



YAYASAN BINA TANI SEJAHTERA



www.binatani.or.id

ANNUAL REPORT 2017



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Foreword

Chairman, Board of Trustees



2017 saw continued growth in the Foundation's positive community impact in Indonesia. The projects and partnerships we have all worked hard to establish here over the last three years have been key to this sustained positive change. Fortunately, our work continues to have a lasting and significant impact for farmers in Indonesia, as well as contribute to global Sustainable Development Goals.

Doubling the agricultural productivity of small-scale producers, through access to seeds and knowledge, is a crucial element of the global Sustainable Development Goal 2 (SDG2) to end hunger. At the Foundation, we recognize our responsibility to come up with innovative strategies that help meet this global challenge. A challenge that seeks to ensure the growing world population has enough quality food to meet their nutritional needs and live healthy lives.

Helping the productivity and incomes of the smallholder farmers we serve plays a significant role in addressing that need. Hence, the projects we undertake at the Foundation strive to go further in ensuring farmers in Indonesia can access seeds and improve their incomes through better growing tactics.

The esteemed partners working on some of these major projects with us include:

vegIMPACT: Who we have been conducting knowledge transfer activities with through demo lot establishments, GAP (Good Agricultural Practices), field days, and vegetable consumption promotions. With vegIMPACT, we have also distributed and sold a whopping 48,000 crop books over the last three years.



ICCO Cooperation: Who is working with us on the G4AW-SMARTseeds Information Service to connect farmers with geo data and field data through mobile devices. With this type of information, farmers can improve production, operate more efficiently, and increase income in a sustainable way.



Cordaid: Who continue to support our work on the Resilience and Livelihood project. This work seeks to strengthen and risk-proof communities, as well as improve agricultural livelihoods in West Timor.



PRISMA: Who we have been coordinating with to reach farmer groups across Indonesia. Prisma helps us accelerate our provision of GAP Knowledge and good quality seed access at farmer level for the benefit of their livelihoods.

At the Foundation, we look forward to continuing our work with our dedicated partners and donors on projects to improve knowledge, productivity, and livelihood in the farming communities we serve.



Joost Pekelharing

Chairman, Board of Trustees

Foreword

Chairman



The welfare of farmers. This is the goal of PT East West Seed Indonesia (Ewindo), the producer of CAP PANAH MERAH vegetable seeds. High quality seeds are our capital in contributing to give a better life. Becoming Farmers' Best Friend is one of our company values. As a best friend, we are always ready to help farmers and provide assistance for them.

This role is also embodied by Yayasan Bina Tani

Sejahtera (YBTS). YBTS is the extension arms of Ewindo to express its commitment to become farmers' best friend. Through YBTS, Ewindo's support can be given to farmers in remote areas who are in areas which would be out of reach otherwise. Through knowledge and technology transfer from the experienced YBTS team, we hope to increase the capacity and productivity of farmers in doing their farm business.

YBTS has a strategic potential to contribute for farmers in Indonesia. Support is not only given by Ewindo, but also strategic partners such as non-profit organizations. YBTS has access to Ewindo resources in terms of human resources, expertise, and even networks as primary support for farmers. Aside from this, YBTS can also receive similar access from other non-profit organizations with the same mission. So with much support from the company and non-profit organizations with good reputation and achievements, the benefit for farmers can be much larger.

We will continue to support YBTS to continue to improve the livelihood of farmers so that they may be more prosperous.

Yours sincerely,
Glenn Pardede
Chairman, Supervisory Board
Yayasan Bina Tani Sejahtera

Introduction

Board of Caretakers,
Yayasan Bina Tani Sejahtera



Yayasan provides extension and training services to farmers to help them increase their vegetable crops yields and household income. We flashed back to year 2014 when a renewed tasks mission is in place – through general direction from Yayasan Founders and Board of Trustees, and also with the very strong support of PT East West Seed Indonesia. Since then Yayasan serves smallholder farmers in less fortunate areas and

islands in eastern part of Indonesia where farmers lack of technical knowledge and best practices. During this period our team grew from 13 became 20 staffs in year 2017.

In 2017 we delivered extension services in 10 regencies of eastern Indonesia, namely: Kupang, Timor Tengah Selatan, Sikka, Maluku Tengah, Halmahera Utara, Halmahera Barat, Morotai, Manokwari, Pegunungan Arfak, and Nabire. Total of 16,383 farmers acquired knowledge and skills through knowledge transfer (KT) and field events activities such as crop demoplot, training of farmers, farmers' field day and technology expo. By acquiring knowledge on good farming practices and by applying them along with good quality inputs, farmers are able to improve crop yield and increase household income.

With 4 years of service now, I believe that Yayasan program have been exerting impacts that linked to several SDGs (Sustainable Development Goals):

- Smallholder farmers increased their household income and resilience to drought-risk [SDG#1 No Poverty];
- Farmers increase their productivity thus increase local supply of fresh vegetable [SDG#2 No Hunger];
- Farmers acquiring knowledge and work-skills through training and KT activities [SDG#4 Quality Education]; and

- Our KT messages promote achievement of farm productivity and efficiency by better usage and responsible use of resources such as efficient use of water through drip-irrigation and inputs such as proportional use of nutrient fertilizers [SDG#12 Responsible Consumption & Production].

Yayasan collaborated with key partners: (1). vegIMPACT since 2014 on Knowledge transfer to support sustainable vegetable farm management; (2). Cordaid and KARINA since 2014 on Risk-proof agricultural livelihood; (3). PRISMA since 2015 on Extension service to help farmers' income increment and better access to input &

output markets; and (4). ICCO Cooperation since 2016 on SMARTseeds geo-data & information service.

Rooms for improvement? Yayasan needs to adopt better impact measurement tool to help us plan, implement and monitor our services. On this occasion, we would like to thank the Board of Trustees and Supervisory Board of Yayasan for full support. We convey similar gratitude to partners and donors: VegIMPACT, KARINA and Cordaid, PRISMA, and ICCO Cooperation for the nice partnership and collaborations.

Thank you.

Edwin S. Saragih

Chairperson, Board of Caretakers

01

About YBTS

Yayasan Bina Tani Sejahtera

Yayasan Bina Tani Sejahtera (YBTS) berkarya untuk membantu perbaikan penghidupan petani agar semakin sejahtera. Berdirinya Yayasan merupakan salah satu strategi tanggung jawab sosial perusahaan PT East West Seed Indonesia (www.panahmerah.id). Kami meyakini bahwa penghidupan petani dapat ditingkatkan melalui transfer pengetahuan dan teknologi guna meningkatkan kapasitas petani dalam berusaha tani. Yayasan memberikan layanan penyuluhan dan konsultasi, melakukan pelatihan budidaya dan usaha pertanian. Program Yayasan menyangkai pada para petani skala kecil di Indonesia, khususnya bagi petani yang memiliki akses terbatas pada pendampingan teknis dan pelayanan penyuluhan. Kami juga memberikan perhatian dan pelayanan pada pengelolaan dan penggunaan sumber daya alam dan lingkungan secara berkelanjutan.

Yayasan didirikan pada bulan April 2009 oleh para pendiri yakni Piet Mazereew, Simon N. Groot dan Kurniawan Sutedja. Dewan Pembina YBTS saat ini adalah Joost Pekelharing dan Joost Gietelink. Sedangkan sejak tahun 2017, Dewan Pengawas YBTS dijabat oleh Glenn Pardede, Ahmad Yuniarto, Flip van Koesveld, dan Stuart Joseph Morris. Dewan pengurus YBTS saat ini dijabat Edwin Saragih (Ketua), Fransiska Fortuna (Sekretaris) dan Kurniawan Sutedja (Bendahara).

Bina Tani Sejahtera Foundation (YBTS) works to assist farmers' livelihood improvement. The foundation establishment is a part of PT East West Seed Indonesia (www.panahmerah.id) strategy for corporate social responsibility. We believe that farmers' livelihood can be improved among others through the transfer of knowledge and technology to increase farmer's capacity and farming productivity. The foundation provides agricultural extension and consultancy services, conduct training on agriculture practices and agribusiness. The foundation targets small-holder farmers in Indonesia, especially for farmers with limited access to the technical assistance and extension services. We also pay attention and provide services in sustainable use and management of natural resources and environment.

The foundation was founded in April 2009 in Purwakarta by Piet Mazereew, Simon N. Groot and Kurniawan Sutedja. Currently, the Board of Trustees of the foundation is Joost Pekelharing and Joost Gietelink. While the Supervisory board of the foundation since 2017 are: Glenn Pardede, Ahmad Yuniarto, Flip van Koesveld, and Stuart Joseph Morris. Currently, the foundation leaded by Edwin Saragih (Chairperson), Fransiska Fortuna (Secretary), and Kurniawan Sutedja (Treasurer).

Vision



As an extension arm of EWINDO, YBTS vision is based on EWINDO vision : We believe in high quality vegetable seeds for better living

With this vision we can support in assisting farmers livelihood improvement and that we also cares about social and environmental issues

Mission



Our mission are to fulfill the task by means of providing agricultural extension, knowledge and technology transfer consultation service in agricultural field, training courses on cultivation and agribusiness.

In this regards, we develop program based on potential for change in smallholder farmers' livelihood improvement in service areas of eastern parts of Indonesia.

Tactical Approach



On-Farm Improvement

- Transfer of knowledge and technologies which enable implementation of good agricultural practices with smallholder farmers so that farmers become more productive and operate efficiently

Off-Farm Value and Linkages

- To enable farmers to generate additional income and add value to their products through improved qualities and better market linkages

Nutrition Value

- To promote better nutrition through higher consumption of vegetables and other healthy crops or products

Creating Synergy

- To promote added value via cooperation and partnership i.e. leveraging supports/expertise of potential partners such as universities, private companies, development organizations, NGOs, etc.

Extension Approach



- Setting demo plot with GAP & good quality seeds of Panah Merah
- Farmers Field Day & technology expo
- Training of Farmers
- Provide knowledge materials & extension tools
- Integrate with others interventions such as:
 - Water access
 - Conservation/climate-smart agriculture
 - Information services



What's In 2017



ARFAK

FLORES





West Timor



02

Outreach & Activity Report

What We Did In 2017?

OUR PROJECTS AREA





OUTREACH IN 2017

- Demoplot & ToF As main Extension & KT vehicle
- GAP and technical service brings farmers knowledge improvement
- Impact to other farmers through training of farmers, field days, expo

A. DIRECT BENEFICIARIES (total)

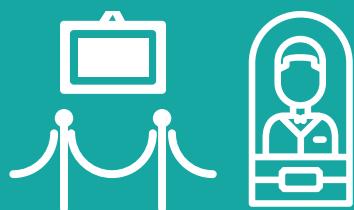
Extension, demo visit, training, field days, + ToT



8,383

B. INDIRECT BENEFICIARIES - Type 1 (total)

Crops guides printed, Exhibitions, fairs, booth



8,000

C. INDIRECT BENEFICIARIES - Type 2 (total)

1. Youtube video
2. YBTS Facebook - Fanpage follows
3. YBTS website users
4. Horti-magazine, newspaper

41,824

18,586

74

13,164

10,000



TOTAL

A + B + C

58,207

TOTAL ACHIEVEMENT OF 58,207 Vs. budget of 30,625

03

Knowledge Transfer Activities

Knowledge Transfer Activity in Eastern Part of Indonesia

Kegiatan Transfer Pengetahuan Di Indonesia Bagian Timur

Indonesia bagian timur memiliki potensi bagi pengembangan sektor hortikultura. Yayasan Bina Tani Sejahtera sebagai bagian dari PT East West Seed Indonesia telah memulai kegiatan alih pengetahuan di wilayah Indonesia bagian timur. Pada tahun 2017, kami berfokus pada 6 (enam) area pendampingan, yaitu Nabire, Pegunungan Arfak, Manokwari, Maluku Tengah, Sikka dan Halmahera Utara. Kami melakukan kegiatan transfer pengetahuan mengenai *Good Agriculture Practices (GAP)*, pembuatan demoplot, survei pasar, dan pengukuran *Return of Investment (ROI)* bagi tiap area demoplot. Di samping itu, kami juga melakukan kegiatan promosi benih Ewindo dan konsumsi sayuran pada setiap pertemuan dengan petani. Capaian yang kami hasilkan yaitu sebanyak 2.115 penerima manfaat langsung dan 3.363 penerima manfaat tidak langsung dari total sebanyak enam kegiatan pendampingan yang didukung oleh 5 (lima) orang staff lapangan.

Eastern part of Indonesia has a lot of potential for horticulture sector development. Yayasan Bina Tani Sejahtera that is part of East West Seed Indonesia has been starting some Knowledge Transfer project in Eastern Part of Indonesia. In 2017, we focused in 6 (six) area of Knowledge Transfer Project, those area are Nabire, Arfak Mountain, Manokwari, Central Mollucas, Sikka, and North Halmahera regency. We did knowledge transfer about the Good Agriculture Practices (GAP), make demoplot, market survey, and calculate the return of investment in every demoplot area. We also promote the Ewindo's seed and vegetable consumption in every field event and farmers meeting. We reached 2,115 direct and 3,363 indirect beneficiaries from six project area and supported by 5 (five) Technical Field Officers.





Knowledge Transfer Activities in Ceram Island

Kegiatan Alih Pengetahuan di Pulau Seram

Project location : Amahai | **Partners :** vegIMPACT | **Period :** Jun-Nov 2017



Project Impact

- Increment of high quality seed user
- Knowledge improvement for farmers
- Increment of yield and profit
- Benefit improvement for agriculture input retailer

YBTS melakukan kegiatan penyuluhan dan alih pengetahuan untuk sayuran di Amahai, Kabupaten Maluku Tengah, Pulau Seram, Provinsi Maluku, sebagai salah satu area terindikasi belum terjangkau pasar untuk benih kualitas unggul di wilayah Indonesia bagian timur. Kegiatan ini sebagian didanai oleh vegIMPACT dan didukung oleh PT East West Seed Indonesia (EWINDO). Pulau Seram merupakan pulau terbesar di wilayah Provinsi Maluku. Memiliki luas 17.100 km² dengan lebih dari 400.000 populasi. YBTS menentukan lokasi demploy di Desa Hollo, Kecamatan Amahai, Maluku Tengah (21 km dari Kota Masohi, Ibukota Kabupaten), sekitar 2-3 jam perjalanan laut menggunakan *speed boat* dari Kota Ambon. Kami berkolaborasi dengan Kelompok Tani "Harapan Tani" untuk membangun demoplot sayuran sebagai lahan utama untuk pelaksanaan kegiatan penyuluhan dan transfer teknologi.

YBTS implemented a project of Knowledge Transfer and Extensions Services for Vegetable Farmers in Amahai, District of Maluku Tengah, Seram Island, Maluku Province, an area indicated as a less-Penetrated Market for commercialized good quality seeds in eastern part of Indonesia. This project was partly funded by vegIMPACT, and supported by East West Seed Indonesia (Panah Merah). Seram Island is the largest island of Maluku province. This island has 17,100 Km² area, more than 400,000 in population. YBTS selected demplot location in Holo Village, Amahai sub-district, Maluku Tengah District (21 km from Masohi City, capital of the district). It is 2-3 hours across the sea lane by speedboat from Ambon City, capital of the province. We collaborated with Farmer Group "Harapan Tani" to establish vegetable demoplot as main vehicle in facilitating knowledge transfer and extension activities.



Training of Farmers

- Agro ecosystem and Fertilizer
- Land preparation
- Plastic mulch installation
- Seedling preparation
- Pesticide and spraying technique



Penyuluhan petani
Training of farmers



Mulch application
Pemasangan mulsa



Persiapan persemaian
Seedling preparation



Kunjungan ke pedagang benih eceran
Visiting seed retailer



Persiapan lahan
Land preparation



Pendekatan dengan petani oleh staff lapangan YBTS
farmers' approaching by YBTS field staff

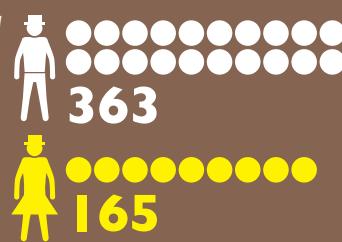


Kunjungan ke dealer benih Cap Panah Merah
Visiting Panah Merah seed dealer



Audiensi ke Dinas Pertanian dan Peternakan Kabupaten Maluku Tengah
Hearing session to the Department of Agriculture and Animal Husbandry of Central Maluku District

**From 5 event, total
ToF participants
in Ceram island
reached
498 people**



Kegiatan penyuluhan di kelompok tani



Extension activity in a farmer group

FIELD DAYS EVENT “LET’S GROW VEGETABLE FOR INCOME AND NUTRITION IMPROVEMENT”

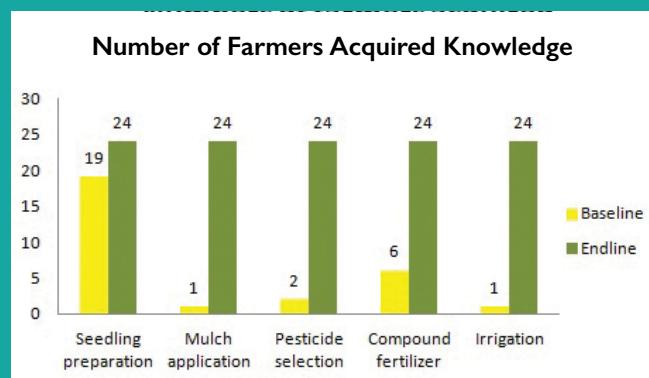
Kegiatan Lapang Petani: "Mari Menanam Sayuran Untuk Peningkatan Nutrisi dan Pendapatan"

Hollo village, Amahai subdistrict, October 26 -27, 2017



Kegiatan expo dengan tema **“Mari menanam sayuran untuk meningkatkan pendapatan dan nutrisi”** diselenggarakan pada tanggal 26 dan 27 Oktober 2017 di Desa Hollo, Kecamatan Amahai. Total pengunjung yang hadir sebanyak 221 orang yang terdiri dari petani dan pemerintah setempat (155 laki-laki; 66 perempuan). Terdapat 9 (Sembilan) varietas sayuran Panah Merah ditanam pada lahan seluas 1.000 m². Selain mengunjungi demoplot, petani juga memperoleh penjelasan mengenai modul GAP oleh staff YBTS.

We held the field days event with the theme **“Let’s grow vegetable for income and nutrition improvement”** on October 26 and 27, 2017 in Hollo village, Amahai subdistrict. Total attendances of this event are 221 farmers and governments (155 male; 66 female). There were 9 (nine) varieties of Panah Merah vegetable crops in 1,000 sqm land. Farmers also got explanation of GAP modules from YBTS staff instead of visiting the demo field.



Improvement of yield and profit

Crops	Yield (kg/m)			Profit (Rp/ 1,000 sqm)		
	Baseline	End line	Improvement (%)	Baseline	End line	Improvement (%)
Sweet corn	0.94	2	113%	8,312,000	13,025,000	57%
Chaisim	0.25	1.55	520%	2,700,000	5,850,000	117%
Cucumber	5.5	10.2	85%	8,276,000	11,800,000	43%

Staff lapangan YBTS memberikan penjelasan mengenai teknik budidaya tanaman sayuran yang benar kepada pengunjung expo
YBTS field staff explained about the good agriculture practices

Berfoto bersama di lahan expo
Taking photo together in the expo field



Pak Ahmad, petani kunci di Desa Holo, Amahai, Maluku Tengah
Mr. Ahmad, the key farmers in Holo village, Amahai, Central Maluku



Berfoto bersama di lahan expo
Taking photo together in the expo field

for vegetable to the expo visitors

Panen paria bersama petani kunci, MR Ewindo dan Dinas Pertanian dan Peternakan Kabupaten Maluku Tengah



Harvesting of bitter gourd with MR Ewindo and the Department of Agriculture and Animal Husbandry of Central Maluku District

Panen caisim bersama petani kunci, MR Ewindo dan Dinas Pertanian dan Peternakan Kabupaten Maluku Tengah



Harvesting of choisum with MR Ewindo and the Department of Agriculture and Animal Husbandry of Central Maluku District



Knowledge Transfer Activities in Arfak Highland, West Papua

Kegiatan Alih Pengetahuan di Pegunungan Arfak, Papua Barat

Objective :

1. Upgrade farmers' capacity
2. Linkage highland vegetable to the potential market

Partners : PRISMA

Period : June 2016 -Dec 2017



Project Impact

- Better farming habit
- Increment of yield and profit

Pegunungan Arfak merupakan titik tertinggi di Provinsi Papua Barat, dengan ketinggian 1.800 mdpl. Kabupaten Arfak adalah wilayah yang baru terbentuk sejak Oktober 2012, yang merupakan perluasan dari Kabupaten Manokwari. Memiliki lebih dari 26.000 populasi yang terbagi dalam 10 kecamatan. Berdasarkan pertimbangan akses dan mobilitas di daerah dataran tinggi, kegiatan YBTS berfokus di wilayah Kecamatan Anggi, Taige, dan Miyambow. Kami mengajak para petani lokal melalui para petani kunci, melakukan kegiatan promosi, distribusi material promosi, dan membantu akses pasar. Total sebanyak 621 petani menerima langsung manfaat dari kegiatan yang kami lakukan.

Arfak highland is the highest point in the province of West Papua, it is approximately 1,800 m asl. Arfak district is the new area since October, 2012. It was expanded from Manokwari District. It has more than 26,000 in population that distributed in 10 sub district areas. Due to access and mobility issues in the highland, we focused on Anggi, Taige, and Minyambow Sub district. We engaged the local farmers with upgrade the capacity of lead farmers, enhance promotional events, dissemination of promotion media, and linkage highland vegetables to market. A total number of 621 farmers got direct beneficiaries through our activities.

Farmers Field Learning



We reached **621 FARMERS AS DIRECT BENEFICIARIES & 1.074 INDIRECT BENEFICIARIES** through video, local media coverage, knowledge material dissemination and 3-leafies seed distribution

Demo Plot Establishment

Terdapat 13 demo plot di Kecamatan Anggi selama periode kegiatan dan juga 1 demo plot di wilayah Taige. Bersama petani setempat, kami membudidayakan wortel, kubis dan sawi putih (petsay). Selama berlangsungnya kegiatan di demo plot, kami juga memberikan pelatihan mengenai GAP dengan berbagai topik, antara lain: persemaian, persiapan lahan, pemupukan, serta pestisida dan teknik pemupukan.

There are 13 demo plots in Anggi sub district during the project period, and also 1 demo plot in Taige sub district. Together with farmers, we grew carrot, cabbage and also Chinese cabbage (petsay). During the demo plot activity, we also delivered the GAP training with various topics, such as: seedling preparation, land preparation, fertilization, pesticide selection and spraying technique.

Farming Habits Impact

Before Project	After Project
1. Low Bed, flooded frequently	1. Higher Bed, min 25 cm, no flood
2. Just know 1 brand of Insecticide	2. Known the different of Insecticide, Fungicide, and Herbicide
3. Don't know about Fertilizer	3. Known and Implement Scheduled Fertilization
4. Make their own seed	4. Known High Quality Seed
5. Don't know about mulch installation and the advantage	5. Start to use plastic mulch

Persiapan persemaian kol bunga dan brokoli
Seedling preparation of cauli flower and broccoli



Pembagian panduan budidaya tanaman bagi petani di Pegunungan Arfak
Crop guide distribution for farmers in Arfak highland



Kegiatan penyuluhan pertanian bagi petani di Pegunungan Arfak
Training of farmer activity in Arfak highland



FIELD DAYS EVENT “LET’S GROW VEGETABLE FOR INCOME AND NUTRITION IMPROVEMENT”

Kegiatan Lapang Petani: "Mari Menanam Sayuran Untuk Peningkatan Nutrisi Dan Pendapatan"

Igimbay village, Anggi subdistrict, May, 30, 2017

YBTS menyelenggarakan kegiatan expo dengan tema “Mari menanam sayuran bagi peningkatan pendapatan dan nutrisi” pada tanggal 30 Mei 2017 di Desa Igimbay, Kecamatan Anggi dengan dihadiri 201 petani dan pemerintah. Kami memulai kegiatan dengan mengunjungi demo field. Para petani kunci menjelaskan tentang info tanaman yang ditampilkan dan GAP yang telah diterapkan. Setelah itu, Ketua YBTS, Dr. Edwin Saragih menjelaskan betapa pentingnya mengadopsi teknik budidaya yang baik dan benar bagi peningkatan produksi serta mempromosikan tentang konsumsi sayuran. Selanjutnya diikuti sambutan dari perwakilan Bank Indonesia dan Pemerintah Provinsi Papua Barat (Dinas Pertanian). Pemerintah Provinsi juga mengapresiasi para petani dengan memberikan bantuan berupa perlengkapan pertanian kepada 10 petani terpilih untuk menunjang aktivitas di lapangan. Selain itu kami juga mendistribusikan panduan budidaya dan CD berisi video mengenai GAP kepada para pengunjung.

YBTS held the field day with the theme **“Let’s Grow Vegetable for Income and Nutrition Improvement”** on May 30, 2017. This event was conducted in Igimbay Village, Anggi Subdistrict and was attended by 201 farmers and government. We started the event with visiting the demo field. Our key farmers explain every crop info and GAP that has been applied. After that, Chairperson of YBTS, Dr. Edwin Saragih explained about how important it is to adopt the best practice to increase the yield, and promote about vegetable consumption. Following is a speech from Bank Indonesia, and Provincial Government (Agriculture Technology Department). The provincial government also appreciated the farmers group by giving some farming tools for 10 selected farmers to support their on farm activities. We also distribute the Crop Guide and a copy of GAP video for participants.



Berfoto bersama di lahan expo
Taking photo together in the expo field



Berfoto bersama petani, PPL dan jajaran Dinas Pertanian di lahan expo

Taking photo together with farmers, extension staffs, and Agriculture department staffs in expo field



FARMER'S TESTIMONY



EKIS INDOW- Igimbay village

"Sekarang ketong dua su tidak bangun jam 9 lagi, tapi bangun jam 6 pagi. Kalau tar ada ayam su patok katong pu berkat"

"Now, we do not wake up at 9 AM anymore, we wake up early now at 6 AM. If we are lazy and late then, the chickens will stole our blessing"



Knowledge Transfer Activities in Halmahera

Kegiatan Aliih Pengetahuan di Halmahera



Kegiatan di Halmahera telah dimulai sejak tahun 2014. Sejak tahun 2016, YBTS telah mulai memperluas area kegiatan hingga ke Pulau Morotai dan wilayah Halmahera Barat. Pada tahun 2017, kami juga mulai berkolaborasi dengan sekolah di wilayah setempat dan NGO lokal lainnya. Selama 8 (delapan) bulan efektif kegiatan, kami telah menjangkau 194 penerima manfaat langsung (106 laki-laki, 88 perempuan) melalui kegiatan *Training of Farmers*, (termasuk kegiatan promosi *trio leafies*). Seluruh petani penerima manfaat telah mendapatkan tambahan pengetahuan mengenai persamaian, pengendalian hama dan penyakit tumbuhan, pemupukan, keamanan pestisida, teknik penyemprotan dan *trio leafies*.

Our activities in Halmahera were established since 2014. Since 2016, YBTS has expanded the activity area to Morotai Island and Halmahera Barat. In 2017, we also started to collaborate with local school and other local NGO. From those 8 (eight) month effective activities, we reached 194 direct beneficiaries (106 male, 88 female) through Training of Farmers Event (include 3-leafies promotion). Those farmers have been learned about seedling preparation, pest and disease management, fertilization, pesticide safety, spraying technique, and 3-leafies vegetable.

Field Activities



Kegiatan penyuluhan pertanian di Halmahera
Training of farmers activity in Halmahera

Collaboration with Local School

- **Apa yang kami lakukan?** Kegiatan promosi konsumsi sayuran dan GAP dalam budidaya *trio leafies*
- **Siapakah yang menerima manfaat?** Kami memberikan pelatihan pelatihan kepada 43 siswa dan guru (14 laki-laki, 29 perempuan) di SD Negeri Obi serta memberikan pelatihan mengenai pengendalian hama dan penyakit tumbuhan pada 17 siswa (13 laki-laki, 4 perempuan) di SMK Malifut.
- **What we do?** 3 -leafies vegetables consumption and delivers the steps or GAP to grow the 3 leafies vegetables
- **Who are the beneficiaries?** We have trained 43 students and teacher (14 male, 29 female) in Obi Elementary School. We also trained about the pest and disease management to 17 students (13 male, 4 female) in Malifult Vocational School.

Contoh lahan pekarangan yang ditanami trio leafies
The example of growing trio leafies on the yard



Training of Farmers

Kami telah memberikan pelatihan kepada 134 petani (79 laki-laki, 55 perempuan) mengenai kesehatan benih, unsur dan kesehatan tanah, pemupukan, mode pestisida dan penggunaan pestisida secara aman. Seluruh petani juga mendapatkan kesempatan untuk mempraktekkan cara mengukur pH tanah, identifikasi hama dan penyakit, serta cara yang paling efektif untuk penggunaan pestisida dan penyemprotan.

We trained directly to 134 farmers (79 male, 55 female). We deliver the theory of seed health, substrate, soil health, fertilizer, pesticide mode of action, and pesticide safety use. All of farmers also got the practices about soil pH, pest and disease identification, fertilization, and the most effective way for pesticide mixing and spraying.

REGIONAL EXPO COLLABORATED WITH EWINDO

Kegiatan Regional Expo Berkolaborasi dengan EWINDO
Soakonora village, Galela, December 13, 2017

Regional Expo atau Farmers Field Day diselenggarakan pada 13 Desember 2017, berlokasi di Desa Soakonora, Galela, Halmahera Utara. Kegiatan ini dihadiri oleh 89 petani (63 laki-laki, 23 perempuan). YBTS berkolaborasi dengan tim Marketing EWINDO. Terdapat 11 (sebelas) varietas yang ditampilkan di area expo, yaitu: labu (Kusuma), Paria (Lipa F1), bayam (Maestro), kangkung (Bangkok), bayam merah (Mira), chaisim (Shinta), terong (Yumi F1), kacang panjang (Peleton), dan kubis (Sehati)

Regional Expo or Farmers Field Day was held on December 13th, 2017, located in Soakonora Village, Galela, North Halmahera. This event was attended by 89 farmers (63 male, 23 female). We were collaboration with Ewindo's Marketing team in conducting this event. There are 11 (eleven) varieties that the visitors can see in this field day area. We are growing pumpkin (Kusuma), bittergourd (Lipa F1), Spinach (Maestro), Kangkong (Bangkok), Red spinach (Mira), Chaisim (Shinta), bird pepper (Dewata 43 F1), tomato (Servo), Eggplant (Yumi F1), yard long bean (Peleton), and Cabbage (Sehati).

Kegiatan regional expo di Halmahera juga dihadiri oleh pemerintah setempat

Regional expo in Halmahera also attended by the local government





Knowledge Transfer Activities in Sikka District

Kegiatan Alih Pengetahuan di Kabupaten Sikka

Project Impact

- knowledge improvement for farmers
- number of farmers increase in 2017

YBTS in collaboration with Caritas Keuskupan Maumere (CKM) conduct knowledge transfer activity in Sikka district, Nusa Tenggara Timur. This activity is facilitated by Karina Jogja and funded by MIN. Those activities were related to agriculture, market, vegetable GAP, marketing and promotion, such as: conduct series of Training of GAP facilitator from YBTS product promoter to CKM field facilitator through trainings and field practices and also mobilize YBTS resources to continue more intensive technical assistance for the climate smart GAP at the demo plots. This project was started in May 2017 and finished in November 2017.

YBTS berkolaborasi dengan Caritas Keuskupan Maumere (CKM) mengadakan kegiatan alih pengetahuan di Kecamatan Sikka, Nusa Tenggara Timur. Kegiatan ini difasilitasi oleh Karina Jogja dengan dukungan dana dari MIN. Aktivitas dilakukan terkait dengan aspek pertanian, pasar, teknis GAP, serta promosi dan pemasaran, antara lain: memberikan pelatihan GAP oleh staff YBTS kepada petugas lapangan CKM melalui training dan praktik di lapangan serta mobilisasi untuk melanjutkan pendampingan yang lebih intensif kepada para petani mengenai *climate smart* GAP di demo plot. Kegiatan ini dimulai sejak bulan Mei 2017 dan berakhir pada November 2017.

Training of Farmers

YBTS dan staff lapangan CKM menyelenggarakan kegiatan *Training of Farmers* sebanyak 13 kali dengan total 212 peserta yang terdiri dari 177 laki-laki dan 35 perempuan. Kami juga membagikan material penyuluhan seperti: brosur, panduan tanaman, panduan budidaya, dan benih *trio leafies*. Selain di lokasi expo yang sudah ditentukan sebelumnya, YBTS dan CKM juga melakukan penyuluhan di desa-desa lain, seperti pelatihan GAP, pembuatan kompos dan pengolahan limbah, pemupukan, pestisida dan teknik penyemprotan, rotasi pestisida, rotasi tanaman serta pengukuran pH air.

YBTS and CKM Field staff conducted training of farmers in 13 times. We reach 212 direct beneficiaries with 177 male and 35 female through this activity. We also distributed the material such as: brochure, crop guide, technical guide, and 3-leafies seeds. Beside in the expo side, YBTS and CKM also did the extension activity in the other village, such as conducts series of training (GAP training, composting and waste management, fertilizing, pesticide and spraying technique, pesticide rotation, crop rotation and measuring the water pH).



Staff YBTS memberikan penyuluhan kepada fasilitator CKM dan petani

YBTS staff explains to CKM facilitators and farmers



Para petani belajar mengenai persiapan persemaian
Farmers learn about seedling preparation



Farmers Field Day

Farmers Field Day diselenggarakan pada tanggal 17 Oktober 2017 di Desa Reroja, Kecamatan Magepanda, Kabupaten Sikka, dihadiri oleh 155 petani. CKM menyusun agenda detail kegiatan FFD ini, YBTS dan EWINDO memberikan dukungan teknis mengenai pemeliharaan tanaman dan aktivitas penyuluhan. Pada kegiatan ini, petani mempelajari tentang GAP khususnya untuk tanaman jagung manis, kubis, bunga kol, cabe keriting, tomat, paria, oyong, dan *trio leafies*.

YBTS dan staff lapangan EWINDO mendampingi peserta untuk mengunjungi lahan FFD. Kami menjelaskan tentang karakteristik tanaman, keuntungan dan kekurangannya. Para pengunjung sangat senang, mereka memiliki keinginan ikut menanam sayuran seperti pada lahan FFD tersebut.

Persiapan FFD dimulai pada bulan Mei 2017. YBTS dan CKM membuat demo plot sayur untuk FFD pada lahan seluas 2.000 m² milik petani. Dimulai dengan persiapan lahan pada bulan Juni hingga Juli. Selain itu kami juga melakukan pelatihan persemaian bagi petani dan fasilitator CKM. YBTS dan CKM secara rutin memantau lahan petani untuk memastikan persiapan FFD dilakukan dengan baik.



Seorang petani menunjukkan tanaman bunga kol miliknya yang tumbuh subur untuk persiapan kegiatan lapang petani

a farmer shows her cauli flower grows well for field day preparation

Farmers Field Day was held on October 17th, 2017, located in Reroroja Village, Magepanda, Sikka District. This event was attended by 155 farmers. CKM was prepared the event details. YBTS and EWINDO gave the supports for Crops Maintenance and Knowledge Transfer activity. In this event, the farmers learn about GAP for sweet corn, cabbage, cauliflower, curly pepper, tomato, bitter gourd, ridge gourd and trio leafy vegetable.

YBTS and EWINDO Field Staff accompanied the visitors for visiting the crops. We explained about the crops characteristic, the benefit, and the weakness. The visitors really happy and they have an ambition to grow vegetable like in this area.

FFD preparation was started in May 2017. YBTS and CKM established demo plot for FFD in 2,000 sqm farmer's field. We started the land preparation in June to July. We also conducted the seedling preparation training at the same time for farmers and CKM field facilitators. YBTS and CKM regularly monitored farmers' field to make sure that the farmers do all the treatments scheduled for FFD preparation.



Panen caisim bersama petani

Harvesting choisum with farmer



Knowledge Transfer Activities in Nabire Regency

Kegiatan Alih Pengetahuan di Kabupaten Nabire

Project:

Increase Productivity of Vegetable through GAP in Nabire District

Objective:

To increase the productivity of vegetable farmers by promoting the cultivation of vegetables in good way and provide information about use of good quality

Partners : PRISMA**Period :** November 2017**Project Impact**

- Knowledge improvement
- Income increment
- Higher interest of vegetable cultivation
- Higher vegetable consumption



Nabire merupakan sebuah kabupaten yang terletak di Provinsi Papua. Nabire memiliki 150.000 populasi yang tersebar di 14 kecamatan. Terdapat petani lokal dan petani transmigran di kecamatan-kecamatan tersebut. Hal ini merupakan potensi yang bagus bagi pasar produk EWINDO. Yayasan Bina Tani Sejahtera, EWINDO dan PRISMA berkolaborasi melakukan promosi di area dataran rendah melalui peningkatan kapasitas petani dan pembuatan demo plot. Kami memulai kegiatan di 3 (tiga) kecamatan yang telah dipilih (Wanggar, Teluk Kimi, Kota Nabire), karena ketiganya berlokasi dekat dengan ibu kota kabupaten. Sebagian besar petani di Nabire sudah pernah menanam cabai, tomat, terong, jagung manis, sayuran daun, dan tanaman dataran rendah lainnya.

Nabire is regency that located in Papua Province. Nabire have more than 150,000 in population that distributed in 14 subdistrict area. There are local farmers and transmigrated farmers in those sub districts, it is a potential market for Ewindo's seed. Yayasan Bina Tani Sejahtera, EWINDO, and PRISMA do collaboration in seed promotion in the lowland area through upgrading the farmers capacity and demo plot. We started the project in 3 (three) selected sub districts (Wanggar, Teluk Kimi, Kota Nabire), because those sub districts are close from the capital. Mostly local farmers in Nabire have been growing Chili, Tomato, Eggplant, Sweet corn, Leafies, and other lowland crops.

DEMO PLOT



*Bunga kol PM 126 F1
Cauliflower PM 126 F1*



*Cabai keriting Kastilo F1
Curly pepper Kastilo F1*



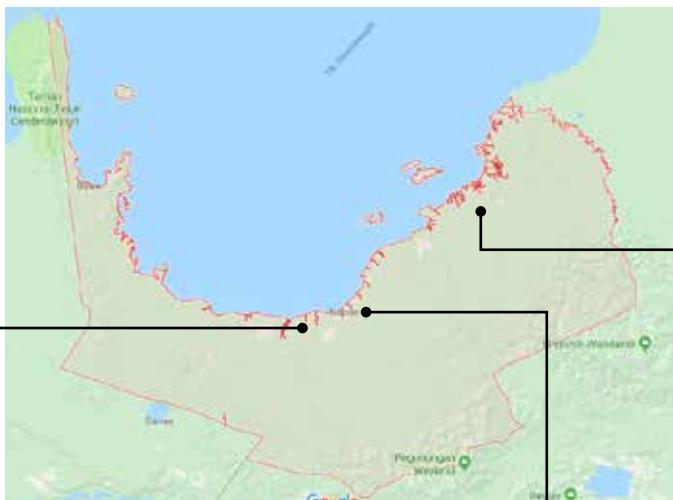
*Seorang petani di lahan kubis miliknya
A farmer with his cabbage filed*

Kami membuat 4 (empat) demo plot sayuran di 3 kecamatan , yaitu cabai rawit (Dewata F1), bunga kol (PM 126 F1), cabai keriting (Kastilo F1) dan kol dataran rendah (Sehati F1). Kami menerapkan modul GAP pada tiap lokasi, misalnya: persiapan lahan, pemasangan mulsa, pemasangan teralis, pemupukan berimbang, serta pengendalian hama dan penyakit tanaman. Sebanyak 72 petani telah mengunjungi dan melakukan diskusi di area demo plot

We set the demo plots up in 3 sub districts and four crops. We select bird pepper (Dewata F1), cauliflower (PM 126 F1), curly pepper (Kastilo F1), and Lowland Cabbage (Sehati F1). We implement the GAP module in every demo location, such as: land preparation, mulch installation, trellis installation, balance fertilization, and pest and disease management. 72 farmers were visited and make discussion in demo plot area.



Training of Farmers



Sub District: Teluk Kimi

Activities	Crop Variety	Demo Size (sqm)	Participants (farmers)
1. curly Pepper demo plot	Kastilo F1	200	
2. Cabbage demo plot	Sehati F1	200	
3. GAP training			13
4. Discussion/ Demo plot visit			36

Sub District: Wanggar

Activities	Crop Variety	Demo Size (sqm)	Participants (farmers)
1. Bird pepper demo plot	Dewata F1	150	
2. GAP training		22	
3. GAP shallot		12	
4. Discussion/ Demo plot visit		24	

Sub District: Kota Nabire

Activities	Crop Variety	Demo Size (sqm)	Participants (farmers)
1. Cauliflower demo plot	PM 126 F1	150	
2. Market Survey			
3. Discussion/ Demo plot visit			12



Para petani di Nabire sedang menyiapkan persamaian dan pemasangan mulsa
Farmers in Nabire do the seedling preparation and mulch application





Knowledge Transfer Activities in Manokwari Regency

Alih Pengetahuan di Kabupaten Manokwari



Project Impact

- Technical adoption
- Income increment
- Number of local farmers increase
- Higher vegetable consumption
- EWINDO seed user increase

Manokwari merupakan salah satu Kabupaten di Provinsi Papua Barat. Yayasan Bina Tani Sejahtera mulai megimplementasikan kegiatan alih pengetahuan dan teknologi di wilayah tersebut sejak bulan November 2015. Kegiatan ini didanai oleh vegIMPACT. Kami menyelenggarakan kegiatan pembelajaran lapangan bagi petani, gelar teknologi, dan pembuatan demo plot.

Pada tahun 2017, kegiatan ini hanya berlangsung selama 3 (tiga) bulan sejak Januari hingga Maret. Selama periode tersebut, kami berkolaborasi dengan 8 (delapan) petani kunci di 4 (empat) desa, yaivtu Desa SP 3, Desa SP 2, Desa Kalimerah dan Desa Pantai Masni. Bersama para petani kunci, kami membuat 8 (delapan) demo plot yang terdiri dari cabai keriting, semangka, paria, selada, cabai rawit, bunga kol dan kangkung (varietas benih Cap Panah

Manokwari is one of the regency in West Papua province. Yayasan Bina Tani Sejahtera started implementing extension and knowledge transfer activities since November 2015. This project was funded by vegIMPACT. We conduct farmer's field learning activities through training, farmer field day and demo plot establishment.

In 2017, this project only lasted for 3 (three) months from January to March. During this period, we collaborated with 8 (eight) key farmers in 4 (four) villages: SP 3 village, SP 2 village, Kalimerah village, and Pantai Masni village. Collaborated with farmers, we established 8 (eight) demo plots of curly pepper, watermelon, bitter gourd, lettuce, bird pepper, cauliflower and kangkoong (varieties of Cap Panah Merah seed). Beside those key farmers, 235 other farmers also visited the demo plots for field learning.

Merah). Selain para petani kunci, sebanyak 235 petani lain juga telah mengunjungi demo plot tersebut untuk belajar.

Kami juga melakukan kegiatan *Training of Farmers* (ToF) di Kecamatan Prafi, Sidey, Masni dan Pantai Masni. Terdapat 22 kali ToF dengan total jumlah peserta sebanyak 235 orang. Selama kegiatan tersebut kami juga membagikan beberapa material penyuluhan seperti brosur, CD berisi video tutorial budidaya, panduan budidaya dan juga paket benih *trio leafies*.

Sebagai hasil dari kegiatan penyuluhan yang telah dilaksanakan, para petani mendapat pengetahuan baru mengenai teknik budidaya yang baik dan benar (GAP). Sebagian besar dari mereka telah menerapkan ilmu yang didapatkan selama mengikuti pelatihan, misalnya: persiapan lahan, persemaian, pemupukan dasar, jadwal pemupukan susulan dan penggunaan pestisida dan insektisida.

We also conducted Training of Farmers in Prafi, Sidey, Masni and Pantai Masni district. There were 22 ToFs conducted with total amount of 235 participants. During the ToF events we also distributed some knowledge material such as brochure, copy of tutorial video, crop guide and also sample of *trio leafies* seeds.

As a result of training or extension activities conducted, farmers got new knowledge of Good Agriculture Practices (GAP). Most of them have applied some techniques learned during the trainings, such as: land preparation, seedling preparation, basic fertilization, additional fertilization schedule and also the use of pesticide and insecticide.

DEMO PLOT

- 📍 SP 3 village, SP 2 village, Kalimerah village, and Pantai Masni village
- 👤 8 (eight) key farmers
235 other farmers learning
- Goals:

TRAINING OF FARMERS

- 📍 Prafi, Sidey, Masni and Pantai Masni district
- 👤 235 Participants in 22 ToFs
- Goals:
Good Agriculture Practices (GAP)
 - Land preparation
 - Seedling preparation
 - Basic fertilization
 - Additional fertilization schedule
 - The use of pesticide and insecticide



Persiapan penyemaian
Seedling preparation



Persiapan larutan pestisida secara aman
Safe handling of pesticide solution



Persiapan instalasai mulsa
Mulch installation



Salah satu petani di Manokwari dan lahan kol bunga miliknya
A Manokwari's farmer and her cauli flower field



Crop box sebagai salah satu media yang digunakan untuk menanam sayuran
Crop box as a media for growing vegetable



Persiapan lahan untuk FFD
Field preparation for FFD



04

Integrated Capacity Building For Farmers' Livelihood Improvement In West Timor

*Pengembangan Kapasitas Terpadu untuk
Peningkatan Penghidupan Petani di Timor
Barat*

Project Impact

- 64% increment of farmers' income
- 74% increment of yield
- Vegetable consumption increases
- Better water access for farmers
- Farmer group's participation improve



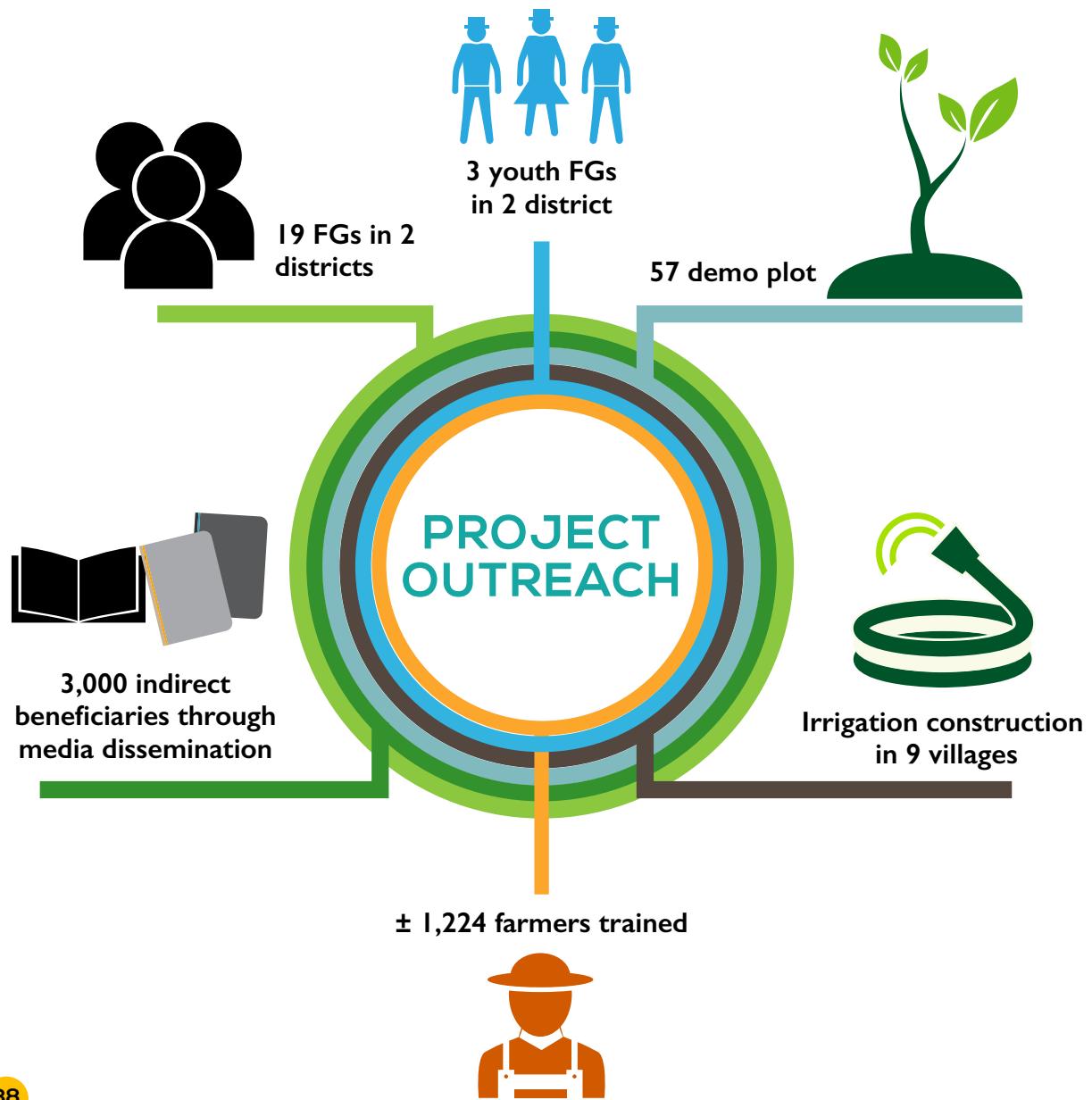
Kegiatan YBTS di wilayah Timor Barat juga berkolaborasi dan didukung oleh Babinsa
YBTS activities in West Timor also supported and collaborated with Babinsa

Program "Pengembangan Kapasitas Terpadu untuk Peningkatan Penghidupan Petani" fase 2017 dilaksanakan di 6 (enam) desa di Kabupaten Timor Tengah Selatan dan 3 (tiga) desa di Kabupaten Kupang, serta pendampingan lanjutan terhadap 28 kelompok tani yang telah didampingi sebelumnya pada tahun 2016. Target di tahun 2017 yaitu pendampingan terhadap 20 kelompok tani dan 3 (tiga) kelompok pemuda di 2 (dua) desa serta 4 (empat) kelompok tani replikasi oleh PPL dan Babinsa. Untuk tahun ini, YBTS juga merangkul PPL dan Babinsa setempat dalam pendampingan kelompok tani dengan pendekatan terpadu dan intervensi. Program ini bertujuan untuk meningkatkan kapasitas pertanian dan penghidupan petani melalui kegiatan alih teknologi *Good Agriculture Practices* (GAP) dan juga mengurangi dampak kekeringan melalui akses informasi

Integrated Capacity Building for Farmers Livelihoods Improvement phase in 2017 implemented in 6 (six) villages in Timor Tengah Selatan district and 3 (three) villages in Kupang District and will be also accompanied in 28 farmer groups (FG) in 2016. The target in 2017 is 20 new FGs and 3 (three) youth groups in the 2 (two) districts and 4 (four) farmer group replications by PPL and Babinsa. For this year, YBTS has let PPL and Babinsa in the assistance of the farmer groups with the integrated approach on the intervention. The project targeted to improve farmers' agriculture capacity and livelihood through Good Agriculture Practices (GAP) technology transfer and to minimize the drought risks by providing climate information and implementing measures on ecosystem management and low cost 3R technology (recharge, retain and re-use water). The project also

iklim dan aplikasi perhitungan ekosistem serta teknologi 3M sederhana (mengisi, menampung, dan menggunakan kembali). Program ini juga memfasilitasi petani untuk membangun hubungan dengan *stakeholders* guna memperluas akses sumber daya dan membentuk pasar untuk produk-produk yang dihasilkan, serta ke depannya untuk meningkatkan nilai jual produk dengan penanganan *pasca panen* yang tepat.

facilitated the farmers to build relation with other stakeholders to access resources and create market for their products and further to produce post-harvest production in increasing the selling value of the harvest.



Improvement on Farmer Groups' Contribution After Project

Peningkatan kontribusi kelompok tani setelah project



FG's MEMBERS

- Sharing knowledge and skill
- Division on the role (task and responsibilities)
- Applied GAP and 3R
- Extend land size of vegetables planting

VILLAGE LEVEL

- Allocation of village funds
- Motivation to other FG's
- As a village program
- Interest in conduct mini expo independently
- Contribution to village regulation (contingency plan)
- Adoption of GAp and 3R

LOCAL GOVERNMENT

- Collaboration of FG's capacity bulding
- Draft of parliament regulation (water construction)
- Retention Basin (embung) planning for agriculture

VEGETABLE TECHNOLOGY EXPO

Gelar Teknologi Sayuran

Kesetnana village, Timor Tengah Selatan regency, October 11, 2017



Bupati TTS, Bapak Paul Mella panen kubis Panan Merah di Desa Kesetnana, Oktober 2017

Head of TTS Regency, Mr. Paul Mella (white hair) harvesting Panah Merah cabbage in Kesetnana village, October 2017

Gelar teknologi sayuran diselenggarakan pada tanggal 11 Oktober 2017 di Desa Kesetnana, Kabupaten Timor Tengah Selatan. Kegiatan ini dihadiri oleh 648 peserta yang berasal dari organisasi lokal dan internasional, sektor pemerintah, sektor swasta, universitas, sekolah kejuruan, kepolisian, dan lain-lain. Pengunjung sangat antusias mengunjungi lokasi expo. Bupati Timor Tengah Selatan membuka acara didampingi oleh ketua YBTS, Yayasan Karina Jogja dan tim marketing EWINDO. Kegiatan ini juga dihadiri oleh staff East West Seed Knowledge Transfer dari Kamboja, Thailand dan Myanmar. Terdapat 20 tanaman sayuran dengan 31 varietas pada lahan expo. Petani menjual hasil panen sayuran tersebut dan memperoleh keuntungan sekitar Rp 423.234.750,00.

The vegetable technology expo was held in 11 October 2017 in Kesetnana village, Timor Tengah Selatan regency. It was attended by 648 people from local and international organization, government sector, private sector, university, vocational school, police division and others. They were very enthusiastic visiting the demo field. The regent of Timor Tengah Selatan Regency opened the event formally, accompanied by YBTS Chairman, leader of Karina Jogja foundation and also Marketing team EWINDO. It was also attended by East West Seed Knowledge Transfer staff from Cambodia, Thailand and Myanmar. There are 20 crops with 31 varieties of vegetable on the demo field. Farmers sold the vegetables of the demo field and they got around 43,234,750.00 rupiahs.





FARMER'S TESTIMONY



MAKSI FAOT - BERSAUDARA FG, *Noemeto village*

"Lahan kami berada di kaki bukit. Sangat sulit bertani pada saat musim kemarau. Kami berterimkasih pada YBTS yang telah membawa air ke tempat kami melalui instalasi irigasi tetes dan memberikan pengetahuan tentang pemeliharaannya. Sangat bermanfaat bagi kami!"

"Our land is located below the hill. It's very difficult to plant in the dry season. We thank you to YBTS has brought water to the land through the installation of drip irrigation and also provide knowledge about maintenance. It's very helpful for us!"

05

SMARTseeds Information Services In Indonesia

*Layanan informasi SMARTseeds di
Indonesia*

SMARTseeds Indonesia adalah sebuah konsorsium dari 7 (tujuh) sektor swasta dan publik. Kerjasama ini melibatkan organisasi/institusi Indonesia dan Belanda yang memiliki keahlian dan pengalaman berbeda-beda untuk mendukung kesuksesan program ini. Konsorsium SMARTseeds Indonesia terdiri dari ICCO, East West Seed Indonesia (EWINDO), Nelen&Schuurman, Text to Change (TTC) Mobile, AKVO, University of Twente- Faculty of Geo-Information Science and Earth Observation (UT-ITC), and Institute Pertanian Bogor (IPB). Ini merupakan program 3-tahun (Oktober 2016 – September 2019) didanai oleh *Netherlands Space Office* (NSO). Tujuannya untuk meningkatkan kecakapan petani, khususnya petani sayuran (cabai, tomat, mentimun). Program ini berlangsung di wilayah Jawa Timur, Jawa Tengah dan Lampung. Produk informasi SMARTseeds berasal dari data lapangan dan sumber data lain (satellite, tanah, cuaca, dan lain-lain). Seluruh data mentah telah diproses dan diubah menjadi format tertentu yang memiliki informasi yang siap disebarluaskan. Informasi ini disimpan dalam sebuah *platform* yang akan digunakan oleh pengguna akhir melalui aplikasi seluler (terintegrasi dengan aplikasi SIPINDO oleh EWINDO), SMS dan portal website. EWINDO menugaskan YBTS untuk implementasi work package-2 dalam proyek ini.

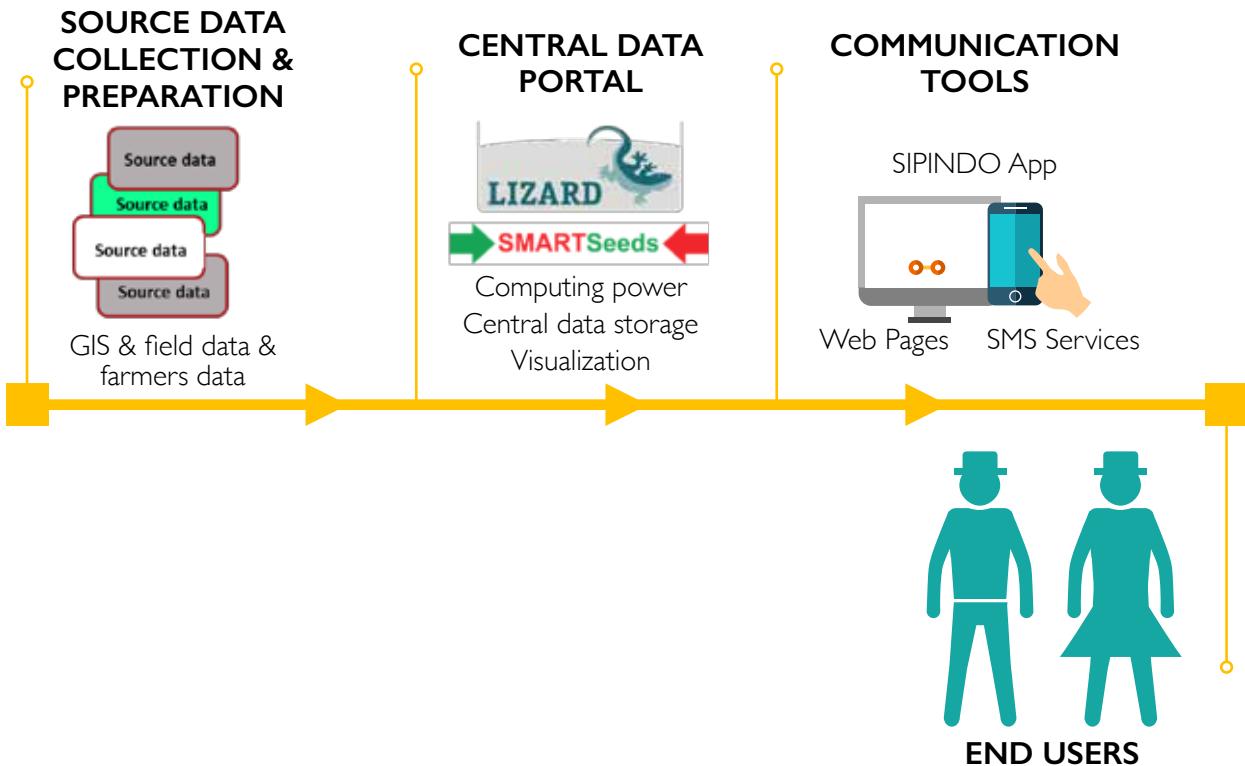


SMARTseeds Indonesia is a consortium of 7 (seven) public and private partners. This partnership involves organizations/institutions from Indonesia and the Netherlands, all of whom have different areas of expertise and years of experience to contribute to the success of this project. The SMARTseeds Indonesia consortium consist of ICCO, East West Seed Indonesia (EWINDO), Nelen&Schuurman, Text to Change (TTC) Mobile, AKVO, University of Twente- Faculty of Geo-Information Science and Earth Observation (UT-ITC), and Institute Pertanian Bogor (IPB). It is a three-year project (October 2016 – September 2019) funded by the *Netherlands Space Office* (NSO) to improve the ability of Indonesians farmers especially vegetables farmers (chili, tomato, cucumber). This project works in East Java, Central Java and Lampung. SMARTseeds information product comes from field data and sources data (satellite, soil, weather, etc). All the raw data that already processed from the raw format into the format which contain the information ready to disseminate are stored in a platform and will be used by the end users through the mobile apps (integrated to SIPINDO apps by EWINDO), SMS and web portal. EWINDO assigned YBTS to implement work package-2 of this project.

EWINDO assigned YBTS to implement work package-2 of this project.

Short Message Services (SMS)

Layanan pesan singkat



Berdasarkan hasil survei awal dan informasi lain dari petani, sebagian besar petani belum menggunakan ponsel pintar, sehingga layanan pesan tertulis SMARTseeds akan menjadi sangat penting. Pada program SMARTseeds, kami menggunakan program "Vusion" dari *Text to Change (TTC) mobile*. Vusion adalah program pesan tertulis interaktif yang terhubung pada program data yang tersebar dengan layanan pesan tertulis, yang artinya informasi dapat otomatis diambil dan disimpan di dalam program tersebut. Petani dapat mengirim pesan tertulis secara gratis ke nomor "2000" dengan permintaan untuk menerima informasi tanah atau perkiraan cuaca untuk wilayah tertentu.

Based on the result of the baseline survey and other contacts with farmers, most of the farmers don't use the smart phone yet, so the SMARTseeds SMS channel will be very important. In SMARTseeds the platform that we used is "Vusion" from Text to Change (TTC) mobile. Vusion is an interactive text messaging platform which connects to the disseminated data platform with the SMS messaging service which means that information can be automatically be retrieved from and stored in the platform. Farmers can send a text message to the toll-free short code "2000" with the request to receive soil information or seasonal weather forecast for their specific location.

Application Integration

PT East West Seed Indonesia (EWINDO) membuat aplikasi SIPINDO (dirilis pada 27 April 2017). Aplikasi ini menyediakan sarana komunikasi utama untuk memberikan pelayanan bagi petani EWINDO dan pelanggan lain berupa berbagai macam informasi dan pengetahuan, seperti GAP, informasi pasar, informasi cuaca (curah hujan, suhu), dan lain-lain. Idenya adalah SIPINDO dan SMARTseeds dapat saling mendukung dan terintegrasi. Informasi produk SMARTseeds akan tersedia di SIPINDO setelah integrasi lebih lanjut, berupa cuaca (perkiraan musiman) dan informasi tanah.

East West Seed Indonesia (EWINDO) developed SIPINDO apps (launched on April 27th, 2017). This app serves as the main communication tool for serving EWINDO farmers and customers on various types of information and knowledge: GAP, market information, weather information (rainfall, temperature), etc. The idea is that SIPINDO and SMARTseeds can support or integrate each other. SMARTseeds information products will be available in SIPINDO after further integration namely: weather (seasonal forecast) and soil information.

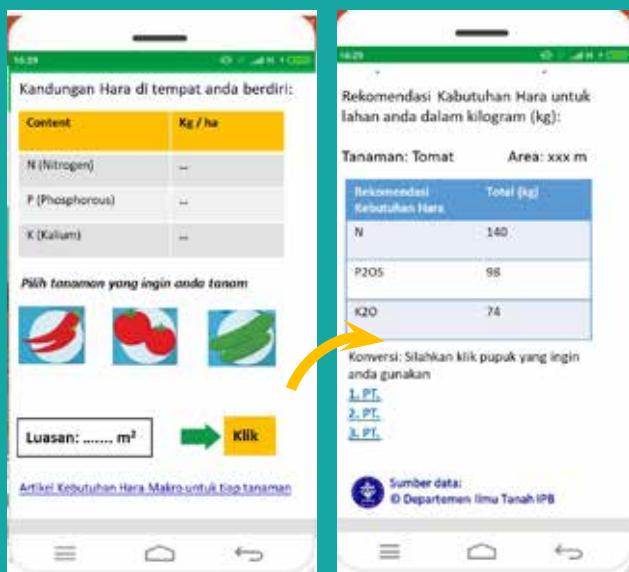
SMARTSEEDS GATEWAY AND FEATURES



SOIL ADVISORY FEATURE

Contoh informasi tanah yang akan diterima oleh petani melalui layanan SMARTseeds di aplikasi SIPINDO

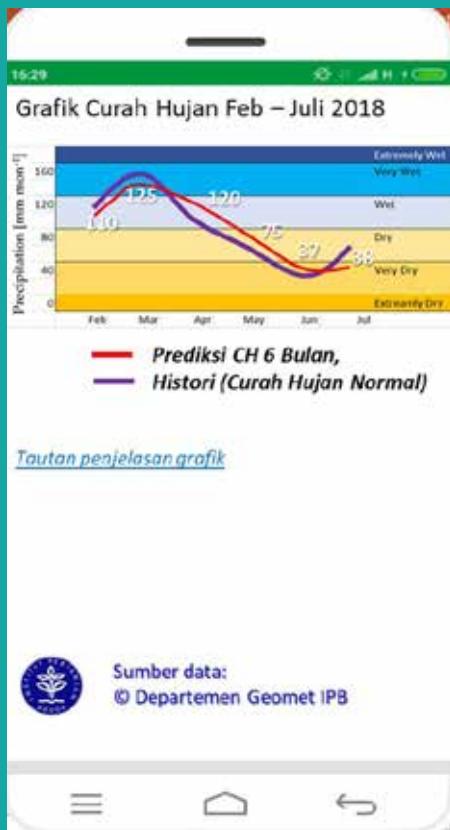
The example of soil information which farmers will get through the SMARTseeds service in SIPINDO apps



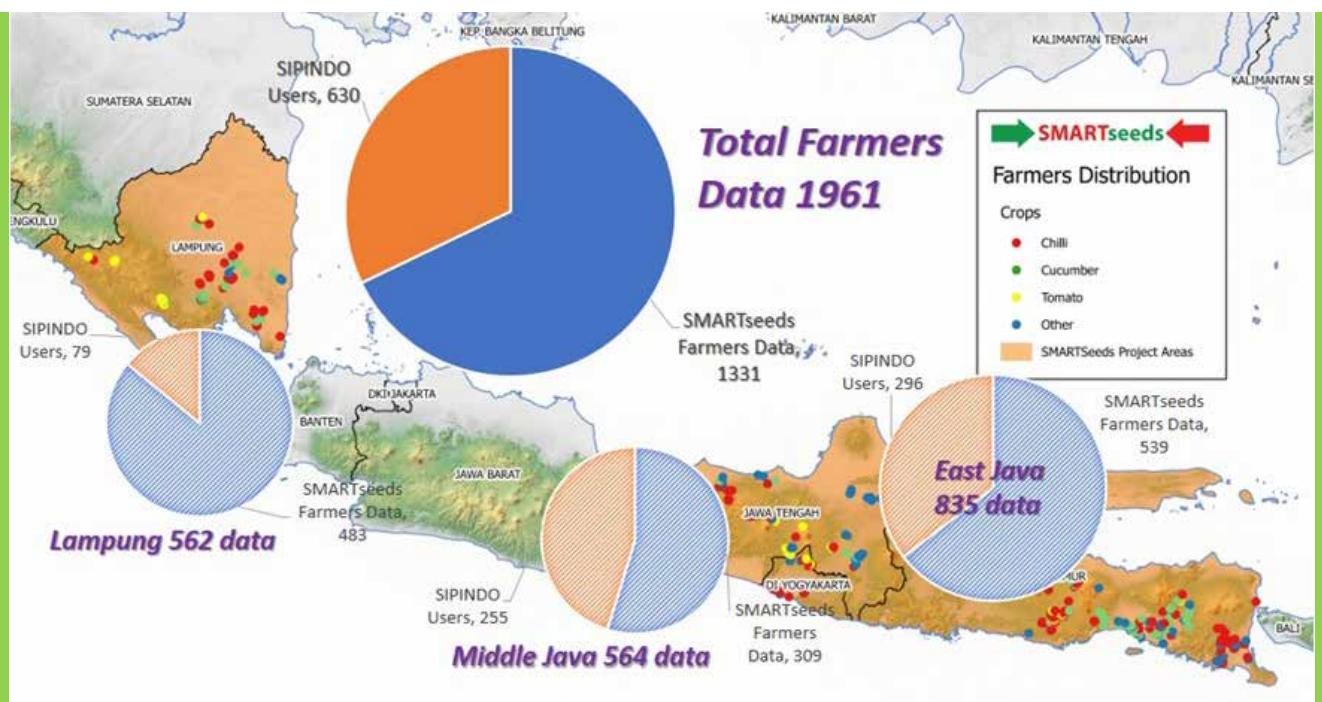
Contoh rekomendasi kebutuhan hara bagi lahan petani berdasarkan informasi tanah yang telah diperoleh

The example of soil nutrients for farmers' field based on the soil information

WEATHER FORECAST INFORMATION



Farmers Data Collection



Pengembangan kapasitas bagi petani saat ini masih menunggu layanan informasi siap. Sementara itu, selama pengumpulan data petani di area kegiatan, kami sembari memperkenalkan program SMARTseeds. Nantinya, saat layanan informasi telah dirilis, para petani tersebut siap memperoleh akses informasi SMARTseeds.

Nantinya, pengumpulan data petani akan dilakukan melalui empat cara, yaitu: survei lapangan menggunakan formulir pada ponsel, menggunakan layanan pesan singkat dua arah, menggunakan aplikasi SIPINDO, dan data petani tim marketing EWINDO.

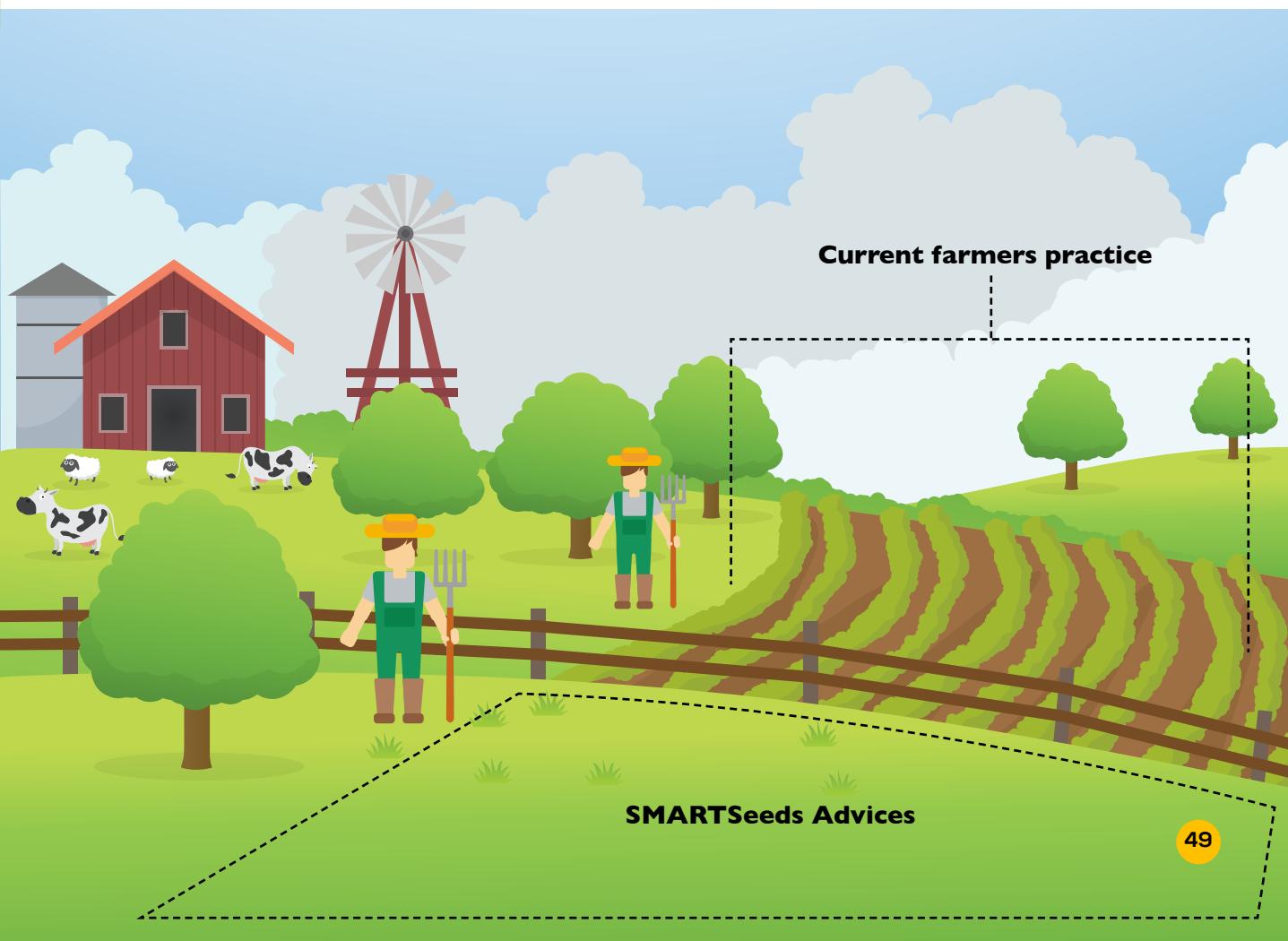
Since the capacity buildings for the farmers are waiting for the information service ready, there is only a meeting or introduction for SMARTseeds project along the farmers' data collection in project area. Once the information service is launched, the farmers are ready to have access to SMARTseeds info.

In the future, farmers' data collection will use four different channels, namely: field survey using mobile form, data collection using 2-way SMS, data collection by SIPINDO app and EWINDO marketing farmers' data.

Demo Plot

Cara lain untuk mengembangkan kapasitas petani adalah melalui demo plot untuk membuktikan rekomendasi yang diberikan SMARTseeds. Terdapat 3 (tiga) demo plot selama periode pertama ini. Demo plot ini akan digunakan untuk verifikasi rekomendasi pemupukan tanah dari SMARTseeds. Konsepnya adalah dengan membandingkan rekomendasi SMARTseeds dengan praktik yang dilakukan petani. Dengan cara tersebut, kita dapat mengukur efektivitas rekomendasi tanah yang diberikan apabila diaplikasikan oleh petani. Kami juga menyelenggarakan kegiatan *Farmers Field Day (FFD)* di ketiga demo plot tersebut, berkolaborasi dengan tim marketing EWINDO.

Other way to conduct capacity building for the farmers even the services is not ready yet is through the demo plot to prove SMARTseeds advice. There are three demo plot established in the first period of project. The demo plot will be used to verify the SMARTseeds soil fertilization recommendation. The concept is to compare SMARTseeds recommendation versus current farmers' practices (side by side comparison), it can measure the effectiveness of our soil recommendations when applied by the farmers. We also conducted the Farmers Field Day (FFD) event in those demo plot, collaborated with marketing team of EWINDO.





FARMER'S TESTIMONY



MR. JAMAN -
Malang, East Java

"Saya merasa takjub, dengan menggunakan lebih sedikit pupuk dan biaya yang lebih sedikit, hasil yang saya dapatkan sama, bahkan lebih baik. Terima kasih SMARTseeds, terima kasih Cap Panah Merah!"

"I was amazed, using the less quantity and cost of fertilizer, the yield is same, but even better. Thank you SMARTseeds, thank you Cap Panah Merah!"

06

We are Happy Farmers!



SARNO (MANOKWARI, WEST PAPUA)



Pak Sarno (60 tahun) tinggal di Desa Kalimerah, Distrik Masni, Manokwari, Papua Barat. Kesehariannya bekerja sebagai petani hortikultura, tanaman yang biasa ditanam antara lain sawi, kangkung dan bayam. Selama 14 tahun bertani ia tidak pernah mau mencoba jenis sayuran lain. *"Kalau disuruh tanam jenis sayuran lain, saya tidak paham. Saya belajar menanam sawi, bayam, dan kangkung sendiri, hanya mencoba saja pada awalnya, karena hanya bertani yang bisa saya lakukan. Selama ini pendapatan yang diperoleh hanya sebatas untuk memenuhi*

Mr. Sarno (60 years old) lives in Kalimerah village, Masni district, Manokwari, West Papua. He works as a horticulture farmer. He usually grows Chinese cabbage, kangkoong and spinach. For 14 years, he never tries to grow other crops. *"I don't understand how to grow another crop. I learnt how to grow Chinese cabbage, spinach, and kangkoong by my self. I just tried at the beginning, because only that I can do. I sell the vegetables, and I use the revenue to meet the daily needs. Sometimes it is insufficient also"*, he said.

kebutuhan harian, terkadang juga tidak cukup", ujarnya.

Melihat kondisi yang dialami oleh Pak Sarno, petugas lapangan dari YBTS mencoba mengajak beliau untuk membuat demo plot paria dengan pendampingan teknis cara budidaya yang baik (GAP), penggunaan pestisida yang tepat guna dan sasaran, serta aplikasi pupuk yang efisien. Pak Sarno sangat bersemangat dan banyak belajar dalam hal proses persemaian, berbagai jenis hama dan penyakit serta cara menaggulanginya, pengolahan lahan, penyemprotan pestisida dan pemupukan.

Kini Pak Sarno telah menuai hasil yang baik. Dari hasil 13 kali panen tanaman paria yang dimiliki, Pak Sarno telah memperoleh pendapatan sebesar Rp. 3.350.000,- di mana modal awal yang di keluarkan oleh oleh bapak sarno sebesar Rp 475.000,-. Pak Sarno mengakui bahwa penghasilannya banyak membantu perekonomian keluarga. Kini ia bisa menabung untuk menyekolahkan cucunya ke Taman Kanak-kanak. Ia juga bisa membantu biaya sekolah cucunya yang saat ini duduk di bangku SMP. Selain itu Pak Sarno juga mampu mencukupi biaya kebutuhan harian keluarga. Bahkan setelah pendampingan ini, Pak Sarno berniat mengajak menantunya membuka lahan baru untuk menanam paria dengan jumlah yang lebih banyak lagi dan menambah jenis dari variasi tanaman sayuran lainnya.

Looking Pak Sarno's condition, YBTS field staff engages him to establish demo plot of bitter gourd. Through the process, YBTS will accompany him and give assistance about Good Agriculture Practices (GAP), the appropriate use of pesticide, and also the effective application of fertilizer. Pak Sarno is really enthusiastic. He learns many things in seedling preparation, pest and disease management, land preparation, spraying technique and also fertilization.

Nowadays, Pak Sarno has reached a good result. From 13 times harvesting, he has got revenue from his bitter gourd around 3,350,000 rupiah, where his cost is only 475,000 rupiah. Pak Sarno admitted that it helps his families economic a lot. Now he can save some money to send his grand son to kindergarten and support another grand son for the school fees in junior high school. Now, Pak Sarno can also suffice the daily needs. After this, he intends to ask his son in law for opening up the new land to grow more bitter gourd and try ne varieties of vegetable crops.

"From agriculture, my grand children can go to school now. I will invite all my family members to cultivate vegetables"



DANIEL MANDIWA (NABIRE, PAPUA)

Bapak Daniel Mandiwa, sosok petani dari Nabire yang tinggal di kampung Lany, distrik Teluk Kimi. Ia sebelumnya pernah melakukan kegiatan bertani kurang lebih 20 tahun yang lalu. Dengan pengetahuan seadanya dan didukung oleh kemurahan alam tanah Papua yang begitu subur, ia mencoba untuk belajar menanam. Ia merasa senang dengan hasil bertani yang didapat saat itu. Namun tiba-tiba semangatnya sirna. Tomat sebanyak 8 (delapan) keranjang yang dibawa ke pasar tidak satupun terjual karena saat itu sedang musim panen tomat di Nabire khususnya oleh petani transmigrasi. Pak Mandiwa merasa kecewa dan membuang seluruh tomatnya ke sungai. Sejak saat itu ia berjanji untuk tidak lagi bertani sayuran. Bulan Agustus 2017 Pak Mandiwa bertemu seorang petugas lapangan dari Yayasan Bina Tani Sejahtera (YBTS). Dari pertemuan itulah ia kembali termotivasi untuk menanam sayuran. Saat itu ia pun memutuskan untuk membuka lahan dan ingin menanam sayuran dengan bantuan pendampingan dari petugas lapangan YBTS.

Melalui sistem demo plot dengan pendekatan pembelajaran lapangan petani yang diterapkan oleh YBTS, bersama petani lain, Pak Mandiwa mendapat pengetahuan dan teknologi budidaya sayuran yang baik mulai dari pemilihan benih yang berkualitas, cara persemaian yang praktis, persiapan lahan, pindah tanam, pemupukan, penyemprotan pestisida dan penanggulangan hama



Mr. Daniel Mandiwa (Pak Mandiwa), a farmer from Nabire who lived in Lany village, Teluk Kimi district. Twenty years later, he has ever done farming. With his average knowledge of agriculture and also the rich of Papua land, he tried to do farming. He felt very happy of the yield. But suddenly, he lost his spirit. He brought 8 (eight) buckets of tomatoes to the market, but he sold nothing. It was a

penyakit. Ia menanam cabai keriting varietas Kastilo F1 dan Laba F1 Cap Panah Merah di lahan seluas 3,6 are (360 m²) dengan populasi 400 pohon. Ia juga melibatkan keluarganya yang lain agar mereka bisa belajar menanam. Setiap minggu Pak Mandiwa bisa 2 (dua) kali panen cabai keriting untuk dijual ke pasar dan hasilnya bisa untuk menambah pendapatan rumah tangganya.

Menjadi cermin atau contoh bagi orang lain dalam hal semangat untuk terus belajar itulah yang menjadi harapan Pak Mandiwa. Ia mengatakan, jika ia tidak kembali ke kebun maka bagaimana dengan kehidupan anak cucunya, mereka memiliki tanah yang luas dan subur tapi tidak bisa bertani. Ia kembali berkebun agar suatu saat nanti anak cucunya bisa mengingat bagaimana ia dulunya memperoleh uang dari hasil bertani. Kini yang dibutuhkan oleh Pak Mandiwa adalah ilmu karena ia percaya bahwa ilmu akan mendatangkan kebaikan dan nama baik.

"I hope that our children will continue what I have done. We have a fertile land. It is all for the future"

harvesting season in Nabire at that time, and many homesteader farmers also brought their tomatoes to the market. He was really disappointed and threw all the tomatoes to the river. Since that time, he promised not to grow vegetable anymore. In August 2017, Pak Mandiwa met a field staff from Yayasan Bina Tani Sejahtera (YBTS). From that meeting, he was motivated again to grow vegetable. He also decided to opened up the field and started to grow vegetable by the assistance of YBTS staff.

Through the demo plot with farmer's field learning approach by YBTS, Pak Mandiwa and other farmers get knowledge and the good farming techniques such as: high quality seed selection, seedling preparation, land preparation, fertilizing, pesticide spraying and also pest and disease management. He grows curly pepper with the varieties of Kastilo F1 and Laba F1 from Cap Panah Merah in 3,6 are (360 sqm) with population of 400 plants. He also involves his family members so that they can learn about agriculture. Pak Mandiwa can do harvest twice a week, and then he bring it to the market. From selling the curly peppers, he can sufficient the household needs.

Pak Mandiwa hopes that he can be the role model for other farmers for his spirit to learn. He said that, if he doesn't do farming, what will his grand children be in the future? They have a huge and fertile land, but they can not do farming. He grows vegetable again so that his family can remember how he can earn money from agriculture. Now, what he needs is knowledge, because he believes that knowledge can bring honor and good things for him.



KELOMPOK PEMUDA “HUTAN BERTANI” DARI SOE, TIMOR BARAT

“Hutan Bertani”
Group: a Young
farmers group from
Soe, West Timor



Yayasan Bina Tani Sejahtera (YBTS) pada tahun 2017 melakukan pembinaan bagi kelompok tani pemuda di Kota Soe, Kabupaten Timor Tengah Selatan, NTT. Kelompok tani pemuda “Hutan Bersehati” terbentuk pada tahun 2016. Sebagian anggota kelompok berprofesi sebagai tukang ojek. Awalnya mereka memulai kegiatan kelompok dengan beternak babi.

In 2017, Yayasan Bina Tani Sejahtera (YBTS) assisted a young farmer group in Soe district, Timor Tengah Selatan regency, NTT. “Hutan Bersaudara” young farmer group was established in 2016. Some of the member is a motorbike taxi driver. In the beginning, they started the activity by raising pigs.

Since April 2017 until now, they feel it

Sejak bulan April 2017 hingga saat ini mereka merasakan cukup berat ketika mulai mempersiapkan lahan dan pembuatan bedengan untuk penanaman cabai keriting (verietas Kastilo F1 Cap Panah Merah) pada demo plot seluas 7 are (700 m²) di 3 (tiga) lokasi di Kampun Sabu. Sejak awal, Camat Kota Soe, Kristian Tlonaen, memberikan dukungan dan motivasi kepada kelompok tani pemuda. Selain itu, dukungan dari anggota kelompok senior sangat berperan dalam mendorong dan memotivasi anggota muda untuk melihat potensi melalui penanaman sayuran, walaupun belum semua anggota termotivasi untuk memulai usaha tersebut.

Ketua kelompok, Cecep Bire, tidak putus asa dan memprioritaskan beberapa anak muda yang memiliki minat untuk segera memulai usaha tersebut. Salah satunya adalah Yulen Henuk (22 tahun) yang sebelumnya adalah seorang tukang ojek. Berbekal pelatihan yang diberikan YBTS dan kunjungan kelompok belajar ke lokasi kebun kelompok binaan YBTS lainnya, ia mengambil keputusan untuk menanam cabai keriting dan paria pada lahan seluas 7 are (700 m²). Kami berharap semoga anak muda lainnya termotivasi untuk memanfaatkan potensi yang dimiliki.

difficult to start the land preparation and beds making to grow curly pepper (Kastilo F1 variety of Cap Panah Merah) on 7 are (700 sqm) of the demo plot in 3 (three) locations in Sabu village. Since the beginning, the leader of Soe district, Mr. Kristian Tlonaen, gives his support and motivation for the young farmer group. Beside that, the support from the senior farmer group is also very important to encourage and motivate the members to see the potency through the vegetable farming, although not all the members are motivated to start it yet.

The group leader, Cecep Bire never gives up and prioritizes some youth that have interest to start grow vegetables. One of the youth is Yulen Henuk (22 years old). Previously, he was a motorbike taxi driver. He has joined the training from YBTS and also did some comparative study to another farmer group before. After that, he decides to start grow curly pepper and bitter gourd in 7 are (700 sqm) land. We hope that the other youths can also be motivated to explore the potential they have.

**"We are young and we have to do something
for a better future of agriculture"**



ABDUR (MOROTAI ISLAND, NORTH HALMAHERA)

Februari 2017 adalah pertama kali YBTS bertemu dengan Pak Abdur, saat itu beliau masih berprofesi sebagai pegawai honorer di Dinas Tata Kota, Kabupaten Pulau Morotai. Saat itu Pak Abdur menanam paria Lipa F1 sebanyak 10 bungkus, namun hanya berhasil panen sebanyak 3 (tiga) kali dengan pendapatan tidak lebih dari Rp 2.000.000,-. Hal ini terjadi karena beliau belum menerapkan penggunaan pupuk dan pestisida pada saat terjadi serangan hama dan penyakit sehingga hasil yang didapatkan kurang maksimal. Pada Maret 2017 Pak Abdur mengikuti pelatihan *Training of Farmers (ToF)* yang diadakan oleh Yayasan Bina Tani Sejahtera. Ia belajar mengenai pemberian pupuk secara efektif, perlakuan pestisida dan cara penggunaan mulsa.

Pada bulan Mei 2017, Pak Abdur mencoba lagi bertanam Paria Lipa F1 namun kali ini hanya sebanyak 4 bungkus dan mencoba menerapkan ilmu yang sudah didapatkan. Dengan modal tidak lebih dari Rp 500.000,- kali ini pak Abdur mampu mendapatkan hasil



February 2017 was the first time for YBTS to meet Pak Abdur. At that time, he was a honorary employee in urban planning department of Morotai Island regency. Pak Abdur grew 10 pouches of bitter gourd Lipa

panen lebih dari Rp 5.000.000,-. Selain itu pak Abdur juga memanfaatkan sisa lahan di pinggir kebun untuk bertanam kangkung Bangkok sebanyak 1 bungkus (1 Kg) dan mendapatkan hasil lebih dari Rp 500.000,-.

Saat ini Pak Abdur sudah tidak bekerja menjadi pegawai honorer di pemerintahan yang sudah digelutinya selama 10 tahun terakhir dan beralih profesi menjadi petani. Perlahan-lahan beliau mulai memperbanyak jenis tanamannya seperti jagung manis dan cabai rawit, namun tetap menjadikan paria sebagai komoditas utamanya karena harga paria yang relatif stabil di Pulau Morotai, yaitu berkisar Rp 8.000,- hingga Rp 10.000,- per kg.

"With a better knowledge, I get a higher yield"

F1, but he could only harvest three times with the revenue around Rp 2,000,000. It happened because he has not applied the right way to use fertilizer and pesticide while there were pest and disease attack, so that he did not get the maximum yield. In March 2017, Pak Abdur joined Training of Farmers (ToF) from YBTS. He learnt about the effective way of fertilizing, pesticide rotation and mulch application.

In May 2017, Pak Abdur tried to grow only 4 pouches of bitter gourd Lipa F1. He also applied the knowledge he got from ToF. He spent around Rp 500,000 for the capital. From the harvest season, he could get the revenue for more than Rp 5,000,000. Beside that, Pak Abdur also grew 1 pouch (1 kgs) of kangkoong Bangkok in the remaining land and he got more than Rp 500.000 for the revenue.

Nowadays, after 10 years of journey, Pak Abdur is no longer work as a honorary employee, he is now a farmer. Slowly, he starts to increase the variety of vegetable, such as sweet corn and bird pepper. But, bitter gourd is still being the main commodity, because of the stable price in Morotai Island (Rp 8,000 to Rp 10,000 per kgs).



AHMAD (AMAHAI, CENTRAL MOLUCCAS)

Pak Ahmad (27 tahun) adalah seorang petani muda asli dari Desa Hollo, Kecamatan Amahai, Kabupaten Maluku Tengah. Sebelumnya ia bekerja sebagai seorang kuli bangunan dan ke tukang ojek, sampai suatu hari ia bertemu dengan seorang teman yang berprofesi sebagai petani. Ia menyarankan Pak Ahmad untuk bertani sayuran. Namun Pak Ahmad belum tertarik, karena tidak memiliki ilmu dasar pertanian.

Suatu hari saat melihat lahan pekarangan di samping rumah Pak Ahmad berpikir ulang untuk mencoba menanam sayuran. Untuk mengawali, ia menanam cabai rawit lokal pada lahan seluas 50 m². Namun ternyata banyak benih yang tidak tumbuh. Kemudian Pak Ahmad menanam kembali benih chaisim dan berhasil panen sebanyak 52 ikat dengan harga per ikat Rp 5.000. Sejak



Pak Ahmad (27 years old) is a young farmer from Hollo village, Amahai district, Central Moluccas. Previously, he worked as a construction worker and a motorbike taxi driver, until someday he met one of his friends, a farmer. His friend suggested him to grow vegetable. But, Pak Ahmad was not interested, because he did not have basic knowledge of agriculture.

Someday, Pak Ahmad looked on his yard, and thought to started grow vegetable. For the beginning, he grew bird pepper from the local seed in a 50 sqm field, but many of them did not grow as well. He tried to grow another

saat itu ia mulai belajar tentang budidaya tanaman sayuran. Setelah itu, Pak Ahmad mencoba menanam chaisim dan tomat pada lahan yang lebih luas, akan tetapi hasilnya tidak maksimal karena terserang hama dan penyakit. Ia terus belajar dan tidak mudah putus asa hingga akhirnya beliau cukup mahir dalam bertani.

Pada bulan Juni 2017, Pak Ahmad bertemu dengan petugas lapangan Yayasan Bina Tani Sejahtera (YBTS). Melihat ketekunan Pak Ahmad dalam bertani, YBTS mengajak Pak Ahmad bekerjasama untuk pembuatan demo plot, yang sekaligus juga menjadi lahan pembelajaran bagi petani lainnya. Dengan pendampingan dari YBTS, ia terus belajar dan menambah pengetahuan tentang pertanian. Sebelumnya, ia menanam sayuran pada lahan seluas 2 (dua) hektar, namun karena perawatan yang belum efektif, hasil yang didapatkan belum maksimal. Setelah mengikuti pelatihan yang diberikan oleh YBTS, diantaranya mengenai pengolahan lahan, penggunaan mulsa, pemupukan yg berimbang serta pergiliran pestisida dan jarak tanam, Pak Ahmad menyadari bahwa hasil panen yang banyak bukan hanya berasal dari lahan yang luas, namun juga dari perlakuan yang efektif.

vegetable, choisum, and then he harvested 52 bundles and sold it with Rp 5,000 for each bundle. Since that, he continually learn how to grow vegetable. After that, Pak Ahmad grew choisum and tomatoes on a larger field, but unfortunately he did not get a maximum yield because there was pest and disease attack. He kept learning and never gave up. Finally, he became more capable in growing vegetable.

In July 2017, Pak Aham met a field staff from Yayasan Bina Tani Sejahtera (YBTS). Looking at the diligent of Pak Ahmad in growing vegetable, YBTS asked Pak Ahmad to collaborate for demo plot establishment. This demo plot will also be the field learning facility for other farmers. By the assistance of YBTS, he continually learning and increase his knowledge of agriculture. Before that, he grew vegetables on 2 (two) hectare land, but because of ineffective treatments, he did not get the maximum yield. After attended the series of training conducted by YBTS with topics of land preparation, mulch application, fertilizing, pesticide rotation and also plant spacing, Pak Ahmad realizes that the higher yield does not come from only the bigger size of land, but also from the more effective treatments.

"Now, I realize that a higher yield comes from a better practices, not only a bigger land size"



PAK LASARUS (ARFAK HIGHLAND, WEST PAPUA)



Pak Lasarus Mandacan adalah salah satu masyarakat asli Kampung Igimbay, Pegunungan Arfak, Papua Barat. Ia pernah menjadi petinju dan pemburu binatang di hutan. Saat ini tinggal seorang diri karena istri dan anak-anaknya sudah meninggal dunia beberapa tahun yang lalu. Saat itu ia mulai berusaha dan berjuang sendiri dengan

Pak Lasarus Mandacan is one of the local citizens of Igimbay village, Arfak highland, West Papua. He ever was a boxing player and animal hunter before. But now, he lives alone because his wife and his children had passed away years ago. Since that, he attempted alone to live as being a traditional farmer. He never got assistance from any government

bekerja sebagai petani tradisional karena tidak mendapatkan pendampingan dari lembaga manapun baik pemerintah atau pihak swasta. Ia menanam wortel, kentang dan daun bawang.

Pada tahun 2017 ketika Yayasan Bina Tani Sejahtera (YBTS) bekerjasama dengan AIP-Rural PRISMA melakukan pendampingan bagi petani di Kampung Igimbay, Pak Lasarus mengikuti pelatihan GAP yang dilakukan di lahan milik petani lain, yaitu Pak Ekis Indow. Dari situlah ia mulai tertarik dengan kegiatan YBTS. Setiap hari ia mengunjungi lahan Pak Ekis untuk mengamati perkembangan tanaman di bedengan. Setelah itu, ia meminta YBTS untuk mendampinginya melakukan budidaya tanaman sayuran di dataran tinggi.

Dengan dampingan dari YBTS, Pak Lasarus menanam kubis untuk pertama kalinya. Mulai dari pemilihan benih, persemaian hingga pemeliharaan tanaman. Dari 6 (enam) bedengan yang ditanami kubis, ia mendapat keuntungan Rp 750.000. Sejak saat itu Pak Lasarus semakin termotivasi untuk menanam sayuran dan membuka lahan lebih luas lagi. *"Saya mendapat banyak ilmu yang bermanfaat dari YBTS, sehingga sekarang saya bisa mengonsumsi sayuran. Ekonomi rumah tangga saya juga terbantu, saya bisa membeli sembako dan bahan bangunan untuk membangun rumah. Terima kasih YBTS!"*, ujarnya.

agency or private organization. He grew carrot, potato, and green onion.

In 2017, when Yayasan Bina Tani Sejahtera (YBTS) collaborated with AIP-Rural PRISMA to assist farmers in Igimbay village, Pak Lasarus joined the GAP training in another farmer's field called Pak Ekis Indow. From this moment, he was interested in YBTS activity. Everyday he visited Pak Ekis field to observe the plant growth on the beds. After that, he asked YBTS to assist him to grow highland vegetable crops.

By the assistance of YBTS, Pak Lasarus grew Chinese cabbage for the first time. We assisted him since high quality seed selection, seedling preparation, until the crop management. From six beds of Chinese cabbage, he got profit around Rp 750,000. Since that, Pak Lasarus is more motivated to grow vegetables and open up larger area for field. *"I got more knowledge from YBTS, so that I can consume vegetables. It also helps me suffice my daily needs. I can also buy some building materials to build my house"*, he said.

"I got better knowledge of farming, it helps me a lot for my household needs"

Happy Team



**Edwin Saragih
(Chairperson)**



**Arga Wisnu Pradana
(Technical Program
Supervisor for Maluku
Papua Area)**



**Bryan H V Sitorus
(Accounting Supervisor)**



**Fransiska Fortuna
(Secretary)**



**Kurniawan Sutedja
(Treasury)**



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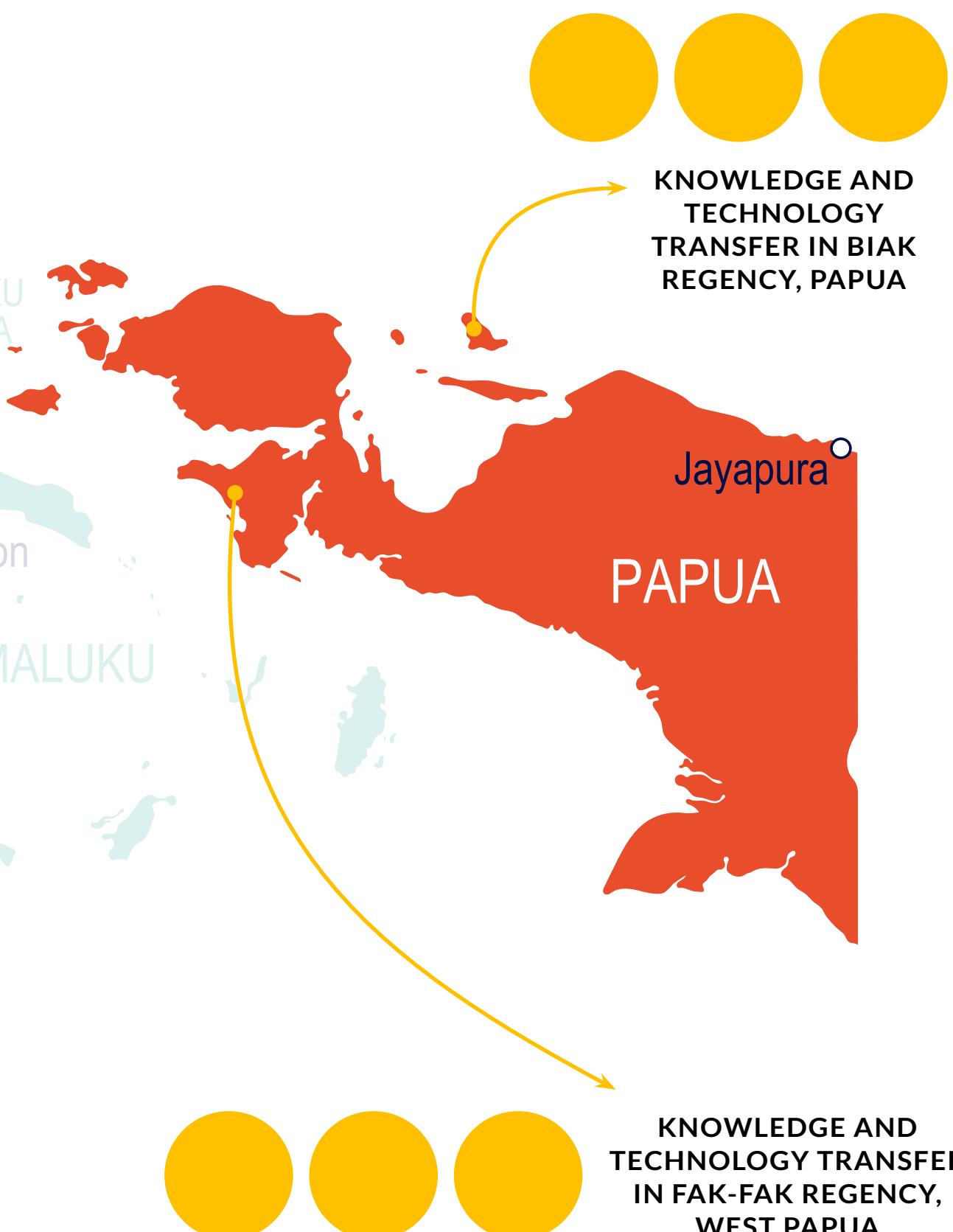


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What's New In 2018??



KNOWLEDGE AND
TECHNOLOGY TRANSFER
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