



YAYASAN BINA TANI SEJAHTERA

www.binatani.or.id



ANNUAL REPORT 2018



We are happy to share our 2018 annual report. The data and information, including the info-graphics are all our operations on 2018, unless explicitly mentioned. We welcome your feedback on this report by emailing us on info@binatani.or.id

Kami sangat senang dapat membagikan laporan tahun 2018, semua data, informasi termasuk infografis merupakan operasi kami di tahun 2018, kecuali jika disebutkan berbeda. Kami sangat berterima kasih atas feedback anda untuk report ini dengan mengirimkan ke email kami di info@binatani.or.id

ANNUAL REPORT 2018



Bina Tani Sejahtera



EAST-WEST SEED

CAPP PANAH MERAH

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MESSAGE FROM

JOOST PEKELHARING

It is fascinating that we saw continued growth of the Yayasan's positive impact to small-holders farming community in Indonesia, especially in the eastern part of the country where farmers have been experiencing improved livelihood by adopting better vegetable farming practices. The projects and partnerships we have all worked hard to establish here over the last 5 years have been key to this sustained positive change.

It is rewarding to see the results of the work with vegetable farmers, and we pride ourselves on the efforts of our enthusiastic employees who work shoulder to shoulder with them.

We have been seeing remarkable impact our transferred knowledge on improving the lives of farmers and their families. Not just in terms of more efficient vegetable production practices, but also in developing better communication about seasonal weather, market information, and offering our advisory services.

We put farmers at the center of our services, and it has long been realized that knowledge and good quality seeds must go hand-in-hand to improve harvests, and so too, the livelihood of farmers. With the support of

the Government of Indonesia – both at the national and regional local level - could we -achieved what we have in the last three decades.

We would like to thank the esteemed strategic partners working on some of these major projects with us include: vegIMPACT on conducting knowledge transfer activities and outreach, ICCO Cooperation who is working with us on a consortium of G4AW-SMARTseeds Information Service to connect farmers with geo data and field data through mobile devices; Cordaid who continue to support our work on the Resilience and Livelihood project; and PRISMA who we have been coordinating with to reach farmer groups and helps us accelerate our provision of GAP Knowledge and good quality seed access at farmers level.

At the Yayasan, 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,
Bina Tani Sejahtera Foundation

MESSAGE FROM

"Through knowledge and technology transfer, We hope to increase the capacity and productivity of farmers in doing their farm business"



The welfare of farmers.

This is the goal of PT East West Seed Indonesia, 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.

Through YBTS, as an extension arms of the company, Ewindo to express and signify its commitment to become farmers' best friend. Through YBTS, Ewindo's support can be given to farmers in remote areas and less penetrated markets.

Through knowledge and technology transfer, we hope to increase the capacity

GLENN PARDEDE

Managing Director of PT East West Seed Indonesia

and productivity of farmers in doing their farm business. In turn, farmers income will be increased and sustained their farming business.

We are grateful that YBTS has gained supports from strategic partners to contribute for farmers in Indonesia. Moreover, YBTS has access to Ewindo resources in terms of human resources, expertise, and even networks. Therefore, YBTS has more to offer in project implementation.

So with much support from the company and also the development organization or non-profit organizations with good reputation and achievements, the benefit for farmers can be much enlarged and scaled-up.

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

MESSAGE & INTRODUCTION FROM

"It is our belief that with unremitting efforts, we may in longer term contributing to betterment of farmers livelihood"



Edwin Sanso Saragih
(Chair of Caretakers)



Fransiska Fortuna
(Secretary)



Kurniawan Sutedja
(Treasury)

Board of Caretakers Yayasan Bina Tani Sejahtera

We are so grateful, and much more of myself, to stand next to Ibu Ana Aibeko, a woman farmer in Kampung Air Mandidi, Nabire, Papua as together we harvested cabbage crop at her demplot in January 2018. The decent smile of Ibu Ana was also reflected with sincere happiness of other men and women working with and supporting Ibu Ana in making the first ever demplot of lowland cabbage was a fair success for Nabire. They thought cabbage could only be grown in highland cool areas. But now, they proved it by themselves that cabbage crop can be made a success source of cash and fresh veggies in the fertile lowland of Nabire area. Thanks to the good quality cabbage Panah Merah seeds which is available in agrikiosk in Nabire town. The farmers now also

have much more crop choices other than cabbage. Our Yayasan works in the field assist farmers in adopting and applying good farming practices with appropriate approach of knowledge transfer process ensuring farmers' success.

It is an example of a story and many more farmers' stories of how they apply good practices to help them increase their



vegetable crops yields and household income. In year 2018, Yayasan trained and provided support for more than 12,000 farmers in several Districts or Regencies in the provinces of Nusa Tenggara Timur (NTT), Maluku, Maluku Utara, Papua, and Papua Barat and also less-penetrated market in Samosir, Belitung, Nunukan and Sangihe-Talaud. This report is an effort of Yayasan team to collect and document our field works. For Yayasan team it is a continuously unremitting efforts in providing service and technical support to small holder farmers.

It is also our belief that with unremitting efforts, we may in longer term contributing to betterment of farmers' livelihood or welfare, contributing to agriculture development, and also exerting impact

towards Sustainable Development Goals (SDGs) at local level or farming household level. Keywords from the SDGs and also from national agriculture development -- or to some degree our own take into our work context -- such as increasing productivity, increasing (local) supply of food (in this regards fresh vegetables), farmers capacity building in acquiring long-life skills and dynamic knowledge, proper and responsible use of resources are at heart of our service.

On this occasion, we would like to thanks the Board of Trustees and Supervisory Board of Yayasan for full support. We extend our sincere gratitude to partners and donors: VegIMPACT NL, KARINA and Cordaid, PRISMA, ICCO Cooperation, and Nusa Halmahera Mining for the nice partnership and supports.

Thank you.

Edwin S. Saragih

On behalf of YBTS Board of Caretakers

**ABOUT
YAYASAN BINA TANI
SEJAHTERA**

01

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).

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.

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 menasar 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 Mazereeuw, 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).

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 Mazereeuw, Simon N. Groot and Kurniawan Sutedja. Currently, the Board of Trustees of the foundation are 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 Caretakers are Edwin Saragih (Chairperson), Fransiska Fortuna (Secretary), and Kurniawan Sutedja (Treasurer).

HOW WE CREATE VALUES

Our 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 assist improvement of farmers livelihood and care also about social and environmental issues

Sebagai perpanjangan tangan dari EWINDO, Visi YBTS didasarkan pada visi EWINDO dimana menyatakan "Kami sangat percaya benih sayuran yang berkualitas untuk kehidupan yang lebih baik"

Dengan visi ini kami membantu peningkatan pendapatan petani dan sekaligus memperhatikan masalah sosial dan lingkungan.

Our Mission

Our mission are to fullfill 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 improvement in smallholder farmers' livelihood in eastern parts of Indonesia.

Misi kami adalah untuk memberikan penyuluhan pertanian, transfer pengetahuan dan teknologi, layanan konsultasi di bidang pertanian, kursus pelatihan tentang budidaya dan agribisnis.

Dalam hal ini, kami mengembangkan program berbasis potensi perbaikan kesejahteraan petani kecil di bagian timur 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

Perbaikan Teknis Budidaya

Transfer pengetahuan dan teknologi yang memungkinkan implementasi praktik pertanian yang baik petani sehingga menjadi lebih produktif dan efisien



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

Nilai Tambah dan Akses Pasar

Petani menghasilkan pendapatan tambahan dan menambah nilai pada produk yang dihasilkan melalui peningkatan kualitas dan hubungan ke pasar



Nutrition Value

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

Nilai Nutrisi

Untuk mengenalkan nutrisi yang lebih baik dengan konsumsi sayuran lebih banyak dan produk sehat lainnya



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.

Membangun Sinergi

Mempromosikan nilai tambah melalui kerja sama dan kemitraan seperti memanfaatkan dukungan / keahlian mitra potensial seperti Universitas, Perusahaan swasta, Organisasi Pengembangan Masyarakat, LSM, dll.

YBTS service in target areas adding Improvement & Values through Extension Service & Knowledge Transfer:



YBTS field activities:

- Establish Demplot,
- Train Farmers,
- Conduct Field Days & Technology Expo,
- Provide knowledge materials & extension tools,
- Integrate with other intervention such as: water access, conservation/climate-smart agriculture, information service.

Kegiatan YBTS di lapangan:

- Membuat Demplot,
- Melatih Petani,
- Melakukan Field Days & Gelar Teknologi,
- Menyediakan bahan-bahan pengetahuan dan alat penyuluhan,
- Memadukan dengan intervensi lain seperti akses air, konservasi/climate-smart agriculture, layanan informasi

Focus Areas & Proposed Impact Indicators



Focus areas: Nusa Tenggara, Maluku, Papua, & less-penetrated markets areas generally characterized by:

- Low level of vegetable production, net fresh importers from Java & Sulawesi
- Traditional farming practices
- Farmers' lack access to GAP knowledge & information; also lack of access to input market (quality seeds, fertilizers, etc.) & outputs markets
- Infrastructure & transportation are developing

Yayasan activities is outreaching to smallholder farmers where they have limited access to good quality seeds and good agricultural practices (GAP) advices.

Farmers who acquire knowledge and skills; if they adopted and practiced them, then farmers will be able to increase crop yield and income.

This is the a desired and expected change. Therefore Yayasan is contributing to better livelihood of vegetable farmers households.

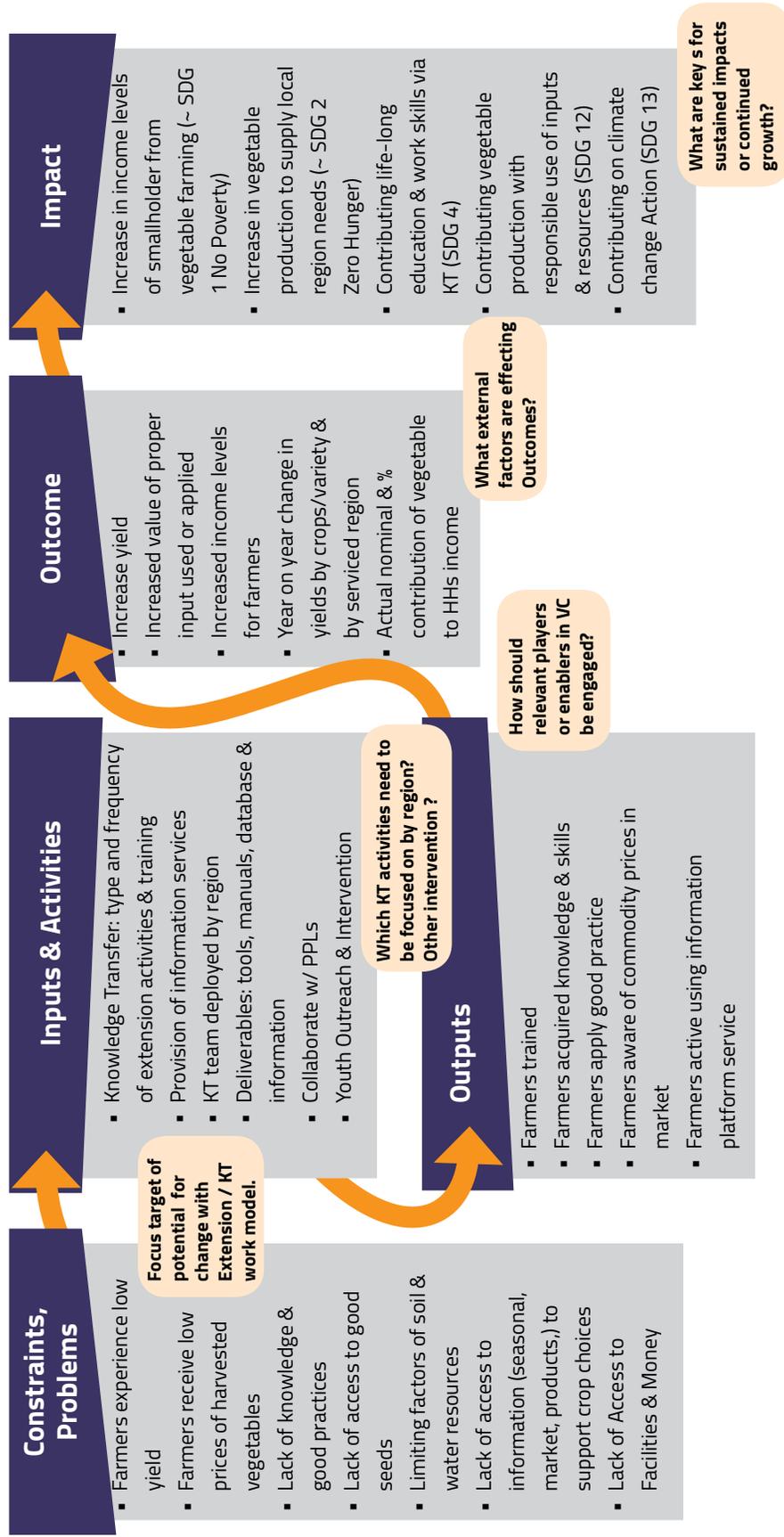
Wilayah fokus: Nusa Tenggara, Maluku, Papua & wilayah pasar yang masih berkembang umumnya dicirikan oleh :

- Tingkat produksi sayuran yang rendah, masih mendatangkan sayuran segar dari Jawa & Sulawesi
- Praktek pertanian tradisional
- Kurangnya akses petani ke pengetahuan dan informasi GAP; juga kurangnya akses ke pasar input atau saprodi (benih berkualitas, pupuk, dll.) & pasar output
- Infrastruktur & transportasi berkembang

Kegiatan Yayasan menjangkau petani kecil di mana mereka memiliki akses terbatas ke kualitas benih yang baik dan saran praktik pertanian yang baik (GAP).

Petani yang memperoleh pengetahuan dan keterampilan serta mengadopsi dan mempraktikkannya, maka mereka akan mampu meningkatkan hasil panen dan pendapatan. Inilah perubahan yang diinginkan dan diharapkan. Dengan demikian Yayasan berkontribusi untuk kehidupan rumah tangga petani sayuran ke arah yang lebih baik.

YBTS Impact Chain & Indicators



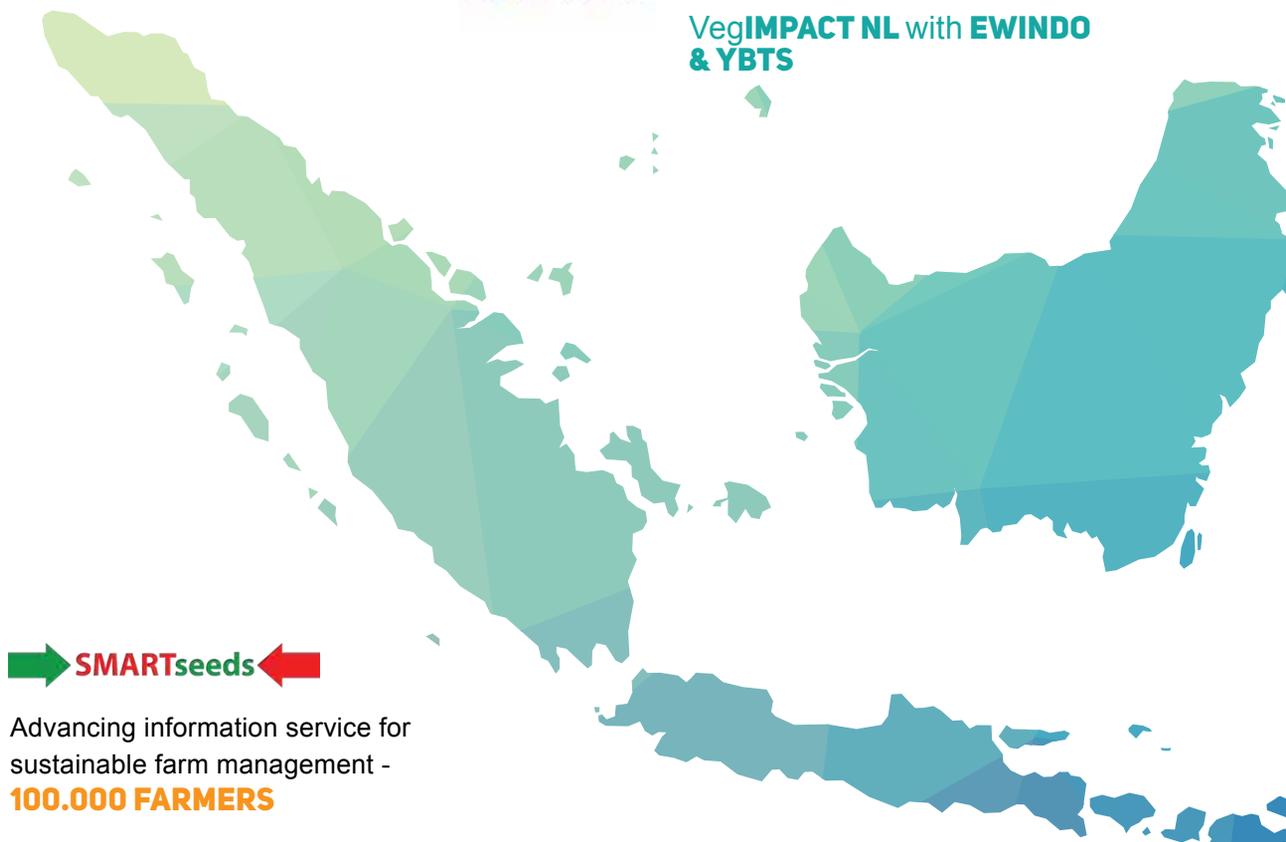
2018 PROJECTS



Contribute to improved vegetable production and private sector developments in Indonesia

30.000 FARMERS

VegIMPACT NL with EWINDO & YBTS



Advancing information service for sustainable farm management - **100.000 FARMERS**

SMARTseeds information service INTO SIPINDO Apps

OUTREACH ACHIEVEMENT 2018

Direct Outreach: Trainings, Demoplot Visit, Field days
 Total **16,492**

Demoplot Numbers
 Total **220**

Information Acces
 Total **139,408**



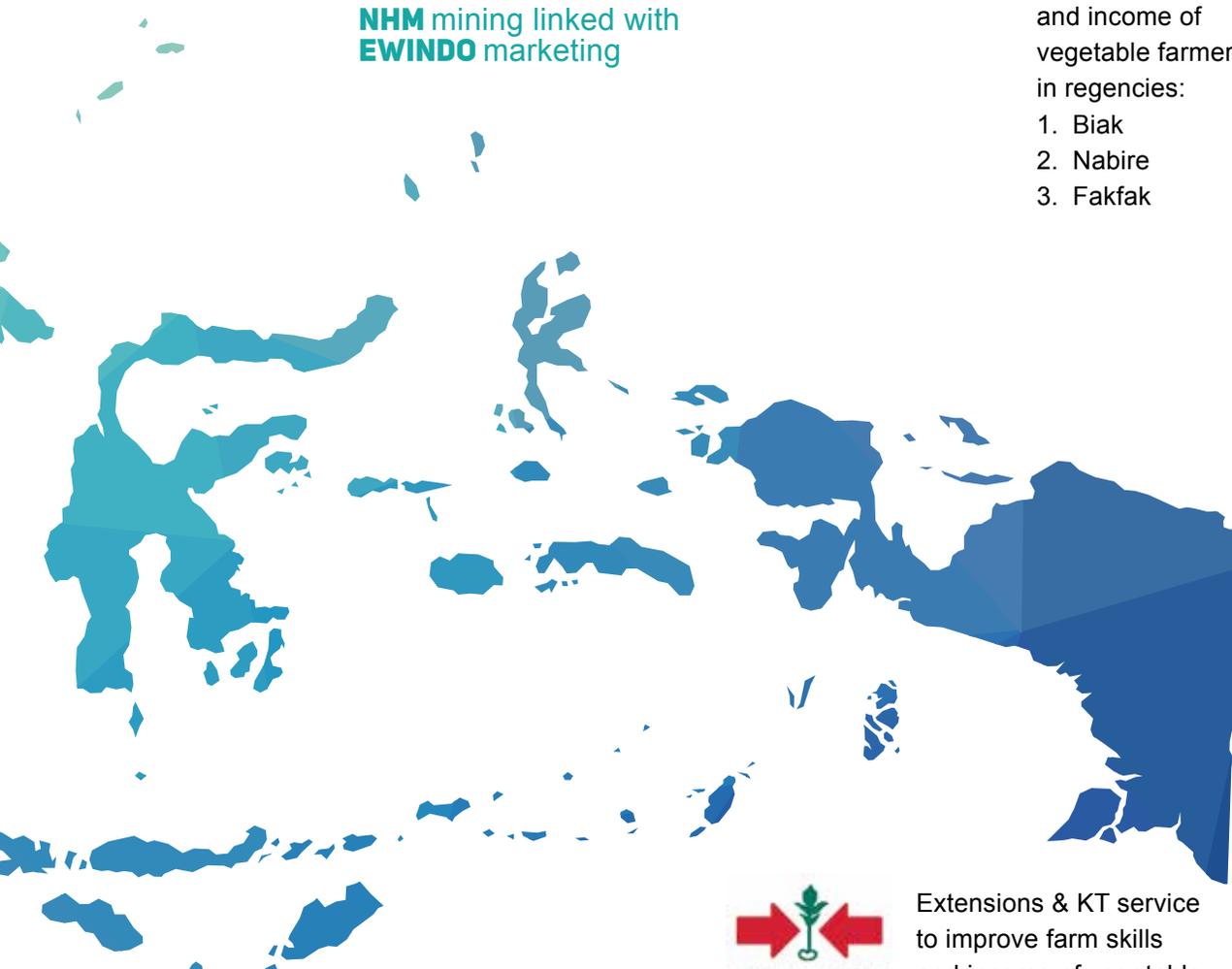
Targeted extension service to ring mining areas as a new livelihood approach in 3 sub-districts

EXTENSION SERVICE for NHM mining linked with EWINDO marketing



Extensions & KT service to improve farm skills and income of vegetable farmers in regencies:

1. Biak
2. Nabire
3. Fakfak



Develop risk-proof agriculture livelihood in drought-prone zone West Timor in 2 regencies:

1. Kupang
2. Timor Tengah Selatan



INTEGRATED LIVELIHOOD PROJECT WEST TIMOR



Extensions & KT service to improve farm skills and income of vegetable farmers in regencies:

1. Biak
2. Nabire
3. Fakfak/Kaimana
4. Halmahera/Morotai
5. Maluku Tengah (Seram)

KT East INDONESIA



KNOWLEDGE TRANSFER ACTIVITIES

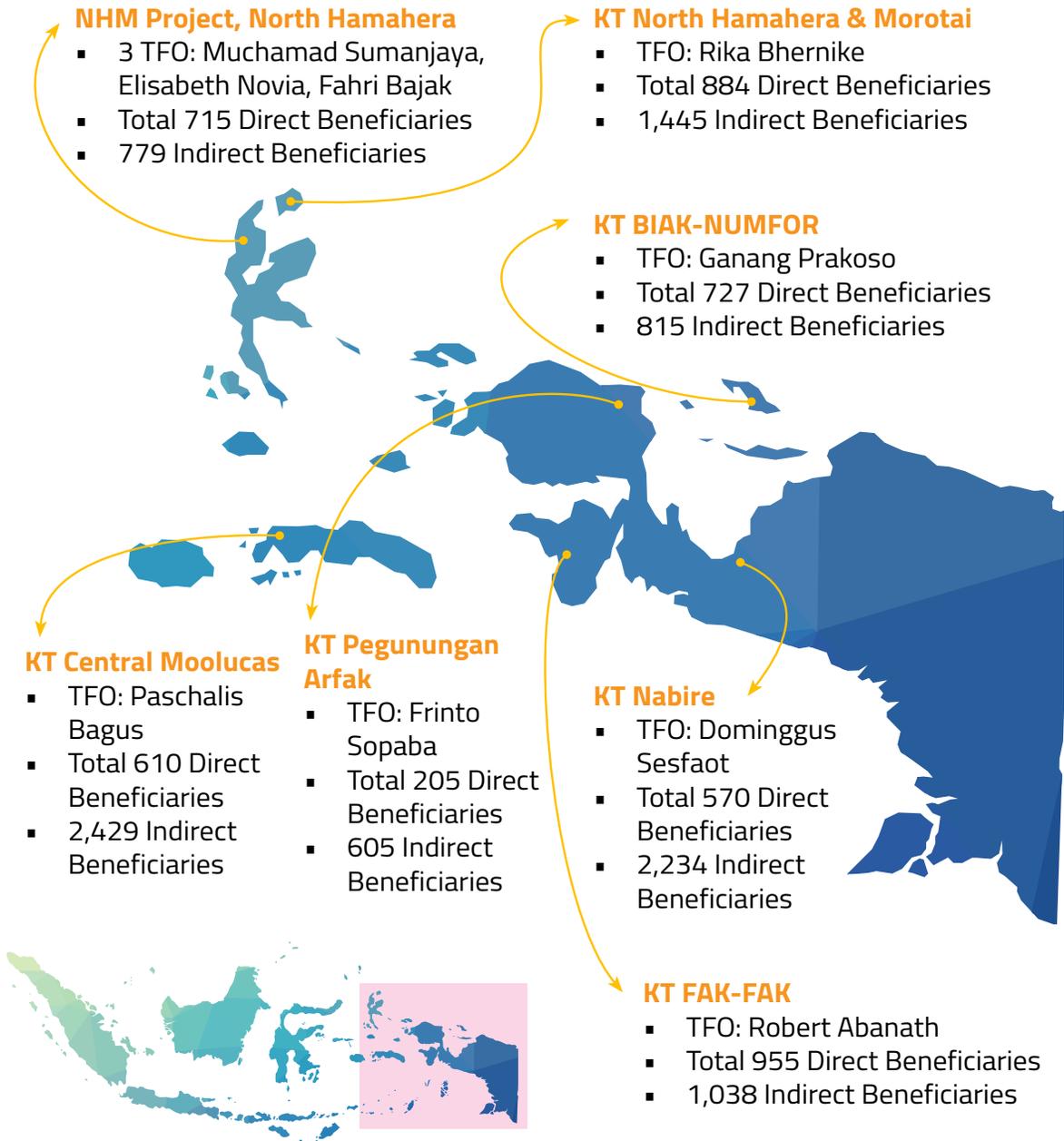


02

01. BACKGROUND, OVERVIEW AND OBJECTIVE

Objective:

To Improve farmers skill, yield and income through implemented Good Agricultural Practices in the Eastern Area of Indonesia



02. OUTREACH OF KT ACTIVITIES 2018

We focused in 7 (seven) area of knowledge Transfer Project, those area are West Papua (Arfak Mountain dan Fak-fak), Papua (Nabire and Biak-Numfor), Central Mollucas, North Halmahera (NHM Project), and Morotai island regency

Tim kami melakukan fokus pendampingan di 7 area, area tersebut adalah Papua Barat (Pegunungan Arfk dan Fak-Fak), Papua (Nabire dan Biak), Maluku tengah, Halmahera Utara, dan Pulau Morotai.

We did **knowledge transfer** about the Good Agriculture Practices (GAP), make demoplot, market survey, and calculate the return of invesment in every demoplot area. We also promote the Ewindo's seed and vegetables consumption in every field event and farmers meeting. **We reach** 4,666 direct and 9,345 indirect beneficiaries from seven project area **and supported by 9** (nine) Technical Field Officer.

Kami melakukan **transfer pengetahuan** mengenai teknik menanam sayuran yang baik, membuat demoplot percontohan, survey pasar, dan menghitung segala biaya dan keuntungan di setiap demoplot perconothan. Kami juga melakukan pengenalan benih Ewindo dan kampanye konsumsi sayuran disetiap kegiatan lapangan bersama petani. **Dengan 9 Technical Field Officer** (TFO), tim KT Indonesia Timur membarikan **pencapaian sebanyak** 4,666 orang mendapatkan manfaat langsung, dan 9,345 orang mendapat manfaat secara tidak langsung.

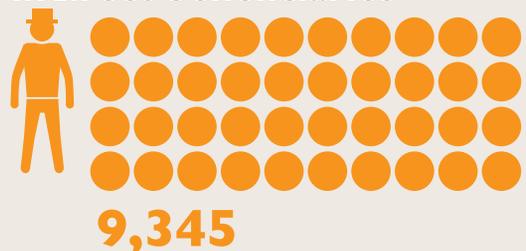
9 Technical Field Officer



Direct beneficiaries

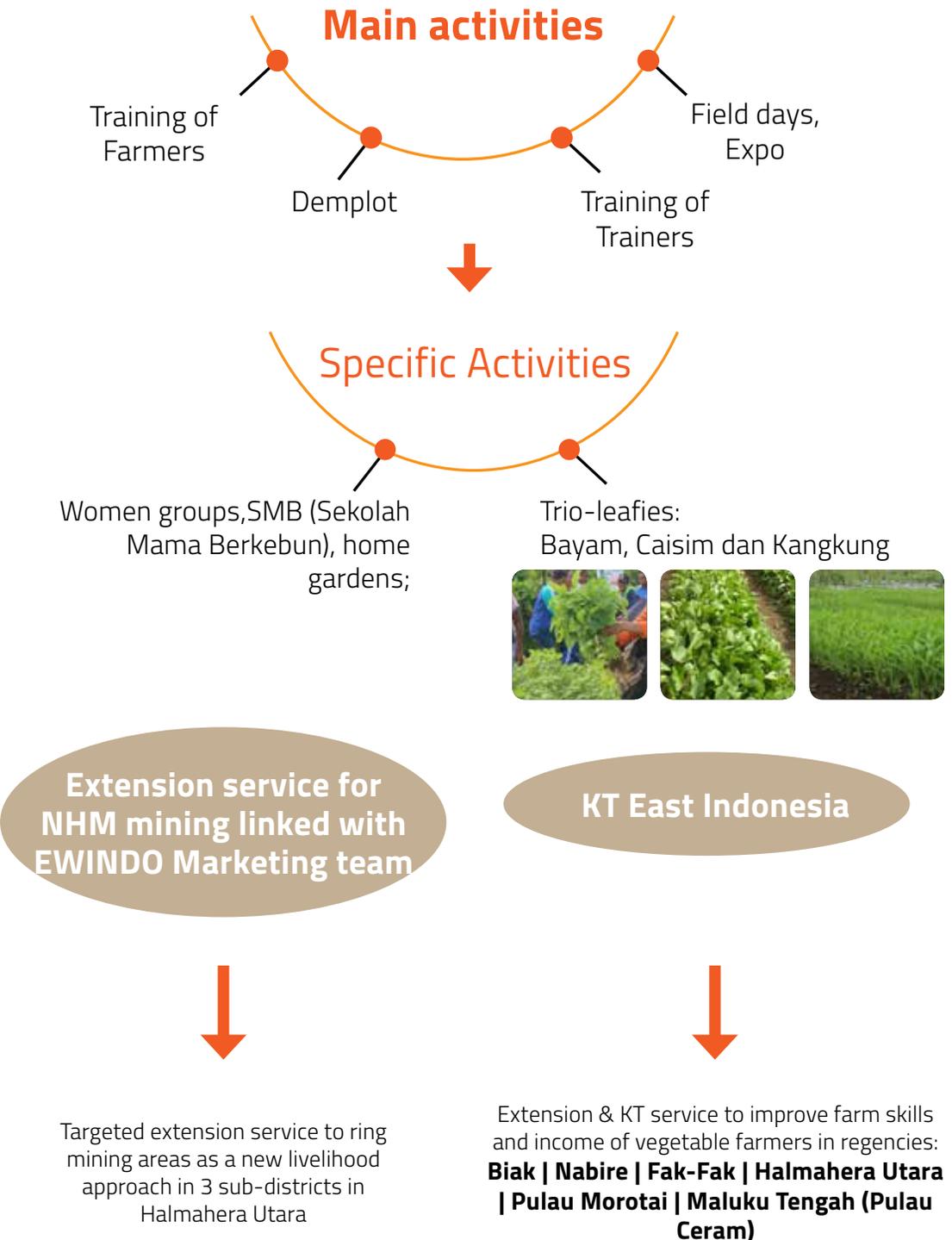


Indirect beneficiaries



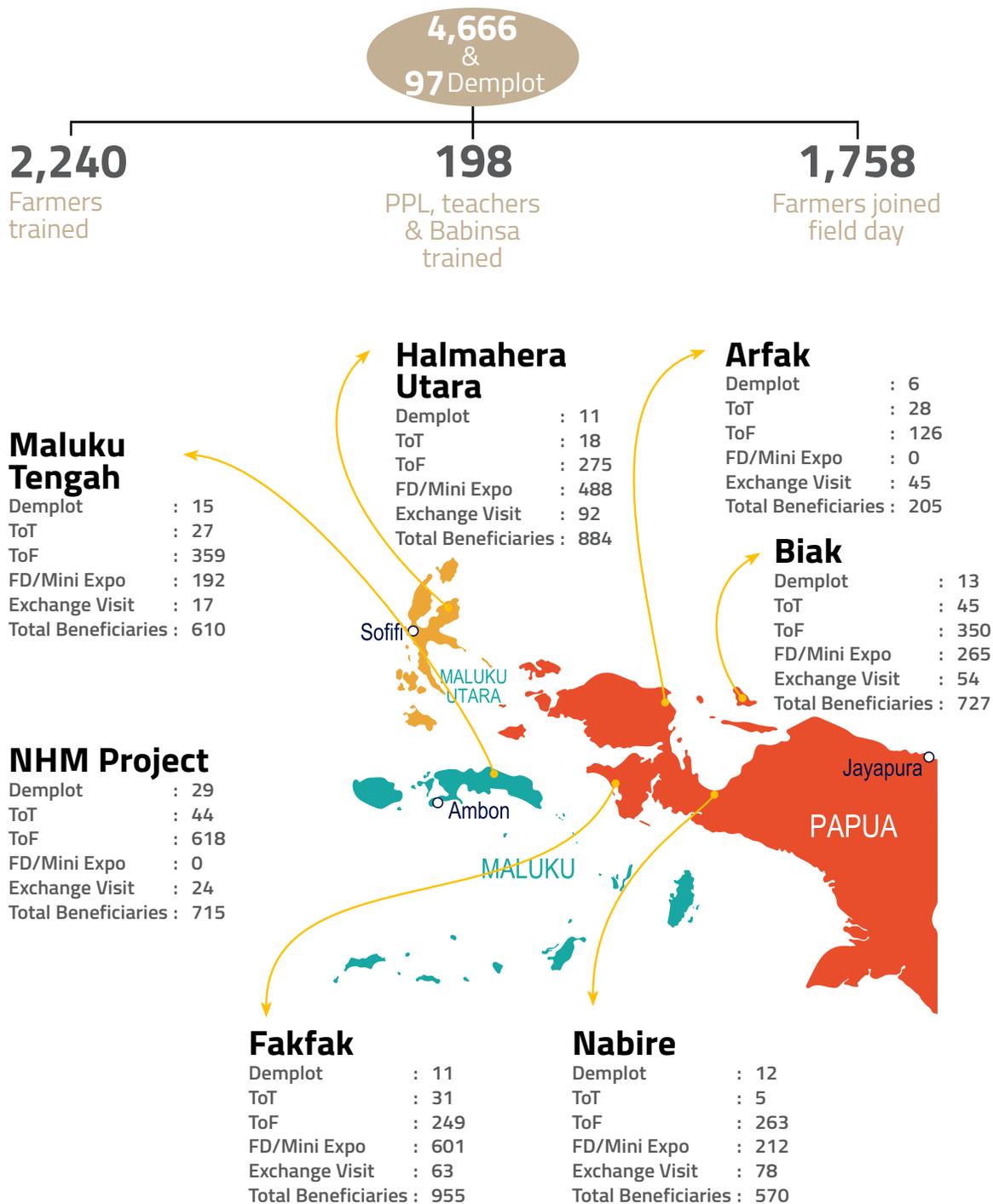
The following picture is an explanation regarding the field assistance carried out in knowledge transfer

Gambar berikut ini menjelaskan tentang pola pendekatan dan pelayanan yang dilakukan dalam kegiatan penyuluhan kepada petani



SNAPSHOT ACHIEVEMENT OF KT ACTIVITIES

Direct Beneficiaries Achieved in 2018: 4,666 Vs 4,106 (Target)

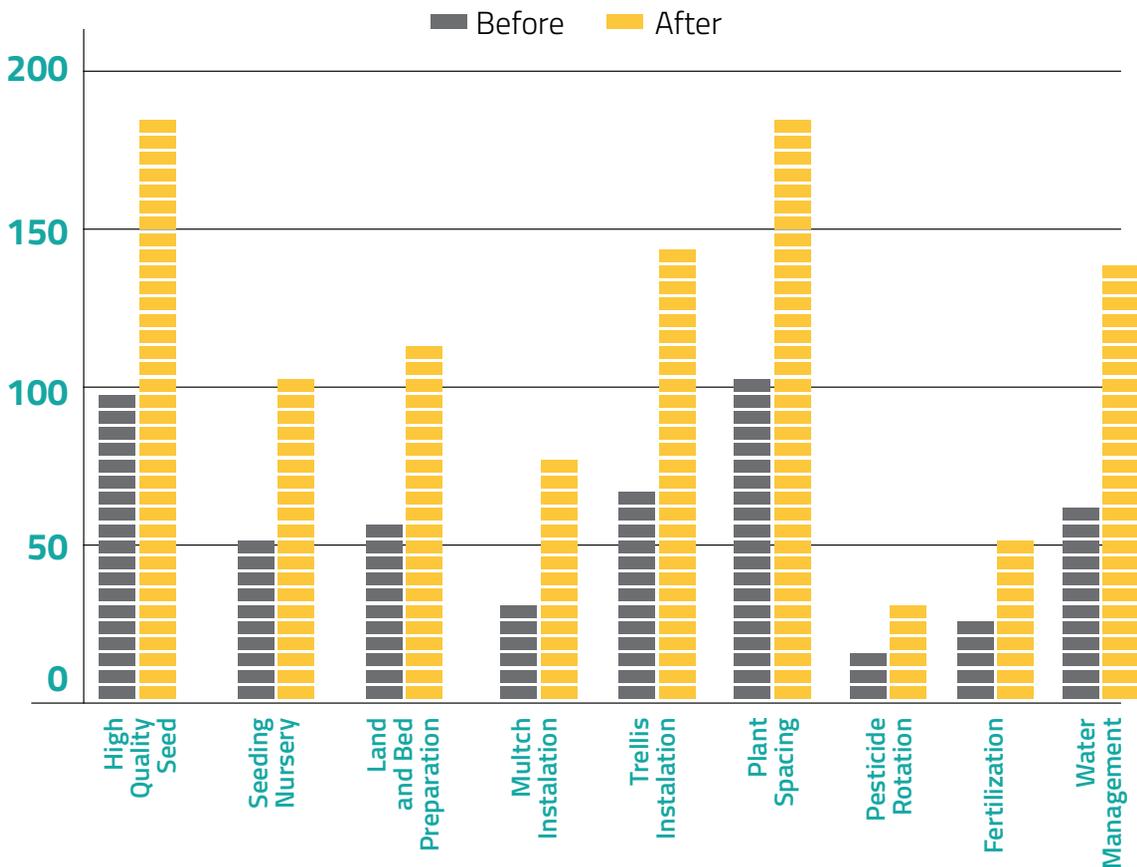


PROJECT IMPACT

GAP Adoption

- Based on the chart below,, the high quality seeds selection, plant spacing, trellis installation, land preparation and water management were the most 5 GAP that adopted by the farmers Eastern Indonesia.
- The pesticide selection is the less GAP that adopted by the farmers, its affected by there is just a bit pest and disease attack in Eastern of Indonesia. So we gave an advice to the farmers for use the pesticide based on the plant needs.
- Berdasarkan grafik di bawah, pemilih benih berkualitas, jarak tanam, pemasangan ajir, persiapan lahan, dan manajemen irigasi adalah 5 tehnik yang paling banyak diikuti oleh petani di Indonesia Timur.
- Memilih dan melakukan pergiliran pergiliran pestisida adalah tehnik yang paling sedikit diaplikasikan, Hal tersebut disebabkan serangan hama dan penyakit tanaman relatif sedikit di beberapa area Indonesia Timur, sehingga kami memberikan saran agar menggunakan pestisida berdasarkan kebutuhan tanaman saja.

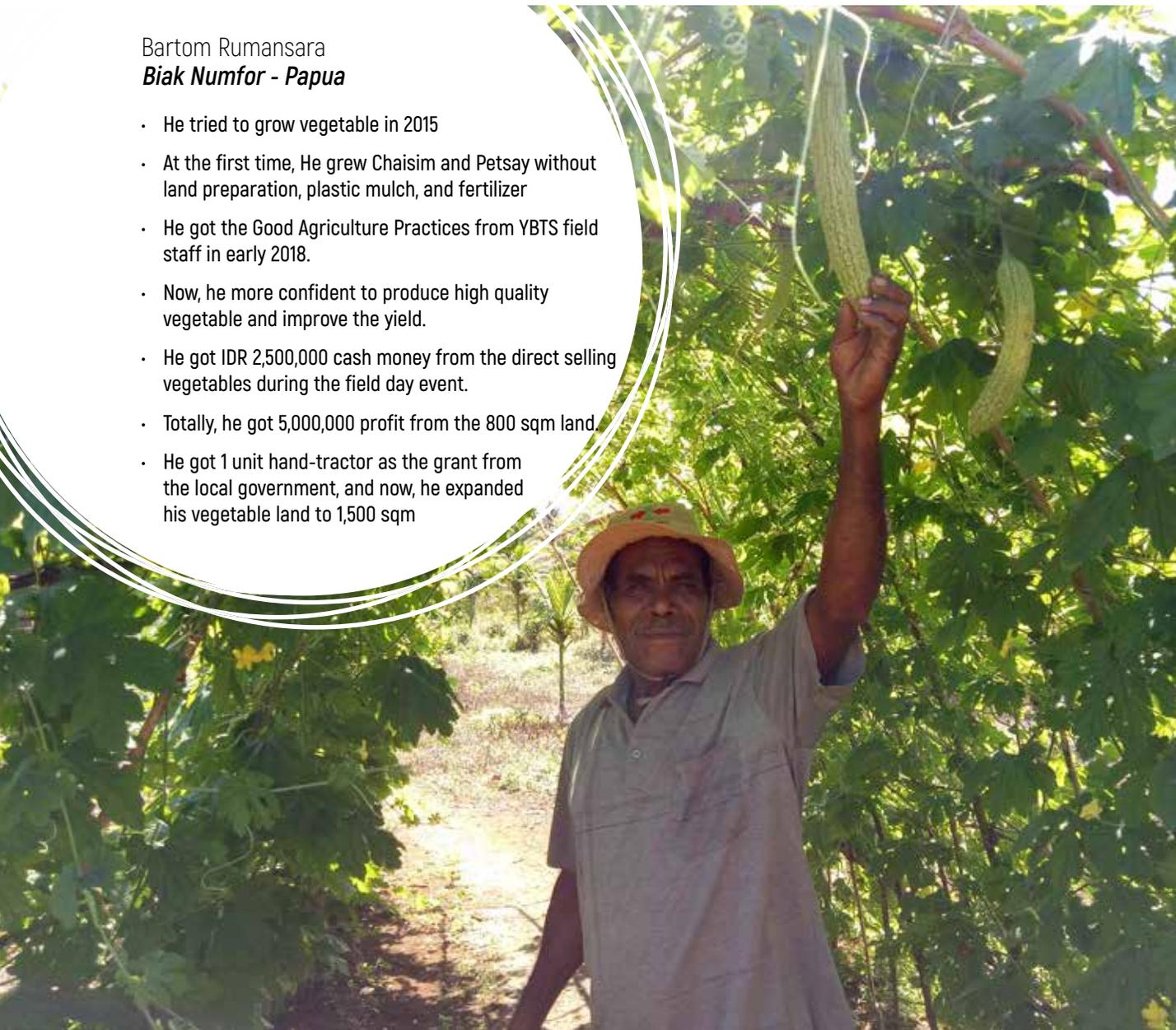
More Farmers Adopt GAP

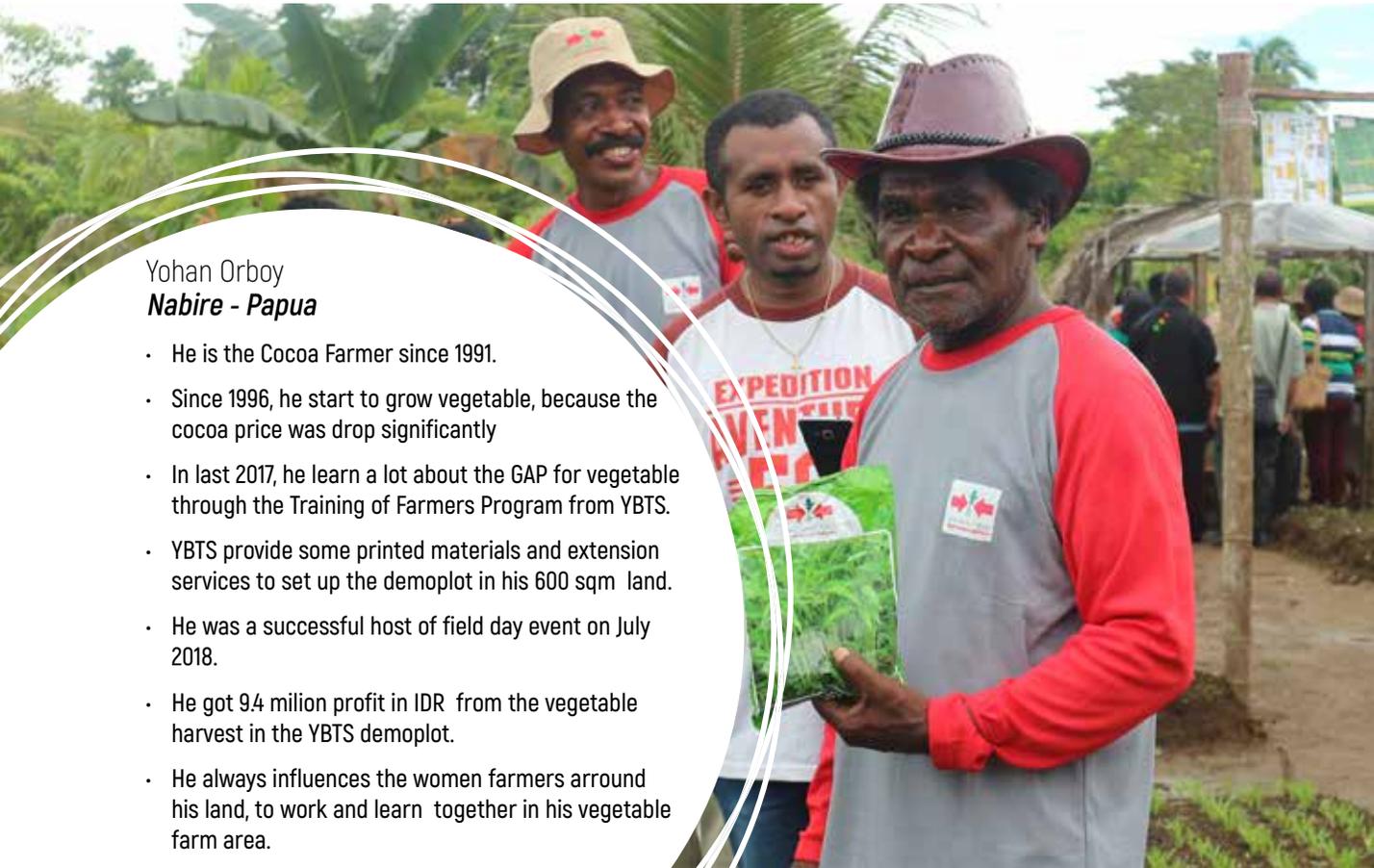


03. FARMERS SUCCES STORY

Bartom Rumansara
Biak Numfor - Papua

- He tried to grow vegetable in 2015
- At the first time, He grew Chaisim and Petsay without land preparation, plastic mulch, and fertilizer
- He got the Good Agriculture Practices from YBTS field staff in early 2018.
- Now, he more confident to produce high quality vegetable and improve the yield.
- He got IDR 2,500,000 cash money from the direct selling vegetables during the field day event.
- Totally, he got 5,000,000 profit from the 800 sqm land.
- He got 1 unit hand-tractor as the grant from the local government, and now, he expanded his vegetable land to 1,500 sqm





Yohan Orboy
Nabire - Papua

- He is the Cocoa Farmer since 1991.
- Since 1996, he start to grow vegetable, because the cocoa price was drop significantly
- In last 2017, he learn a lot about the GAP for vegetable through the Training of Farmers Program from YBTS.
- YBTS provide some printed materials and extension services to set up the demoplot in his 600 sqm land.
- He was a successful host of field day event on July 2018.
- He got 9.4 milion profit in IDR from the vegetable harvest in the YBTS demoplot.
- He always influences the women farmers around his land, to work and learn together in his vegetable farm area.



04. PROJECT PERSONEL: KNOWLEDGE TRANSFER TEAM

KT in East Indonesia



Arga Wisnu Pradana
(KT Coordinator)



Dominggus Sesfaot
(TFO Nabire)



Roberd Abanath
(TFO Fakfak)



Ganang G. Prakoso
(TFO Biak)



Rika B. Sitepu
(TFO Halmahera)



Paschal B. Utomo
(TFO Seram)

NHM CSR in North Maluku



Muchamad Sumanjaya
(TFO Kao Barat)



Elisabeth Novia
(TFO Malifut)



Fahri D. Bajak
(TFO Kao Teluk)



LEAFIES VEGETABLE
Introduction
and **WOMEN**
EMPOWERMENT
in Improving Family
Income

03

BACKGROUND

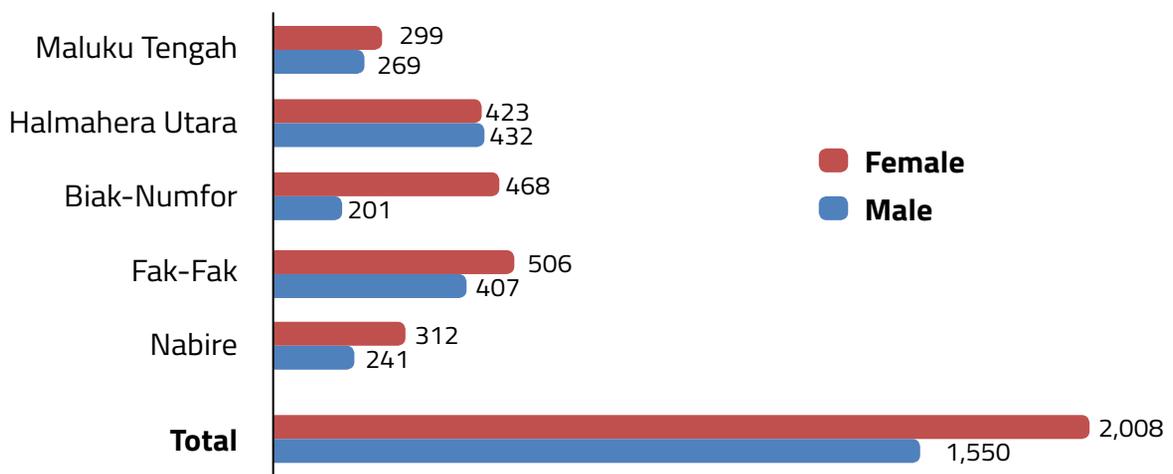
The Women in Eastern Indonesia really have a potential to grow vegetables. We started with Leafies Vegetable to make them more interested in vegetable farming. Women farmers have more time and teamwork in growing vegetable than the men. They also can be a vegetable seller they have harvested crops.

Leafy vegetables crops are very easy to plant – not only by small scale farmers but also by women or anyone by simply sowing leafy seeds in house-yards, polybags, or a more recent approach of vertical garden. It can be grown on open soil with simple raise beds or with media mix in crop boxes. It can also be harvested in 2-3 weeks' time. We expect that leafies vegetable is the right starter crop to improve their income, nutrition and vegetable farming skills.

Petani perempuan di Indonesia Bagian Timur memiliki potensi yang tinggi untuk mengembangkan sayuran dengan baik. Kami memulainya dengan kegiatan bernama Leafies Vegetable untuk menarik perhatian mereka dalam melakukan budidaya sayuran. Petani perempuan memiliki lebih banyak waktu dan kemampuan kerjasama yang tinggi dalam mengembangkan sayuran daripada petani pria. Selain itu, mereka juga bisa langsung menjual sayuran setelah panen.

Tanaman sayuran ini sangat mudah untuk ditanam – tidak hanya oleh petani skala kecil tetapi juga oleh siapa pun dengan hanya menyemaikan benih tanaman ini di pekarangan rumah, polybag, atau dengan pendekatan menggunakan vertical garden. Kami berharap, dengan adanya program 3 sayuran daun ini akan menjadi langkah awal untuk meningkatkan pendapatan, nutrisi, dan kemampuan dalam menanam sayuran.

- Women roles in vegetable farming & gardening; they also promote consumption
- Women participations in field events (demplots, trainings, field days & farming activities) is high



WOMEN EMPOWERMENT IN HORTICULTURE PROGRAM – SMB (SEKOLA MAMA-MAMA BEKEBON)

Central Mollucas
reGENCY, Seram
island

Biak reGENCY,
Papua province

Nabire & Fakfak
reENCIES, Papua



SMB group in Seram island

A woman with her home gardening in Waderbo village

Women played key roles in vegetable demoplot learning (Nabire)



Women Farmer School (SMB) members transplanted the chaisim seedling to the field in Maluku Tengah reGENCY

Kangkong Harvest in Waderbo Village, East Biak. Women Farmer Group was selling it directly to local market with a proper price

Klomang Group, is the women farmer group in Mendopma Village, Fak-fak ReGENCY. They organized FFD event in Fak-Fak

BIAK NUMFOR, PAPUA

Women Group Harvesting Kangkong



Several women in Waderbo village harvested Kangkong leafies. They are not only got some cash, but also they able to cook the fresh kangkong for their family. YBTS team provided them technical assistance in setting up leafy vegetables for their benefits.

Mace-Mace di desa Waderbo memanen sayuran Kangkong. Mereka tidak hanya mendapatkan uang, tetapi juga dapat memasak kangkung segar hasil panen untuk keluarga mereka. Tim YBTS memberi mereka bantuan teknis dalam berkebun sayuran daun untuk keuntungan mereka.

CENTRAL MOLLUCAS, CERAM ISLAND

Women Group Planting Chaisim



SMB members transplanted the chaisim seedling to the field. They are working together in organizing and maintaining that crop while the YBTS field staff is accompanying them.

Tim SMB melakukan pindah tanam bibit sawi ke lahan. Mereka bekerja sama dalam menyiapkan dan memelihara tanamannya, sementara tim YBTS membimbing mereka dalam kegiatan ini.



Kangkong demoplot in Waru Village, and Pakchoy Demoplot in Nakupia Village. Both locations are used by others farmer to learn and exchange visit. YBTS field staff deliver knowledge about GAP in each exchange visit event.

Demoplot Kangkong di Desa Waru, dan Demoplot Pakchoy di Desa Nakupia. Kedua lokasi ini digunakan oleh petani lain untuk belajar dalam kegiatan studi banding. Staf lapangan YBTS memberikan pengetahuan tentang GAP di kegiatan kunjungan petani ke lahan demplot ini.

NORTH HALMAHERA



YBTS with PT NHM did first harvest of Chaisim in Sangaji Jaya and Leleseng village, Kao Barat. We have a commitment to engage local farmer through knowledge transfer and GAP practices in 57 village around PT NHM (Mining Circle). The farmers will start with leafies vegetable (Kangkong, Choisum, Spinach) to make them more interested with vegetable farming.

YBTS dengan PT NHM melakukan panen pertama Chaisim di desa Sangaji Jaya dan Leleseng, Kao Barat. Kami berkomitmen untuk melatih petani lokal melalui transfer pengetahuan dan praktik GAP di 57 desa, 3 kecamatan lingkaran tambang PT NHM. Para petani memulai dengan menanam sayuran daun (Kangkong, Choisum, Bayam) karena mudah untuk dibudidayakan, hal ini membuat mereka lebih tertarik untuk lebih mendalami teknik budidaya sayuran.



Pakchoy in Galela Selatan Village. This is a sustainable farmer group in North Halmahera. We conducted Field Day two times (2017 & 2018) in this location. They just started their farmers group with 13 members, and currently they have 40 members.

Petani Pakchoy di Desa Galela Selatan. Ini adalah kelompok tani berkelanjutan di Halmahera Utara. Kami telah melakukan 2 kali FFD di lokasi ini (2017 & 2018). Kelompok tani mereka dimulai dengan dengan 13 anggota, dan saat ini mereka telah memiliki 40 anggota.

NABIRE & FAK-FAK REGENCY



Klomang Group, is the women farmer group in Mendopma Village, Fak-fak Regency. This group that have 13 active members. They are the host of YBTS Field day event in Fak-fak Regency. The YBTS field staff give an advice that this group should always grow leafies vegetable. Because it just takes 3-4 weeks and they can sell to the local market with good price.

Kelompok Klomang, adalah kelompok wanita tani di Desa Mendopma, Kabupaten Fak-fak. Grup ini memiliki 13 anggota aktif. Mereka adalah tuan rumah dalam kegiatan FFD yang diselenggarakan oleh YBTS dan PRISMA. Staff lapangan YBTS memberikan saran bahwa kelompok ini harus selalu menanam sayuran daun. Karena sayuran tersebut hanya butuh waktu 3-4 minggu dan kemudian mereka dapat langsung menjual hasil panen ke pasar lokal dengan harga relatif tinggi dan stabil.

TRIO LEAFIES IN WEST TIMOR: PROMOTING CONSUMPTION & SIGNIFICANT INCOME



Public expo location – Youth group in Biloto village

Promote Trio Leafiest through Expo

- Bayam (red and green), kangkong and caisim in the expo farm
- The event inspires people to consume vegetables and motivates them to plant it.
- Trio leafies: easy to plant and maintain
- Can use their yard for family nutrient.
- It helps the farmers to grow vegetables in a sustainable manner.

Ibu Martha Selan (in Cendana village)

- Caisim and kangkong never stop (21 days)
- harvest can be carried out every week source of regular income
- fulfil their daily needs and consumption.
- She earned for 1 bed is Rp 200,000, so for 12 beds around IDR 2 millions



Ibu Martha in Cendana village



Tahatoen Farmer Group– KuataeVillage

- still grow the leafies for market needs and household consumption which are still fulfilled every day.
- For selling the traders directly buy at the farm and by themselves
- Of the land of area 10m², the group earn between IDR 1– 1.5 million



INTEGRATED LIVELIHOOD PROJECT



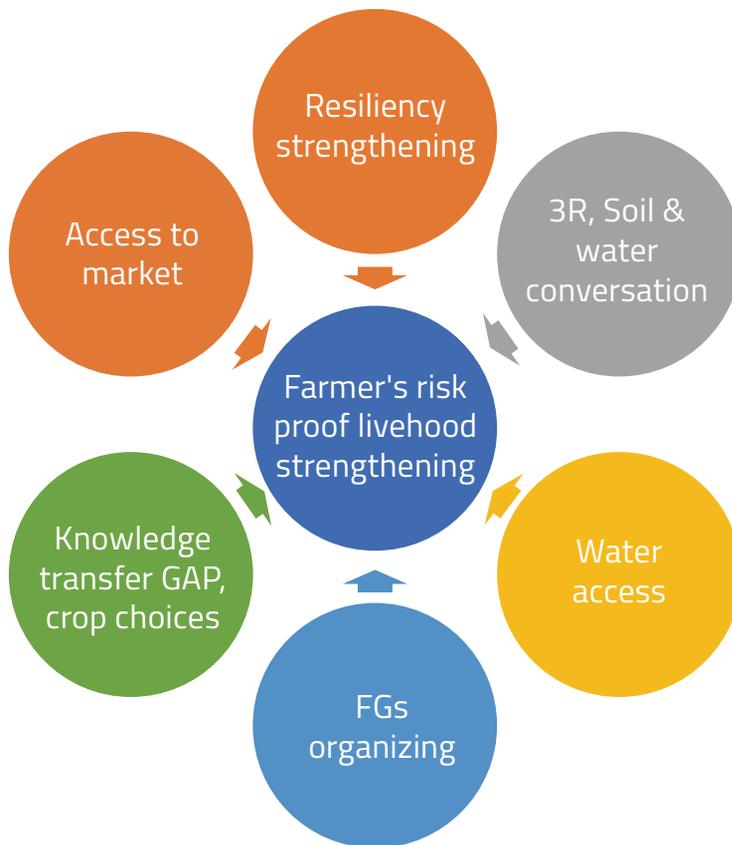
04

01. BACKGROUND, OVERVIEW AND OBJECTIVE

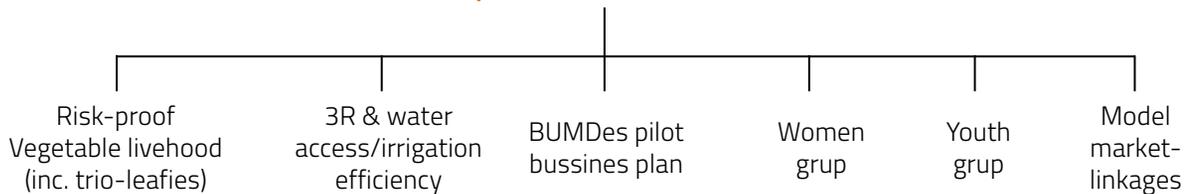
Develop risk-proof agriculture livehood in drought-prone zone west timor in 2 regencies:
1. Kupang
2. Timor tengah selatan

Main activities

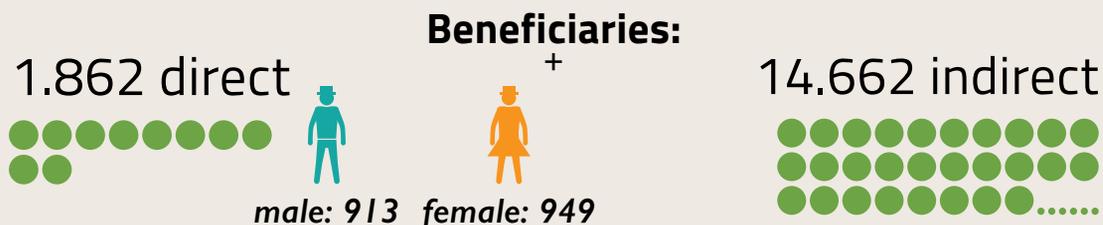
Integrated actions for livehood (vegetable) improvement



Specific Activities



02. OUTREACH 2018



Farmer Groups

No cost Extension Period (Jan- march):
27 FG's 407 members

Year 2018:
21 FG's, 1 youth;
381 members)

ToT, ToF, Short Course Training

ToT (PPL's);
27 participants,

ToF (CWS Fg):
30 participants
(Enonabuasa village)

Government/ Stakeholder units

Kupang and TTS District (10 units), Babinsa and Police

Indirect beneficiaries obtained through

Material dissemination:
Crop guide and book,

media publication:
14.662

PROJECT RESULTS

FARMER GROUPS AND MAIN ACTIVITIES



21 FG's; 1 Youth group
(new FG's 2018)
16 FG's 2017
(still accompanied)



Core Demo plots:
Core : 21 (8850 m2),
EXPO: 1 (7400m2),
Independent EXPO: 1
(3000 m2) in New FG's



Plasma Demo plot
Target: 40 demo plots (on going process)



3R (Recharge, retention and Reuse):
Water trapped, infiltration hole, Terrace, beds system, Planting Tree

WATER ACCESS FACILITY CONSTRUCTION

- Water access infrastructure based on needs and sustainability (**22 FG's**)
- Type of water construction are pipe installations, UV plastics (all FG's) ; water pump (**4 FG's**) and manual drip irrigation (**1 FG**).
- FG's are maintaining water access to irrigate farmlands and contributed of local material
- Total pipe installation: 1944 meter, total **plastic UV: 260 meter, Hose : 2600 meter**
- Drip irrigation (**932 meter**) as a model for introduction of technology and considered the availability of water resources in FG's
- Water pump machine 4 unit with spiral hose: **25 m**,
- Installation of UV plastic and pipe to watering vegetables easily and closer.
- Akses infrastruktur air berdasarkan kebutuhan dan keberlanjutan (**22 poktan**)
- Jenis konstruksi adalah instalasi pipa, plastic UV (semua kelompok tani/Poktan), pompa air (**4 poktan**) dan irigasi tetes manual (**1 poktan**)
- Poktan melakukan pemeliharaan untuk akses air untuk mengairi di lahan pertanian dan berkontribusi untuk penyediaan material lokal.
- Total instalasi pipa: 1944 m, **plastik UV: 260 m, selang: 2600 m**
- Irigasi tetes (**932 m**) sebagai model untuk pengenalan teknologi dan mempertimbangkan ketersediaan sumber air di lahan Poktan
- pompa air 4 unit dengan selang spiral : **25m**
- instalasi plastic UV dan pipa agar penyiraman lebih dekat dan mudah.

BEST PRACTISE 3R



Location:
FG Yerusalem Farm
Kuatae village - TTS

▼ Before intervention: **Water source condition was lack of water discharge especially start from September to March.**

▼ Intervention in the form of infiltration holes and water traps made since May 2018



PUBLIC EXPO IN YOUTH GROUP

- Farm size; 7400 m² with 21 crops (33 varieties) manage by 50 members (total farm for crops only: 5044 m²).
- Expo officially opened by Chief of Agriculture Department of NTT Province.
- 683 People attended the event in Biloto villages – TTS district held on 25 October 2018
- Many parties (government, private sector, NGO/INGO, Fg's, Police and Army division)
- Income per December 2018 : IDR.41.047.500,-
- Ukuran lahan:7400 m² dengan 21 jenis sayuran (33 varietas) dikerjakan oleh 50 anggota (total lahan untuk sayuran:5400m²)
- Expo secara resmi dibuka oleh Kepala Dinas Pertanian Prov. NTT
- 683 peserta hadir pada EXPO di Desa Biloto, Kab. TTS tanggal 25 Oktober 2018
- Berbagai pihak hadir (pemerintah, pihak swasta, NGO/ING), Polisi dan TNI)
- Pendapatan per Desember 2018: Rp. 41.047.500,-



EXPO farm Lahan EXPO



Youth Group, YBTS, KARINA and Agriculture NTT province discussion during expo

Kelompok Pemuda, YBTS, KARINA dan Dinas Pertanian Prov. NTT melakukan diskusi pada saat Expo



Members of youth group in Biloto village
Anggota Kelompok Tani Pemuda Desa Biloto



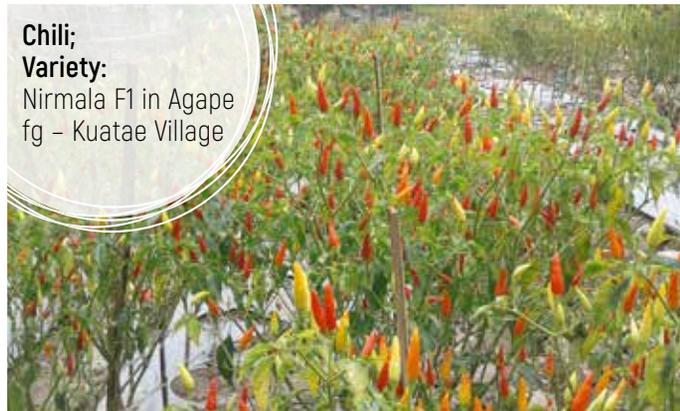
Harvest of Hot pepper by Chief of Agriculture province, YBTS, KARINA, Police and Army, Church organization
Panen Cabe Besar oleh Kepala Dinas Prov. NTT, YBTS, KARINA, Polisi dan TNI dan Gereja

BEST INCOME AND YIELDS OF FARMER GROUP

Farmer Grup	Crops	#plant	Yields (Kg)	Revenue (IDR)
Youth Biloto	Tomato	1.851	2.348	11,730.250
Youth Biloto	Big Chili	1.009	2.328	12.559.000
Youth Biloto	Curly Chili	1.120	379	7.232.500



Variety:
Servo F1 In Youth Ebenhaezer Biloto village



Chili;
Variety:
Nirmala F1 in Agape fg - Kuatae Village



Broccoli;
Variety:
super green F1
Mawar Fg - Karang Siri village



Big Chili;
Variety:
Pilar F1 Youth Ebenhaezer Biloto village

03. FARMERS SUCCES STORY

KELOMPOK TANI NEKMESE
Desa Kesetnana - NTT

Agar Anak Muda Kami Semuanya Sarjana

- With assistance from YBTS, it has knowledge about seed selection, land management, nursery, fertilization and pest and diseases control
- Previously monthly income of IDR. 5-7 million, now they earned IDR. 10-11 million/month
- Types of vegetables grown are mustard greens, kangkong, spinach, tomatoes and chili.
- The results of growing vegetables increase the family economy and educate their children to bachelors





KELOMPOK TANI AKAR MAS
Desa Netpala - NTT
**DULU PAKAI LUMPUR,
SEKARANG PAKAI OTAK**

It was the first time they received training on vegetable cultivation in theory and practice through demonstration plots

- Previously, seed growth was only 25%, after YBTS assistance had seed growth of 90% and increased production
- At present with the knowledge that is owned, is able to spread knowledge to other farmers

04. PROJECT PERSONEL



Junike Susan Medah
(Coordinator)



Febrianus Mado
(Technical Transfer Officer)



Blasius Halek
(Project Officer)



Aprianus Vester Asbanu
(Technical Field Officer)



Welem Andi Tana
(Technical Field Officer)



Hermina Supadi
(Project Officer)



Elis Wienfried Kitu
(Water Facility Officer)



Ary Bale Lay
(Project Officer)



Leonard Sonbai
(Admin Officer)

Sipindo

Powered by apps.



GEODATA FOR AGRICULTURE AND WATER (G4AW) SMARTseeds INFORMATION SERVICES



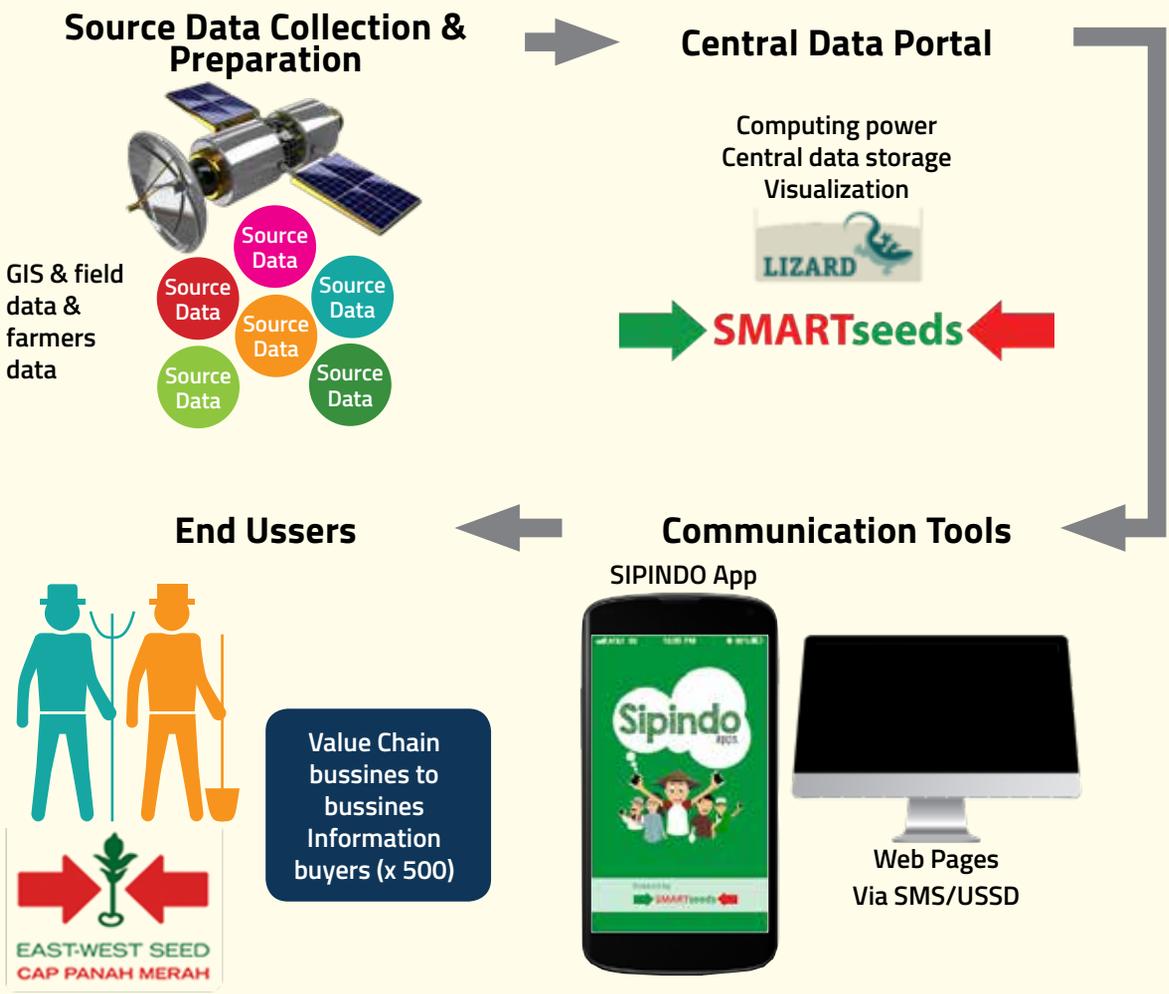
Nelen & Schuurmans



05

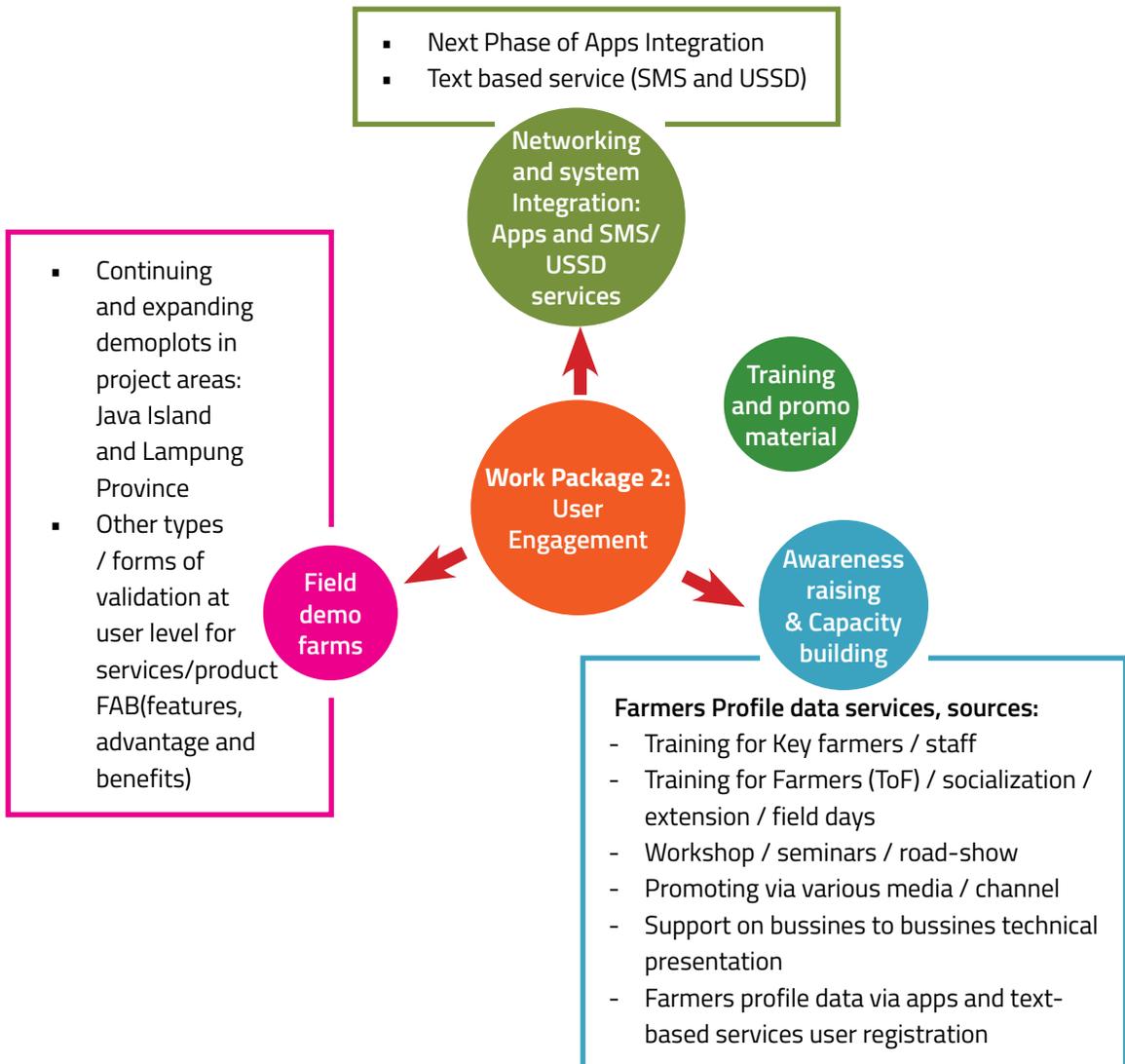
01. BACKGROUND AND AREA

- Implement a sustainable information service that supports farmers to increase their production, income, food security and to reduce the inputs of water, fertilizer and pesticides.
- Target group smallholders: 100,000 vegetable farmers
- Sustained services: Social Enterprise after project



02. OUTREACH 2018

EWINDO/YBTS MAIN ROLES IN SMARTseeds PROJECT - OVERVIEW



INFORMATION SERVICES

Sipindo
Powered by apps.
SMARTseeds



The grand launching of the app SIPINDO Powered by SMARTseeds was attended by more than 150 guests. Aside from the national media, the launching event was also witnessed by:

- the Deputy for Food and Agriculture Coordination of the Ministry of Economic Affairs, Dr. Ir. Musdhalifah Machmud, MT,
- the Director of Crop Protection of the Directorate General of Horticulture of the Ministry of Agriculture, Ir. Sri Wijayanti Yusuf MAgpsc,
- representatives from the Presidential Office, the National Development Planning Agency - BAPPENAS, the Ministry of Health, the Dutch Embassy, ICCO Organization, Academics, NGOs, agriculture companies and
- representatives of farmers assisted by EWINDO from across Indonesia

Acara Grandlaunching Aplikasi Sipindo Powered by SMARTseeds dihadiri oleh lebih dari 150 tamu undangan. Selain dari media nasional, acara ini juga disaksikan oleh:

- Dr. Ir. Musdhalifah Machmud, MT., Deputi Koordinasi Pangan dan Pertanian Kemenko Perekonomian
- Ir. Sri Wijayanti Yusuf, M.Agr.Sc, Direktur Perlindungan Tanaman, Direktorat Jenderal Hortikultura, Kementerian Pertanian
- Perwakilan dari Kantor Staf Presiden, BAPPENAS, Kementerian Kesehatan, Kedutaan Besar Kerajaan Belanda untuk Indonesia, ICCO Organization, Akademisi, NGO, perusahaan swasta di bidang pertanian dan
- Perwakilan Petani dari Seluruh Indonesia

APPS



First phase of integration was done for two features namely Soil Advisory and Seasonal Climate Forecast, there is an additional feature namely rainfall prediction vs historical 30 years data feature.

Fase pertama Integrasi SMARTseeds ke dalam layanan informasi Sipindo telah selesai untuk dua fitur yaitu Rekomendasi Pemupukan dan Prakiraan Iklim Musiman, juga hadir satu fitur tambahan yaitu Prediksi hujan yang dibandingkan dengan data 30 tahun kebelakang

SOIL ADVISORY



Soil advisory feature is generated from soil sample result which is analyzed in the Laboratory of the Department of Soil Sciences, Bogor Agricultural University (IPB) for Nitrogen (N), Phosphorus (P) and Potassium (K). Furthermore, this value is converted into recommendations for N, P₂O₅ and K₂O for chili, tomato and cucumber based on the location of users who access this service. Soil Advisory feature is available for East Java, Central Java, Yogyakarta and Lampung.

Untuk menghasilkan rekomendasi pemupukan, dilakukan analisis sampel tanah di laboratorium Departemen Ilmu Tanah Institut Pertanian Bogor (IPB) untuk kandungan Nitrogen (N), Fosfor (P) dan Kalium (K). Selanjutnya nilai ini dikonversi menjadi rekomendasi N, P₂O₅ dan K₂O untuk cabai, tomat dan timun berdasarkan lokasi pengguna yang mengakses layanan ini. Fitur Kandungan Hara dan Rekomendasi Pemupukan saat ini baru tersedia untuk wilayah Jawa Timur, Jawa Tengah, Yogyakarta dan Lampung.

RAINFALL PREDICTION AND COMPARISON WITH 30 YEARS RAINFALL HISTORICAL DATA



Seasonal climate forecast is generated using the output from global climate models for seasonal climate predictions. These results were then carried out statistical modeling to predict various regions in Indonesia. The information resulted from this model are rainfall forecast for six months, rainy / dry season onset and the comparison with thirty (30) years climate data in the separate features. The seasonal climate and rainfall prediction with 30 years historical data are available for Indonesia below the equatorial line.

Fitur prakiraan iklim musiman dihasilkan dengan menggunakan keluaran dari model iklim global untuk prediksi iklim musiman. Hasil tersebut lalu dilakukan pemodelan statistik untuk memprediksi berbagai wilayah di Indonesia. Prediksi yang dihasilkan antara lain adalah curah hujan untuk enam bulan dan awal musim hujan / kemarau (onset) serta dibandingkan dengan data tiga puluh (30) tahun kebelakang dalam fitur yang terpisah. Fitur Prakiraan Iklim musiman serta fitur prediksi curah hujan dan data 30 tahun kebelakang tersedia untuk wilayah Indonesia dibawah garis khatulistiwa.

CAPACITY BUILDING AND AWARENESS RAISING

CAPACITY BUILDING

Series of data collection / farmers meeting / FGD / to collect baseline and farmers / user data registered in, total 19,698 farmers

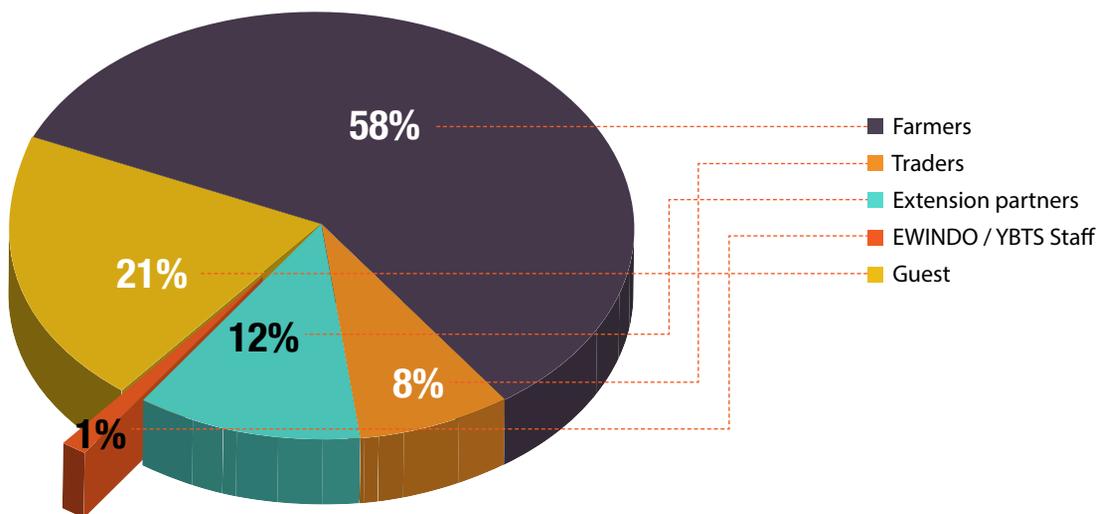
- Farmers data collection 3,573
- **SIPINDO users registered 16,125 from 20,340 downloaders**

Pengumpulan data / temu petnai / FGD untuk mengumpulkan data petani serta pengguna layanan

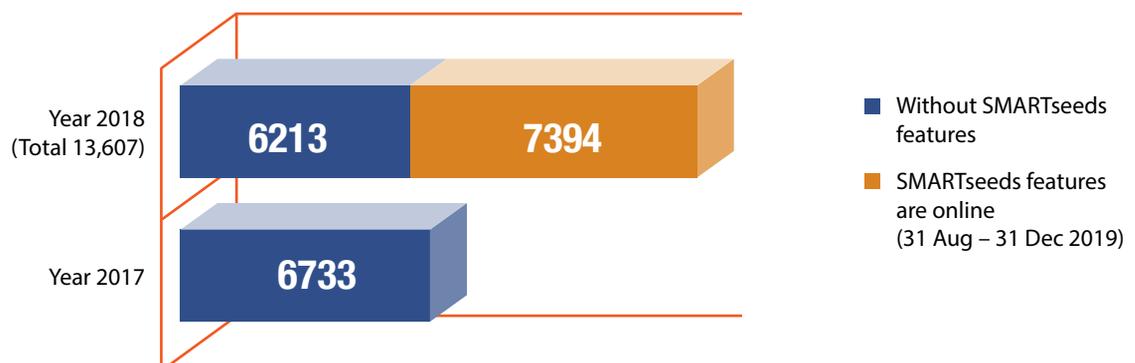
- Pengumpulan data petani 3,573
- **Jumlah pengguna layanan yang teregistrasi 16,125 dari total 20,340 pengunduh layanan**

SIPINDO APPS DOWNLOADERS

User Role Percentage



Total 20,340 Downloaders

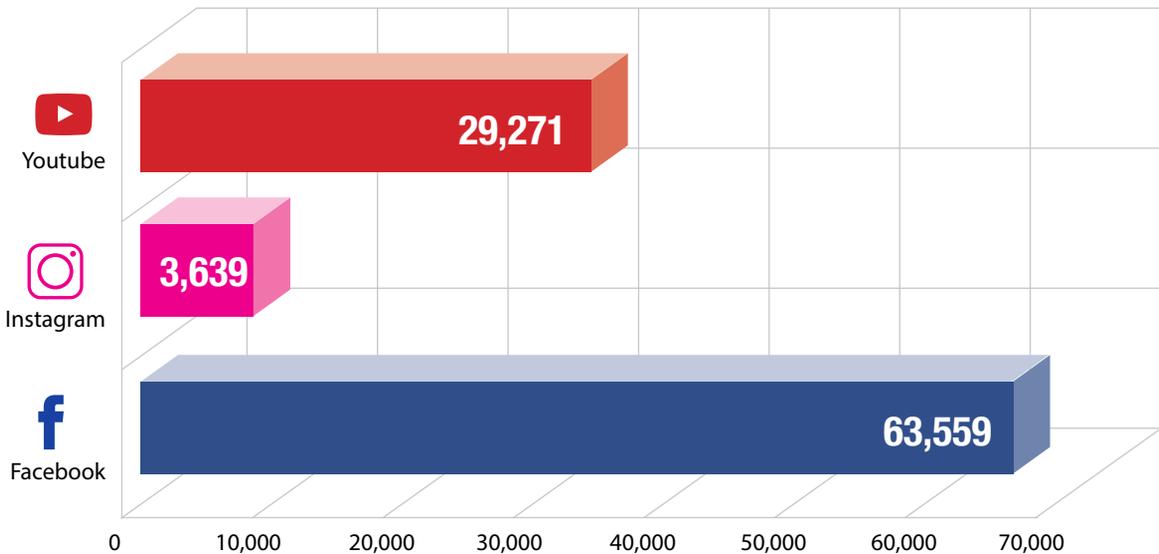


AWARENESS RAISING



- Social media used in the project: Facebook, YouTube and Instagram
- YouTube account used in the project: Sipindo Official, PanahMerahTV and ICCO Regional Office South East Asia
- There is also Sipindo Official account on Facebook and Instagram to achieved project beneficiaries

ACHIEVEMENT SOCIAL MEDIA



Indirect Beneficiaries Total
96,469



03. FARMERS SUCCES STORY

Suwarno Jaman

Gondanglegi, Malang - East Java

- Pak Sujaman, the first ever SMARTseeds soil advisory demoplot farmers
- This is his first time planting chili. In the past, he only plant sugarcane.
- He was doing an actual comparison for SMARTseeds soil advice and vs. his friend advice for doing planting
- The cost of fertilizer using SMARTseeds soil advisory advice is 31.53% less than his friend advice (current farmers group practices)
- The yield from SMARTseeds advice is 14.67% higher compare to current practices.
- He was amaze as he used the less cost of fertilizer but the yield was earlier. He hopes this information can help the farmers, not only him but also his friend.



Ma'i

Pagak, Malang - East Java

- Pak Ma'l is experienced chili farmers, almost every time he always planting chili as Pagak is one of chili center in Malang, even East Java.
- On this SMARTseeds soil advisory chili demoplot, he can reduce the fertilizer cost up to 3.17% compare to his current practices
- The yield from SMARTseeds advice is 26.32% higher compare to his current practices.
- He said that he was very happy from the result by SMARTseeds soil advisory recommendation





Khoirul "Irul"
Pujon, Malang - East Java

- Mas Irul is a SMARTseeds soil advisory demoplot tomato farmers.
- The most visible things that felt by Khoirul is about the cost of fertilizer. Compare to current farmers practices which is using compound fertilizer (such as NPK), SMARTseeds uses single fertilizer (such as SP36, KCL, etc) that is cheaper.
- "The fruits between SMARTseeds and my practices is same, the differences is about cost, using SMARTseeds recommendation is cheaper" said Pak Khoirul. The data told that Mas Irul save the cost fertilizer up to 83.9%.
- He also increase the yield up to 6.97% compare to his old practices. "The physical appearance and it size is same, the differences is about the cost" said Mas Irul.

04. PROJECT PERSONEL: G4AW SMARTSEEDS TEAM



Sadhu Z. Janottama
(Coordinator)



Ainun Elfajrin
(Admin & Finance Officer)



Lovian Sinambela
(TFO Lampung)



Sudiarto
(TFO Jawa Timur)

Selamat Datang Petani A...



EAST-WEST SEEDS
CAP PANAH MERAH

... (Training) ...
... bersama den...



CARA KERJA INSEKTISIDA

No.	Tipe Area	Luasan
1		
2		
3		



Perhatikan cara kerjanya sesuai ke tujuan untuk
masing-masing!

No.	Tipe Area	Luasan
1		
2		
3		



BALITSA
Balai Penelitian Tanaman Sayuran



IPACT

seeds
after living



vegIMPACT NL

Improving Vegetable Production and Strengthening Private Sector Development in Indonesia



06

01. BACKGROUND, OVERVIEW AND OBJECTIVE

The vegIMPACT NL program contributes to improved vegetable production and private sector development in Indonesia. The Program builds on the result of previous joint Indonesian-Dutch horticultural cooperation project, especially the vegIMPACT program (2012-2017). The program activities of vegIMPACT NL (2018-2020) address Knowledge transfer, Seed potato technology and supply system, Shallot production and post-harvest technology and Young farmer, while digital information and social media are cross-cutting and supporting activities. The vegIMPACT NL program is financed by the Government of the Netherlands and coordinated Wageningen University.

Program vegIMPACT NL berkontribusi pada peningkatan produksi sayuran dan pengembangan sector swasta di Indonesia. Program ini dibangun berdasarkan hasil dari proyek holtikultura Indonesia-Belanda sebelumnya, khususnya program vegIMPACT NL (2012-2017). Kegiatan program vegIMPACT NL (2018-2020) membahas transfer pengetahuan, teknologi benih kentang dan system pasokan produksi bawang merah dan teknologi pascapanen dan petani muda, sementara informasi digital dan media social adalah kegiatan lintas sectoral dan pendukung. Program vegIMPACT NL dibiayai oleh pemerintah Belanda dan dikoordinasi oleh Wageningen University & Research di Belanda.



Focus of vegIMPACT NL

- Scaling the outreach of accumulated knowledge and experience developed in vegIMPACT;
- Development of innovative and sustainable vegetable production solutions with private sector partners both from The Netherlands and Indonesia



Yayasan Binatani Sejahtera as main implementing partners of four activities of the vegIMPACTNL program which consist of Knowledge Transfers, Shallot Production and postharvest Technology, Digital Information and Social Media and Monitoring and Evaluation of the Knowledge Transfers.

Yayasan Binatani Sejahtera sebagai mitra pelaksana utama dari empat kegiatan program vegIMPACTNL yang terdiri dari Transfer Pengetahuan, P roduksi Bawang Merah dan Teknologi pascapanen, Informasi Digital dan Media Sosial dan Monitoring dan Evaluasi Transfer Pengetahuan

KNOWLEDGE TRANSFER

Good Agricultural Practise Trainings to Farmers

TOPICS

I. Variety, Seedlings and Nursery Management

II. Fertilizer and Crop Nutrition

III. IPM, Chemicals and Crop Protection

IV. Spraying techniques and Farmers Safety

TARGET

For Period 2018–2020

With special focus markets:

| Belitung | Samosir |
| North Kalimantan | Sangihe |

- **100 Product Promotors** from EWINDO and **12 Technical Field Officers**
- **30,000 Farmers** reached through Knowledge Transfers (m/f)
- **3,000 Shallot farmers** reached (m/f)
- **14 Regional Expo**
- **10 TOT** and covered **200 participants**

Knowledge transfers consist of four activities, Training of Trainers (TOT), Farmers Field Days (FFD), Regional Expo (RE), and Training of Farmers (TOF). Each farmers targeted to attends 4 sessions Training of Farmers during the project, the topics of training of farmers are :

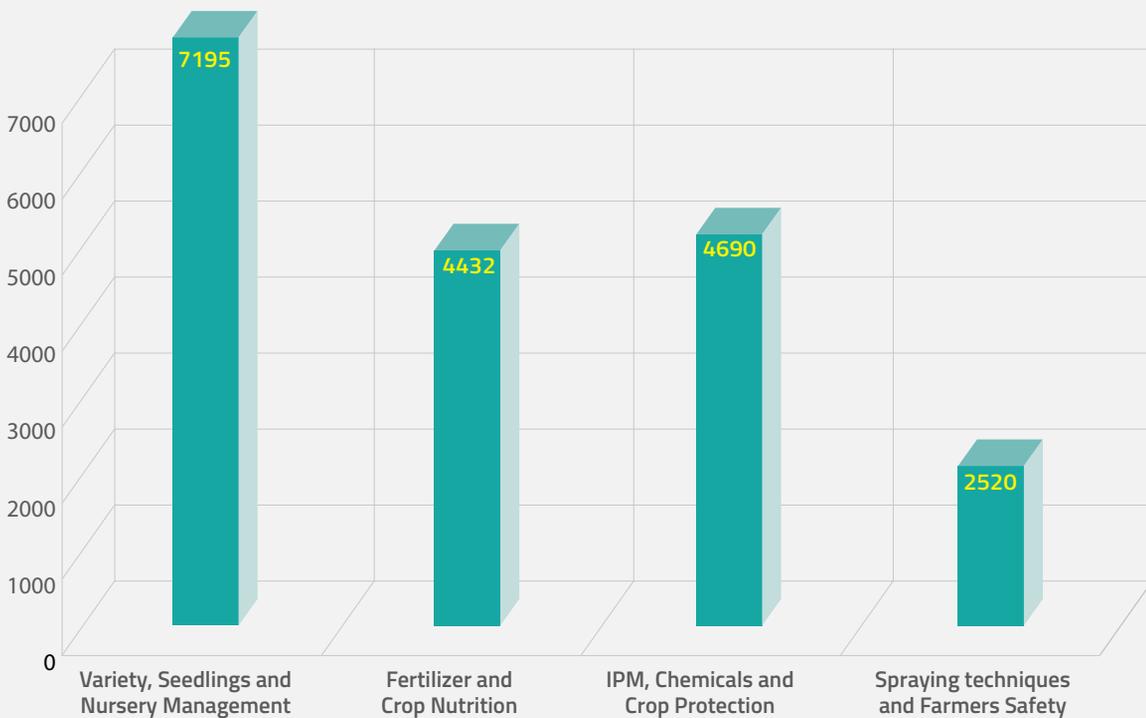
1. Variety, Seedlings and Nursery Management
2. Fertilizer and Crop Nutrition
3. IPM, Chemicals and Crop Protection
4. Spraying techniques and Farmers Safety

Transfer pengetahuan terdiri dari empat kegiatan, Pelatihan untuk Pelatih (TOT), Hari Lapangan Petani (FFD), Expo Regional (RE), dan Pelatihan Petani (TOF). Setiap petani ditargetkan untuk menghadiri 4 sesi Pelatihan Petani selama proyek, topik pelatihan untuk petani terdiri dari :

1. Variasi, Pembibitan dan Manajemen Pembibitan
2. Pupuk dan Nutrisi Tanaman
3. IPM, Bahan Kimia, dan Perlindungan Tanaman
4. Teknik Penyemprotan dan Keselamatan Petani

02. OUTREACH 2018

TRAINING TO FARMERS, FARMERS FIELD DAYS AND FARMERS EXPO



TOF reported are 367 events which mostly focus on topic variety, seedling, and nursery management accounted for 7195 farmers received the topic. It is then followed by topic on integrated pest management 4690 farmers, fertilizer and crop nutrition 4432 farmers, and there are other 2520 farmers received topic on spraying technique and farmers safety. Number of women farmers participated in the events reach 68% of the target, and similarly 29% for men farmers compare to targets.

Jumlah TOF yang dilaporkan adalah 367 kali dimana topik yang paling banyak diterima oleh petani adalah varietas, pembibitan, dan manajemen persemaian, yaitu 7195 petani. Selanjutnya diikuti oleh topik terkait Pengendalian Hama Terpadu 4690 orang, topik pemupukan dan nutrisi tanaman 4432 petani, dan sebanyak 2520 petani yang telah mendapatkan topik terkait teknik penyemprotan. Jumlah petani perempuan yang berpartisipasi adalah 68% dari target dan 30% untuk petani pria dibandingkan dengan target.

TRAINING OF TRAINERS

1. 6 TOTs conducted in some areas: Ambon, Kupang, Jember, and Cirebon
2. 96 Participants achieved, they are extension staff of EWINDO and YBTS
3. 5 trainers come from Wageningen University and Research: Huub Schepers, Mout De Vrieze, Henk Van Reuler, Diep Phan, dan Johann Bonnard,
4. 3 topics: Integrated Pest Management, Soil Fertility and Fertilization, and Monitoring & Evaluation.



No	Topics	Trainers	Location	Date	Participants
1	Monitoring and Evaluation	Johann Bonnard	Fak. Pertanian,	18–19 Sep 2018	10
2	Integrated Pest Management	Huub Schepers, Mout de Vrieze	Univ. Pattimura, Ambon	20–21 Sep 2018	17
3	Soil Fertility Management	Henk Van Reuler, Diep Phan	Kupang	29–30 Okt 2018	16
4	Monitoring and Evaluation	Johann Bonnard	Kupang	31 Okt 2018	7
5	Soil Fertility Management	Henk Van Reuler, Diep Phan	Jember	1–2 Nov 2018	25
6	Integrated Pest Management	Huub Schepers, Mout de Vrieze	Cirebon	3–4 Des 2018	21
Total					96



SHALLOT RESEARCH PROGRAM

- To test a number of agronomic practices to optimize TSS systems and to develop cultivation recommendations
- To analyze the cost-benefit of TSS-based cropping systems. To assess the current status of resistance of Spodoptera populations in Indonesia
- To develop recommendations to control Spodoptera
- To support companies with upgraded technologies and / or business models ready to market post-harvest solutions
- Untuk menguji sejumlah sistem budidaya guna mengoptimalkan sistem TSS and mengembangka rekomendasi budidaya
- Menganalisis cost-benefit sistem TSS serta menguji tingkat resistensi pada populasi Spodoptera di Indonesia
- Mengembangkan rekomendasi cara untuk mengendalikan Spodoptera
- Mendukung perusahaan dengan teknologi pasca-panen terkini dan/atau model bisnis yang siap untuk pasar



Optimizing bulb quality

- Direct sowing and transplanting
- Density and spacing planting system



Grading and quality of shallot bulb produced

- Class I: < 1.5 cm
- Class II: 1.5 – 2.5 cm
- Class III: > 2.5 cm



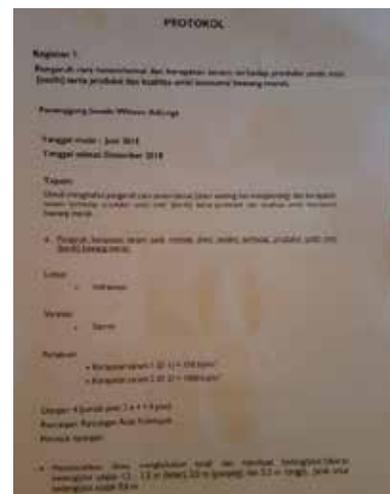
Shallot plantation using graded bulb material

- Yield

Project Area

- Experiment conducted in Desa Sumur Adem, Indramayu, West Java.
- 800 m² land prepared for the research in farmers area
- Collaborated with WUR (Wageningen University and Research), IVEGRI (Indonesian Vegetable Research Institute) , East West Seed Indonesia and Farmers to complete the trial research
- Penelitian dilaksanakan di Desa Sumur Adem, Indramayu, Jawa Barat
- 800 m² lahan di gunakan berada di lahan petani
- kerjasama dengan WUR, IVEGRI, EWINDO dan petani untuk menyelesaikan percobaan

Tools and Material

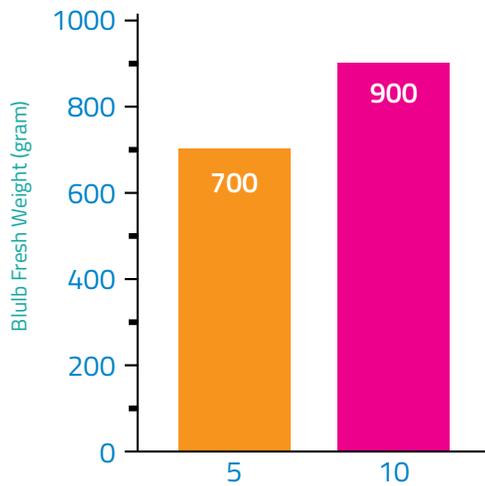


Protocol of the research trial developed by WUR

2018 Shallot Trial Result
Shallot Trial completed on 16th January 2019



Treatment (seed/m²)
Graph 1. direct seeding



Treatment (gram/m²)
Graph 2. transplanting

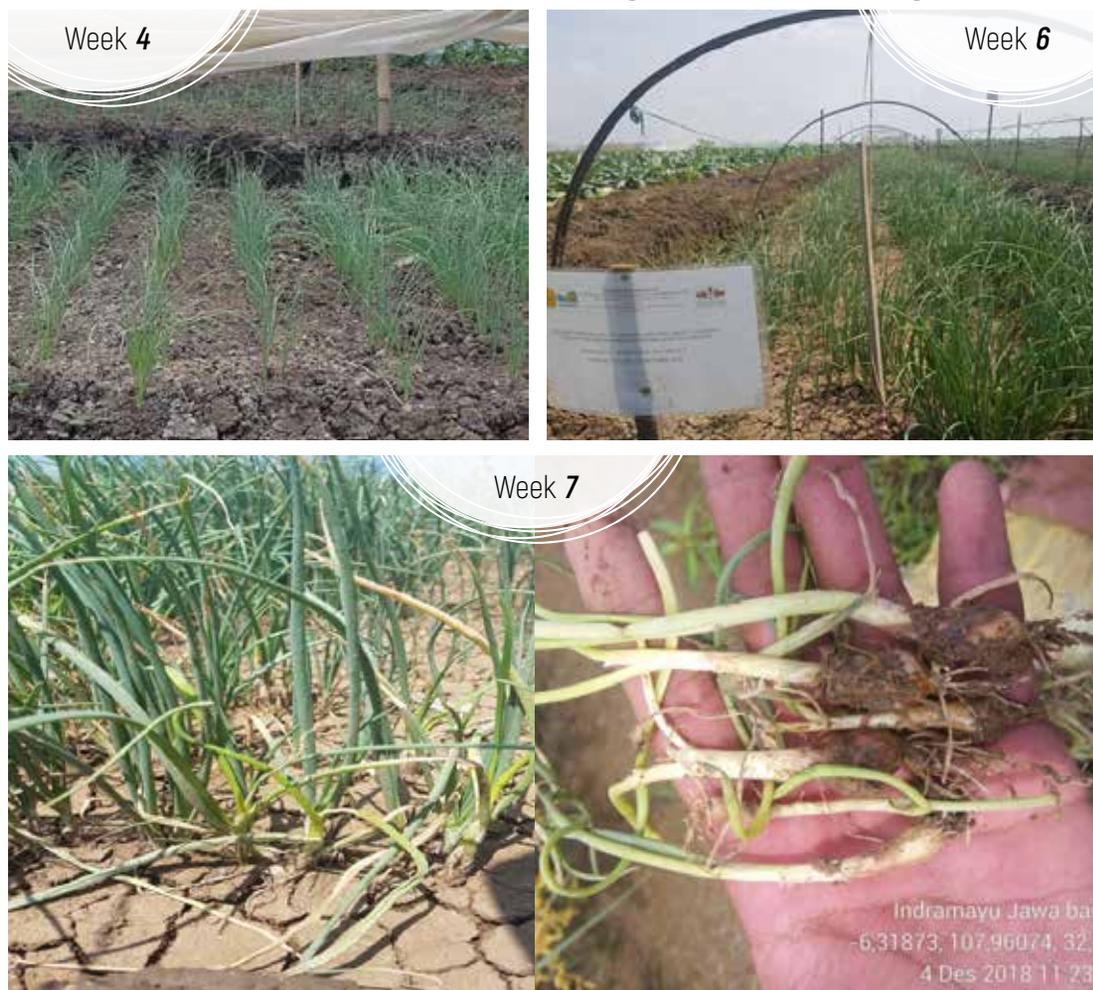
In both treatments of direct seedlings and transplanting, showed trend as high density treatment was gaining higher yield compared to the low density treatment. As you can see the treatment of 1000 seeds/m² in direct seedlings and 10 gram/m² in transplanting gain 27.71% and 22.22% higher yield respectively compare to treatments 750 gram/m² and 5 gram/m² of both treatments. However, the grading effect couldn't be seen clearly due to many of plants decay that was caused by Fusarium

Pada dua penelitian baik itu tabur langsung dan transplanting menunjukkan pada perlakuan dengan kerapatan yang padat memiliki hasil yang lebih tinggi dibandingkan dengan kerapatan atau jumlah populasi yang rendah (low density). Seperti yang dapat dilihat perlakuan dengan 1000 benih/m² dan 10 gram/m² pada percobaan tabur langsung memiliki persentase 27.71% dan 22.22% hasil panen lebih tinggi dibandingkan dengan perlakuan 750 benih/m² dan 5 gram/m². Akan tetapi, efek dari ukuran umbi tidak dapat dilihat secara jelas disebabkan oleh banyaknya tanaman yang membusuk akibat serangan Fusarium

What happened in experiment 2018? (flashback on Fusarium infection)

Week	Remarks
week 1 to 6 after sowing	All plant looks healthy and there were no infected plant
Week 7	Some plants in the direct seeding plot showed symptoms of Fusarium Infection
Week 8	Clear symptom of Fusarium infection appeared both in transplanting and direct sowing plot
Week 9-11	Diseases severity increased and was found in all plot
Week 12	90 % of plants in the field were infected

Development of Severe Fusarium Attack During Wet Season Planting





Week 8



Week 9



Week 10



Week 12

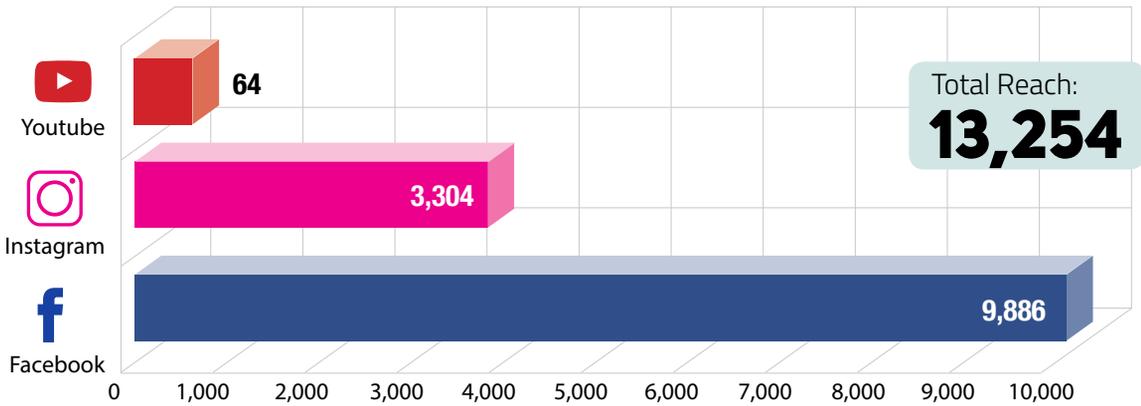
Lessons learned

- It is important to know the history of land before choosing an area for planting to avoid disease infection especially when growing crop during rainy season
- Diseases which caused by fungi need to be treated preventively.
- Drainage system was an important factor in disease spreading
- Humidity and temperature gave significant impact in disease infection

Bahan Pembelajaran

- Penting untuk mengetahui sejarah penggunaan lahan sebelum memilih area untuk budidaya hal ini untuk mencegah serangan penyakit khususnya jika kegiatan budidaya dilakukan selama musim hujan
- Penyakit yang disebabkan oleh jamur perlu dilakukan tindakan pengendalian yang bersifat pencegahan
- Sistem drainase adalah faktor penting didalam proses penyebaran penyakit
- Kelembaban dan temperature memberikan dampak yang signifikan terhadap serangan penyakit.

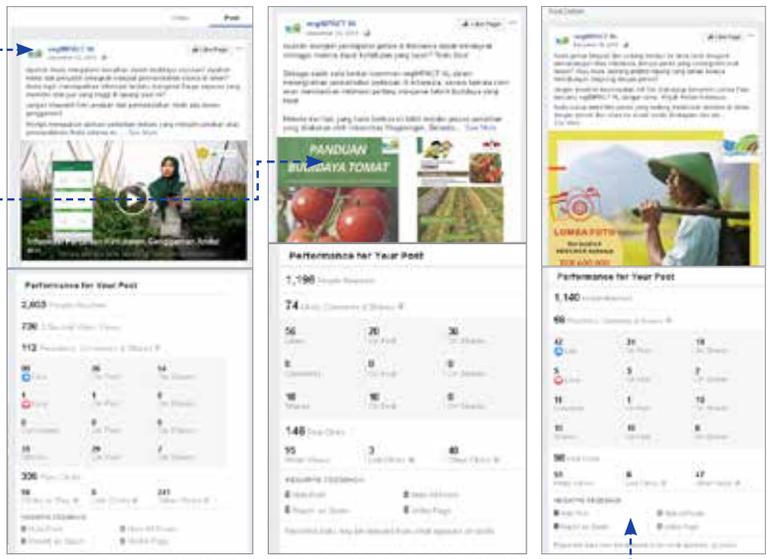
DIGITAL INFORMATION AND SOCIAL MEDIA



Top 3 Posts on Social Media

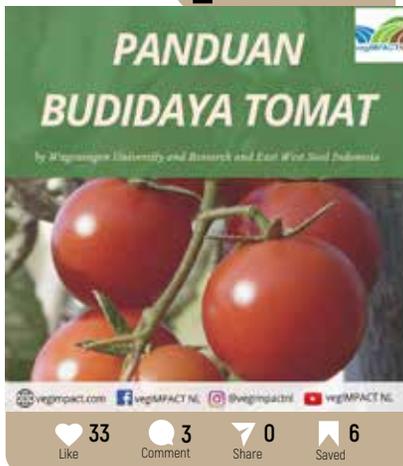
Facebook

1. Informasi Pertanian Kini dalam Genggaman Anda!
Reached: 2,803 people
2. Panduan Budidaya Tomat
Reached: 1,196 people
3. Lomba Foto
Reached: 1,140 people



Instagram

- 1 Reached 873 people
- 2 Reached 435 people
- 3 Reached 273 people



04. PROJECT PERSONEL: YBTS VEGIMPACTNL TEAM



Eva Sulistiawaty
(Program Coordinator)



Mifthakul Farikah
(Admin)



Rahma Yani
(Shallot Track
Coordinator)



Frinto Sobapa
(TFO Sangihe)



Lilik Triyanto
(Knowledge Transfer
Coordinator)



Safira Maulidina
(Digital Information
Officer)



**Erlangga Danu
Wijaya**
(TFO Samosir)



Andre Ferdinando
(TFO Belitung)



Nisa Lutfiana
(TFO Nunukan)



**SUPPORTING
SUSTAINABLE
DEVELOPMENT
GOALS**

07

Yayasan Binatani Sejahtera

Contributing to SDGs at Local Level

We work over the years with the smallholders farmers, assist them in improving livelihood and better living environment in Indonesia. We focus working with the farmers (both men and women) in order that they are able to attain higher production, better income, more options of vegetables consumption, and of course with better skills and knowledge.

With the latter not only on cultivation techniques and product knowledge but also about access to seasonal climate forecast and commodity price information, farmers are better equipped to farm in coping with challenges such as erratic rainfall pattern, limited water and soil nutrient, and poor market access.

Kami bekerja selama bertahun-tahun dengan petani kecil, membantu mereka dalam meningkatkan mata pencaharian dan lingkungan hidup yang lebih baik di Indonesia. Kami fokus bekerja dengan petani (baik pria maupun wanita) agar mereka dapat mencapai produksi yang lebih tinggi, pendapatan yang lebih baik, lebih banyak pilihan konsumsi sayuran, dan tentu saja dengan keterampilan dan pengetahuan yang lebih baik.

Dan yang terakhir tidak hanya pada teknik budidaya dan pengetahuan produk tetapi juga tentang akses ke prakiraan iklim musiman dan informasi harga komoditas, petani lebih siap untuk bertani dalam menghadapi tantangan seperti pola curah hujan yang tidak menentu, keterbatasan air dan nutrisi tanah, dan akses pasar yang buruk.



Terrace bed
14,454 m²



UV Plastics water conservation
260 m



978 m Water trapped



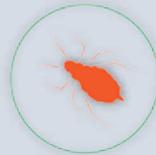
136 Water hole absorption



Training on



Variety, Seeds and nursery management



Integrated Pest Management



Fertilizers



Farmers safety



5,313



11,179

- 2 ZERO HUNGER
- 4 QUALITY EDUCATION
- 5 GENDER EQUALITY

Celeb

Kab. Halmahera Utara

Molucca Sea

Kab. Pegunungan Arfak

Kab. Biak Numfor

Kab. Fak-Fak

Kab. Maluku Tengah

Kab. Nabire

Laut Banda

Timor Barat
(Kab. TTS & Kab. Kupang)

Arafura Sea

Timor Sea

24% to 37%
monthly income
(in average) of farmers on
Knowledge Transfer Activity



- 1 NO POVERTY
- 2 ZERO HUNGER



**FARMERS'S
TESTIMONY**

08



FARMER'S TESTIMONY



ESDIN NAINGGOLAN

Ketua kelompok tani Mekar Sari, Desa Sari Sarihit, Kab. Samosir

"Before we just knew growing shallot through its bulb, but now we begin to learn how to grow them with the seed, what we called true shallot seed (TSS). "

"Dari dulu kami cuma tau menanam bawang merah dari umbinya saja, tapi sekarang kami mulai belajar menanam dari bijinya, yang biasa dibidang orang TSS (true shallot seed)".



FARMER'S TESTIMONY



RAFRES BARE

Ketua kelompok Tani Tumendang, kelurahan Mahena, Kecamatan Tahuna, Kabupaten Sangihe

"So is this the technology (pH meter) that people often use to measure kind of dolomite (CaCo3)? We did not really knew about soil pH, so we just grew vegetable as usual, and if we saw there were symptoms/ problems to the plants, we thought that it was only because of diseases attack. Fortunately, we now know that too acid or too alkaline the soil, it will affect significantly the growth of the plants."

"Jadi yang sering pake kapur pertanian itu alat ukur nya seperti ini?? Selama ini kami memang tidak tau soal pH tanah, jadi kalau kami tanam dan ada gejala tanaman tumbuh tidak normal selalu kami pikir itu penyakit. Sekarang kami baru tau kalau tanah terlalu basa atau asam juga mempengaruhi pertumbuhan cabe."



FARMER'S TESTIMONY



DARDI, *Lampung*

"This was good, I need to hire additional labor as the fruits from SMARTseeds recommendation was comes earlier and more than I predict before"

"Bagus banget, dengan saran SMARTseeds saya panggil tenaga tambahan untuk panen, karena buahnya besar dan matang lebih awal"



FARMER'S TESTIMONY



MISKIADI

Ketua Kelompok Tani Sinar Jaya, Desa Perawas, Kab. Belitung

“Our knowledge on the right use of pesticides is still lack behind, so we often apply them inappropriately. We used to mix some solutions without any recommendation and dosage awareness, because we thought that the more the solution we used, the better the result will be. After attending some trainings, we just realized that what we did is totally incorrect, and now we try to improve it.”

“Pengetahuan kami tentang penggunaan pestisida masih sangat minim, sehingga kami sering salah aplikasi. Kadang kami mencampur larutan asal-asalan tidak sesuai aturan dan dosis, karena kami anggap semakin banyak campuran dan dosisnya maka hasilnya semakin bagus. Eh ternyata kami baru tau selama ini apa yang kami lakukan ternyata tidak tepat dan sekarang kami mulai memperbaiki.”



FARMER'S TESTIMONY



KHOIRUL “IRUL”

Malang

“Until this stage, the fruit between SMARTseeds and my practices is same, the differences is about cost, using SMARTseeds recommendation is cheaper” said Pak Khoirul in EWINDO Highland Tomato Show (FFD) along with break fasting with the farmers, June 8th, 2018. “The physical appearance and it size is same, the differences is about the cost” said Pak Khoirul in this event.

Dengan pertumbuhan buah hingga saat ini itu sama, yang membedakan itu dibiaya, ternyata pakai SMARTseeds itu jatohnya lebih murah” ungkap Khoirul dalam kegiatan FFD Tomat Dataran Tinggi EWINDO yang dibalut dalam buka bersama pada tanggal 8 Juni 2018. “Fisik dari tomat sama, besar buah sama, yang membedakan itu dari biaya” lanjut Pak Khoirul dalam acara tersebut.



FARMER'S TESTIMONY



**YOHANIS
SESFAO,
NTT**

"I am happy to be able to harvest tomatoes successfully, it could be 18 million from the demonstration plot that I worked on with the assistance of the Bina Tani Sejahtera Foundation team"

"Saya senang bisa panen tomat dengan sukses, dapat 18 juta dari lahan demplot yang saya kerjakan dengan dampingan tim Yayasan Bina Tani Sejahtera"



FARMER'S TESTIMONY



**MAMA YUKKE,
Ceram Island**

"It was my first time to grow eggplant. I have been receiving a lot of new knowledge (GAP) from YBTS field staff."

"Ini adalah pertama kalinya saya menanam terong. Saya telah menerima banyak pengetahuan baru terkait teknik menanam sayuran yang baik dari staf lapangan YBTS"



FARMER'S TESTIMONY



**JOHN PETRUS NEOLAKA,
Desa Fatukoko**

John Petrus Neolaka (Mr. Willi) was a motorcycle taxi driver and had no experience growing vegetables. Through YBTS, he began learning about how to plant shallot (tuk-tuk varieties) in the group demonstration plot. After that, he planted bitter melon 450 plants and earned IDR. 5 million. This, making Mr. Willi more motivated to expand his farm to plant cucumber 1800 plants

John Petrus Neolaka (Pak Willi) sebelumnya adalah seorang ojek motor dan tidak memiliki pengalaman menanam sayuran. Melalui YBTS ia mulai belajar tentang cara menanam bawang merah (varietas tuk-tuk) di demplot kelompok. Setelah itu ia menanam pare sebanyak 450 pohon dan memperoleh penghasilan sebesar Rp. 5 juta. Hal tersebut membuat Pak Willi makin termotivasi untuk memperluas lahannya untuk menanam ketimun sebanyak 1800 pohon



FARMER'S TESTIMONY



MACE ELISIA,
Fak-fak

"In my 1st time grow chili, I got 150 kgs from 200 population, and the price per kg is IDR 50,000. The TFO from YBTS (Roberd) always accompanying me to implement the Good Agriculture Practices."

"Pertama kali saya menanam cabai, saya mendapat lebih dari 150 kg dari 200 populasi, dan harga per kg adalah Rp 50.000. TFO YBTS (Roberd) selalu mendampingi saya untuk menerapkan GAP"



FARMER'S TESTIMONY



AMALUN,
Malifut, North Halmahera

"I implemented the technique that I got from exchange visit. I've harvested my Bird Pepper(Dewata F1) with higher quality than before."

"Saya menerapkan teknik yang saya dapatkan dari kegiatan studi banding yang difasilitasi YBTS. Saya sudah memanen cabai rawit Dewata F1 saya dengan kualitas lebih baik dari sebelumnya."

YBTS OFFICE PERSONNEL



Ainun
(Admin & Finance Officer)



Maya Oktarini
(Accounting Officer)



Dede Sri Maharani
(General Admin)



Achmad Pranata
(Admin & Finance Officer)



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Kelurahan Cakung Timur, Kecamatan Cakung, Jakarta Timur 13910 - Indonesia

