have a turning point moment that inspired you to think differently about your work?**

There was a growing weight of evidence that certain plant nutrients could be the key to understanding the loss of soil fertility that prevents farmers' attempts to take more than one or two crops from a slash-and-burn site. Breakthroughs in the ecology of soil phosphorus in my laboratory in Cambridge, UK, cleared away confusion and contradiction in the literature and opened the way to a promising set of field trials. These upheld the original hypotheses and led to the alternative agricultural system, in place of slash/burn, that Inga Foundation is now promoting.

### **Q: Tell us about your background—professionally, personally, or as a team.**

Until 1984, I worked as a Topographic Surveyor on improving projects in many developing countries. Since 1988, I've been a Tropical Ecologist specializing in the ecology of tropical rain forests and in the ecology of slash-and-burn agriculture. I am the Founder and Trustee of Inga Foundation and Director of its Land for Life Program in Central America. Our teams in Central America are led by local foresters and agronomists who have extension assistants trained by them on our demonstration farms.

To roll out a revolutionary and highly successful rural livelihood based on the food security provided by the proven agroforestry system developed by the Cambridge projects. This is called Alley Cropping (Inga A-C) with nitrogen-fixing trees of the tropical genus Inga.

### **How are you trying to solve it?**

By the slow and painstaking introduction of the complete model based on the above system. The “Guama Model” provides food security in basic grains grown in the Inga A-C system; cash-crops grown in the Inga A-C system; tree crops associated with more widely-planted Inga as shade and source of natural Nitrogen; reforestation with tropical broadleaf timber trees. Reforesting tropical regions also leads to large carbon uptake into both soil carbon and the trees themselves—the recently released Drawdown project put tropical forest reforestation as the 5<sup>th</sup> best out of 100 approaches in terms of potential carbon dioxide reductions.

We started by recruiting 40 families in 2012, and now have 240 families in various stages of adoption, including fully implementing our methodology—the Inga system.

### **Tell us a story! Who will your solution impact?**

Think of Martin Garcia in the Cangrejal valley of northern Honduras. Martin supports a family of about 12 individuals; of various generations. His inherited land had a history of repeated slash/burn episodes over 100 years. He described the soil as “esteril” (sterile) until the Inga system restored it. Prior to taking maize, beans, tomatoes, and Cacao from the Inga system, he says that he would earn about \$6 per day as a “peon” manual laborer for three to four days per week, and spent the remaining time struggling to produce anything on his own land. He says the system has transformed his life: “from peon to producer.” He now has his own autonomy. This story is being repeated, with variations, for more than 200 families.

## **BECOMING A SOLVER**

**What do you think the Solve community can uniquely bring to solving your**

to present the phenomenal, game-changing promise of this model to an audience capable of funding its acceleration and expansion across wide swathes of the humid tropics.

### **What's the challenge that you think Solve should take on next?**

A global campaign to publicize (repeatedly and widely) the solutions it has so admirably supported.

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#### RELATED CHALLENGE

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**SOLVE**

at **MIT**

ANNUAL FLAGSHIP MEETING

MAY 8 - 10, 2017

[SEE EVENT DETAILS](#)

# INGA ALLEY CROPPING - A SUSTAINABLE ALTERNATIVE TO SLASH AND BURN AGRICULTURE

Mike Hands

GRAND  
PRIZE  
WINNER  
2017

## INNOVATION

Inga Alley Cropping is a promising alternative to slash and burn agriculture developed by Inga Foundation's Director, Mike Hands, based on the insights gained through over a decade of research into slash and burn farming in partnership with Cambridge University.

This cropping enables maintaining soil fertility and good harvests year after year, thereby breaking the cycle of slash and burn and allowing families to gain long term food security on one piece of land.

### MIKE HANDS



Inga Foundation Founder and Director Mike Hands has been working to halt the destruction of the rainforest for over 20 years. An experienced tropical ecologist and scientific researcher, Mike divides his time between his farm

in Cornwall, UK, and the Inga Foundation's chief project, the Land for Life Project in Honduras.

**CONTACT:** Mike Hands, Higher Penhale, Lostwithiel Cornwall PL22 OHY, UK. **Web:** [www.ingafoundation.org](http://www.ingafoundation.org), **Email:** [mhands400@btinternet.com](mailto:mhands400@btinternet.com)

## DESCRIPTION

Once the alleys of Inga trees have developed, they are pruned at chest height. At this stage, they have dominated the site and shaded out the weeds. The branches are stripped of leaves and used as mulch, thus protecting the soil and preventing further weed growth. The crop is then planted through the mulch into the pruned alleys. No herbicides or pesticides are needed. The pruned Inga tress recovers and regrows, providing the crop with some shade and protection from the sun.



Chili tabasco growing between pruned Inga tree alleys

Once the crop is harvested, the Inga is then left to grow until the next planting season arrives, by which time they have fully recovered and the whole cycle is ready to be repeated, starting with pruning the Inga alleys once more.

## RELEVANCE

This system delivers huge benefits through ensuring a reliable harvest year after year from the same plot of land with minimal labor required. By recreating the conditions naturally found on the forest floor, Inga out-competes the aggressive invasive grasses which normally dominate the farmers' plots. This biological weed control is hugely important as without it securing a harvest can require a huge amount of labor in terms of weeding per year. In fact, it is often the combination of the takeover by weeds, as well as the loss of fertility, that forces farmers to abandon their plots and clear new areas of forest.



Growing black pepper, plantains and curcuma

Larger branches are used as firewood, allowing families to obtain all the wood they need for cooking from the Inga plots and thereby tackling another important cause of deforestation.

The farmers are now successfully growing perennial crops like plantains, curcuma, black pepper in the Inga allee farmlands.