Edufarmers

Impact Report 2023

edufarmers

Impact Report 2023

Table of Contents

Message from Our Chairman

Yahja Djanggola

> Besides, one of our goals is to optimize the impact on children suffering from malnutrition through the intervention of stunting prevention program by developing a digitally-based and integrated Zero Stunting program.

Growth does not derive from a single action only but also from our commitment, determination, and improvement. In 2023, we are striving to keep our promises to contribute to the agricultural sector so as to improve the welfare of farmers, providing access to the source of science related to the research and practical knowledge, and optimize the impact on children suffering from malnutrition through the intervention program and through our new initiatives in a bid to address stunting issues. Edufarmers Impact Report 2023 constitutes the reflection of our journey which we have successfully embarked throughout the year with diverse parties. In my capacity as Chairman of the Foundation, I proudly present Edufarmers Impact Report 2023 as a tangible evidence of our commitment.

Throughout 2023, Edufarmers will continue to expand its reach in increasing agricultural productivity and tackling stunting in Indonesia. Our journey over the past year has encouraged our determination to continue to provide positive impacts through various activities. Despite all challenges, with the support from Google.org, we are able to facilitate various needs to support food security in Indonesia.

Starting with Bertani Untuk Negeri (BUN) program (Farming for the Nation) that was already initiated in 2020, Batch 6 and Batch 7 of the BUN Program in 2023 reached its peak by implicating as many as 1,160 youths and 3,618 farmers of 6 different commodities (including the new commodities of coffee and cocoa). Based on the achievement rate of the corn demo plot, which in 2022 produced 7 tons/ha to 10.6 ton/ha, as well as the achievement of the paddy demo plot of 7.8 tons/ha, the close collaboration between Edufarmers, farmers, and stakeholders is proven to have played a significant role in achieving the milestone. With some 26 agricultural researches and experiments on paddy, corn, and chili plants, we did not only ramp up our production but also empower farmers to become an agent of change in the sector of agriculture.

Besides, one of our goals is to optimize the impact towards children suffering from malnutrition through the stunting prevention program by developing a digital-based and integrated ZeroStunting program. The ZeroStunting program is committed to providing guarantees for the quality and sustainability of daily operations. Starting from expectant mothers, lactating mothers, to children, the ZeroStunting program provides a comprehensive solution to achieve Indonesia ZeroStunting. In 2023, for instance, we distributed 132,000 eggs, the amount of which has increased 4.01 times compared to it was in 2022. This is also the case with the number of its beneficiaries which has also increased by 6.16 times compared to 2022, with 1,158 beneficiaries in 2023.

The achievement could not have been realized without the substantial support from donors and partners who have entrusted us to contribute to the development of the agricultural sector as well as to the management of stunting issues to attain Indonesia Emas in the future. The success of Edufarmers is not measured from the statistic and numerical data only but also from the success story of each individual who has been impacted by our program.

From the farmers' increased income due to the improvement of their agriculture productivity, as well as from their children who are free from stunting, have allowed them to grow optimally and obtain equal opportunities as other children.

Through this report, we have presented our achievements, revealed their impacts, elaborated the steps we wish to achieve, and strengthen our commitments to maximizing positive impact in the future.

Entering the year of 2024, Edufarmers remains optimistic about continuing our efforts to make positive changes in the sector of agriculture and health in Indonesia.

Our Team

Chairman
Yahja Djanggola

Chief Operating Officer
Amri Ilmma

Head of Agri Services Department
Ignatius Egan Jonatan

Bertani Untuk Negeri

Field Manager Operations (Broiler)
Meisy Fazriany

Program Manager Bertani Untuk Negeri
Evaulia Nindya Kirana

Field Manager Operations (Layer)
Dwi Ardianto Wirawan

Operation Analyst
Zahara Fardillah

Field Manager Operations (Jagung)
Arief Sukirmawan

External Liaison Associate
Dian Winarthi

Field Manager Operations (Horti)
Asep Zaenal

Agriculture Program Associate
Hasnan Yani

Field Manager Operations (Kakao)
Andi Amirullah

Field Manager Operations (Kopi)
Firdiansyah

Knowledge

Data Analyst
Jonathan Nikijuluw

Knowledge Associate - Poultry
Wisnu Lunardi

Knowledge Manager
Cahyo Adileksana

Knowledge Associate Crops 1
Ananta Bayu Pratama

Learning and Development

Learning & Development Manager
Nabilah Putri Nurhaliza

Learning & Development Associate
Huda Shidqie

Agronomy Trainer
Sucipto

Vice President of Partnership
Denny Ramelan

Head of Stunting Program Dept.
Felix Limanjaya

Head of Shared Services Dept.
Iwan Rahadian

Head of Business & Channel Development
Yos Fahleza Rahmatullah

Stunting

Program Manager Stunting Prevention
Dyah Kenyar Nindita Hermanus

Project Associate Stunting Prevention
Chastity Philadelvia

Shared Services

F&A Section Head
Herlina Tjahjadi

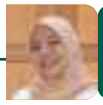
Finance Officer
Anita Proborini

Accounting Officer
Rosita Arneta Amelia

HR GA Strategy
Mici Anisa Soraya

HR GA & IT Operation
Wahab Kamal

Operation Finance BUN & HR Administration
Imelda Siboro



Operation Finance Research & Stunting
Ayu Anggraini Sundari

Business and Channel Development

Partnership Associate
M. Ichsan Alma'i

Partnership Associate
Dibyana Galih Prakasita

Marketing Communication Associate
Eskavia Hanif Putri

Creative Director
Novanda Fibrianti

Campaign & Event Associate
Firari Giannindra

Vision and Mission

The Edu Farmers International is a non-profit organization established in 2015 the goal of which is to ensure the farmers' welfare as well as to develop the Indonesian young farmers. Having such a goal, we are committed to building positive impact towards the sector of agriculture in Indonesia.

The agriculture sector admittedly plays a significant role in improving the national economy. However, the agricultural issues in Indonesia tend to be often neglected. From year to year, the Indonesian farmers are facing bigger challenges, such as the access to the agricultural resources, technology, markets, climate changes and natural disaster, pests and plant diseases, as well as the limited knowledge and skills of the farmers.

On the other hand, in 2021, we initiated a dual approach to assist the government in addressing the challenges faced by Indonesian farmers and also contributed to the stunting rate reduction. Our program initiative is equipped with knowledge and skills for farmers to thrive and directly intersects with the provision of natural nutritional sources. Through workshops and collaborations, we aim to create a sustainable agricultural system while also providing good natural nutritional sources to foster holistic development; not only in agriculture but also in the well-being of children experiencing stunting in Indonesia.

Our Vision

To become a world-class foundation that is credible, trustworthy, and impactful across the four pillars of food security: availability, sustainability, access, and food utilization.

Our Mission

a. To become a center of excellence for the agricultural sector through education, training, research, and the development of a sustainable agricultural ecosystem, aiming to improve farmers' welfare and empower future agricultural leaders.
b. To achieve #ZeroStunting in Indonesia through holistic, impactful, and sustainable stunting prevention platforms, movements, and programs, based on partnerships and leveraging technology and digital solutions.

Values

Integrity

The ability to act consistently in accordance with the organizational and community values, codes of conduct for profession/business albeit in a difficult situation. [Professionalism]

Mentorship

Ability to develop the abilities of other people and teams, including continuing to learn and build one's own capacity. [Develop self and others]

Persistence

A persistent drive and results-oriented mindset, with the ability to learn, comprehend, andperform tasks well, even exceeding the standards set by the organization. [Grit to achieve something].

Adaptability

The ability to solve problems and to work effectively in diverse situations, the capability to adapt when working with diverse individuals, groups, and cultures. [Innovation & problem solving]

Customer Centric

To place customers in the center of all decisions, processes, and activities by understanding and fulfilling their requirements, preferences, and customers' expectations so as to ensure satisfaction and to foster sustainable collaboration [Service excellent].

Technical Excellent

To have mastery of the required specific and comprehensive skills to perform various work in a good and effective manner. [Hard & soft skills, conceptual, and people management]

Milestone Edufarmers

2015

Edufarmers was established with its name being Japfa Foundation, as a foundation that has four pillars of social mission, namely education, food, sports, and emergency response.

2019

Japfa Foundation shifted its focus into education and training in order to enhance farmers' productivity and income.

2020

The BUN program was first initiated in East Java, attended by 11 farmers and 16 fresh graduates.

2021

- Japfa Foundation changed its name into Edu Farmers International Foundation.
- Edufarmers began its collaboration with diverse stakeholders, including the collaboration with the Ministry of Education, Culture, Research, and Technology (Kemendikbudristekdikti).
- Edufarmers extensified its program to maize commodity and establish a collaboration with THRIVE (Train Her to Promote Resilient, Inclusive Value Chains and Economic Empowerment).

2022

- Gained support from Google.org to expand program types and scope.
- Joined Filantropi Indonesia.
- Established Knowledge Center.
- Organized agriculture-based stunting prevention program.

2023

- Convened the First Agrinnovation Conference in March 2023.
- Built Instagram ZeroStunting and TikTok Edufarmers & ZeroStunting platforms.
- Made Youtube as a learning forum/channel.
- Joined SCOPI (Sustainable Coffee Platform of Indonesia).
  Joined AVPN (Asian Venture Philantrophy Network).
- Added 5 ZeroStunting Intervention Programs (Egg Distribution (Japfa & 1000 Days Fund), Egg & Milk (Nestlé), Monitoring & Evaluation (MIPI & Meek Nusantara Foundation).

Agricultural Achievement & Impact

1160 Youth

3618 Farmers

7 Commodities:

- Broiler Chicken
- Layer Chicken
- Paddy
- Maize
- Chili
- Coffee
- Cocoa

2000 Applicants of Agrinnovation Conference

920 Participants of Offlines Conference

36 Speakers

30 Exhibition

26 Community & Media

1.5x Increased the Adoption of Good Agricultural Practices (GAP)

20K Followers of social media

26 Researches

14 Agriknowledge videos

2 mio Viewers

12,6 mio Impression

5 Agricultural cultivation modules

ZeroStunting Achievement & Impact

1158 Beneficiaries

44 Intervened Villages in **10** regencies/cities

132K Egg Distributed

157 Posyandu (Integrated Healthcare Center)

154 Caders

3 Associations Collaborate

5 Partnership

Program Bertani Untuk Negeri / Farming for The Nation

According to the 2022 Global Food Security Index, Indonesia ranks 63 of 113 surveyed countries, which is lower than its neighborhood countries (Singapore, Malaysia, China, and Vietnam). This index measures the food security of a country based on a number of indicators, namely food accessibility, availability, quality and security, as well as sustainability and adaptation.

One of the important indicators that becomes the focus of the Edu Farmers International Foundation is the food accessibility and food security leading to agricultural productivity. Moya et al (2016)[1] cites that the most important plant of Indonesia (paddy) only has a productivity of USD 8.84 per person/day, which is lower than that of the other agriculture countries such as Thailand (USD 62.52 per person/day), Vietnam (USD 49.13 per person/day), China (USD 20.86 per person/day), and the Philippines (USD 10.53 per person/day). There are several factors that led to this phenomenon, including the lack access to counselling services, the lack access to agritechnology, education, resources, etc.

These farmer regeneration issues are getting increasingly important from day to day in line with the increased median age of farmers in Indonesia. Youths are less interested in the sector of agriculture because they regard this sector as being "old-fashioned" or "filthy". The worse thing is that there are more youths who study agronomy or husbandry move to another sector and profession. This has caused the median age of farmers in Indonesia to increase due to the poor regeneration.

Batch	Commodities	Location	Number of youth participated	Number of farmers participated
1	Broiler chicken	West Java	16	11
2	Broiler chicken	Banten, West Java, East Java	44	132
3	Broiler chicken	East Java	112	176
4	Broiler chicken, layer chicken, horticulture	West Java, Central Java, East Java	143	230
5	Broiler chicken, layer chicken, horticulture, maize	Banten, West Java, Central Java, East Java, Central Sulawesi	189	409
6	Broiler chicken, layer chicken, maize, coffee, cocoa	North Sumatera, West Java, East Java, South Sulawesi, Central Sulawesi	293	1216
7	Broiler chicken, layer chicken, maize, coffee, cocoa	North Sumatera, West Java, East Java, South Sulawesi, Central Sulawesi	363	1444

In 2023, the BUN program has generally made a significant expansion in terms of its number of beneficiaries that has increased 3x compared to that in the 2022 BUN program, as well as of the coverage of its commodity including plantation, namely coffee and cocoa.

[1] Moya, P. F., Bordey, F. H., Beltran, J. C., Manalili, R. G., Launio, C. C., Mataia, A. B., ... & Dawe, D. C. (2016). Costs of rice production. Competitiveness of Philippine rice in Asia, edited by F. Bordey, P. Moya, J. Beltran, and D. Dawe. Nueva Ecija, Philippines: Philippine Rice Research Institute.

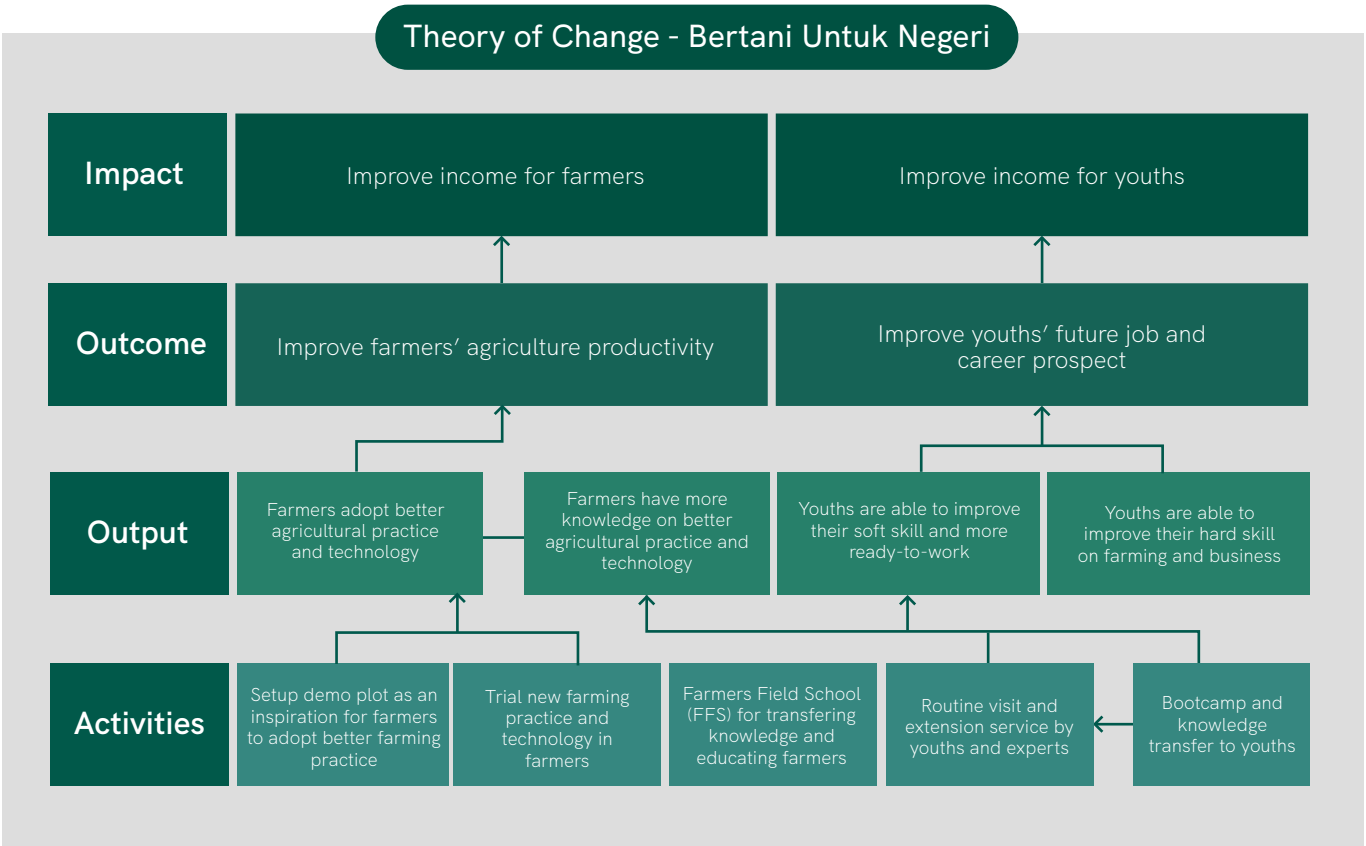
Goals of The BUN Program

1. To allow traditional farmers to improve their standard of living and farming productivity through better practice of adoption and cultivation technology.
2. To allow the Indonesian Youths to improve their hard-skill and soft-skills through the collaboration with farmers so it will add to the state of readiness of the agricultural-sector workers on completion of their studies.
3. To foster the love for the agricultural sector to grow, as well as to inspire the youths to engage themselves into the sector of agriculture in the future.

Theory of Change

The final impact we wish to achieve through the BUN Program is the increased income which can be seen from the two sides, namely the farmers and the youths. We believe that the farming productivity means a lot to farmers because the farm product can be increased with the same or even less input. The relevant and updated knowledge elevation and technology advancement and adoption constitute the key to unleashing better farm production in the future.

Meanwhile from the perspective of the youths, we believe that good occupation or career requires high and complex capability as the key to reaching better self-potential while at the same time improving their income. As the prerequisite, our youths need basic hard-skill and soft-skill required for the professional work performance: self-regulation, problem solving and critical way of thinking, communication, empathy, resilience, and so on.



Program Design

The youths and smallholder farmers participating in the BUN program will be working together intensively for 5 months. There are two main phases to be undergone by the participants:

Bootcamp and Training for Youths

In the first month of the program, youths will receive training which focuses on three areas, namely cultivation technical expertise, business skills and soft skills. Such training is conducted offline by using an active learning method during which the facilitator will encourage them to study through a series of activities, discussion, cases of study, and direct learning session on the spot (particularly the cultivation technical expertise) under the facilitation of some experts. This bootcamp is aimed at preparing the youths so they can perform their roles accordingly during the incoming Productivity Projects.

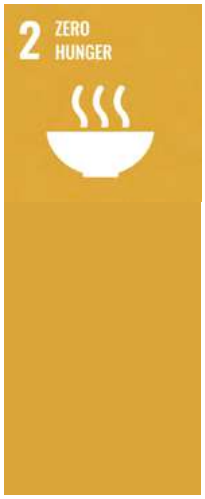
Productivity Projects

Starting from the second month onward, the youths will be challenged to directly visit the field in order to change the farmers' habit and mindset related to their farming activities and encourage them to better implement the farming practice and technology. Below is a list of activities to be undertaken by the youths related to the Productivity Projects:

- Conducting comprehensive analysis on the technical side and farming management in order to find out the gap between productivity and its root problems.
- Providing learning facilitation to farmers on a biweekly basis through a demo plot method and Field School so farmers can personally see the outcome of the good agricultivation standards and receive explanation about the agricultural practice being offered.
- Teaming up with the farmers in doing the agricultural experiments in the area or limited population to see the outcome prior to adopting the practice in all agricultural areas.
- Paying a routine visit (once a week at minimum) to the farmers' land to forge a close relationship, monitor the implementation process, and have discussion with farmers to ensure the meeting of the productivity target.

Impact on Sustainable Development Goals (SDGs)

In overcoming the global challenges, the UN has 17 SDGs (Sustainable Development Goals). We understand the importance of overcoming such challenges, and we are to ensure that our program is in accordance with the SDGs.

SDGs Number	Indicator	Our Intervention
	• [2.3] By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment. • [2.4] By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.	• We prepare a demo plot with optimal farming practice to encourage farmers to apply them on their own agricultural land. • We hold Farmer Field School as a media of knowledge transfer in farming practices and technology adoption. • We conduct joint trials with farmers in a plot to demonstrate the results of farming practices. • We conduct regular visits and agricultural extension services for small-scale farmers (through youths and experts) to discuss and tailor the implementation of practices on their farms.
	• [4.4] By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.	• We provide training to young people (recent graduates or students) in both technical and non-technical skills crucial for employment or entrepreneurship. • We provide opportunities for young people to apply their knowledge and skills in solving problems and driving real change by collaborating with farmers to enhance the adoption of good farming practices and increase farmers' productivity.
	• [8.5] By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value. • [8.6] By 2020, substantially reduce the proportion of youth not in employment, education or training.	
	• [13.3] Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.	• We engage in the transfer of knowledge and cultivation practices aligned with environmentally friendly farming methods to farmers.

Impact Measurement Methodology

We use the Kirkpatrick evaluation model as a framework to measure the impact on reactions, knowledge, behavioral changes, and outcomes for both youth and farmers throughout the program. We collect baseline data prior to the implementation of the intervention, then compare it with final data after the program concludes. This is done to assess the progress achieved during the program implementation using predefined impact indicators.

01. Impact on the Youths

No.	Indicator	Description	Method of Measurement
1	Net Promoter Score (NPS)	The level of beneficiary's satisfaction and loyalty obtained from the measurement of their willingness to recommend the BUN program.	Self-assesment from the beneficiaries using a Likert scale of 1-10.
2	Knowledge	The level of beneficiary's understanding and capability in applying the technical skills and knowledge to solve problems.	Case study tests
3	Adoption of *Soft Skills*	The level of application of behavior and soft skills in work according to the expected standards to be developed during the BUN program.	Mentors' assessment of the beneficiary using the Likert scale of 1-7 for each behavioral aspect.

02. Impact on the Farmers

No.	Capability	Description	Method of Measurement
1	Net Promoter Score (NPS)	The level of beneficiary's satisfaction and loyalty obtained from the measurement of their willingness to recommend the BUN program.	Self-assessment from the beneficiary using a Likert scale of 1-10.
2	Knowledge	The level of beneficiaries' understanding of good farming/farming management techniques and standards.	Multiple choice tests
3	Adoption of SOP	The level of beneficiary's application of good cultivation techniques and management according to the standards in farming enterprises.	Assessment from field facilitators of the beneficiaries.
4	Improvement Rate	The percentage of farmers' productivity increased after the BUN program	Measurement of the productivity of the farming enterprises before and after the BUN program.
5	Productivity – Broiler Chicken	Level of increased productivity experienced by the successful broiler farmer after participating in the BUN program.	The comparison of Productivity Index (IP) in broiler chicken farming before the program and at the end of the BUN program.
6	Productivity – Laying Hens	Level of increased productivity experienced by the successful layer farmer after participating in the BUN program.	Comparison of the composite index of Hen Day (HD) and Feed Conversion Ratio (FCR) in layer chicken farming at the start and the end of the BUN program.
7	Productivity – Farming	Level of increased productivity experienced by successful farmers after participating the BUN program.	Comparison of the farming productivity (ton/ha) before and after the BUN program.

Impact: Farming for the Nation (BUN) batch 6

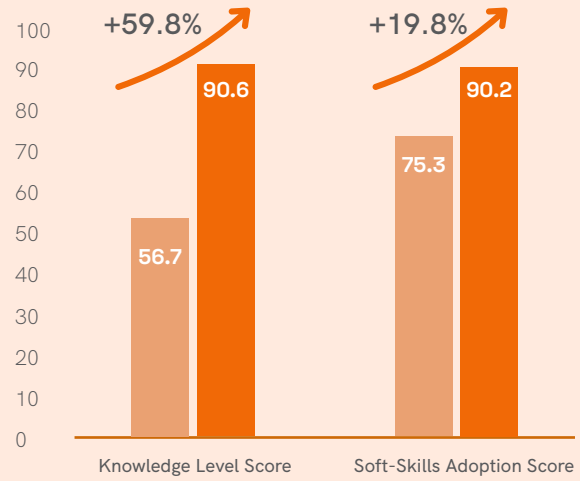
Period : February 2023 – June 2023

Commodity : Broiler chicken, layer chicken, maize, chili, coffee, cocoa

Location : North Sumatera, West Java, East Java, South Sulawesi, Central Sulawesi

Partners : Magang dan Studi Independen Bersertifikat (MSIB), Ministry of Education and Culture, Research and Technology, Badan Penyuluhan dan Pengembangan Sumber Daya Manusia Pertanian (BPPSDMP), Ministry of Agriculture, PT Ciomas Adisatwa, PT Japfa Comfeed Indonesia Tbk

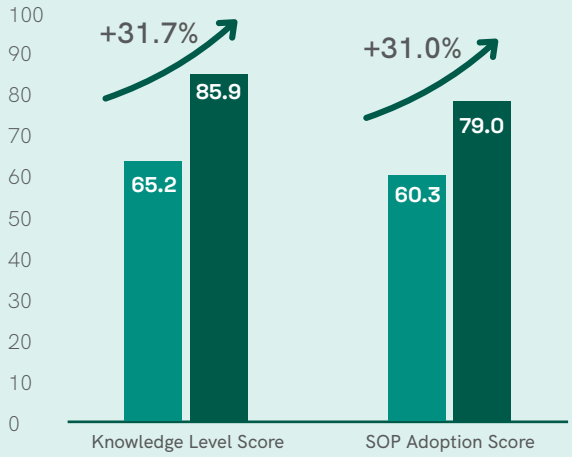
Impact on Youths



Net Promotor Score: **73.7**

Number of Youths: **293**

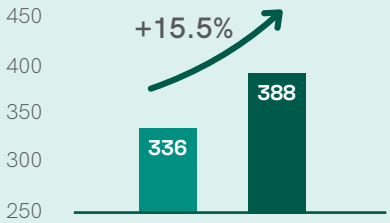
Impact on Farmers



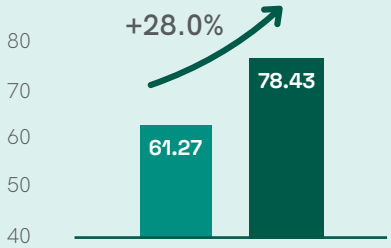
Net Promotor Score: **72.9** Improvement rate: 70%

Number of Farmers: **1216**

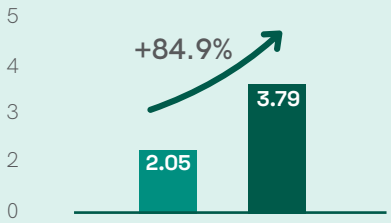
Productivity of Broiler Chicken (Performance Index)



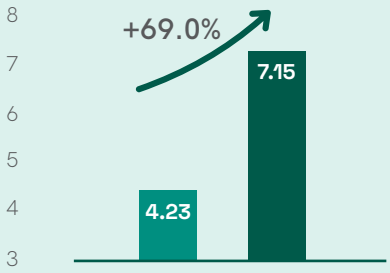
Layer Chicken Productivity Score



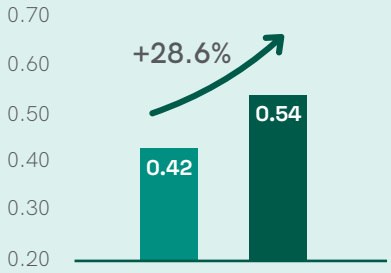
Productivity of Maize (ton/ha)



Productivity of Chili (ton/ha)



Productivity of Coffee (ton/ha/year)



Productivity of Cacao (ton/ha/year)

What's New in Bertani Untuk Negeri (BUN) 6 Program:

BUN Horticultura Program launched in 2022 has been made more specific into BUN Chili in 2023.

The BUN Coffee Program constitutes the addition of new commodity in the pilot scale which is undertaken to nourish coffee farmers in Humbang Hasundutan Regency, North Sumatera.

The BUN Cocoa Program constitutes the addition of new commodity in the pilot scale which is undertaken to nourish cocoa farmers in Sigi Regency, Central Sulawesi.

There is a new collaboration to implement the BUN program together with the Agricultural Development Polytechnic (Polbangtan) and the Indonesian Agricultural Engineering Polytechnic (PEPI) under BPPSDMP Ministry of Agriculture in South Sulawesi and Central Sulawesi to develop broiler chicken farmers, maize farmers, and chili farmers.

Impact: Farming for the Nation (BUN) batch 7

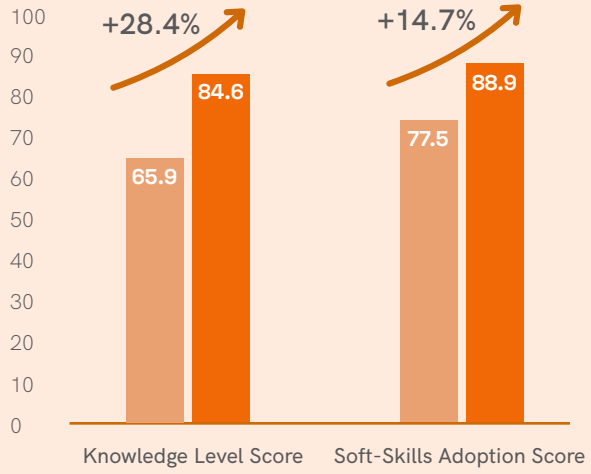
Period : August 2023 - December 2023

Commodity : Broiler Chicken, Layer Chicken, Maize, Chili, Coffee, Cocoa

Location : North Sumatera, West Java, East Java, South Sulawesi, Central Sulawesi

Partners : Magang dan Studi Independen Bersertifikat (MSIB), Ministry of Education and Culture, Research and Technology, Ministry of Agriculture, PT Ciomas Adisatwa, PT Japfa Comfeed Indonesia Tbk

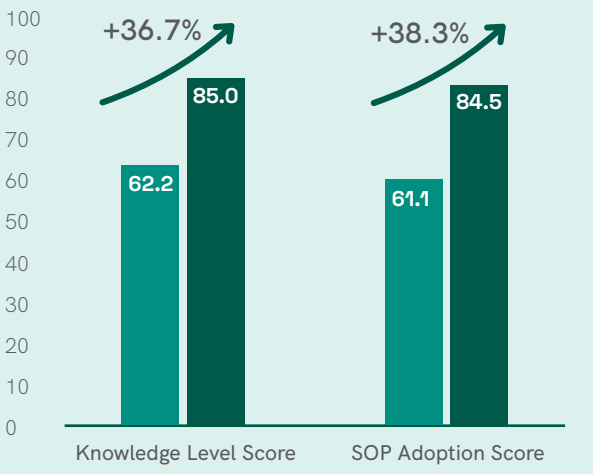
Impact on Youths



Net Promotor Score: **84.3**

Number of Youths: **363**

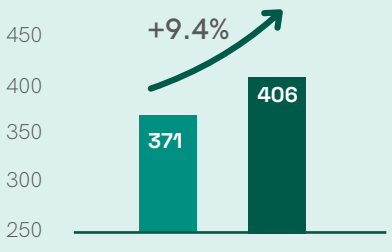
Impact on Farmers



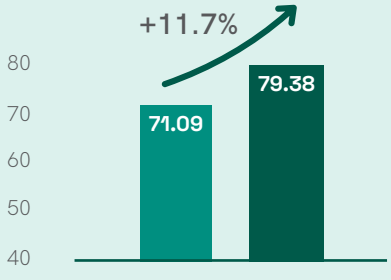
Net Promotor Score: **84.3** Improvement rate: 72.7%

Number of Farmers: **1444**

Productivity of Broiler Chicken (Performance Index)



Layer Chicken Productivity Score



* The impact on productivity for the new farming commodity can only be measured after 6 months as of the program commencement so during the reporting period of this Impact Report 2023 it has not been measured.

What's New in Bertani Untuk Negeri (BUN) 7 Program:

The BUN Coffee and BUN Cocoa Programs have successfully completed its pilot phase, and each of them reached 59 youths and 300 farmers who has benefited from the program.

In one of the BUN Maize program areas, specifically in Dolo Barat Subdistrict, Sigi Regency, the BUN program has been successfully implemented by Field Extension Officers (PPL) at the Mantikole Agricultural Extension Center (BPP). In the future, we hope for deeper synergy with BPP throughout the BUN program locations.

Impact Stories: Farmers

Lortminto Simatupang

"That Spirit Recovers"

He is Pak Lortminto by name. This 51-year-old coffee farmer from Purba Dolok, Subdistrict of Dolok Sanggul, Humbang Hasundutan Regency, North Sumatera has done coffee farming since 20 years ago. He has 2-ha area of coffee and horticultura commodity. While being a coffee farmer, Pak Lortminto had never received facilitation program from any parties. It has been many years that Pak Lortminto hasn't felt the results of cultivating his coffee, which Sumateranese refer to as "ranggasan" akin to the proverb saying 'Unwilling to Live but Don't Want to Die'. Even Pak Lortminto once only obtained 12 kg from the harvest, which was far from proportional to the cost and effort he had expended. It made him desperate and had no hope of coffee cultivation any longer. In the end, Pak Lortminto nearly decided to destroy all of his coffee plants and substituted them with potato plants. That was before Edufarmers invited him to become facilitated farmers of BUN program. The Team of Edufarmers managed to convince him to continue his coffee farming and help him take care of the coffee plants.

When the youths came over, he welcomed them happily. He had awaited this facilitation for decades, before Edufarmers finally came to him for taking care of the fate of the coffee farmers in his place. Pak Lortminto was really enthusiastic about following the BUN program. When the youths came to his land, he always raised his concerns. He was also really active attending the Field School, because he wished to gain new knowledge. In order that such knowledge can be applied to the coffee land of Pak Lortminto, the youths in teaming up with the field team of Edufarmers had previously prepared a demo plot to take care of Pak Lortminto's damaged coffee plants, starting from isolating the plants, clearing the weeds, doing some pruning, and applying fertilizer to the coffee plants. Pak Lortminto carefully observed the plant maintenance performed by the Team of Edufarmers, and replicate such method to the other coffee plants.

Albeit there has not been any harvesting activities, his coffee plants are seen to have become better. The appearance of many flowers and fruits on those plants made him get more excited. As the head of Gapoktan, Pak Lortminto wishes to inject his spirit to the other coffee farmers. During the Gapoktan discussion, he started sharing his experiences on how to plant coffee with all of his heart. The issues faced by the coffee farmers there are more of the lack of time management of the farmers because they are also planting other horticultura plants. Pak Lortminto suggested that farmers should allow one day in a week to take care of their coffee plants so the outcome will be maximal.

Testimony

"First of all, in my capacity as the Leader of the Farmer Group Satahi of Purba Dolok Village, allow me to express my gratitude to Edufarmers Foundation that had brought farmers of Purba Dolok Village, Subdistrict of Dolok Sanggul in this program. We would also like to thank you the college students who have nourished us in coffee cultivation program over the past few months.

I am delighted to be able to participate in the Bertani Untuk Negeri program, considering the fact that this program has helped us enhance our knowledge about coffee cultivation. We just learnt that the coffee farming method we had adopted thus war was less appropriate. The presence of the Edufarmers program and college students have been of great help for us so we better understand the coffee cultivation, pruning, application of fertilizer, pest control, harvesting, and post-harvesting process.

We hope in the future Edufarmers Foundation will continue delivering its program to coffee farmers like us."

Bu Firawati

"Women's Role in Farming"

This 40-year old lady is Ibu Firawati. She is a maize farmer from Rarampadende, Subdistrict of Dolo Barat, Sigi Regency, Central Sulawesi Tengah, and she has been farming for 7 years; continuing her parents' business of running a maize farm because her parents can no longer manage their farm. Her farm constitutes the inheritance from her parents. As a matter of fact, Bu Firawati wished to sell her farm, but she forwent her intention of doing it because she paid respect to their parents' struggle; from then she decided to continue the business. Her parents were never tired of teaching her how to do farming.

In addition to managing a maize farm, Bu Firawati also helped her husband doing photography. This mother with two children has a tight schedule for daily activities. On the sideline of her daily activities, however, she remained focused on managing her maize farm. In her opinion, doing the maize farm constitutes one of her source of incomes to help afford the household economy, particularly providing the best education for her children.

Bu Firawati's children also shared the same interests of managing the farm as they often came along with their mother as she did the farming activities. Ibu Firawati is convinced that someday their children can continue what she has been doing.

However, because Bu Firawati's business are less stable (sometimes good, sometimes less maximum), she got enthusiastic by the time the Bertani Untuk Negeri program reached her place. The Edufarmers Team tried to give some recommendations to Bu Firawati by teaching her how to apply better plant spacing and how to apply the seed treatment method. After a series of efforts implementing the recommendations from the college students and the Team of Edufarmers, Bu Firawati's began to see fast improvement of her business.

Seeing the fact that there remained many farmers who have less access to education, particularly female farmers, with support from her husband, Bu Firawati dared herself to run for legislative election to be able to struggle for improving the welfare of the female

Testimoni

"This BUN program plays a crucial role for us, especially for the farmers in Rarampadende. Previously, we were not used to it but now we are, previously we did not know [the good farming practice] but now we know it. I have gained substantial knowledge and experience. I hope the BUN program will continue so it can provide benefits and inspired farmers so they can apply the proper cultivation standards in accordance with the GAP standards so its results can improve accordingly."

Impact Stories: Farmers Development Associate

Rizal Hadi

"New Hopes for Farmer Regeneration"

Rizal is a Semester-8 student of Agribusiness Department of Mataram University NTB. Born from the horticultura business family, Rizal decided to deepen his knowledge in agribusiness department because he was concerned with the problems faced by his parents in the agricultural business, starting from the price fluctuation to the failed harvest, all of which cause the economy of his family to become less stable. To the worse, they destroyed their plants and spent a lot of money without any results.

Prior to deciding to join the Bertani Untuk Negeri program, Rizal initially consulted his two parents about what commodity to choose, from then his parents recommends chili commodity so he can learn a lot about good cultivation and so he can implement it in his place of origin.

As Rizal joined the BUN program, he learned that there had been different cultivation methods at the early treatment between the one performed in West Java and in NTB. In his place of origin, the farmers planted the plants directly from the beds but in West Java, they applied basic fertilizer first prior to planting them.

When the BUN program ended, the facilitating farmers gave Rizal a number of seeds to be planted in his place of origin. He planted the seeds on a land of 1,000 m^2. Although, the weather was not in a favorable condition at that time, with the knowledge he gained during the BUN program, Rizal managed to retain his plants in good shape unlike the other farmers, and he still survived his harvest.

In anticipation of his post graduation, Rizal wished to keep making contribution to the agriculture sector, continue helping his parents, disseminating his knowledge to the local farmers in his place, and inspire more youths to plunge into the agriculture sector instead of going overseas to Malaysia or leaving for Kalimantan.

Testimoni

"On attending the activities of Bertani Untuk Negeri, I feel greatly inspired and satisfied with this wonderful experience. Through this program, I gained deep understanding of the importance of the agricultural sector in support of the state food security. After having conversation with the farmers and acquiring counselling from the expert mentors, I obtained invaluable insights into the farming challenges and opportunities. I am proud to be part of this movement the aim of which is not only to improve agriculture productivity but also to support the welfare of the farmers.

I thank Bertani Untuk Negeri for opening my eyes and sharing such experiences that change my perception about agriculture, as well as injecting my spirit to continuously take active part in building this country through the agricultural sector."

Sri Budi Ningsih

"Deepening Knowledge about Cocoa Cultivation in Order to Further Develop my Place of Origin"

Sri Budi Ningsih is a college student from Central Sulawesi going to Tadulako University. Sri attended the Bertani Untuk Negeri program (Batch 7) in Central Sulawesi Tengah where she domiciles. She is greatly motivated to gain as many as knowledge to build her place of origin. Sri was born from a family that has their livelihood as farmers. Her parents and elder sibling run crystal guava farms.

Sri feels that her family has properly managed their plants of commodity because her parents are supported by their children who went to agriculture school. But then she was thinking of expanding her business into another commodity that has a bigger prospect, in this case cocoa cultivation. The thing is that Sri did not have enough platform to get such a business started.

As the BUN program opened up an opportunity to contribute to cocoa commodity, she did not hesitate to get herself registered. When performing activities in the field, Sri did take time to seriously learn about cocoa cultivation in accordance with the GAP. She appeared to have been really familiar with what she must be doing when planting cocoa for the first time. The things she had to do include preparing the land, checking the climate as to whether it is good to plant cocoa, preparing the planting stuff and protected trees prior to planting cocoa, and observing thoroughly the planting space.

To deepen the knowledge she gained, Sri also started helping farmers in the project productivity. She motivated farmers to continue their busines considering the fact that many farmers in the local area have lost hope. Besides, Sri also gave farmers an example as how to perform side-cleft grafting as well as good entris practice.

Sri hopes that through this program and with the spirit she has demonstrated, she can lift up the favorite commodity in Central Sulawesi and contribute indirectly to the local economy of her domicile so her she and her friends do not have to leave for another place to make a living.

Testimoni

"Bertani Untuk Negeri Batch 6, particularly cocoa commodity, has earned me substantial knowledge and invaluable experiences. This program also has forged me to have a better character than it was before. I gained very comprehensive knowledge that support he world of agriculture. Moreover, this program has brought me many friends throughout Indonesia for which I am grateful. I hope everything I gained in BUN Batch 6 will be kept sustainable and demonstrated transpire in the future not just today, particularly the silaturahmi (close relationship) between the colleagues of FDA BUN 6 Cocoa, facilitated farmers, FF and everyone at Edufarmers."

Stunting Prevention Program: ZeroStunting

17.1%
Average reduction in stunting

6.16 times
Increased Numbers of Beneficiaries from 2022 to 2023

1158
Beneficiaries

10
Regencies/Cities

44
Vilages

154
Caders

157
Posyandu (Integrated Healthcare Center)

132.000
Egg distributed

5 Partners

Program Impact in 2023

	Kab. Malang	Kab. Maros	Kab. Lebak	Kab. Bogor	Kab. Pasuruan	Kab. Batang	Kab. Karawang	Kab. Pandeglang	Kab. Sukabumi	DKI Jakarta
# of Villages	4	5	1	4	8	15	4	1	1	1
# of Beneficiaries	184	172	144	143	113	130	113	75	74	10
# of Caders	16	15	25	-	37	32	29	-	-	-
# of Egg Distribution	22.080	20.640	25.920	12.740	11.300	13.000	11.300	7.500	7.400	-
# of Posyandu	14	14	6	-	36	43	23	11	10	-
Start Period	Jan 2023	Jan 2023	Sep 2023	Okt 2023	Okt 2023	Okt 2023	Nov 2023	Okt 2023	Okt 2023	Jul 2023
Partner	zero stunting	zero stunting	1000 Days Fund		Nestlé	Nestlé	Nestlé	Nestlé	Nestlé	MEEK Foundation

Background and Program Description

Presidential Regulation (Perpres) Number 72 of 2021 cites that in the context of realizing healthy, smart, and productive human resources, and achievement of sustainable development, the acceleration of stunting eradication needs to be sought. This strategy aims at lowering the stunting prevalence, one of which is to ensure the fulfillment of nutrition intake and the improvement of the nourishment patterns. Based on the SSGI 2022 data, approximately 21.6% (4.7 million of balita/children under five of age) in Indonesia experience malnutrition and categorized as children with stunting. In other words, 1 of 5 toddler in Indonesia suffers from malnutrition within a lengthy time.

Therefore, Edu Farmers International Foundation has the initiative to develop a nutrition and agriculture-based stunting management program called ZeroStunting since September 2022. During the year of 2023, the ZeroStunting program was executed in 10 cities/regencies, namely in Malang Regency, Maros Regency, Lebak Regency, Bogor Regency, Pasuruan Regency, Batang Regency, Karawang Regency, Pandeglang Regency, Sukabumi Regency, and DKI Jakarta. Through the intervention of stunting management, the ZeroStunting program on average succeeded in reducing the prevalence of stunting by 17.1% by the end of 2023.

The implementation of the ZeroStunting program includes the provision of animal protein which is chicken eggs to be given to the beneficiaries on a daily basis namely one day one egg campaign. The ZeroStunting program activities include the collection and validation of data on stunting children under five of age, rollout to the local stakeholders, daily and monthly monitoring, the holding of workshops on nutrition and health, as well as the evaluation of process and impact at the end of the program.

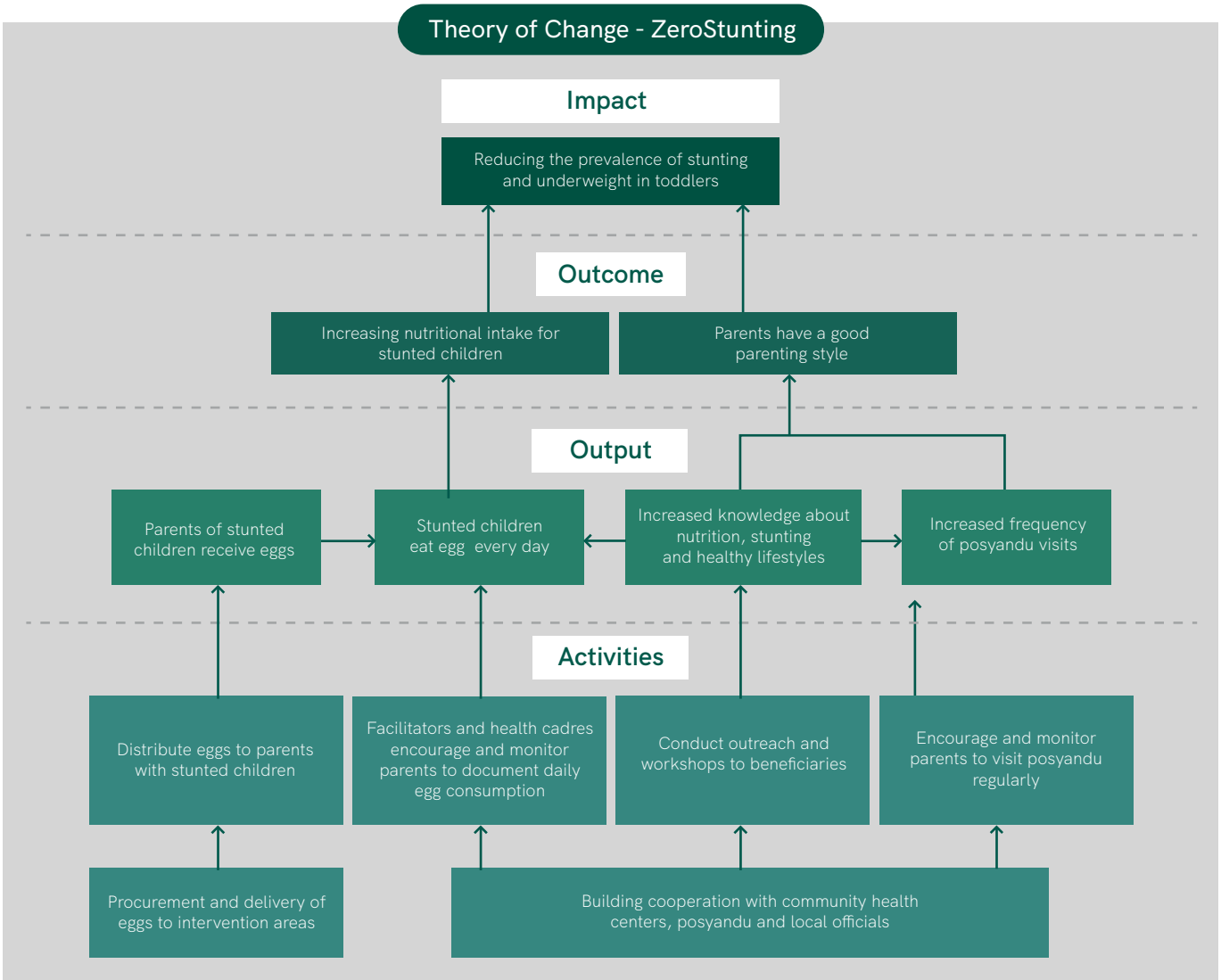
Goals

The ZeroStunting Program is driven by the spirit to achieve the goals below:

- To lower the prevalence of stunting and underweight children in the intervention program location.
- To increase the animal protein intake and micronutrients on toddler (children under five of age).
- To enhance knowledge and raise awareness of parents of the nourishment patterns, as well as the importance of animal protein in correlation with the growth and development of children under five of age.
- To establish collaboration with penta helix such as the government, institution, or business people, community, and media to jointly achieve Indonesia ZeroStunting.

Theory of Change

The ZeroStunting Program aims at lowering the level of stunting prevalence and underweight through the campaign of the consumption of one egg per day (one day one egg campaign). The granting of eggs to the program beneficiaries is aimed at increasing the accessibility to the source of animal protein at an affordable price, particularly to families who have their children indicated with stunting aged 1 to 5 years. In addition to the granting of eggs, the ZeroStunting program also provides education on the importance of the balanced nutrition intake and good nourishment method for the growth and development of children under five of age, as well as the good way of cooking healthy and hygienic eggs in the hope that there will be increased understanding and heath practice of the community. Speaking of children growth and development, ZeroStunting Team also performs periodical monitoring of body weight and body height along with the cadres of Posyandu (Integrated Healthcare Center) .



Impact on Sustainable Development Goals (SDGs)

In overcoming the global challenges, the UN has 17 target of sustainable development (SDGs). We understand the importance of overcoming the challenge and ensure that our actions are in accordance with the SDGs.

SDGs Number	Indicator	Activity
2 ZERO HUNGER	[2.2] By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.	• To fulfill the nutrition requirement of children under five of age, and provide animal protein at an affordable price. • To make easy access to rich nutrition for children under five of age.
3 GOOD HEALTH AND WELL-BEING	[3.2] By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.	• To fulfill the animal protein requirement on children under five of age as the program beneficiary, considering the fact that such animal protein serves as the builder of the body immune system. • To perform monthly monitoring of children under five of age as the program beneficiary so their growth and development can be monitored accordingly.
4 QUALITY EDUCATION	[4.2.1] The proportion of children aged 24-59 months who are developmentally on track in health, learning and psychosocial well-being, based on their sexual gender.	• To provide knowledge about children's growth and development in accordance with their respective age. • To provide knowledge to the parents of the program beneficiary about the importance of animal protein on children under five of age. • To provide recipes of egg-based creative menu so children won't easily get bored.

Our Partners

Non Profit Organization

1000 Days Fund

MIPI
PENDIDIKAN ORGANISASI PENELITIAN

MEEK Foundation
In God We Serve

Private Sector

JAPFA

Nestlé

Projects

ZeroStunting Pilot Project

Period : January 2023 - May 2023

Location : Malang & Maros Regencies

About the Program : ZeroStunting *pilot project is undertaken* by providing subsidized eggs worth Rp1,000.00 each to be consumed by the program beneficiary one piece per day for 4 months (*one day one egg*). The target of the program beneficiary under the *pilot project* aged 6 – 59 months has been indicated to have suffered from *stunting* and *underweight*. *After* intervention has been given, the number of *stunted* children at the beginning of the *project* has decreased from 302 to 255, whereas the *underweight children has decreased from* 125 to 34 at the end of the *project*.

Outcome : Number of beneficiaries : 340 children
Number of egg distributed : 42.720 pieces

	Preliminary Data (%)	Final Data (%)
Stunting Children	88.8%	75%
Underweight Children	36.8%	10%

Egg distribution to the program beneficiaries assisted by the existing cadres.

Workshop on the importance of the monitoring of children growth and development to the custodians of the program beneficiaries.

1 Day 1 Egg

Period	:	September 2023 - March 2024
Location	:	Lebak Regency, Banten
Partners	:	1000 Days Fund
About the Program	:	1 Day 1 Egg is a program of collaboration between 1000 Days Fund and ZeroStunting to improve the requirement for protein and nutrition through the provision of 1 egg one day for 6 months to pregnant and lactated mothers, and toddler aged up to 2 years. The program of 1 Day 1 Egg is also aimed at improving the target's awareness and at changing their habit through education and cleanliness. In measuring the success of the 1 Day 1 Egg program, a routine and comprehensive monitoring is held on a daily basis. The role of 1,000 Days Fund in 1 Day 1 Egg is to provide training and education to cadres on how to measure body weight and height as well as to give educational facilitation to the local community in the hope that cadres can facilitate the community and realize ZeroStunting in each of their respective areas.
Outcome	:	144 program beneficiaries consist of pregnant mothers, lactated mothers, and toddler aged 6 – 24 months. Some 25,920 eggs have been distributed.

Socialization of posyandu (Integrated Healthcare Center) program to cadres and participants.

Cadres and village midwives preparing the eggs to be distributed.

Egg distribution to participants by cadres.

Balita of the program participants are consuming eggs.

Hundred Days of Nutrition Assistance

Period	:	October 2023 - February 2024
Location	:	Pasuruan Regency, Batang Regency, Karawang Regency, Sukabumi Regency, and Pandeglang Regency
Partner	:	PT Nestlé Indonesia
About the Program	:	Hundred Days of Nutrition Assistance is a stunting prevention program from PT Nestlé Indonesia held in collaboration with ZeroStunting. This program focuses on the improvement of protein and nutrition through the provision of 1 milk and 1 egg daily for 100 days to balita aged 1 – 5 years. In addition to the provision of 1 milk and 1 egg on a daily basis, the Hundred Days of Nutrition Assistance program also provides education about nutrition and the status of children's health to mothers, cadres, and village midwives through both offline and online educational workshop delivered by Prof. Ali Khomsan – Professor of Food and Nutrition from the IPB (Institut Pertanian Bogor).
Outcome	:	505 program beneficiaries consist of toddler aged 1 – 5 years and as much as 50,500 milk and eggs has been distributed to the program beneficiaries.

Delivery of milk and eggs to the custodians of the beneficiary.

Day 15 of milk and egg consumption.

Educating cadres and program beneficiaries by Prof. Ali Khomsan – Professor of Food and Nutrition from the IPB (Institut Pertanian Bogor).

Monitoring and Evaluation

Period : October 2023 - December 2023

Lokasi : Subdistrict of Dramaga, Bogor Regency

Partner : MIPI

About the Program : The MIPI (Perkumpulan Masyarakat Ilmu Perunggasan Indonesia) of IPB held an acceleration program of stunting reduction in the Subdistrict of Dramaga, Bogor Regency in collaboration with the ZeroStunting. In the context of the stunting rate, the distribution of 300-kg free eggs was conducted in 4 villages so each beneficiary received 2 kilograms of eggs.

The program achievement can be seen from the final results of the project, namely the number of stunted children decreased from 125 to 108, whereas the underweight children decreased from 63 at the start of the project to 46.

Outcome :
Number of beneficiaries : 143 children
Number of egg distributed : 12.740 pieces

	Preliminary Data (%)	Final Data (%)
Stunting Children	87.4%	75.5%
Underweight Children	55.06%	32.1%

Granting of eggs to the program participants/beneficiaries at the Dramaga Subdistrict

MIPI along with the ZeroStunting program conducted Training of Trainer to cadres in Dramaga Subdistrict

Monitoring and Evaluation

Period	:	July 2023 - November 2023
Location	:	Marunda, Cilincing, DKI Jakarta
Partner	:	Meek Nusantara Foundation
About the Program	:	Meek Nusantara Foundation, in collaboration with the Community Health Center (Puskesmas) in Marunda Village, Cilincing District, North Jakarta, has implemented a stunting reduction program by initiating parenting education for parents of children identified with stunting. In addition to providing this education, Meek Nusantara Foundation and Marunda's Community Health Center have launched a program to provide one egg and one milk daily to ten children identified with stunting. To ensure comprehensive impact monitoring, Meek Nusantara Foundation has partnered with the ZeroStunting program to assist in the evaluation and monitoring of the daily egg and milk program by creating a stunting and underweight reduction impact monitoring dashboard. Over the course of five months, the program has resulted in a decrease in the number of stunted children from an initial 10 to 6 children now free from stunting. Similarly, the number of underweight children has decreased from 5 to 4 children now free from being underweight.

Collaborative audience related to the ZeroStunting program and Meek Foundation

Rollout of the collaboration program between ZeroStunting and Meek Foundation to the Dasawisma of Marunda Rusun and Puskesmas Cililitan, North Jakarta

Testimonial About the Program

Ibu Dede Sumiyati – M. Baharudin Yunus (11 months)

Participants of 1 Day 1 Egg Program in Lebak Regency

Thanks to the ZeroStunting for allowing my kid to attend this program and get through the status of underweight. The ZeroStunting Program helped me understand the importance of observing children's nutrition through the granting of MPASI. In addition, the intervention in the form of daily egg consumption helps improve the nutrition of my kid. I hope all of the ZeroStunting programs in Kujangsari, Lebak Regency, will be made sustainable because I feel I have been facilitated and given good nutritional knowledge for children during the MPASI until they reached 5 years old.

Dede Sumiyati

Ibu Siti Halifa – Anna Anisa (28 months)

Participation of the 100 Days Nutrition Assistance program in Pasuruan Regency

I am delighted to have participated in the 100 Days Nutrition Assistance program because initially my kid had no appetite and was less active, but now he had his body weight always increased by 2-3 ounces every month. I hope the 100 Days Nutrition Assistance program will continue and that in the future its assistance be made more variative.

Ibu Sri Hariyati – Dhea Novita Anggraeni (27 months)

Participation of the 100 Days Nutrition Assistance program in Batang Regency

Alhamdulillah I am pleased to take part in the 100 Days of Nutrition Assistance program. Prior to the participation in the program, my kid weighed 9.3 kg with the height being 79.5 cm. Now my kid weighs 10.6 kg with the height being 87 cm. Besides, my kid is now getting more active, healthy, and smarter. This program has yielded positive impact on my kid as he is getting more active and enthusiastic about consuming milk and eggs, and moreover the other participants and I are always given reminders through the group forum. Many thanks to PT Nestlé Indonesia and ZeroStunting who have held this program, I wish them every success with their endeavor.

Sri Haryati

Ibu Devi Susanti – Muhammad Azmi Al-Baihaqi (24 months)

Participation of the 100 Days Nutrition Assistance program in Karawang Regency

Prior to the 100 Days of Nutrition Assistance program, my kid's height and weight were considered inadequate. My kid was also less active and had no appetite. After attending the program, however, my kid gained height and weight. Besides, he is getting more active and has better appetite through the provision of milk and eggs. One thing I like about this program is that its organizers are consistent in monitoring the granting of eggs and milk to its beneficiaries and that there is an educational program about children nutrition. Hopefully, our kids can get out of the stunting zone and remain healthy and active.

Devi Susanti

Ibu Reli Yuliatiningsih

The Village Midwives Program 1 Day 1 Egg in Lebak Village

Alhamdulillah, I thank ZeroStunting who has initiated the 1 egg program every day through egg distribution or PMT directly to the targeted beneficiary of 1000 HPK. While attending the program, there were no hindrances, and everything went smoothly. Changes occurred when weight and height measurement was conducted during which they successfully gained their weight and height and there was an improved consumption of nutrition on children, and that mothers began to come over to Posyandu on a routine basis. I hope this program will continue and can change people's habit toward betterment through collaboration and approaches to the villages of intervention.

Reli Yuliatiningsih

Ibu Istigfarillah Elok Rahmaaini

The Village Midwives Program 100 Days of Nutrition Assistance in Pasuruan Regency

The ZeroStunting Program is very good because it can increase balita's weight and height every month. In addition, through this program we got counseling on how to fulfill the meeting of nutrition on children. I hope this program will be continued for a longer period and can reach other areas focusing on stunting. I hope our children can get out of the stunting condition as soon as possible.

Ibu Mutiatun

The Cadre program 100 Days of Nutrition Assistance in Batang Regency

I am very pleased to attend the stunting management program from ZeroStunting along with Nestlé Indonesia. Through this program, alhamdulillah we can improve the nutrition of the beneficiaries. After a series of routine monthly monitoring, children's height and weight began to increase. Mothers' knowledge about stunting is getting improved, and they are getting more aware of the importance of the good provision of nutrition on children. I hope mothers will continue good habits in the form of the provision of milk and eggs to children as part of the nutrition fulfillment even after this program has ended.

Mutiatun

Ibu Susiyana

The Cadre program 100 Days of Nutrition Assistance in Karawang Regency

As the posyandu cadre, I should like to thank you for the sustainability of the ZeroStunting program, and for the knowledge on nutrition. Because of the 100 Days of Nutrition Assistance program, balita had gained their weight and height through the provision of milk and eggs. In the future, as the cadre of posyandu, I want to receive more nutritional education from this program with a longer duration so mothers of balita can better understand nutrition and proper food preparation for their children.

(Susiyana)

Research and Knowledge Development

Initiative Background

To achieve the long-term vision and mission of Edufarmers, the role of research activities and knowledge development is crucial for building Edufarmers' expertise foundation in enhancing the productivity of the farmers it supports, as well as for disseminating agricultural knowledge to a broader audience so the impact provided by Edufarmers can reach more stakeholders.

The activities undertaken by Edufarmers in relation to this initiative shall include:

1. Research and Development

In order to maintain food security, Edufarmers conducts various research on key food commodities to sustainably increase agricultural productivity and harvest quality. With support from Google.org, we strive to amplify the impact of our research and development efforts, benefiting both farmers and the community.

Edufarmers conducted experiments in research fields to test various cultivation practices, production inputs, and technologies that can enhance agricultural productivity and reduce production costs, particularly for rice, maize, and chili commodities. The results of these experiments will be utilized to support agricultural programs implemented by Edufarmers and disseminated to the general public in the future.

Throughout 2023, there had been 26 agronomy experiments made by Edufarmers in the context of improving the agriculture productivity. Based on the agriculture research, Edufarmers has managed to achieve the productivity below:

- Paddy : 7,83 ton gkp/ha
- Maize : 10,65 ton/ha (vs 7 ton/ha di 2022)

The results of the experimental research conducted can be further explained in the table below:

No.	Title of Research	Location	Time	Result
1	The Influence of Rice Husk Application as Organic Mulch and Irrigation Drip Watering Intensity on the Growth and Yield of Corn Plants.	BPP Simou, Subdistrict of Labuan, Donggala Regency, Central Sulawesi	21/3/2023 through 11/7/2023	The treatment of hydrogel irrigation technique + rice husk mulch 4 kg/m2 + mikoriza provides the best results with a productivity of 7.22 tons/ha. Findings from the research indicate that maintained soil moisture leads to an increase in plant height and maize crop productivity.
2	The Influence of Rice Husk Application as Organic Mulch on Weed Population in Corn Cultivation in Donggala Regency	BPP Simou, Subdistrict of Labuan, Donggala Regency, Central Sulawesi	14/3/2023 through 5/7/2023	The treatment of 4 kg/m2 rice husk as organic mulch shows the best results in terms of morphological aspects and yield of corn plants, reaching 7.23 tons/ha. Rice husk can be used as organic mulch in corn cultivation. The silica content in rice husk provides additional nutrients for corn plants.
3	The Influence of Variation in Fertilizer Types and the Addition of Plant Growth Regulators on the Growth and Yield of Corn in Donggala Regency.	BPP Simou, Subdistrict of Labuan, Donggala Regency, Central Sulawesi	14/3/2023 through 5/7/2023	The fertilizer treatment with a variety of types including NPK + Urea + SP-26 + plant growth regulators (ZPT) shows the best results in terms of growth and yield. However, in this research, the results are not yet optimal due to the use of a planting medium with a hard structure and insufficient irrigation frequency. In this study, the highest productivity only reached 3.7 tons/ha.

No.	Title of Research	Location	Time	Result
4	Comparative Study of Ciherang Inbred Variety with Intani 602 & Sembada 188 Hybrid Varieties on the Growth and Yield of Rice Plants in Ngawi Regency.	Subdistrict of Ngawi, Ngawi Regency, East Java	24/10/2022 through 21/2/2023	This research aims to assess the growth and yield responses of various rice plant varieties. The research results indicate that the Ciherang variety is highly susceptible to attacks from grassy stunt disease, which is an endemic disease in the Ngawi District during the study period. The Sembada and Intani 602 varieties are highly susceptible to brown planthopper infestations.
5	Growth and Yield Responses of Various Rice Varieties: Mapan P05, Bridantara 8, MR 219, Inpari 48, and Inpari 32.	Subdistrict of Paron, Ngawi, East Java	7/4/2023 through 7/7/2023	In this study, it was found that the Inpari 32 variety exhibited the best yield in terms of productivity, with 7.83 tons/ha. However, for plant growth, the best-performing variety was Mapan P05. Selecting the appropriate variety for the planting location is one of the efforts to achieve optimal results.
6	Growth and Yield Responses of Various Rice Varieties: Inpari 32, Gamagora 7, Mapan P05, and Sunggal.	Subdistrict of Paron, Ngawi, East Java	31/8/2023 through 29/11/2023	This study was conducted to compare several varieties. The Mapan P05 variety exhibited the best growth and yield performance compared to other varieties, with 5.71 tons/ha. During the course of this research, all plants experienced El Nino stress, resulting in less optimal yields.
7	The Influence of Various Levels of Fertilization Dosage on the Growth and Yield of Large Red Chili Plants.	Subdistrict of Pacet, Cianjur Regency, West Java	5/12/2022 through 31/5/2023	The treatment with a fertilizer dosage level of 25% of the recommended amount showed the best yield for Large Red Chili plants, reaching 1.76 tons/ha. This research was conducted at an altitude of 1,100 meters above sea level. There was a significant and widespread incidence of Anthracnose disease during the study, leading to decreased productivity.
8	The Influence of Fertigation Frequency and Various Levels of Fertilization Dosage on the Growth and Production of Chili Plants in the Cipanas Area, Cianjur.	Subdistrict of Pacet, Cianjur Regency, West Java	5/12/2022 through 31/5/2023	The treatment with watering frequency twice a week and fertilizer dosage at 50% of the recommended amount proved to be the best in this study, yielding 1.30 tons/ha. The research was also conducted under massive Anthracnose disease incidence conditions, leading to reduced plant productivity.
9	The Effect of Magnewish and BioSilac Application on the Growth and Yield of Large Red Chili Plants (Capsicum annuum) Darmais F1 in Cianjur Regency.	Subdistrict Pacet, Cianjur Regent, West Java	5/12/2022 through 31/5/2023	Based on the research findings, the herbicide application technique using drones has not shown good effectiveness.This is because the sprayed volume received by the plants is insufficient. According to observations, the Crop technology in pest monitoring is not yet sufficiently effective, as it can only read microclimate data but cannot identify pest attacks in real-time.

No.	Title of Research	Location	Time	Result
10	Testing Herbicide Application using Drone Sprayer Technique and Pest Monitoring using Crop Technology in Corn Cultivation in Mojokerto Regency.	Subdistrict of Gedek, Mojokerto Regency, East Java	3/11/2022 through 8/2/2023	Based on the research findings, the herbicide application technique using drones has not shown good effectiveness. This is because the sprayed volume received by the plants is insufficient. According to observations, the Crop technology in pest monitoring is not yet sufficiently effective, as it can only read microclimate data but cannot identify pest attacks in real-time.
11	Growth and Yield Response of Corn Varieties NK Perkasa and Adv Ruby under Different Planting Systems.	Subdistrict of Puri, Mojokerto Regency, East Java	8/5/2023 through 28/8/2023	The treatment with the planting system of 1 seed per hole using Adv. Ruby showed the best result, yielding 10.65 tons/ha. The use of the appropriate variety and planting only 1 seed per hole can provide good results.
12	Growth and Yield Response of Corn Variety ADV Jago under Different Legowo Row Arrangements.	Subdistrict of Puri, Mojokerto Regency, East Java	14/9/2023 through 29/12/2023	In this study, the treatment with the legowo row planting system using 2 seeds per hole yielded the best results compared to 1 seed per hole, with a yield of 10.16 tons/ha. The use of 2 seeds per hole affected the population density per unit area per plant, thereby influencing the crop yield.
13	Comparative Study of Monoculture and Polyculture Planting Systems in Bird's Eye Chili Cultivation: Growth and Economic Yield.	Subdistrict of Cisurupan, Garut Regency, West Java	11/6/2023 to present	Preliminary Results: So far, the monoculture planting system has shown better growth and yield performance compared to the polyculture system. Currently, the harvest yield in the monoculture planting system is 129 kg, while in the polyculture system, it is 65.89 kg. In the polyculture planting system, cabbage plants are used as intercropping plants.
14	Growth and Yield Response of Bird’s Eye Chili Plants to the Environment in Ciwidey, Bandung Regency	Subdistrict of Ciwidey, Bandung Regency, West Java	15/7/2023 to present	Preliminary Results: This research aims to observe the growth response of chili plants in steep slope conditions. So far, the plants have shown good response and have yeilded 715/35 kg of bird’s eye chili.
15	Growth and Yeild Response of Bridantara 8 Rice Varieties.	Subdistrict of Ngawen, Klaten Regency, Central Java	24/7/2023 through 18/11/2023	The objective of this research is to assess the potential of Bridantara 8 varieties grown in specific locations in Klaten Regency. The results of this study indicate that the Bridantara 8 variety exhibits good growth performance and yields, reaching 4.8 tons/ha. Researchers speculate that these results are still highly improvable

No.	Title of Research	Location	Time	Result
16	The Effect of Paclobutrazol on the Harvest Index of Corn Crops.	Subdistrict of Ngawen, Klaten Regency, Central Java	27/9/2023 to present	Preliminary Result: The treatment of Paclobutrazol with a dosage of 600 ppm applied twice at 42 and 60 days after planting (DAP) showed the best growth performance, with a higher number of cobs per plant produced.
17	Growth and Yield of NK Super Corn Plants at Different Spacing Between Rows in the Legowo System on Well-Irrigated (Drip) Land.	Subdistrict of Ngawen, Klaten Regency, Central Java	27/9/2023 to present	Preliminary Result: The row spacing treatment with a distance of 100 cm resulted in larger cob size compared to the treatment with closer row spacing.
18	Growth and Yield Response of NK Super Corn Plants to Different Applications of Conventional Fertilizer, NitronPlus, and Liquid Fertilizer.	Subdistrict of Ngawen, Klaten Regency, Central Java	27/9/2023 to present	Preliminary Result: The conventional fertilizer application (broadcast) resulted in the best growth compared to foliar fertilization treatments using liquid fertilizer and NitronPlus. The cob size produced with conventional fertilization (K) was also larger compared to NitronPlus (NP) and liquid fertilizer (PC) treatments.
19	The Application of PGPR (Pseudomonas sp) and Mycorrhiza (Glomus family) on the Growth and Yield of Rice Plants.	Subdistrict of Ngawen, Klaten Regency, Central Java	5/10/2023 to present	Preliminary Result: The treatment involving the addition of PGPR and Mycorrhiza has shown significant differences in growth parameters so far, but its impact on plant yield observation parameters is yet to be determined.
20	The Effect of Zinc (ZnSO4) and Boron (H3BO3) Application on the Growth and Yield of Rice Plants.	Subdistrict of Ngawen, Klaten Regency, Central Java	5/10/2023 to present	Preliminary Result: The application of Boron and Zinc fertilization did not show significant differences in plant growth compared to the control plants.
21	Growth and Yield Response of Inpari 32 Rice Plants to Different Applications of Conventional Fertilizer, NitronPlus, and Liquid Fertilizer.	Subdistrict of Ngawen, Klaten Regency, Central Java	5/10/2023 to present	Preliminary Result: The conventional fertilizer treatment resulted in better growth performance compared to foliar fertilization treatments using liquid fertilizer and NitronPlus. When considering SPAD values, the conventional fertilization treatment also yielded higher readings compared to the other two treatments.
22	Improving Production of Several Upland Rice Cultivars with Appropriate Fertilization Technology.	Lab. of Seedling Technology of the Faculty of Agriculture, University of Tadulako, Central Sulawesi	9/9/2023 through 31/12/2023	Based on the research findings, the treatment of NPK at 200 kg/ha showed the best growth performance compared to other treatments, for both Delima and Dongan varieties. Currently, data collection on yield components is still ongoing, so information regarding yields is not available yet.

No.	Title of Research	Location	Time	Result
23	The Influence ofTerra Preta Application andThickness of RiceStraw Mulch on the Growth and Yield of Hybrid Corn Plants (Zea mays L) Pertiwi 5.	Subdistrict of Tomo, Sumedang Regency, West Java	11/9/2023 through 23/12/2023	Based on the results of this study, the application of Terra Preta at doses of 15 tons/ha and 20 tons/ha significantly influenced the growth and yield of corn plants. Meanwhile, the difference in thickness of rice straw mulch did not yield significant differences in response.
24	Testing the Effectiveness of Brotowali Stem Extract (Tinospora crispa) Using Two Types of Solvents to Suppress the Intensity and Severity of Fall Armyworm (Spodoptera frugiperda) Infestation and Increase Corn (Zea mays L.) Yield.	Lab. of Pest & Disease, Faculty of Agriculture, University of Tadulako Palu, Central Sulawesi	18/9/2023 through 22/12/2023	Based on the results of mortality, infestation intensity, and severity levels, Brotowali stem extract with 15% ethanol solvent effectively reduced infestation intensity by up to 35.60% and severity of Spodoptera frugiperda infestation by 16.04%. Additionally, Brotowali stem extract with 20% water solvent effectively reduced infestation intensity by up to 37.92% and severity of Spodoptera frugiperda infestation by 18.18%.
25	The Influence of Controlled Release Fertilizer Dosage on the Growth and Yield of Bird's Eye Chili Plants (Capsicum frutescens L.)	Garden of Research Experiment , Faculty of Agriculture, University of Andalas, Padang, West Sumatera	1/10/2023 to present	Preliminary Results: This study aims to examine the influence of dosage of controlled release fertilizer on the growth and yield of bird's eye chili plants. Currently,the research has just entered the early harvest phase, and plants treated with controlled release fertilizer show earlier harvesting age compared to single and compound fertilizers.
26	The Influence of Phosphate Fertilizer Dosage and Phosphate Solubilizing Bacteria (Bacillus spp.) on the Growth and Yield of Bird's Eye Chili Plants (Capsicum frutescens L.)	Subdistrict of Kebonarum, Klaten Regency, Central Java	23/10/2023 to present	Preliminary Results: This study aims to examine the influence of phosphate fertilization and Bacillus bacteria as phosphate solubilizers on plant growth and yield. Currently, it is in the early harvest phase, so not all yield components data have been fully collected. However, regarding plant growth, so far, the treatment with 1.2 grams of phosphate fertilizer and 15 grams per liter of Bacillus bacteria shows the best results in plant growth.

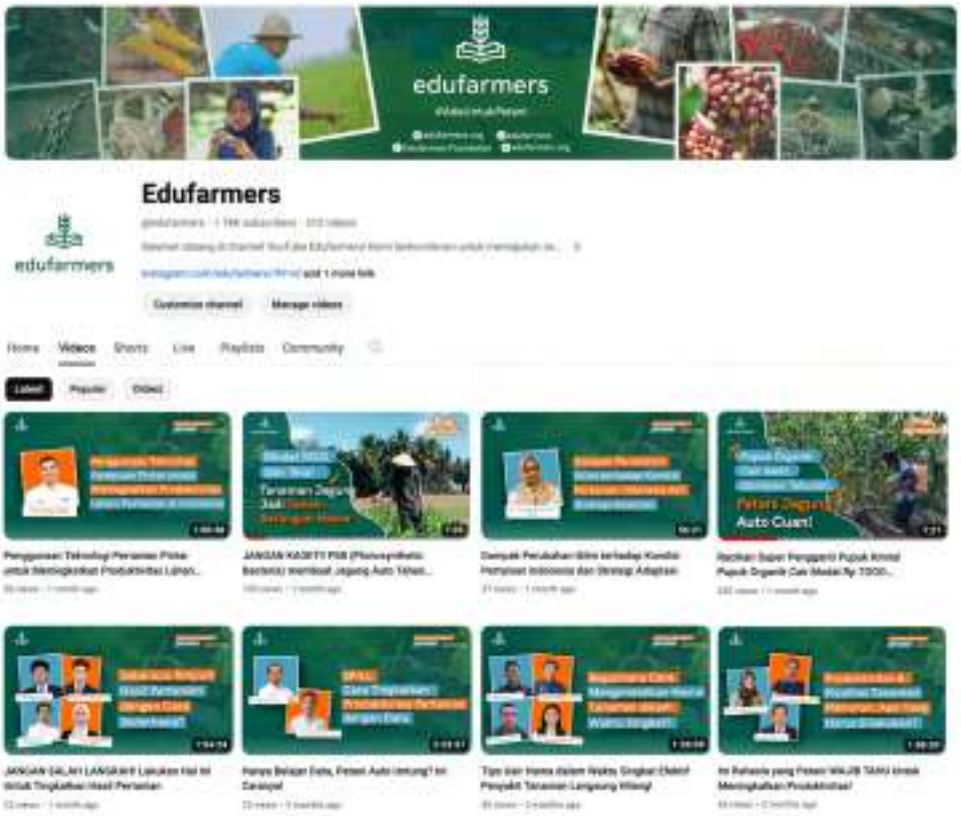
2. Management and Knowledge Dissemination

As digital technology advances today, we have utilized support from Google.org to create various learning media, including research and study results as well as educational videos.

Edufarmers collected knowledge and information from the whole programs and research that had been conducted, then making such knowledge documents, media, and videos on the summary of practical knowledge that can be accessed by public for free. This initiative is part of the main mission of Edufarmers to introduce the potential agricultural industry to the community at large.

In 2023, there were 5 basic learning modules published on Edufarmers website. The entire modules can be accessed for free at https://www.edufarmers.org/publication

Edufarmers also routinely made learning videos on the agricultural techniques that have been published on Edufarmers website as well as on YouTube video channel (https://www.youtube.com/@edufarmers).



3. Enlightenment Day

Edufarmers managed to hold Enlightenment Day which constitutes the first scientific research and innovation conference addressed to researchers and academician community. This program is part of the Edufarmers commitment to contributing to the science and technology development, especially in the sector of farm and agriculture.

The Enlightenment Day 2023 was held on Tuesday, 19 December 2023, presented by 17 speakers and attended by more than 250 participants.

In Enlightenment Day 2023, the participants initially discussed the climate change issues along with their impact on the agricultural sector in Indonesia, as well as the application of smart agriculture technology that can be an alternative way of adapting to and mitigating the climate change. Subsequently, participants can enter into smaller rooms to discuss various topics any further.

4. Agrinnovation Conference

Agrinnovation Conference 2023 constitutes an annual program that focuses on innovation and the latest development of agricultural sector. This program invited participants from various industry such as agritech, professional services, fintech, ecommerce, and edutech.

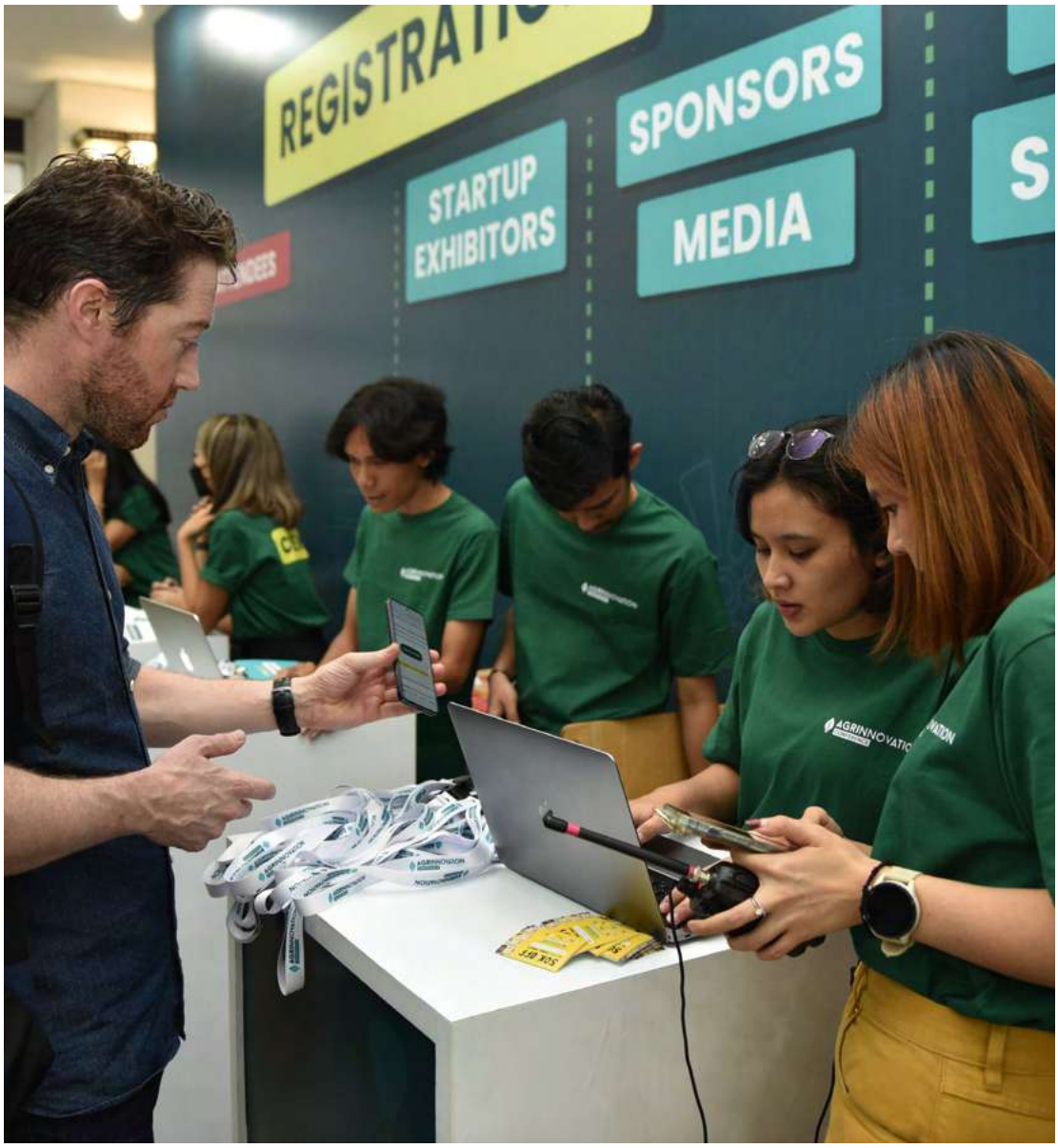
With the support from Google.org, we successfully organized an agricultural conference to connect participants in building innovations, providing exposure, and fostering business opportunities in the agricultural sector.

Agrinnovation Conference 2023 was designed to share various experiences to its participants. With 13 different sessions; starting from the opening by the Minister of Agriculture, the main panel that brought in industrial leaders, to the special session that introduced innovative startups. This conference was able to fulfill the requirements of various segments of audience. In fact, this program was able to create rooms for the sharing of knowledge, discussion, and collaboration that produced new insights and partnership.

The main panel in this conference has become a valuable forum for industry leaders, both from the business and venture capital sides, to share their experiences, insights, and visions for the future of agriculture. With 36 inspiring speakers, this panel does not only offer strategic perspectives but also becomes the participants' source of motivation to keep innovating and collaborating so as to make impactful changes.

Agritech Village that becomes one of the focuses in Agrinnovation Conference 2023 managed to attract 103 applicants for the agritech startup throughout Indonesia to contribute to the agriculture transformation. This reflects the huge potential from the innovative layer of community. Of many applications, there were only 30 startups selected to participate in Agritech Village, and 6 startups that had earned special highlights during the aggrotech startup highlight session on the main stage, which allowed them to show off their brilliant ideas to audience and investors would-be.

The success of the Agrinnovation Conference 2023 cannot be separated from the huge support of various parties. With 13 main sponsors, 26 community and media, this program became a forum of collaboration that sustains the agriculture innovation ecosystem. Such support is not only from the financial aspect but also involves participant networking, increases the program visibility, and provides an added value to all the parties involved.



Shared Programs

1. Development of Agriculture Community

Period : September 2022 – September 2023

Location : Kei Besar Island, Kab. Maluku Tenggara, Maluku

Partner : Yayasan Dokter Peduli (DoctorSHARE)

About the Program : Edufarmers in teaming up with Yayasan Dokter Peduli (DoctorSHARE) was trying to address the high stunting prevalence challenges in Pulau Kei Besar which was caused by the lack income to access protein. Albeit the island of Kei Besar is abundant in marine resources and has plenty of fish as a good source of protein, non-coastal communities have difficulty accessing fish due to logistical challenges and a lack of economic resources to obtain them.

Edufarmers has deployed a field agronomist to the program location to set up demo plots, provide education, and support non-coastal communities in starting more productive farming by utilizing the local materials. This initiative aims to enable them to generate additional income from the vegetables produced, allowing them to purchase protein sources and to ultimately break free from stunting.

Outcome :

- Some 164 farmers from 15 villages in Kei Besar had attended training and facilitation programs.
- Some 23 types of horticultura plants and 13 farming techniques had been introduced.
- The farmer champion of the farming community had been established.
- The extension of support and the showing of commitment from the local administration to promote agriculture in Kei Besar.

2. Delivery of Agronomy Training to the Company Staff

Period : June 2023 – August 2023

Location : Solo, Magelang, and Pati, Central Java

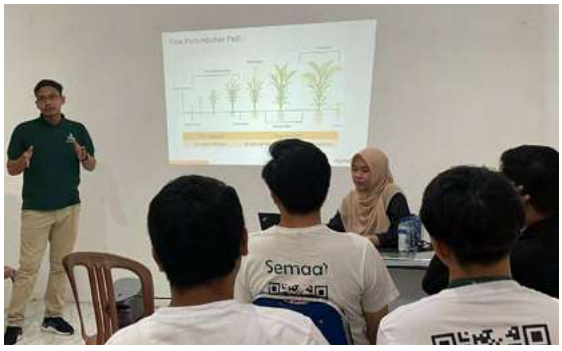
Partner : Kopernik

About the Program : Edufarmers collaborates with Kopernik to provide training to field staff of a relevant organization on the basics of agronomy and agricultural input product knowledge. This empowers them to speak about and sell their services to farm stores more effectively than it was ever before.

Subsequently, Edufarmers creates modules to teach field staff about the basic agronomic processes for rice, corn, and chili, as well as related agricultural input products that will be most sought after during each planting season. Facilitators from Edufarmers then conduct face-to-face training sessions in small groups setting.

Outcome :

- Some 44 field staff members have attended a basic agronomy training program.
- Based on the results of the post-test conducted, there has been an increased knowledge as much as 9.18%.post-test.



3. Land Management

Period : June 2023 – Present

Location : Ciwidey Subdistrict, Bandung Regency, West Java

Partner : IOTANI

About the Program : IOTANI is a startup organization in the agriculture sector that has a focus on the production of horticultura plants through self-owned farming, contract farming, and trades. They focus on contract farming and trades, meanwhile Edufarmers establishes collaboration with them to carry out farming management operations on their own land.

Edufarmers has the capability to manage farming land because the capability required is similar to that undertaken by Edufarmers through their demo plot in the research initiatives and agricultural development.

Our Partners

Universities

Lambung Mangkurat University

Syiah Kuala University

Hasanudin University

Andalas University

Siliwangi University

Brawijaya University

Gadjah Mada University

Institut Pertanian Bogor

Government

Foundations, Associations, and International Organizations

Private Companies, BUMN, Start-ups, and Others

Our Upcoming Goals

On Agriculture

1. **Experimentation of new, more effective and more efficient facilitation models**

   In order to reach and have a broader impact on farmers throughout Indonesia, in 2024, Edufarmers intends to experiment and pilot various support models so that the cost per impact can be reduced and the use of donor funds can be optimized. Some of the models currently being developed include partnering with Field Extension Officers (PPL) from local Agricultural Extension Offices (BPP), location-based semi-permanent support models, models specifically targeting youth, and others.

2. **Acceleration and reinforcement of capability to conduct farm research and pursue optimum farm production**

   In the upcoming year of 2024, Edufarmers intends to allocate larger resources to strengthen its capabilities in agricultural research to achieve optimal production, enabling it to conduct even more experiments. Additionally, as part of this capacity strengthening effort, Edufarmers is opening up extensive opportunities for collaboration with various entities such as universities, research institutions, foundations, and companies to sharpen and innovate the experiments conducted.

3. **Development of an online platform for disseminating agricultural knowledge to the wider community with support from Google.org**

   Edufarmers will launch an online platform and accelerate its YouTube channel with more educational content that can be utilized by farmers and aspiring agricultural entrepreneurs to learn technical agricultural and livestock cultivation sciences.

On Stunting

1. **To develop programs through experimentation with new interventions and the strengthening of community training**

   To provide a more holistic impact on a community, ZeroStunting will attempt the implementation of interventions involving the development of layer chicken coops. The produce from these layer chickens will be distributed to two parties, namely beneficiaries to address stunting and the managers of the chicken farms. With this concept, it is hoped that the construction of chicken coops can help sustainably support the community economically while also addressing stunting. We also aim to expand the training materials for cadres and beneficiaries to support behavior change within the community.

2. **To create a digital ecosystem that automates field processes and provides donors with a sense of ownership over all the donations they have provided.**

   The creation of digital products will be divided into two categories, namely the products used by donors and the products used by field teams. Digital products for donors will have features that help them gain full transparency into ongoing activities and foster a strong relationship with beneficiaries. Meanwhile, digital products for field teams will assist them in digitally capturing necessary data and integrating it into the digital products for donors.

3. **To drive the public to better understand the issue of stunting and encouraging them to contribute more to addressing stunting issues.**

   We will accelerate public awareness of stunting issues through more innovative and measurable marketing activities. Launching strategic events in collaboration with external parties will be our focus to raise public awareness of stunting. During those events, we will also provide public with some opportunities to contribute to addressing stunting issue.

Financial Information

For the 12 month period ending December 31, 2023 (in IDR)

Donation & Other Income	2023	2022
Donation	14.450.000.000	9.145.400.000
Long Term Investment Income	-	2.799.760.000
Other Donation	6.750.344.486	3.882.692.822
Other Income	18.472.737	14.854.089
Total	**21.218.817.223**	**15.842.706.911**
Expenses		
Program		
Education Equality Improvement	-	349.599.574
Bertani Untuk Negeri	5.579.531.623	4.225.883.572
Agriculture Development Research	1.370.935.967	723.870.847
THRIVE-GROWASIA	-	100.558.818
Stunting	869.624.048	219.355.755
Agrinnovation Conference	1.084.854.318	-
Marketing and Business Development	769.782.875	-
Administrative Expenses		
Personnel	8.860.195.026	5.927.185.721
Office Admin	327.960.269	151.575.015
Bank Charges	4.287.450	2.641.500
Depreciation	179.594.870	128.414.639
Operation Support	474.937.649	337.217.100
Maintenance Repair	748.943.229	526.685.915
Taxes	1.616.571.491	761.202.032
Total Expenses	**21.887.218.815**	13.454.190.488
Total Expenses & Loss	**21.887.218.815**	13.454.190.488
Increase/Decrease Net Assets	- 668.401.592	2.388.516.423
Net Assets at Beginning of The Year	**5.185.437.708**	2.796.921.285
Net Assets at Current Month	**4.517.036.115**	**5.185.437.708**

edufarmers

You can contact us at
partnership@edufarmers.org to discuss further
about the potential for our joint collaboration

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