Greenboard

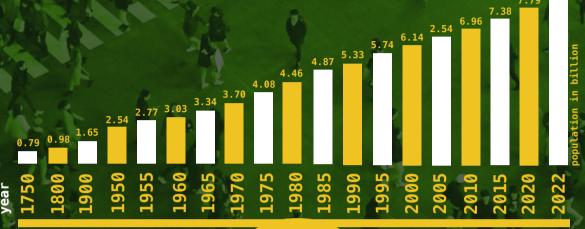
1ssue **02**

I eat everyday, does the food crisis even exist?





are we in a crisis?



BILLION world population

14th November 2022, we were informed that the world population has reached 8 billion people!
In just two years, the number of people facing, or at risk of, acute food insecurity increased from 135 million in 53 countries pre-pandemic, to 345 million in 82.

Food crisis occurs when rates of hunger and malnutrition rise sharply at local, national, or global levels. Food scarcity that occurs in an area due to the following factors:

The larger the population the higher the need for food. Meanwhile, agricultural land may be reduced.



What is the Solution?
Find the answer in this Greenboard!

"

The war in Ukraine is inducing a three-dimensional crisis: food, energy and finance, with devastating impacts on the world's most vulnerable people, countries and economies."

António Guterres Secretary-General of the United Nations

Myth vs Reality

Cultivating suboptimal lands, including peatlands, as one of the solutions to fight against the food crisis.

but they say: while data said: Only Indonesia uses peatlands for agriculture peatlands are used for agriculture peat forests Peatlands for farmers are the The top 4 factors of the main largest source of GHG emissions in sources of global agricultural global agriculture greenhouse gas emissions... rice co cultivation 11% enteric fermentation 15% synthetic fertilizer 43% 16% manure left on pasture Data Source 1. Wet International (2008) 2. FAO (2013) **Joni** TJF Avatar

content

1	Are we in a Crisis?
2	What is Food Crisis?
3	Myth vs Reality
7	Roadmap
3	Movie Recommendation for Food Enthusiast
4	Joni's Comic: A Day in Our Life
5	Expert Says: Connecting with nature to Build Food Self-sufficiency
6	Meet the Intern: What do I think when they talk about food crisis?
21	TJF at External Events
23	#TellYourStory
24	Campus Visit
25	Meet the Team

In the age of plenty, why do people die from hunger?





l eat everyday, does the food crisis even exist?

11 Kedaireka goes to Pulau Burung



ulau Burung

If I feed my own, do I feed the world?

19

From peatland to our plate



In the age of plenty, why do people die from hunger?

Even if we safely eat everyday without worry, history gives us a hint that food crisis is always in our backdoor. In our daily life, we barely ever hear the news about people dying from hunger and malnutrition. With the growing economy and technology, we can just buy food casually while in different parts of the world people are struggling to bring food to their tables. In fact, Indonesia has always been facing a high rate of stunting due to malnutrition.

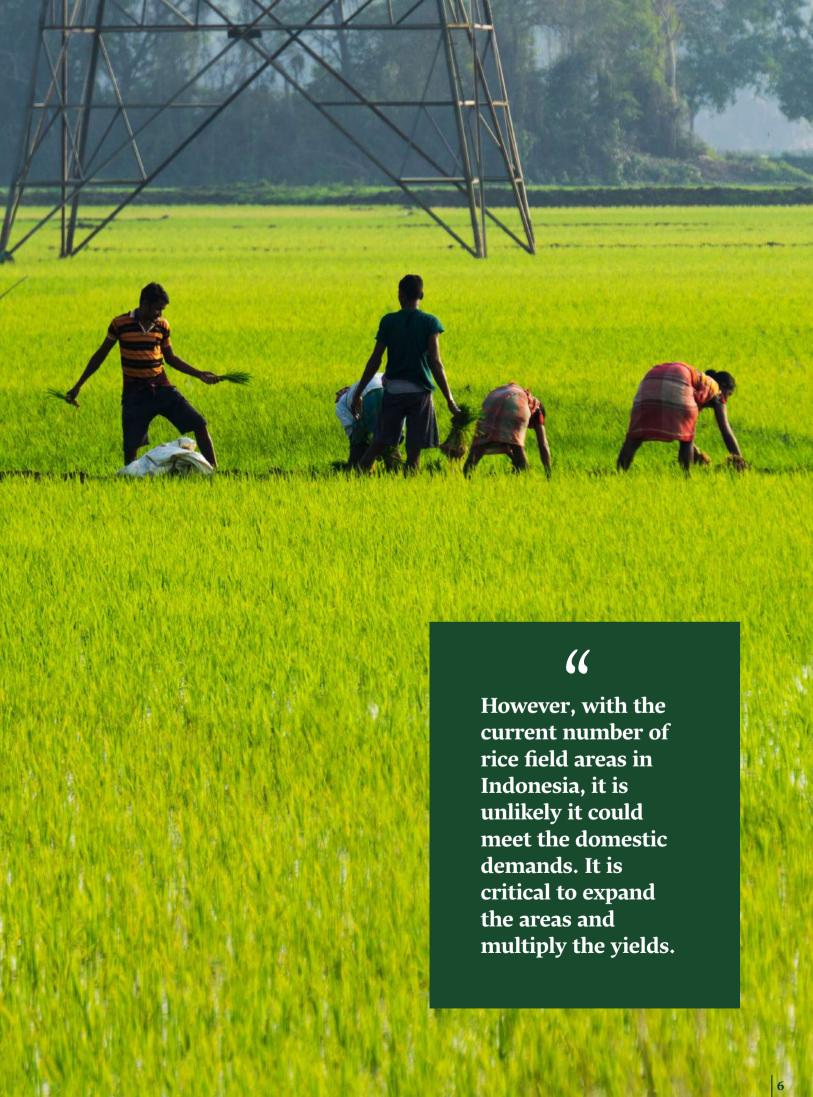
Historically speaking, Indonesia had experienced food shortages that severely affected the people lives in the 1960s. After that, our food policy was designed to achieve food self-sufficiency, especially on rice commodities. However, with the current number of rice field areas in Indonesia, it is unlikely it could meet the domestic demands. It is critical to expand the areas and multiply the yields.

Although in 2012 the United Nations stated that our existing food production is enough to feed ten billion people, the COVID-19 pandemic and Russia-Ukraine war showed us how fragile the global food system is. These two events highly disrupted the global supply chains. They affect panic-buying, supply scarcity, and even severe starvation. We still experience the adverse impact until today, especially the Indonesian farmers that depend on fertilizer import from Russia.

Then, how about our future?

A report from the Food and Agriculture Organization of the United Nations (FAO) stated that the number of malnourished people in Indonesia is around 22 million people. Solving our food security by relying on a global food supply chain is not wise for archipelagic countries like us. locally Developing sourced food improving our food sovereignty, diversifying and not depend on rice as staple food, and utilizing suboptimal land as productive agriculture, are the answers to prevent hunger in the age of plenty, especially for our beloved country, Indonesia.

Tay Juhana Foundation exists with a dream to provide food for humanity. With the abundant resources of suboptimal lands, we can work together to secure our future from the food crisis.











2018 CONDUCTING RESEARCH

and Innovation





EDUCATING

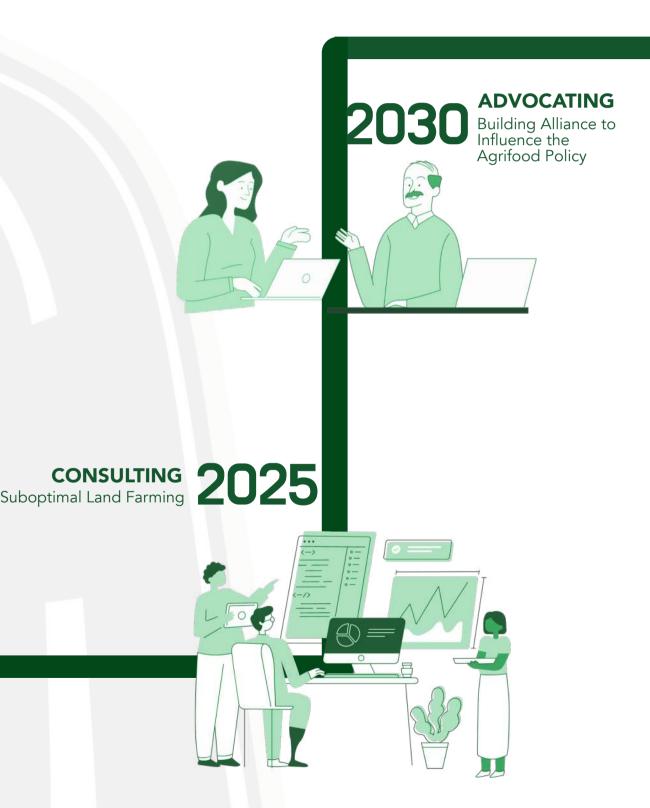
Communication Tools for the Needed Change



#tellyourstory
Take Your Action, Be Our Hero



AD AP



Feature

l eat everyday, does food crisis even exist?

Humans have many forms of fears, ranging from fear of having a miserable life, fear of not achieving their dreams to fear of missing out. However, if fear of not getting enough food is not among your daily thoughts, you might not even believe that the world is undergoing a global food crisis.

This phenomenon is generally described as a situation where multiple countries experience food scarcity due to many factors, including disrupted supply, surging prices, and conflict. This typically leads to large-scale starvation or at least nutrient deficiency.

There are three main reasons why this crisis does not seem so concerning to you. One, you are privileged enough to remain unaffected. Two, your country has a relatively reliable domestic food production to meet the local demand. And three, your government still has enough money to subsidize essential commodities to maintain reasonable prices.

No matter which aspect brings more contribution to your comfortable life, it does not change the fact that on the other side of the world, or even in an area that is only a few kilometers away from you, there are some people who are affected by this food crisis.

But you may ask, why is this crisis even happening?

The global food price has skyrocketed in the past years, and the pandemic just made it worse. It imposed mobility restrictions that drastically disrupted the food supply chain. It also leads to a great economic downturn where people lose their jobs and cannot bring enough nutritious food to the table.

Today, when the pandemic finally seems to end, the fast economic recovery requires a vast energy supply, including from natural gas, which is the same primary material to produce fertilizer. The sudden and staggering demand for this commodity leads to surging prices and scarcity. To make it worse, the conflict between Russia (the world's biggest fertilizer exporter) and Ukraine (the world's biggest wheat exporter) has jeopardized the price and stock of both commodities.

At the farmers' level, the fertilizer price has doubled or tripled with minimal stock. Consequently, they'll lower food production and quality, which causes food scarcity and higher prices on the market. Not only that, here comes the even bigger threat: climate change. The changing temperature has brought more intense heat, which makes the plants harder to grow.

The food crisis will not disappear simply because it does not affect you today. Maybe you don't have to wait until it undermines your life. Joining the movement that promotes food security is an important action you can take to deal with the crisis.



Zara. Program Manager





Kedaireka goes to Pulau Burung

Empowering the farmers to fight against its forever enemy: Expensive fertilizer

Farmers are on the frontline of the global food crisis. They are heavily affected by the soaring price of fertilizer. Meanwhile, TJF keeps advancing its research to bring impact to the farmers' community. Seeing how much farmers rely on chemical fertilizer, which not only costs them too much but also leads to excessive use that harms the environment. Thus, we started to identify ways to improve their agriculture practice.

This year, TJF collaborated with experts from IPB University to develop a science-based method called nutrient cycle that will enable coconut farmers in Pulau Burung to thrive. Instead of using a large amount of chemical fertilizer, the method imposes the use of organic ones made of decaying underbrush.

To put simply, the farmers just need to let the underbrush grow and cut them manually every four months. Eventually, the decaying bushes turn into organic matter that is highly nutritious to soil and plants. The brushes will grow again, and we'll repeat the manual cut regularly. That's how the cyclic process between the underbrush (organic fertilizer), soil nutrients, and plants works. This way, the farmers can significantly minimize their chemical fertilizer use, which both saves money and nature.



"

Fertilizer prices have doubled or tripled. It's giving me a lot of hard times. I can only afford to fertilize a small portion of my plantation area. As a result, the harvested coconut quality is not good enough to be sold at a fair price. I earn less than I should, which affects my household consumption. I hope this crisis is going to end soon.







TJF & IPB University have conducted two rounds of socialization events in three villages in Pulau Burung to promote the nutrient cycle method. This brought a series of insightful discussions between the farmers and the research team. Happy to see their enthusiasm and the new knowledge they gained so they can cultivate the suboptimal land better.

"

This socialization grows our knowledge about how to solve the underbush problem. We thought that herbicide was the efficient way, but now we know that we can just simply let them grow and cut them. This method will not cost us a lot of money.



movie recommendation for food enthusiast!

Streetfood Asia (2019)



It's somewhat poetic that "Street Food," a show dedicated to the unsung heroes behind an already looked-down-on culinary tradition. By delivering six stories from Asian countries, this series showed that it does not attempt to hide under layers of pretense, and it offers real stories of food as both a thing of beauty and a thing of survival. One of the stories that has been featured is from Yogyakarta, Indonesia (Jajan Pasar).



Deso Ampuh Pangan (2020)

Deso Ampuh Pangan (Desa Tanguh Pangan) is a reality of rural community life in Yogyakarta. Away from the hustle and bustle of the city bustle, farming communities are not too worried about the availability of food, men and women in the village work hand in hand to make ends meet. They receive every gift from God by always being grateful for the land, water and air that nourish food crops.

Sumber Makmur (2021)

Niskala Studio/YouTube



Since March 2020, one of the outskirts of Denpasar has turned this abandoned land into an organic vegetable garden. The vacant land that used to contain piles of garbage, now contains rows of tiled fenced gardens with compost and soil in them. In the middle of the field there is a kind of ball as high as one meter with pots of vegetables on the outside.

Special Content

a Day in Our Life...



Expert Says:

Connecting with Nature to Build Food Self-sufficiency

In 1998, Indonesia was impacted by a monetary crisis that led to the currency collapse. Even so, the tourism industry in Bali became popular locally and internationally. This situation made people in Bali, especially Kadek, decide to work in the tourism sector. Due to the tight schedule, he didn't care for his health and was sick for two years. He went back and forth to the hospitals for two years and tried the traditional treatment. It led him to spend his last penny on the treatment.

This situation forced him to rack his brain in cultivating his one-hectare land inheritance. It was unique because his land is typically described as dryland and relies on the rainy season. In the first experiment phase (generative), his rice's growth could have been better. The color turned to yellow, and his neighbor laughed at him. Then in the vegetative phase, the rice tillers increased, turning green. In the harvesting time, the result was better than his neighbors''.

Eager to share this experience, he initiated an open sharing session where he found an interesting case; the term "organic farming" has become a demotivational word for the farmers since they thought it would cost a lot of money. The fact is the other way around. Kadek gives an example of the agriculture system before the 1960s, where there were no chemical fertilizers, and they used the surrounding natural resources.

Along with the improvement of his health, Kadek has been aware that food could be medicine. This awareness grew as he saw Kadek Suardika was born and raised in Ubud, Bali, Indonesia. He is the founder of Yayasan Emas Hitam Indonesia, a grassroots permaculture NGO that aims to promote, support, and develop regenerative solutions for poverty and development across Indonesia.

Kadek Suardika Founder Yayasan Emas Hitam Indonesia

that since the food self-sufficiency program in Indonesia, people have been forced to use synthetic fertilizers. In fact, using chemicals in the field will eliminate all living things around, which is really helpful for plant growth.

After returning to this country from studying Agroecology in India, he took the initiative to build a foundation named Yayasan Emas Hitam Indonesia. Emas Hitam, translated to "Black Gold", refers to Humus, the dark, nutrient-rich organic material that forms from the natural decay of plant and animal matter. Emas Hitam applies the Permaculture Ethics and Principles of Tri Hita Karana philosophy, originally used by local Balinese in daily life.

Meet the Intern:

what do I think when they talk about food crisis?

If I can say two words to describe my thoughts about the food crisis it will be scary and real. This is my first time having an internship where I learn about agriculture & the possibility of a food crisis in the future. For these past 3 months, I can say it is an incredible journey.

I come from a communication background, so agriculture is something new for me. Since I was a college student, I've been interested in SDGs issues, including hunger and poverty, but I never knew that suboptimal lands could be a loophole for these problems. Learning that we can utilize land that is less fertile but still can be used to strive for food security, makes me understand that even though the threat of food crisis is real, there is still a hope for our future.

With the support and guidance from the TJF team, I learn to articulate this solution to the public through insightful social media content. I realize that by sharing and campaigning this to other people, we can build awareness of the food crisis and what can we do to tackle it together. Food crisis is an actual problem and even though we are not experiencing it right now, there are other people who experience it. If we are not doing anything, there's a possibility that we can experience it as well someday.

TJF has taught me many insightful knowledge that impacts my personal being as well. I become more mindful of what I eat and respecting the food that I have gotten. I love the value and idea that TJF brings and I believe there'll be many great things that TJF will do. I hope TJF will continue to grow and impact many other people in various level of society to understand about food security better.

"

Food crisis is an actual problem and even though we are not experiencing it right now. there are other people who experience it. If we are not doing anything, there's a possibility that we can experience it as well someday.



If I feed my own, do I feed the world?

story from a Local Farmer in Pulau Burung district

Last June this year, the TJF team went to Pulau Burung district for the third time as our project laboratory area. As a new member in TJF, it's mandatory for me to visit the area named Pulau Burung District. It is located in the Province of Riau, Sumatra island. Honestly, I've never been there before, but I heard a lot of stories from TJF's team. Starting from our departure day, I never expected it would take a long time to get there. We took a plane, boat, even motorbike to arrive. I could feel how unique this place is since the first time. From this excitement, I then found a bunch of amazing experiences while living here.

The experience started when I was visiting one of the remote villages named Hibrida Jaya. It's quite far from the center of Pulau Burung District. We need to take a two-hours boating to be there. Not just that, another fact is there is no public boat from this village. We should go to another village by motorbike around an hour to meet with the public boat and yes it's always on schedule every time. Anyway, the boat is the main public transportation here in Pulau Burung District - but if you want to try some challenging rides through the coconut plantation, you can use the motorbike for sure!

Hibrida Jaya is one of the villages where most of the communities still rely on the coconut plantation. I could see this since I arrived here for the first time. Yes, that's my opinion - but, it's not the truth at all! Some of the local farmers here in suboptimal land, which is 'peatland', are also trying their best to cultivate horticultural plants such as eggplant, cabbage, chili, long beans, and many more.

I highlighted the 'peatland' because no one believes its potential to grow food. But again, Pulau Burung can break this argument! I met with one of the local farmers, who then became my inspiration. He is pak Ahmad Nuri, who came from a small town in Java island and moved to this village in 1996 for the transmigration program. He was born and raised in a farming family and just graduated from Islamic primary school (re: Madrasah Ibtidayah in Indonesia). He is then living his big dream to give the best education for his children working as a farmer. The first time he arrived here, he tried everyday to grow food. A thousand efforts have been made, and finally he found the way!

Pulau Burung

"

Why is the work as a farmer always underestimated? Don't you think it's a precious job? Not just for you, but also for the next generations."

> Pak Ahmad Nuri, Local Farmer in Pulau Burung

Pak Ahmad Nuri said that this place is far from any places, especially the market center. The difficulties for public transportation set the boundaries for the local community even for food accessibility. Therefore, he innovates everyday by cultivating to ensure the food availability not just for his family but also for the neighborhood surrounding.

Through these efforts, he could send his children to school until the university level. He is very passionate about farming, in terms of sustainability especially methods not just for the environment but also for the economic and social side. He believes that being a farmer is not a limitation for him to get a better life. He then questioned, "Why is the work as a farmer always underestimated? Don't you think it's a precious job? Not just for you, but also for the next generations." I am just amazed and think beyond, the food that I eat everyday comes from a beautiful heart and deep intention. How amazing this person is! I learned many things from him through the deep dive discussions that day.

Beside this inspirational story, I found Hibrida Jaya as a place that gave me a lot of life lessons. The land, the hospitality, the smiles of children, the positive vibes of local people, the special color of water in peatland, even the internet connection that is provided in certain areas. Beyond that, there is a hope. A hope from a small village, then I could say as a 'remote area' in another part of Sumatera, Indonesia.

As a person who lives in a big city and familiar with various news about the food crisis, I found myself as a 'new comer'. Pak Ahmad Nuri and Hibrida Jaya village are experts on this. They lived in their own way to survive nowadays and afterwards.

Well, if pak Ahmad Nuri could feed his own, does he feed the world? Sure, he does! He feeds the world of communities there!









Runthrough

From Peatland to Our Plate

Commemorating Peatland and Wetland Day this Year



Have you ever thought about the origin of the food source on your lunch plate? Well, you might think it was from the food cabinet or the fridge in your kitchen.

Let's take a step backward; before you cook the ingredients from your kitchen altogether, where did you get your food materials? Some of you might buy them from the market, and the others might plant them themselves.

Whether you buy or plant the food materials, you might not realize that they come from a very unique kind of land.

Various types of land provide us with materials to eat, not only the fertile lands. It can be from unconventional kinds of lands; one of them is peatland.

This year, Joni brought us to remember last year's journey on the way to learn about peatland agriculture. He is now on his way to be a food fighter for he has been developing his knowledge on peatland agriculture since last year. Before long, to commemorate World Wetland Day and World Peatland Day, Joni brought us to last year's memory to thank Peatland, as one of Wetlands, for the food on our plate.

#Bring the Caption Challenge

We invited our friends to recall the journey we did last year on becoming a farmer last year through #BringTheCaption Challenge as a commemoration of the World Wetlands Day. Three friends have been awarded for the best stories. This is what they say:

Progress is progress, no matter how imperfect it may be. We're so proud of the steps we take on our wetland. From empty land to productive land, our new source of foods. We have a long way to go to achieve sustainable farming. So, let us know in the comment if you would join us in this journey.

Andi Nurul (Winner of Bring the Caption)

Have you ever imagine how if our farms become more decreasing but you and me are still need foods and we are growing by number?

Well, it is not just an imagination and really happens already due to agricultural land conversion for other use.

Luckily, we have wetlands which are dominantly abandoned. We can utilize that lands to ensure the food security.

But just remember, we should it properly by practicing climate-smart and sustainable farming!

Andre Dani (Winner of Bring the Caption)

today we're going t

#PeatParty Challenge

To commemorate World Peatlands Day, we signify to instigate our friends on social media to uphold the food materials they know cultivated on the peatland through TJF Challenge "Peatland to Our Plate." Three reel videos had shown how our friends perceive the sources of our food materials in an effort to find a way to safeguard our food security hand in hand.





From left to right are the reels video winner: Daluman Ice Coconut (1st Winner), Ciwang from Sagoo (2nd Winner), Grilled Carp with Candlenut (3rd Winner).

Runthrough

TJF at External Events

Presented TJF carbon research to 200 delegates from 10 countries and expanded the network to 30+ organizations. The forum has a business model where private sector, academia, and government synergizes for mutual benefit. On 17-22 September, Zara and Ihsan were deployed to attend the AsiaFlux Conference in Kuching, Malaysia. They managed to be invited to present our carbon flux research in front of around 200 international peatland scientists. It was a great opportunity to showcase Sambu Group best practice, gaining network to 30+ global organizations, and knowledge exchange.

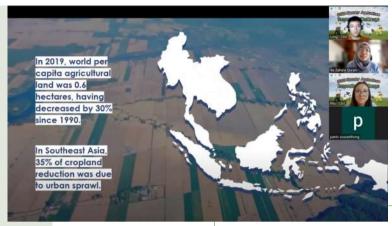






Circular Agriculture Innovation Challenge (CAIC) 2022 Southeast Asia. The CAIC 2022 is an innovation challenge program aimed to provide a more engaging learning experience on the topic of modern agriculture regarding a new economic model, a circular economy. TJF is one of the speakers for the Agriculture & Innovation sub-theme Workshop. More than 20 participants from Southeast Asia joined this program.

TJF attended as one of the speakers at Circular Agriculture Innovation Challenge (CAIC) across Southeast Asia countries 2022. Zara as TJF's representative delivered topics in Agriculture and Innovation by explaining about TJF's works and concerns especially in Water Management in the Peatland area.









One of TJF's members, Juni, had an opportunity to attend the YSEALI Academic Fellowship program summer 2022 on environmental cohort issues at East West Center Hawaii, USA sponsored by the U.S Department of State. The program ran for two weeks, Juni was also invited to be one of the panelists on Conservation & Community talked about TJF and its research. She introduced TJF and gained relations related to the program that could be carried out in the future.

The #tellyourstory 2.0 as a commemoration of World Food Day 2022, focused on the story building through workshop sessions with experts in food security & content development.

Started from one-day workshop, then continued by ideation week to build their stories through video making under the supervision of facilitators from Niskala Studio as our collaborator. After ten days, all finalists joined the Final Day. At the end of the event, we got two winners who delivered stories about local tradition in Banten and Bandung government's program to secure the food.

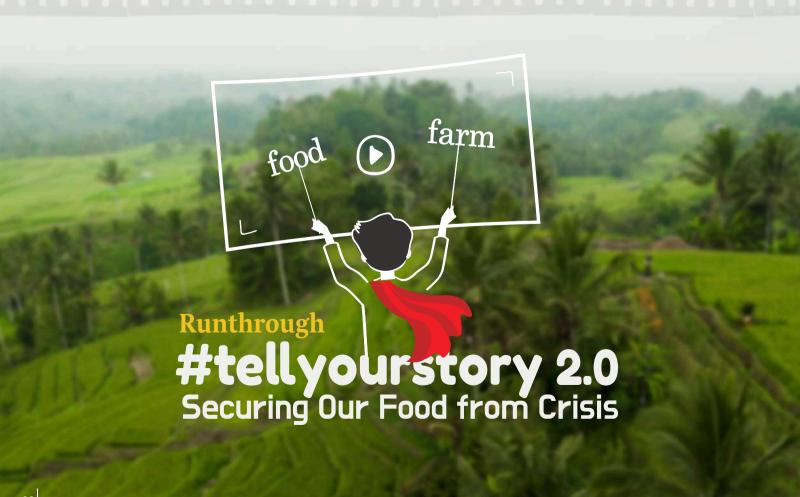
This workshop provides several perspectives on food issues. First, from people who are directly involved in food production. Second, perspectives on how to 'package' messages about food.











meet the team



Runthrough

CAMPUS VISIT







Farmers historically have so many stories about their lives on the farmland. Yet, a smattering of literature on farming aspirations led to little attention to the narratives which can frame and shape them. As a result of obscure agricultural narratives are the underestimated occupations for farmers. Therefore, Campus Visit TJF x **UGM** focused on creating and disseminating sustainable agriculture practices, especially on the suboptimal land, to be more engaging and tailored. As a speaker, Yahya has led 87 students of Agricultural Extension and Communication Study Program, Gajah Mada University, to join forces to discuss the way in building the narrative to shape agriculture dissemination.











Tay Juhana Foundation

www.tayjuhanafoundation.org

Point Lab Building No. 28, Jalan Lapangan Banteng Utara No.1, Pasar Baru, Jakarta Pusat, 10710 Phone: 0815 8855 584

© Copyright 2022