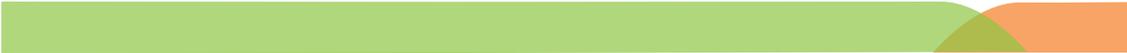


ANNUAL REPORT 2019



YAYASAN
BINA TANI
SEJAHTERA

www.binatani.or.id



We are happy to share our 2019 annual report. The data and information, including the info-graphics are all our operations in 2019, unless explicitly mentioned. We welcome your feedback on this report by emailing us on info@binatani.or.id

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Joost Pikelharing
Chairman, Board of Trustees
Bina Tani Sejahtera Foundation

MESSAGE FROM

Joost Pekelharing



It is rewarding to see the results of the work with vegetable farmers, and we pride ourselves on the efforts of our enthusiastic technical field officers 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 – at the national, regional and local level – we could achieve 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 NL 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; Anton Jurgens Fonds-Cordaid-KARINA who

continue to support our work on the Resilience and Livelihood project; and Nusa Halmahera Minerals on reaching 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



GLENN PARDEDE
Managing Director of
PT. East West Seed Indonesia

“
Through knowledge and
technology transfer,
we are committed to
improving the capacity
and productivity of farmers
working on their farms

Farmers Prosperity

This is the goal of PT East West Seed Indonesia (EWINDO), the producer of CAP PANAHA MERAH vegetable seeds. High quality seeds are our capital in contributing to the welfare of farmers and at the same time promoting vegetables consumption.

Farmers' Best Friend is one of our company values. We are close to farmers to guide and encourage them to be successful. We overcome challenges together by visiting and giving them excellent services.

Through YBTS, an extension arm of the company, EWINDO is able to express and signify its commitment to provide excellent services for the prosperity of farmers. In addition to that, EWINDO's support can be extended to farmers in remote areas and less penetrated markets. Through knowledge and technology transfer, we are committed to improving the capacity and productivity of farmers working on their farms. An improved livelihood will feed their lives sustainably.

We are grateful that YBTS has always been able in obtaining supports from strategic partners and doing something meaningful for farmers in Indonesia. Moreover, YBTS has access to EWINDO resources in terms of colleagues, expertise and even networks. Therefore, YBTS has more to offer in project implementation.

Thus, with much support from the company and the well development of organization with good reputation and achievements, the benefit for farmers can be much enlarged and scaled - up.

We fully support YBTS in their continuous effort securing the livelihood and prosperity of farmers.

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

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



EDWIN SANZO SARAGIH
(Chair of Caretakers)



FRANSISKA FORTUNA
(Secretary)



KURNIAWAN SUTEDJA
(Treasurer)

Board of Caretakers Yayasan Bina Tani Sejahtera

Yayasan Bina Tani Sejahtera works in the field assisting farmers in adopting and applying good farming practices with appropriate approach of knowledge transfer process ensuring farmers' success. Farmers are at the center of our service, and our field staff are acting like agents of change in contributing farmers to adopt good farming practices which in turn improve their work efficiency and productivity.

It is our belief that with unremitting efforts, we may in longer term contribute to betterment of farmers' livelihood at village levels and catalyzing more business activities in rural economy. How? We have proven that good quality seeds adopted by farmers and they worked it out with good agricultural practices resulted in adoption of other good agro-inputs. Our approach by starting with good seeds has been interlinked with the use and adoption of good fertilizers, good crop protection, mulching, and irrigation. We are happy to report that in 2019 more than 23,000 farmers received knowledge transfer

benefits through our demo plots learning for key farmers, farmers training, field days and technology expo events. Moreover, our social media outreached to more than 144,000 engagements (likes, views, shares).

Our farmers beneficiaries are distributed across 30 districts of Eastern Indonesia in the Provinces of Nusa Tenggara Timur (NTT), Maluku, Maluku Utara, Papua, and Papua Barat and several other districts in Western Indonesia such as 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 smallholder farmers. We dedicate this report to all our staff in Yayasan as their hard work has been really paying off towards the Yayasan goal and serving farmers.

On this occasion, we would like to thank the Board of Trustees and Supervisory Board of Yayasan for full support. Our parent organization PT East West Seed Indonesia is always supporting and motivating us for more positive impacts to contribute to farmers' success.

Our most esteemed partners and donors (directly and indirectly): vegIMPACT NL, KARINA and Cordaid, Anton Jurgen Fonds, ICCO Cooperation, Nusa Halmahera Mining, Yayasan Cinta Papua, and PT Lautan Luas for the nice partnership and supports

Thank you.

Edwin Sanso Saragih

On behalf of the Yayasan Caretakers



ABOUT
YAYASAN BINA TANI
SEJAHTERA

01

YAYASAN BINA TANI SEJAHTERA

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

HOW WE CREATE VALUE

OUR VISION

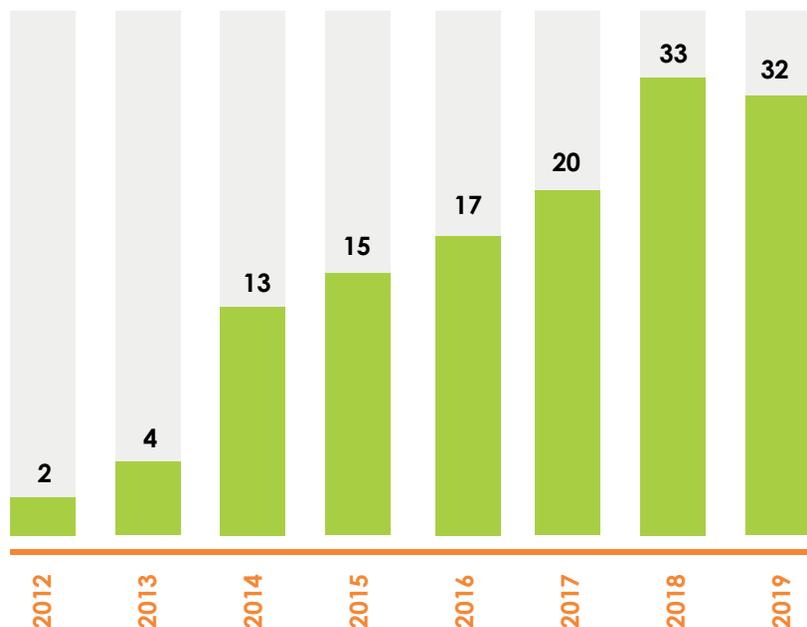
As an extension arm of EWINDO, YBTS vision is based on EWINDO vision. We believe in high quality vegetable seeds for better living. With this vision we assist improvement of farmers livelihood and care also about social and environmental issues.

OUR MISSION

In realizing the vision, YBTS provides knowledge and technology transfer, agriculture extension and consultancy services, and conducts training on agriculture practices and agribusiness. In this regards, we develop program based on potential for improvement of smallholder farmers' livelihood in eastern parts of Indonesia and less penetrated markets. YBTS, founded in April 2009, targets small-holder farmers especially those with limited access to the technical assistance and extension services. We put great attention and provide services in sustainable use and management of natural resources and environment.

WHAT WE DO

DEMO PLOT	TRAINING OF FARMERS	FIELD DAYS EXPO	OTHER INTERVENTIONS
<ul style="list-style-type: none"> Learn and practice Use EWS seeds Apply GAP Share experience 	<ul style="list-style-type: none"> Educate on GAP using Knowledge materials: crop guides, flyers, booklet, videos, etc. 	<ul style="list-style-type: none"> Share success story Share and distribute knowledge materials 	<ul style="list-style-type: none"> Water access, soil & water conservation, resilience, information service, youth initiatives



Number of Staffs

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



Nutrition Value

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



Off-Farm Value and Linkages

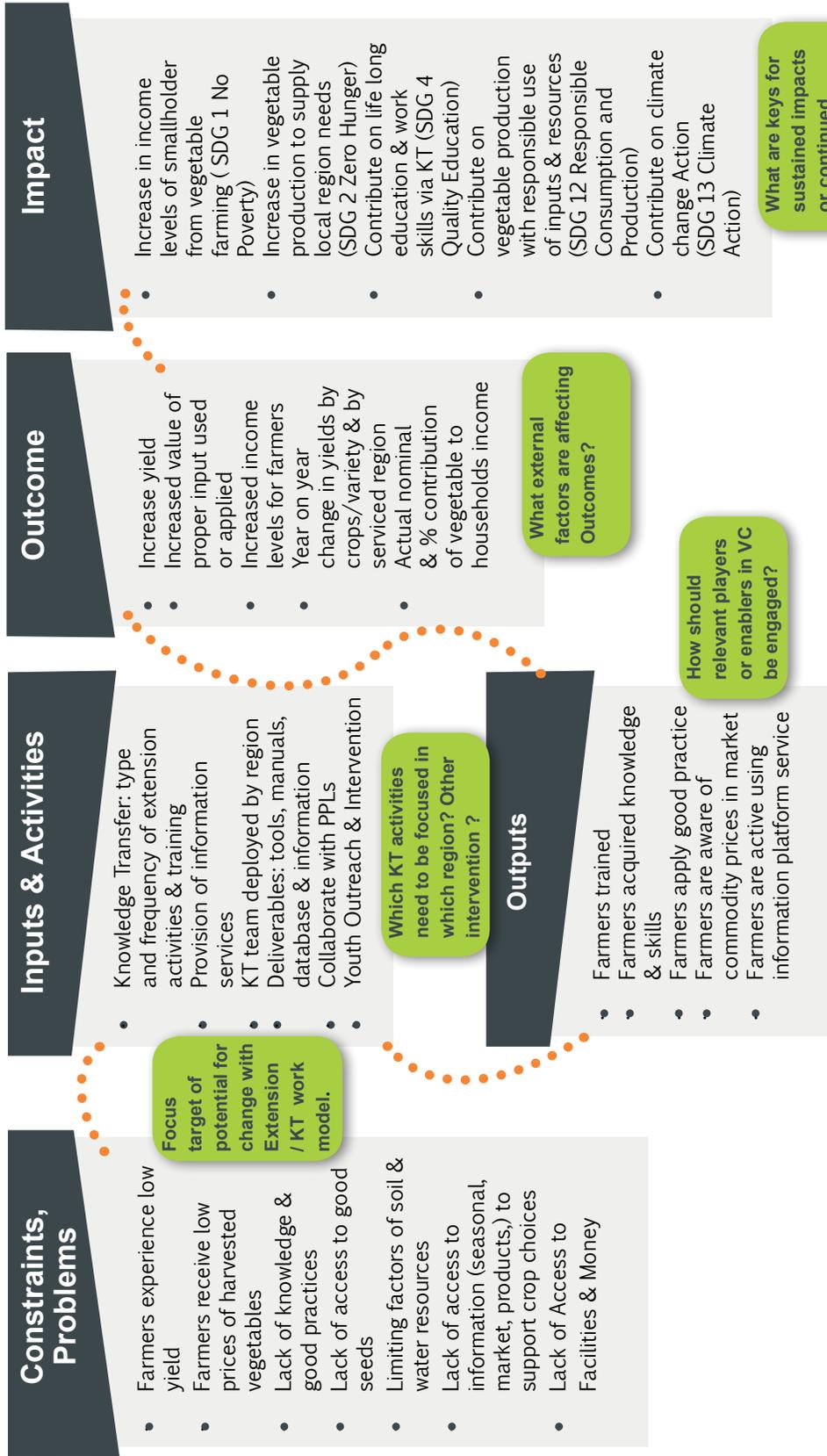
To enable farmers to generate additional income and add value to their products through improved qualities and better market linkages



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.

YBTS Impact Chain & Indicators



YBTS Working Areas in 2019



Our focus areas in Nusa Tenggara, Maluku, Papua and less-penetrated markets are 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

- 1** Our works aim at encouraging farmers to acquire GAP knowledge and skills
- 2** Farmers practice GAP on their farms. They will get higher yield and increase household income.
- 3** Farmers repeat cultivating good quality seeds with GAP. They manage farming with good calendars

Farmers are at the center of our service



Training of Farmers



Farmers get knowledge material



Farmers supported by local Government



Farmers practice and learn together

- Our KT program reached 23,361 farmers across Indonesia
- By adopting good quality vegetable seeds and GAP (good agricultural practices), farmers increase productivity and income
- Supports of agri extension officers, regent, police, public figure even more to motivate farmers

Actual performance KT activities and events 2019

Number of demonstration plots	312
Average ROI (return on investment) from demonstration plots	580 %
Number of training events	622
Number of farmers field days and expos	77
Number of farmers reached in field KT activities	23,361

Crop demoplots: knowledge, practices and seeds value



312 Demoplots in year 2019

- 260 key farmers' demoplots
- 52 replicated demoplots

From demoplot, key farmer gets actual profit (avg.) USD 470 per season with profit range: USD 49 (leafies) – USD 1,944 (melon)

Return on Investment (RoI) for several crops:



CROP	Average ROI	No. of Demoplot
Bitter Gourd	443 %	12
Cabbage	416 %	17
Chili (Big Type)	506 %	9
Chili (Bird Pepper)	448 %	34
Chili (Curly Type)	463 %	8
Choisum	632 %	18
Cucumber	436 %	21
Eggplant	361 %	7
Kangkong	511 %	15
Shallot	517 %	13
Sweet Corn	444 %	13
Tomato	432 %	36
Watermelon	416 %	7
Yard long bean	361 %	7

Farmers Training and KT Field Events

Through training and KT field events, farmers acquired knowledge and skills

- 23,361 farmers were trained, learned, and practiced GAP at demoplots to increase vegetable yield, and attended other KT field events (field days and Expo)



TRAINING OF FARMERS

to transfer GAP knowledge and facilitate improved farmers' skill



Series of activity to educate on GAP using Knowledge materials: flip chart, crop guides, flyers, booklet, videos, etc.



Completed with 4 topics or more :

- Seed Selection, Seedling and Nursey
- Fertilization
- Spraying Techniques and Farmers' Safety
- Integrated Pest Management

FARMERS FIELD DAYS

- Neighboring farmers (40 – 60 farmers) are invited to visit demo plots to learn and observe GAP (cultivation technique, pest and disease identification, detail on crop & varieties)
- In this event, key farmers share their own experience or success stories with others.
- Showing one crop

to facilitate key farmers sharing experience and success from planting crop(s) to fellow farmers and other local farmer groups (FG)



EXPO

- Generally more than 150 farmers and guests attend an expo
- 77 FFDs and Expos had been successfully held in year 2019
- Showing minimum of three crops

to promote technological packages (seeds, etc.) to bigger and wider farmers and public network, printed and digital materials are shared; and to celebrate farmers/FG success



Field Days and Expos

Success is well shared and displayed



77 Field Days and Expos attended by 8,444 farmers (avg 109 per event)

- Bigger demoplots various crops with KT messages about seeds, seedling and good practices (raised bed, fertilizers application, drip irrigation, etc.)
- KT materials distributed

Positive impression & feedback

- Farmers, local leaders, women
- Local Government (the Regent, Agriculture Head, Extension staffs)
- Sometimes joining in from local agri-kiosk and collectors
- Promote digital information and social media



336,671 View, Likes, Share

YBTS posts in FB, YouTube, IG, Website, incl. materials disseminated through field expos



KT materials to facilitate learning and transfer of knowledge are available at :

 @yayasanbinatani

 growhow.eastwestseed.com

 vegIMPACT NL

 Sipindo Apps

 vegIMPACT NL

 Printed Materials

 vegIMPACTNL



TFO Paschal Showed Pest Identification Booklet in Central Mollucas.

Crop Guides

- 1 Ridge gourd
- 2 Pumpkin
- 3 Cucumber
- 4 Bittergourd
- 5 Pakchoi
- 6 Cauliflower
- 7 Chaisim
- 8 Cabbage
- 9 Tomato
- 10 Chili
- 11 Eggplant
- 12 Yard Long Bean
- 13 French Bean
- 14 Onion
- 15 Sweetcorn
- 16 Okra

Technical Guides

- 1 Seedling Production
- 2 Trellis Installation
- 3 Mulch Instalation
- 4 Tuta absoluta
- 5 Pesticide Safety
- 6 Macronutrients
- 7 Drip Irrigation
- 8 Container Gardening
- 9 Land Preparation
- 10 Bacterial Wilt
- 11 Mode of Action (Pesticide)
- 12 Virus Vector
- 13 4 Rights (Fertilization)
- 14 Home Gardening

Videos

- 1 Yard Long Bean
- 2 Sweetcorn
- 3 Luffa (Ridge gourd)
- 4 Hot Pepper
- 5 Cucumber
- 6 Transplanting
- 7 Seedling Production
- 8 Safe Use Pesticides
- 9 Net Trellising
- 10 Mulching
- 11 Land Preparation
- 12 Drip Irrigation

vegIMPACT NL materials

- 1 Crop & technical guides
- 2 Booklet 30 pratical messages
- 3 Diagnostic guide: pest & diseases
- 4 Flip-charts on seeds selection: nurseries, GAP, IPM, safety
- 5 Animation videos of #4





1. PERSEMALAN

TANAH + SEKAM/PASIR
 MEDIA SEMAI TERDIRI DA
 (perbandingan 1:1), tergantung da

media tanam harus tercampur dengan baik

STERILISASI
 dengan

Masukkan media tanam ke dalam tray

1 biji per lubang

tutup dengan plastik sungkup jika hujan turun

TEMPAT PERS

PEMBIBITAN

TANAH (1) + PASIR

Media semai yang baik terdiri dari 10

Media semai perlu dijaga dengan suhu yang stabil, kering atau ter

Mengurangi jenis tanaman untuk memutus siklus hama

Pastikan media tanam yang digunakan untuk persemaian bebas dari penyakit dan gulma. Media harus memiliki kapasitas me struktur tanah बेपारी agar memungkinkan drain

Pindah tanam harus dilakukan pada cuaca yang cerah di sore

Seminggu sebelum ber

WAGeningen

KNOWLEDGE TRANSFER ACTIVITIES



02

OBJECTIVE

To improve farmers' skill, yield and income through implementation of Good Agricultural Practices in the Eastern Area of Indonesia.



ARGA WISNU PRADANA
Technical Program Spv.

The eastern part of Indonesia has a lot of potential for horticulture sector development. In 2019, we focused in 7 (seven) areas of Knowledge Transfer Project,



Maya Oktarini
Accounting Officer



Dede Sri Maharani
Accounting Assistant

We reached 5,913 direct and 22,417 indirect beneficiaries from seven project areas and supported by 9 (nine) Technical Field Officers

We conduct knowledge transfer of Good Agriculture Practices (GAP), make demoplots, market survey, and calculate the return of investment in every demoplot area. We also promote EWINDO's seed and vegetable consumption in every field event and farmers meeting.

YBTS APPROACH

The YBTS approach is more towards a technical approach, individually and in groups.

YBTS also maintains good relations with the local government, partners, and farmers to reach our objective.

YBTS focus on the main activities of extension services which include the creation of demonstration plots, Training of Farmers, Training of Trainers, comparative studies/exchange visit, distribution of learning materials, and the making of mini expos or Field Day.



KNOWLEDGE TRANSFER TEAM



3 TFO Ahmad, Elis, Fahri

NHM PROJECT, NORTH HALMAHERA

Direct Beneficiaries
1.733
Indirect Beneficiaries
3.247

TFO Rika Bhernike

KT NORTH HALMAHERA & MOROTAI

Direct Beneficiaries
927
Indirect Beneficiaries
5.023

TFO Ganang Prakoso

KT BIAK - NUMFOR

Direct Beneficiaries
1.246
Indirect Beneficiaries
5.504



North Maluku

West Papua

Papua

Maluku

TFO Paschalis Bagus

KT CENTRAL MOLUCAS

Direct Beneficiaries
598
Indirect Beneficiaries
3.819

TFO Roberd Abanath

KT FAK-FAK

Direct Beneficiaries
245
Indirect Beneficiaries
245

TFO Dominggus Sesfaot

KT NABIRE

Direct Beneficiaries
651
Indirect Beneficiaries
574

TFO Ahmad Sumanjaya

KT ALOR ISLAND

Direct Beneficiaries
225
Indirect Beneficiaries
190



ACHIEVEMENT

Direct & Indirect Beneficiaries based on Project Area :
Maluku and Papua



Farmers trained through ToF and 373 farmers attended exchange visit vs. ToF target of 2,170 in 130 sessions



Accumulative of 112 demplots (94 regular; 18 replication), vs. target of 105.;



2,033 participants attending field day and expo Vs. target of 1,600 with a total of 17 field day events



22,417 (target; 10,000) accumulative of in-direct beneficiaries were achieved through 5,882 brochures (crop+technical guides) and books distributed.

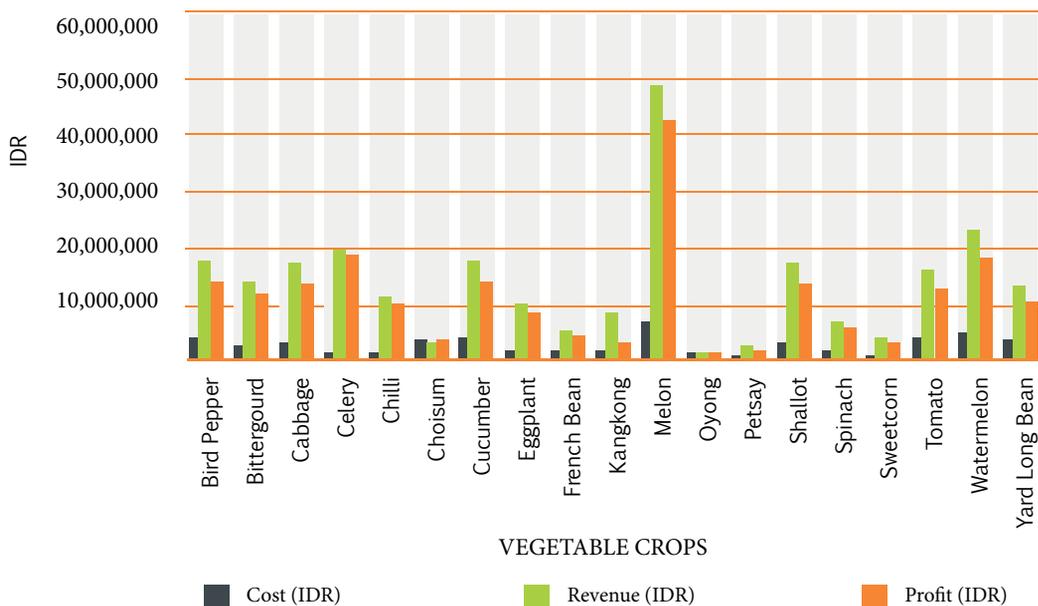
4,535 views/likes in social media (FB, IG, YouTube) and 12,000 views from online/local news.

DEMO PLOTS

The top 5 of profitable crops in our area were **Melon, Watermelon, Shallot, Bird Pepper, and Yard Long Bean.**



Demoplots Profit in 1,000 Square Meters



TRAINING OF FARMERS

Our team has conducted 198 training of farmers (ToF) which were carried out to a total of 2,980 farmers.



The topics we have delivered are :

- **Basic seedling nursery**
- **Land preparation**
- **Fertilization**
- **Crop protection**
- **Farmers' safety.**

Each farmer group gets at least 3 ToF meetings to deliver those topics.

The field staffs distribute the crop guides and other printed materials which are related to the training topic

They use field tools such as: pH meter, sprayer, pesticides safety gear, flipchart, and projector to explain and practice the ToF topics

FARMERS FIELD DAY (FFD) AND MINI EXPO

Field Day event will be held when all of the crops are in the optimum period (ready to harvest).





We invited at least 60 farmers for FFD and 120 farmers for mini expo, to visit our demoplot

We delivered the information about the demoplot crops, the GAP, and the technology applied through presentation, posters, banner, crop guides, and videos

We also conducted training of farmers during the field day events with the specific topic

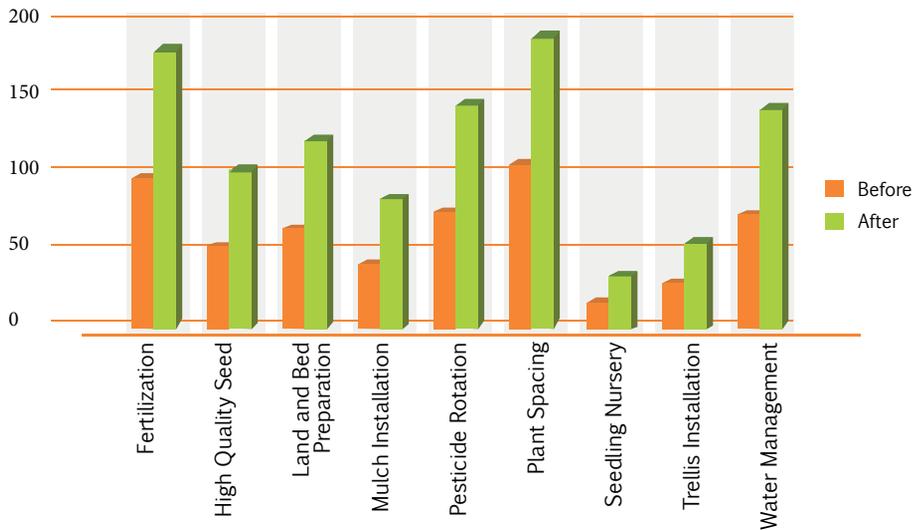
We have conducted 17 Field Day events in Eastern Indonesia area. As many as 2,033 participants attended field days and mini expos.

PROJECT IMPACT

GAP ADOPTION

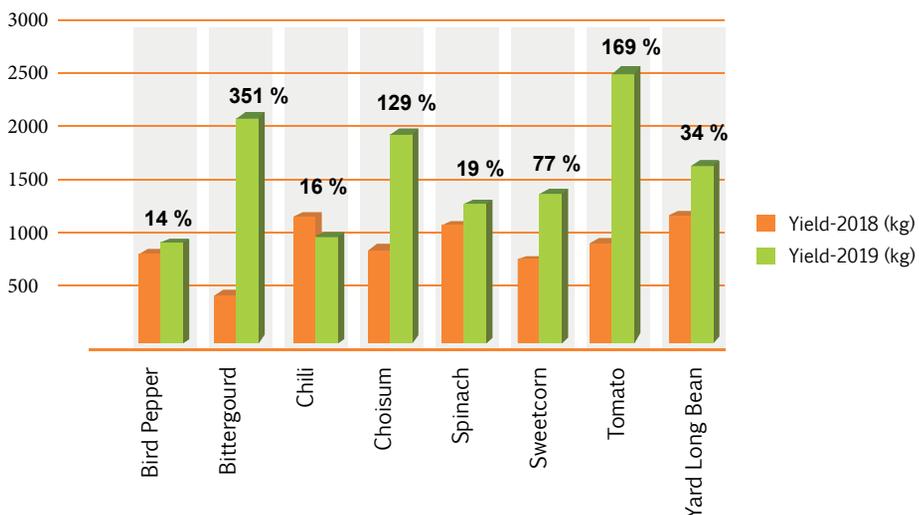
We did intensive knowledge transfer activity to the farmers during our project period.

We saw that there are farmer's skill improvements after they receive new knowledge about Good Agriculture Practices



High quality seeds selection, plant spacing, trellis installation, land preparation and water management were the top 5 GAP that adopted by the farmers in Eastern Indonesia. We gave advice to the farmers to use the pesticide based on the plant needs, and pesticide regulation.

YIELD INCREASE (%)



Choisum, bittergourd, and tomato have significant yield increment (more than 100%) it can happened because those crops were planted with GAP, and in the right season.

MONTHLY ADDITIONAL INCOME %

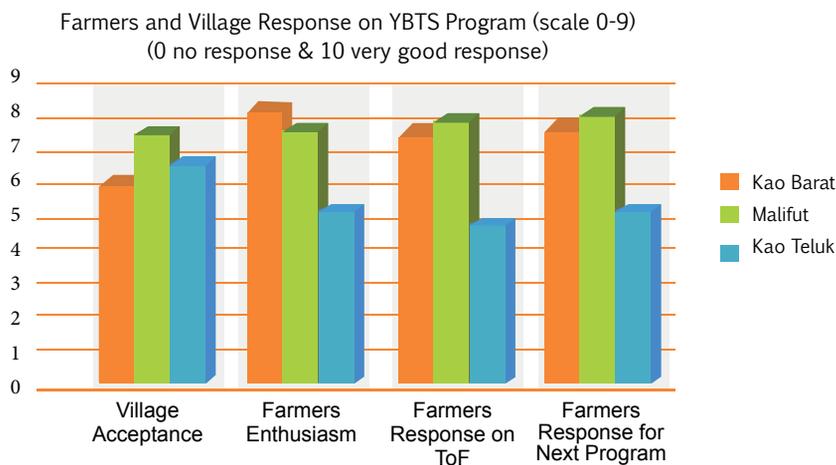
NO	AREA	Avg Land Size (sqm)	Avg Monthly Income (IDR)	Avg Add Income (IDR)	% Add Income
1	Nabire	412	4,125,000	1,005,813	24.38
2	Maluku Tengah	372	3,250,000	2,127,181	65.45
3	Biak	317	3,500,000	1,356,664	38.76
4	Kao Barat	188	3,005,714	861,173	28.67
5	Malifut	282	1,938,067	1,100,250	56.77
6	Kao Teluk	186	3,057,619	678,847	22.20

Based on demoplots with key farmers in Papua (Biak, Nabire), North Mollucas (Kao Barat, Malifut, Kao Teluk) and Mollucas (Central Mollucas) farmers got additional household

income contribution from vegetable farming; 22 up to 65 % to their average monthly income.

The vegetable farming in Eastern of Indonesia is a potential business to support the household income, and absolutely as a main income as well. If the farmers applied GAP, they will get the better yield and income, because the farmers often got a good price in Eastern Indonesia market area..

FARMERS GROUP AND VILLAGE SATISFACTION IN NHM AREA



Malifut subdistrict has the highest village acceptance and farmers response on ToF and for next sustainable program. Farmers in Kao Barat show most enthusiasm to join horticultural development programs from YBTS and NHM. In Kao Teluk, we need to conduct more extension program and discussion with village and subdistrict leaders to make more interesting programs for farmers.

FARMER'S TESTIMONY

“

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

**Mama Yukke
Ceram Island**



“

We are very proud with YBTS, almost 1 year the field staff (Rika) has been accompanying the new farmers here and we have seen the positive impact in better yield and income for the farmers. We will support the farmers to enlarge their vegetable farms, at least 6 (six) new farmer groups are ready for growing the vegetable crops in Morotai Island

**Sherly Laos,
Head of Family
Welfare Program in
Morotai Island**





“

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

**Amalun Ali, Malifut
North Halmahera**



“

We started the youth group in Waharia Village with 8 members. After 3 months, we already have the GAP knowledge and implemented GAP in our own land

Musa Yuweni
(center in the picture)
Nabire Regency



**WOMEN EMPOWERMENT
IN ACQUIRING FARMING
SKILL AND GENERATING
INCOME**

03

The women in Eastern Indonesia have a potential to grow vegetables and to gain income.



We started with leafies vegetable to make new women farmers become more interested in vegetable farming.

Leafies vegetable can be grown in open soil with a simple raise beds or with media mix in crop boxes. It can also be harvested in 2-3 weeks' time. The women farmers who have been growing leafy vegetables are mostly new farmers.

Women farmers have more time and teamwork in growing vegetable than the men. They also can be a vegetable seller when they have some harvested crops.

Leafy vegetables are very easy to plant – not only by small holder farmers but also by women or anyone by simply sowing leafy seeds in homeyards, polybags, or a more recent approach of vertical garden

ACTIVITIES IN EASTERN INDONESIA

- a) In 2019, we have trained 1,128 women farmers and women from family welfare program (PKK), and 21 % of them have been growing vegetable on their own land.
- b) The existing groups started to grow other crops, such as Cauliflower, Cabbage and Tomato
- c) Our Field staff also made a collaboration with government field staff (PPL) to deliver 4 GAP topics to them.

NO	AREA	Nb. Trained Woman Farmers	Nb. Vegetable Grower	Avg Land Size (sqm)	Avg Profit per Month
1	North Halmahera	530	71	296	821,538
2	Central Mollucas	221	65	283	1,332,917
3	Nabire	178	31	250	610,250
4	Biak	199	74	225	765,000
TOTAL		1128	241		
Percentage of women farmers who planted vegetables : 21.37 %					



NORTH HALMAHERA

This picture is the members of women farmer "Kamboja" who already have the skills in tomato farming.

In this regency, we have trained 530 women. As many as 71 out of 400 have been growing vegetable on their own land, and on their group farm.

Our field staff delivered 4 topics training regarding GAP to them

During our collaboration with Nusa Halmahera Mining, we also gave extension service to the women (Family Welfare Program /PKK).





WEST TIMOR, INDONESIA

Mrs. Debora Duru (44)

Mrs. Debora Duru (44), has been working as a PPL (Field Extension Officer) for 16 years at Agriculture Service of Timor-Tengah Selatan, West Timor, Indonesia. In Karang Siri village of Soe township, one of her working area assigned by the Government, she keeps motivating women to gain farming knowledge and skills and to have a role to support their increasing household needs in income. Mrs. Debora attended a training for the trainers held by our team Junike Susan Medah, Febrianus Mado, Hermina KH.Supadi, Blasius Halek in 2018-2019. Since then she is evenmore hands-on in helping women farmers in her working villages; her passion is being realized that women play an important role in farming to support family livelihoods



"I'm delighted that there is a clear improvement. On the average they can send their children to universities and start building semi-permanent houses," said Debora.

The presence of YBTS in her working area is very helpful. The most benefit perceived is the correct nursery process taught by YBTS and the farmers get better result from it. Now 85% seeds may

survive, in the past it was only 65%. "I'm very enthusiastic working together with YBTS because both of us develop farmers," she expressed her thought.

She hopes that the trainings may change the farmers' ways of working, especially build their skills, knowledge on vegetable cultivation and increase their income. (*)



SANGIHE ISLANDS, NORTH SULAWESI

Mama Rosmin

In the village of Lenganeng, North Tabukan, in the Regency of Sangihe Islands, North Sulawesi; 40% of horticultural farmers are female because their husbands work as fishermen, copra workers, construction workers and blacksmiths. For this reason, these women then form a farmer group of 15 mothers to grow various vegetables and spices. Part of the harvest will be cooked by themselves and the rest are sold to support their household income.

After completing household chores, these women will be carrying bamboo baskets to work on their fields. Mama Rosmin Harinduangi, the head of the Lestari 2 Farmer Group, one of the mothers who is actively growing vegetables and tubers. Especially leafies such as choisum, which she continues to produce for the availability of leafies in Sangihe. This received the attention of the Sangihe Regency Government, that in 2019, Mama Rosmin received a token of appreciation for her achievements as a farming mother.



"I can't sit still at home, so when my husband works as blacksmith, I go to the field. The Choisum harvest from this 800 sqm field can give me nett income Rp 3-4 million per month."

CENTRAL MOLLUCAS

Visitors of Women Farmer School (SMB) Expo, in Jerili village

YBTS field staff did collaboration with a church in organizing Farming School for Women (Sekolah Mama Berkebun).

This school is located in Jerili Village, TNS Subdistrict, Central Mollucas. The purpose of this school is to facilitate the women in order to know how to grow vegetable

As many as 221 women farmers have been trained by YBTS' staff, with 65 of them have been growing vegetables in their home yard.



NABIRE

Women in Samabusa Village (Nabire) preparing the land, seedling, and transplanting the seedling

We also introduce the planter for kangkong, and YBTS field staff did a collaboration with PPDM program. PPDM is a collaboration program between International Fund for Agriculture Development (IFAD) and Papua & West Papua Government.

The main purpose of this program is to reduce the number of poor household in Indonesia and to optimize the village budget use through the rural activities.

We did vegetable promotion in Nabire Regency since 2017. in 2019, we have trained the GAP module to 178 women farmers. 31 of the women farmers have been growing vegetable on 50-300 sqm land.



BIAK NUMFOR

Mace Kapitarauw transplanting the seedling in Warsansan Village

We also did collaboration with the local government in Kawasan Rumah Pangan Lestari (KRPL Program). KRPL is the Sustainable Home Gardening Program where the home yard has the function to produce tubers and vegetables.

At least 74 women farmers in Biak have been growing the vegetable (leafies, tomato, cabbage) on their home yard.

During our activities in Biak in 2019, we trained 472 farmers, and 199 out of 472 are women.



TANGERANG

KWT Anthurium: From women's empowerment to food security. Nambo Jaya, Tangerang, Banten.

Initiated with a program from local government to improve food security, a female group in Nambo Jaya was established. YBTS field staff has been supporting the community since early 2019 regarding vegetable cultivation and GAP through series of trainings, demonstration plots, and festivals.

Providing Information and Communication Technologies (ICTs) with SIPINDO powered by SMARTseeds App has enabled the 40-member female group to move from subsistence farming into small-scale commercial farming, being able to produce more than they need for themselves.

KWT Anthurium have also become a model to other groups to grow their own vegetables and contribute to the household income as well as improving food security.





INTEGRATED LIVELIHOOD PROJECT



Anton Jurgens Fonds
Act social, think business

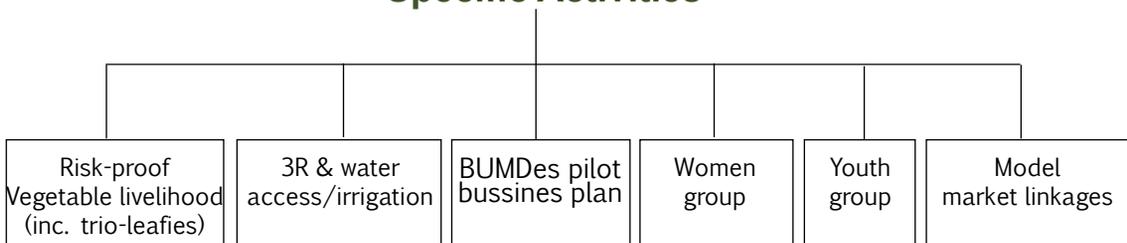


04

BACKGROUND OVERVIEW AND OBJECTIVE

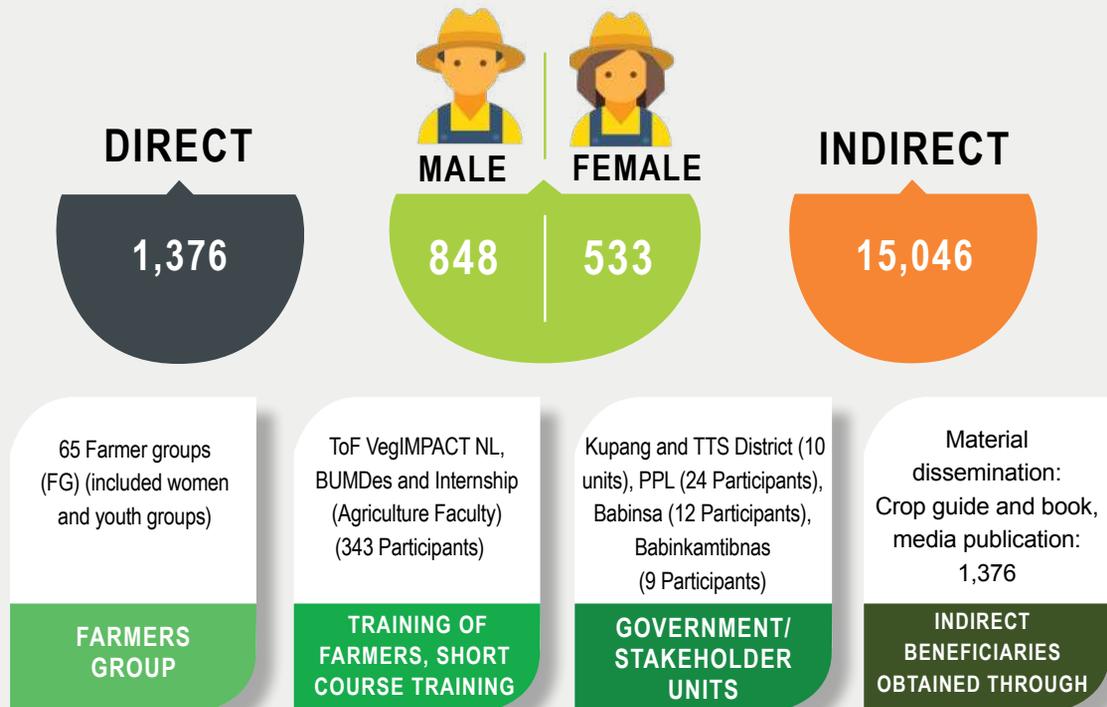


Specific Activities



OUTREACH 2019

BENEFICIARIES



ROLE AND SERVICES OF PARTNERS/ STAKEHOLDER

FARMERS/ FARMER GROUP

- Applied and shared knowledge and skill of GAP/3R
- Division on the role between man and women (task and responsibilities)
- Extend farm size on vegetables planting
- Planting scheme a year (2 times/year)

VILLAGE LEVEL

- Allocation of village funds for agriculture sector
- Motivations to other FG's for growing vegetables
- Village program: demo plots, Expo and BUMDes management and business
- Planning to conduct mini expo independently
- Contribute to village regulation (contingency plan)
- Adoption of 3R and GAP

LOCAL GOVERNMENT, BABIN KAMTIBNAS BABINSA

- Draft of parliament regulation (Water Conservation)
- Collaboration of FG's capacity building
- Retention Basin (embung) planning for agriculture
- Replication Demo plots
- Spreading technical knowledge of GAP and 3R to more farmers / farmer groups

PRIVATE SECTOR

- Support to provide agriculture input
- Collaboration for market linkage
- Information and distribution of product
- Provide subsidized fertilizer

PROJECT RESULTS

FARMER GROUP AND MAIN ACTIVITIES

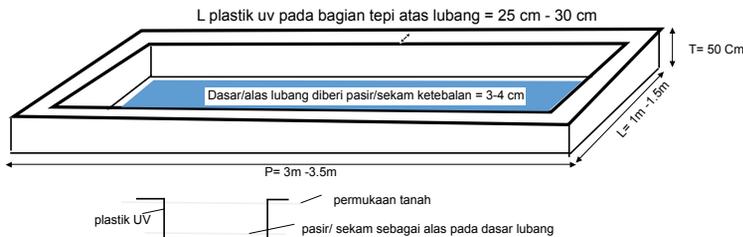


- Total: 65 FG with 1036 members (male: 624, female 412)
- Core demo plots 2019: 23 demo plots = 116.92 are with 7 crops
- Plasma demo plots: 50 FG = 1223 sqm with 9 crops
- Replication demo plots: 34 demo plots, 8300 sqm with 13 crops
- Integrated with conservation (soil and water)
- 3R activities are focused at each demo plot and water sources area as way of supporting the availability of water on farm

WATER ACCESS FACILITY CONSTRUCTION

- Water access infrastructure based on needs and sustainability (**24 FG's**) including: pipe installations, UV-plastic water storage, drip irrigation, and pump machine installation.
- Farmer Groups are maintaining water access to irrigate farmlands and contributed of local material

Simple Water Storage

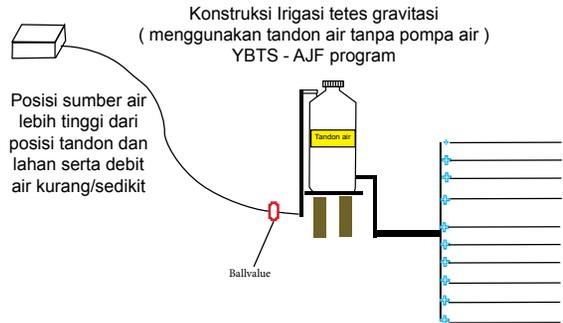
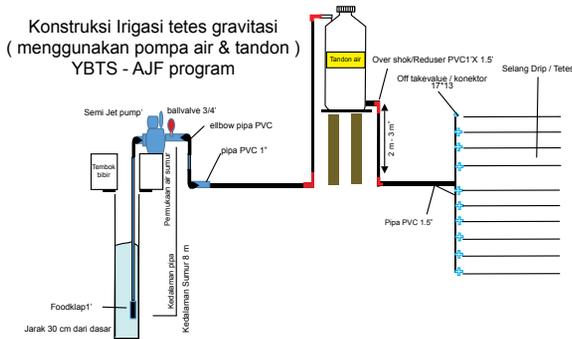


- Installation of UV plastic and pipe is to watering vegetables easily and closer to the crops
- Total pipe installation: 2028 m, total plastic UV: 300 m, Hose: 450 m

Ket. Gbr :
 Penampung air menggunakan plastik UV dengan 20 micron
 L plastik UV 3 m
 Ukuran Lubang penampung
 Panjang Lubang 3 m - 3,5 m
 Lebar Lubang 1-1,5 m
 Kedalaman Lubang 50 cm

Drip Irrigation

- Drip irrigation (3244 m) as a model for introduction of technology and provides water for 9 Farmers Groups with water pumps, and 6 FGs with manual drip irrigations



BEST PRACTICE

3R and Water Facility Construction



BEFORE INTERVENTION

There was no water source in the FG Farm. They only planted kangkong, choisum and celery on a **500 sqm** land

INTERVENTION

Intervention in the form of infiltration holes and water traps made for 2 years from May 2018 to 2019, They can now plant on a **1,500 sqm** land.



Simple Water Access

LOCATION



Feuknoni Fg
Cendana urban village
TTS

BEFORE INTERVENTION

Farm size 5 are for 14 members. No planting during dry season. Only plant kangkong and mustard.

INTERVENTION

Piping system 50 meters from water sources. Provide UV plastics 4 meters for 2 storages. Planting all season for 6 crops (kangkong, mustard, tomato, string beans, cucumber and chili). Total farm size 30 are for 14 members



Water Construction (Drip Irrigation)

LOCATION



Laharoi FG Farm
Kesetnana Village
TTS

BEFORE INTERVENTION

New Farm.
there was no planting
of vegetables
Water tank 1100 L
owned by farmer

INTERVENTION

Drip irrigation hose:
Factory made: 300 m (**IDR. 1,031,400**).
Accessorised **IDR. 200,000**
Total: **IDR. 1,231,400**
Watering time is reduced by 3 hours
with farm size 800 sqm



CELEBRATE FARMERS' SUCCESS

- Farm size : 7716 sqm with 9 crops (12 varieties) managed by 5 FG's in Kesetnana , Oelbubuk and Fatukoko
- Expo was officially opened by Bupati at Oelbubuk and Fatukoko villages and Vice Bupati of TTS district at Kesetnana village
- 292 People attended the event at Oelbubuk Village for Medium Expo-TTS district held on 26 June 2019 and 309 people attended Independent Expo at Kesetnana Village TTS district held on 4 December 2019
- FFD (10 times) attended by 1202 people in 10 FG's demoplots
- Many parties (government, private sector, NGO/INGO, FG's, Police and Army division)



Mandiri Expo - Desa Kesetnana - TTS



Expo in Fatukoko Village : selling fresh vegetable



Medium Expo - Desa Oelbubuk - TTS



**FFD in Oesusu Village :
Support from Local Government.**

BEST INCOME AND YIELDS OF FARMER GROUPS



Tomato - Betavila F1

Farmer Group : Laharoi Kesetnana
Plant : 1,800
Cost (IDR) : 1,559,500
Yields (Kg) : 4,803
Revenue (IDR) : 14,410,000



Melon - Aramis F1

Farmer Group : Toktit Oesusu
Plant : 1,432
Cost (IDR) : 1,614,930
Yields (Kg) : 518
Revenue (IDR) : 10,350,000



Tomato - Betavila F1

Farmer Group : Meoamaf Hane
Plant : 1,600
Cost (IDR) : 1,539,130
Yields (Kg) : 5,238
Revenue (IDR) : 13,955,000



Curly Chili - Kastilo F1

Farmer Group : Fetonoel (Fatukoko)
Plant : 1,002
Cost (IDR) : 855,210
Yields (Kg) : 380
Revenue (IDR) : 10,278,000

FARMER'S SUCCESS STORY



Sofia Pingak - Leader of BIFE AMEPUT Farmer Group
Cendana Urban Village – TTS District- NTT

“Plant Vegetables Throughout the Season”

- Work with Women Farmers Groups and motivate members to grow vegetables.
- Always do crop rotation, starting from tomatoes, beans, cucumbers, pakcoi and especially leaf vegetables regularly.
- Has an income of at least **IDR. 2,500,000 / month.**
- Planting throughout the season because of the benefits of growing vegetables



Yumina Toto, Leader of Batukarang Farmer Group
Kesetnana Village

Kesetnana Village - TTS District NTT “Great Farmer”

- She is a formidable female farmer who is actively growing vegetables
- Main crops in her farm: tomatoes, watermelons and big chili
- Planting 2 times a year with an income of **IDR 30 million /** season.
- Be motivated to keep learning about vegetable cultivation.

Simon Neolaka :
“Farming Brings Success”

- Get guidance from YBTS and learn from seedbed to harvest.
- Knowing the right application in vegetable cultivation
- Harvest of tomato (Betavila F1) in December: 1750 kg with an income of **IDR. 21 million.**
- Farmer group focus on growing water spinach, tomatoes, mustard greens and big chili.
- Has a planting schedule and crop rotation



Leader of TAHATOEN Farmer Group
KUATAE Village – TTS District- NTT

Silvester Aby
“Forwad Together Through
Farmer Groups Activities”

- Working in groups has begun to show benefits, since YBTS and PPL provide assistance
- Currently understand about the cultivation of bird chili pepper (Nirmala F1)
- YBTS provides a lot of knowledge and is easy to understand
- Each group member expands the land and grows several types of vegetables



Nkemesse Farmer Group
Benlutu Village – TTS District- NTT

“Proud to Be a Vegetable Farmer”

- Learn to grow tomatoes from YBTS since 2017 and is active until now to grow vegetables with members of group
- Planting beans, bittergourd and tomatoes in 1 year
- Each harvest earns **IDR. 8-9** million per season
- Get support from her husband in planting vegetables because there is additional income



*Damaris Mella, Leader of Tafeun Monit Farmer Group
Kesetnana Village – TTS District- NTT*



*Suyling Benu, Young Farmer-Nekmese of Farmer Group
Kesetnana Village – TTS District- NTT*

“Farming for the Future”

- He is a young farmer in the Nekmese group and is currently 30 years old
- Bachelor of Engineering but is currently learning about vegetable cultivation for the future
- Planted melons and earn **IDR 8 million**, bird chilli with income of **IDR 13,200,000** and still harvesting
- Together with other members of group arrange the planting scheme so that it does not over produce

PROJECT TEAM



Junike
Coordinator



Febrianus Mado
Knowledge Transfer Officer



Elis W. Kitu
Project Officer



Blasius Halek
Project Officer



Hermina Supadi
Project Officer



Ary Ch. Balelay
Project Officer



Aprianus Asbanu
Extension Officer



Welem Andi Tana
Extension Officer



Leonard Sonbai
Administration and
Finance Support

Sipindo

Powered by apps.



GEODATA FOR AGRICULTURE AND WATER

SMARTseeds Information Services



05

PROJECT AREA

East Java Province, Central Java Province including Yogyakarta,
West Java Province, Banten Province, Lampung Province

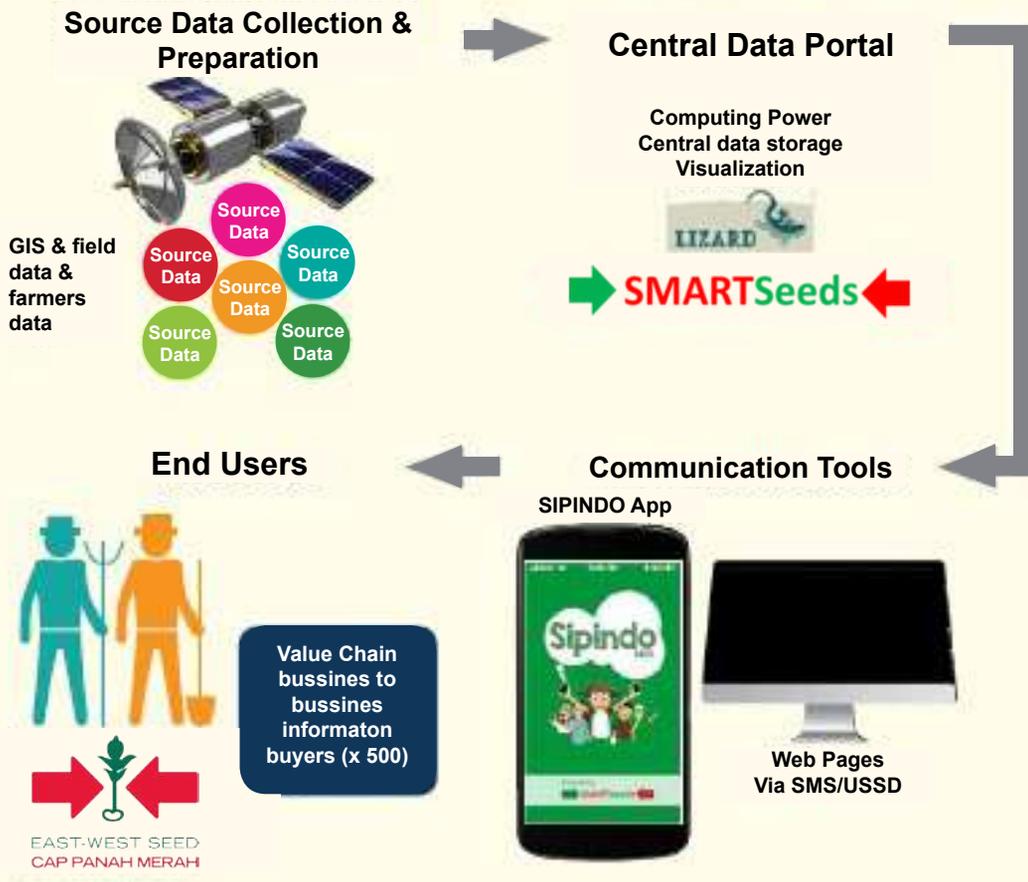
Implement a sustainable information service that supports farmers to increase their production, income, food security and to reduce the inputs of water, fertilizers and pesticides.

Target smallholders: 100,000 vegetable farmers

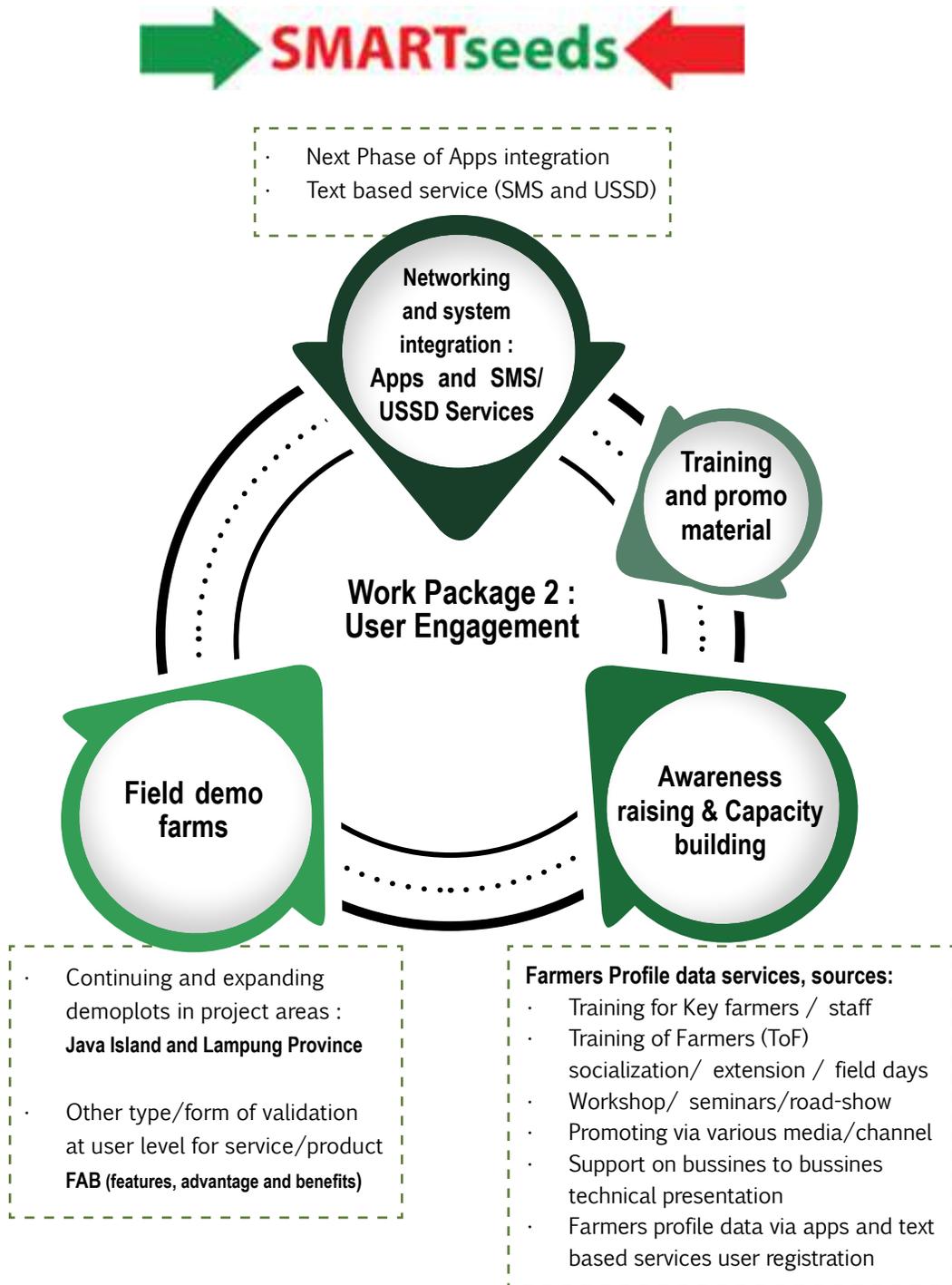
Sustained services: Social Enterprise after project



SMARTseeds information flow



EWINDO/YBTS MAIN ROLES IN SMARTseeds



SMARTseeds Partnership Activities



Agreement on the Social Enterprise establishment to sustaining the SMARTseeds information services



Soil sampling & training on soil rapid test with experts' team from IPB University and Akvo





Sipindo
Powered by apps.

Experts' team from Gadjah Mada University (UGM) as pest and disease information data provider for SMARTseeds



EWINDO – Nelen & Schuurmans collaboration on data processing

Climate experts' team from IPB University as weather data provider for SMARTseeds



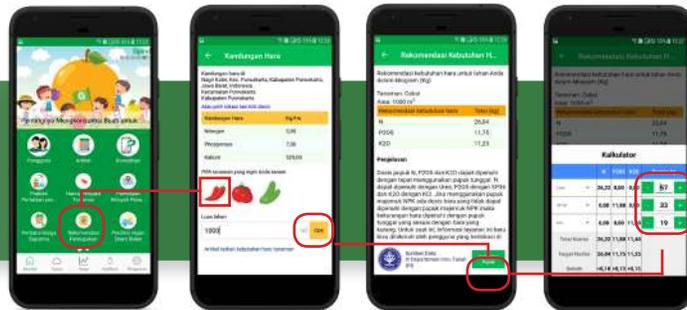
Information Services : Sipindo apps

The objectives of SMARTseeds Project are to develop and deliver information services that provide a location-specific recommendation for vegetable farmers, particularly chili, tomato and cucumber farmers based on a combined use of satellite data and field survey, to help increase productivity and at the same time reduce cost for input. Based on the baseline survey, SMARTseeds Project provides the following information services needed by farmers:

- Soil nutrients and fertilizer recommendation
- Climate/seasonal forecast
- Daily/short-term weather forecast
- Pest and disease advice
- Irrigation advice

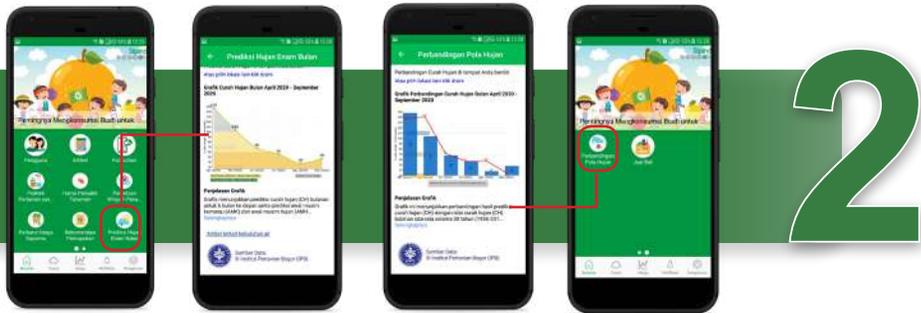


1



Soil Advisory

Soil advisory feature is generated from soil sample results which are analyzed in the Laboratory of the Department of Soil Science IPB University 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 was initially available for East Java, Central Java, Yogyakarta and Lampung. Along with some improvement on the second phase of information services, Soil Advisory information is currently covering the whole Java Island and Lampung.



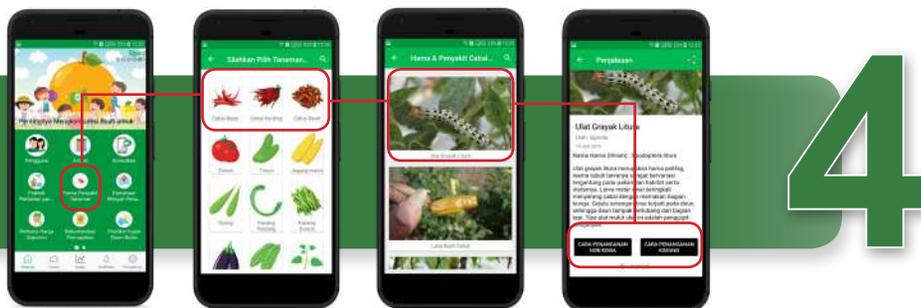
Rainfall Prediction and Comparison with 30-year Rainfall Historical Data

The seasonal climate forecast is generated using the output from global climate models for seasonal climate predictions. These results were statistically modeled 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 30-year climate data in the separate features. The seasonal climate and rainfall prediction with 30-year historical data are available for all of the southern part of the equatorial line of Indonesia.



Daily Weather Forecast

The Daily Weather Forecast feature was added into Sipindo powered by SMARTseeds on the second phase. It provides daily weather information for maximum the next 9 days with 9 km spatial resolution. This feature is a location specific information including rainfall amount, temperature, wind speed and wind direction information.



Pest and Disease Information

In cooperation with the expert team from Gadjah Mada University (UGM), EWINDO has further developed the Pest and Disease database to provide both chemical and non-chemical advice to farmers in order to control pests and diseases.

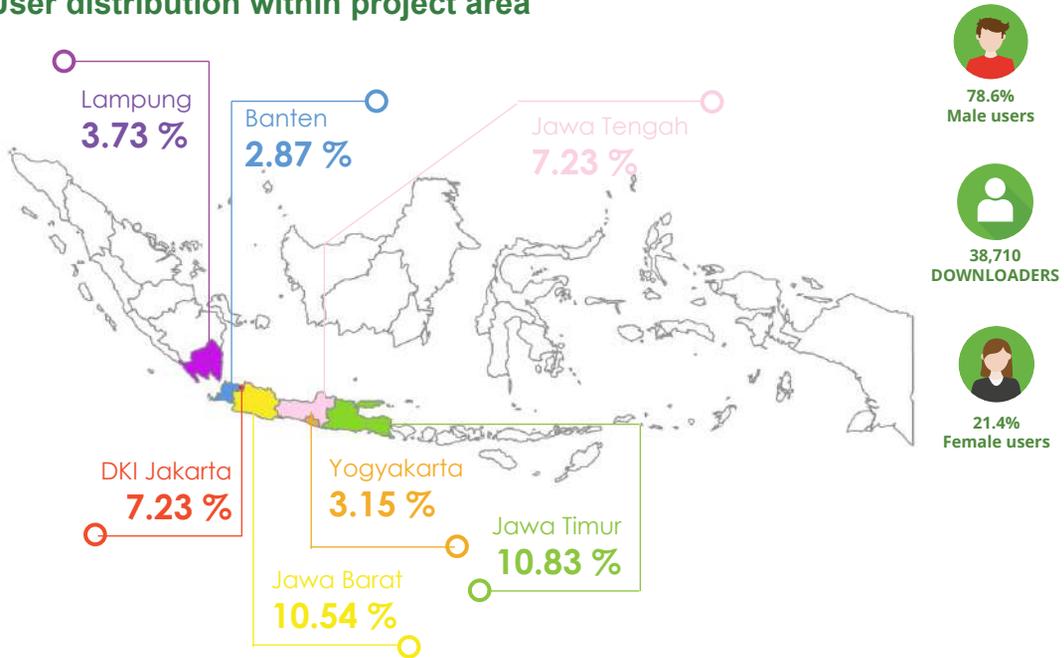
OUTREACH 2019

Beneficiaries

Capacity Building

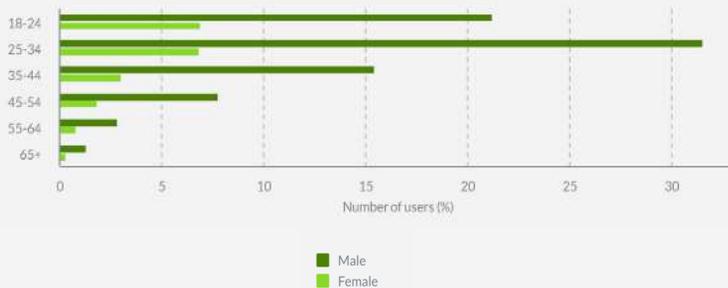


User distribution within project area



Achievement on social media

SIPINDO users by age



- @sipindo.official
1,304 Followers
- @sipindo.official
4,535 Followers
- @sipindo.official
184,900 Viewers



Selogiri, Wonogiri, Jawa Tengah



**Training
of
Farmers**



Malang, Jawa Timur



**Training
of
Trainers**



Wonogiri, Jawa Tengah



Cilegon, Banten



Blitar, Jawa Timur

**Expo and
Farmers
Field Day**

FARMERS' TESTIMONY



“

I applied the Sipindo Application in my cultivation, the results are very satisfying. One of the most helpful features for me is Soil Advisory.

Sipindo provides complete information about nutrients in the land, that way we are able to know the right dose for fertilization. All this time, farmers are accustomed to over cultivating land.

Dwi
Wonogiri, Central Java -



“

Fertilizer recommendation and rainfall prediction features from Sipindo really helped me improving the productivity of my crops. My cucumbers bear fruit earlier and produce more fruits.

Dardi
- Lampung -



“

Sipindo really helps us as housewives and female farmers regarding vegetable cultivation and good agricultural practices. We are able to know how to fertilize with the right dose and to identify pests and disease with IPM control

KWT Antharium
(Female farmer group)
- Banten -

PROJECT TEAM :



Andi Bachtiar
Coordinator



Achmad Pranata
Admin & Finance Officer



Lovian Sinambela
TFO Jawa Tengah



Sudiarto
TFO Banten



Bina Tani
Sejahtera



WAGENINGEN
UNIVERSITY & RESEARCH



EASTWEST SEED
CAP PANAH MERAH

Medium Expo Sayuran
Sangihe 2019

MARI JO TORANG BA KOBONG, DENG MAKANG SAYOR
FOR TORANG PE KESEJAHTERAAN DENG TORANG PE GIZI LEBE BAE



vegIMPACT NL

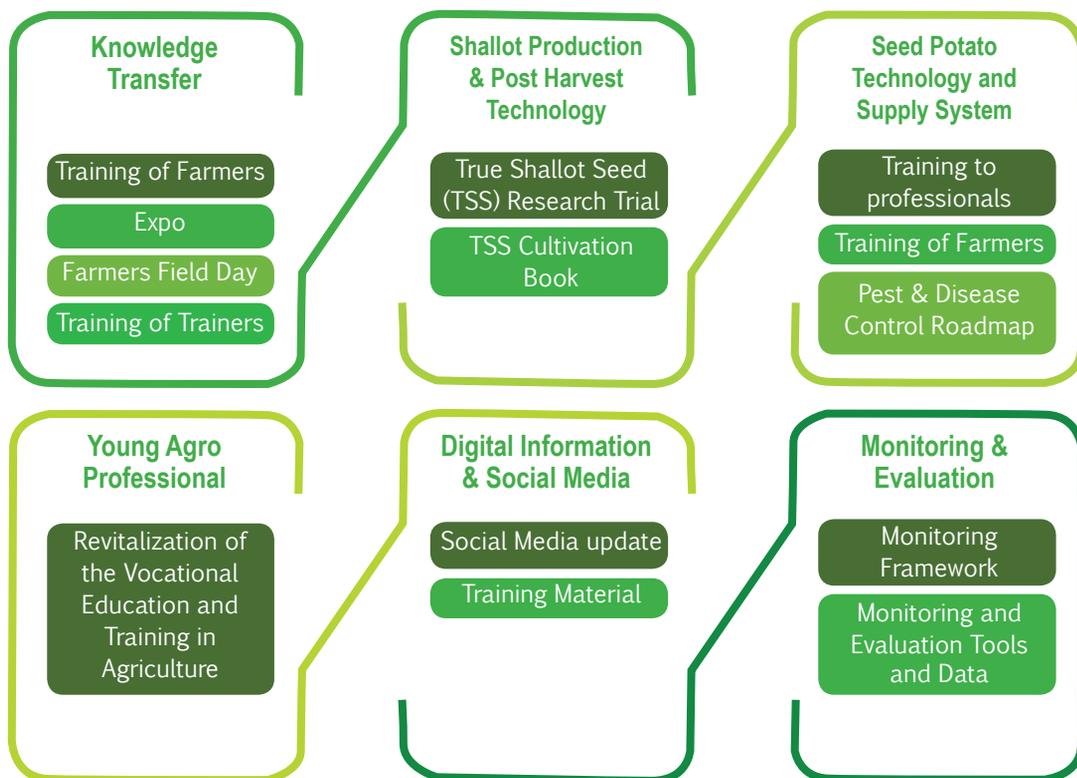
Vegetable Production with Impact Next Level



06

The vegIMPACT NL program builds on the result of previous joint Indonesian - Dutch horticulture cooperation, the vegIMPACT (2012-2017). The addition 'NL' stands for both Next Level and the Netherlands: vegIMPACT NL contributes to the further ('next level') development of vegetable production and private sector development in Indonesia using horticulture knowledge and expertise from the Netherlands and Indonesia. The program is fully supported by the Government of Kingdom of the Netherlands and coordinated by Wageningen University & Research (WUR).

vegIMPACT NL is Knowledge Generation and Knowledge Transfer of 6 Tracks:



YBTS is the main implementing partner of KT, Shallot, DISM, and M&E (2020). The Potato track is implemented by Kenhose (Kentang Hollando Sejahtera). The Young Agro Professional prepares vocational students of agriculture for employment in the agriculture sector. A sector cannot grow if skilled and educated young resources are lacking.

KNOWLEDGE TRANSFER

Gives access to smallholder farmers to receive training and practice on Good Agricultural Practice (GAP). Each farmer is to attend 4 sessions of training with topics:



Seed Selection
Seedling and
Nursery



Fertilization

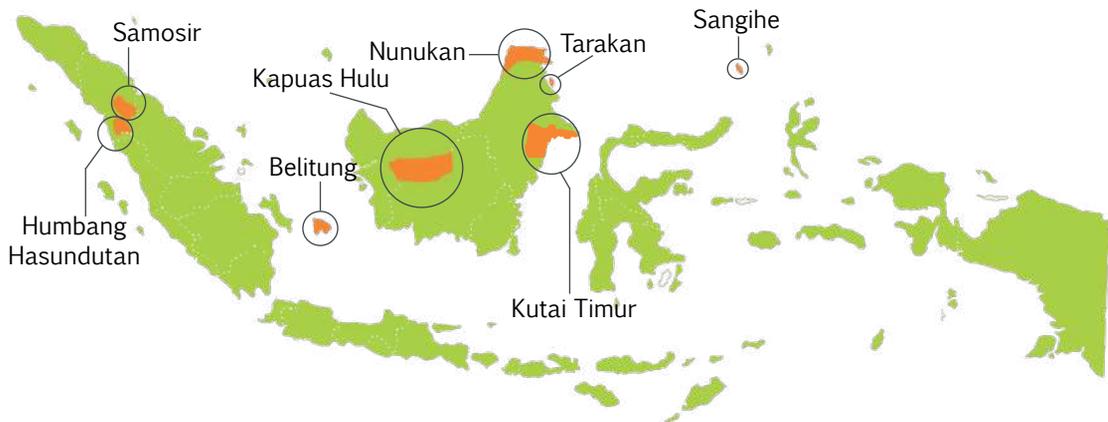


Spraying Techniques
and Farmers' Safety



Integrated Pest
Management

Less Penetrated Market 2018 - 2020



100
PRODUCT
promoters from
EWINDO
& **20**
TECHNICAL
FIELD OFFICERS

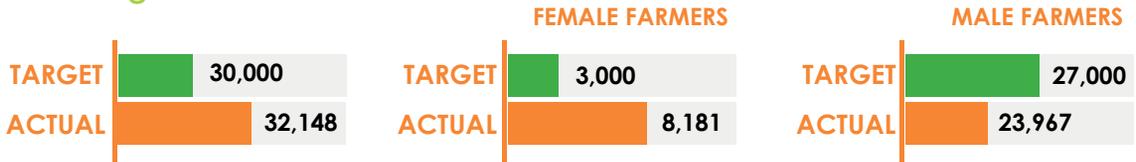
32,148
FARMERS REACHED
THROUGH KNOWLEDGE
TRANSFER (M/F)

8ToT
SESSIONS
WITH
139
PARTICIPANTS

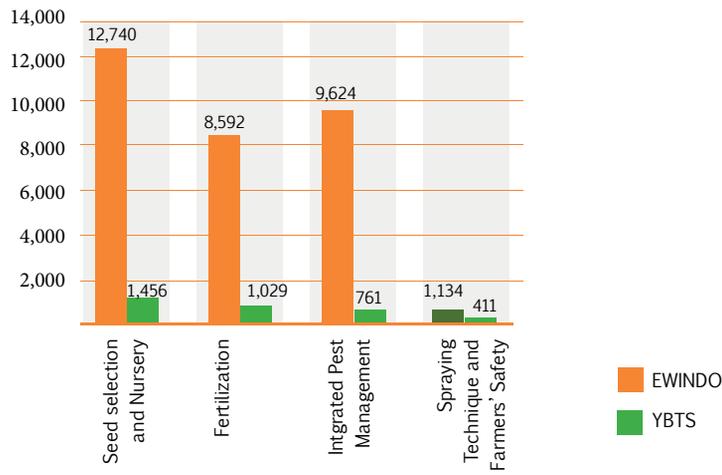
19
EXPOS

OUTREACH 2019

Training of Farmers



Farmers Number per Module



TFO Frinto delivered training of farmers with the topic of IPM to group of farmers in Sangihe



TFO Nisa shared knowledge during ToF in Nunukan



TFO Andre conducted training of farmers in Belitung

Farmers Field Day and Farmer Expo



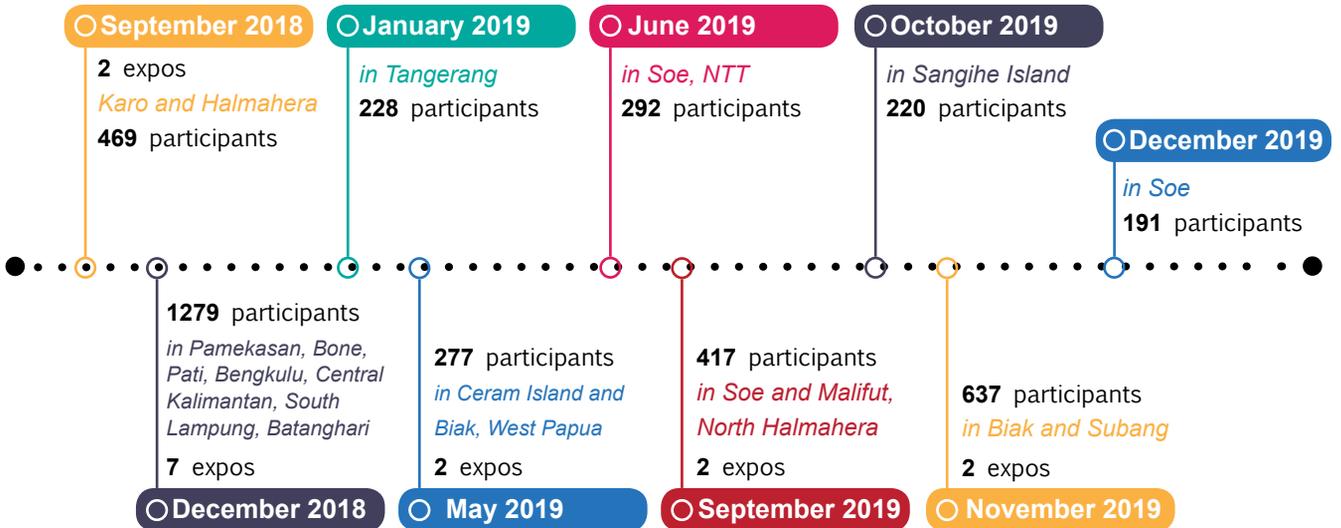
FFD activity
in Nunukan, North Kalimantan



FFD activity in Samosir, North Sumatera



Expo activity in Sangihe, North Sulawesi



Training of Trainers



September 2018

2 ToT

topic **M&E and IPM**

with Trainers from Wageningen University & Research (WUR) : Huub Schepers and Mout de Vrieze

in **Ambon**

27 participants (YBTS field staffs, University of Pattimura Ambon staffs, Marketing EWINDO)



October 2018

2 ToT

topic **Soil Fertility and Monitoring and Evaluation Management**

with Trainers from WUR : Henk Van Reuler, Diep Phan and Johann Bonnand

in **Kupang**



23 participants (YBTS field staffs, Marketing EWINDO, Product Promoters EWINDO, Agronomist staffs of Inti Harapan Kupang)

Training of Trainers



Nov and Dec 2018

2 ToT

topic **Soil Fertility Management**

Nov 2018 with Henk Van Reuler and Diep Phan from WUR *in Cirebon*

Dec 2018 with Huub Schepers and Mout de Vrieze from WUR *in Jember*



46 participants
(Production EWINDO, Quality Assurance EWINDO, Marketing EWINDO)



February 2019

2 ToT

topic **IPM**

with Trainers from WUR : Huub Schepers and Mout de Vrieze *in Medan and Palembang*



43 participants
(YBTS field staffs, Product Promoters EWINDO)

Knowledge Transfer Material

E-learning on GAP: <https://www.vegimpact-e-learning.com/>



KNOWLEDGE GENERATION

True Shallot Seed (TSS) trial research:

- Agronomic practice: impact of different production method and planting distance
- Cost-benefit analysis
- Resistance assessment of Spodoptera exigua and control recommendation
- Postharvest solution and business model ready for market (farmer & company)
- TSS technical guide flyers and TSS cultivation book (2020)



Activities:

- 1 Experiments in Purwakarta and Garut with WUR developed the trial research protocol
- 2 A joint work of WUR, BALITSA, EWINDO, UGM, IPB, and farmers to complete the trial research
- 3 29 March 2019: TSS introduction in Samosir, North Sumatra - a female farmer group, Tani Mekar Sari, was introduced to plant shallot from TSS and practiced nursery
- 4 13 August 2019: TSS Expo at SMKN 12 Garut, West Java - attended by all students, 139 farmers and 14 agriculture extension officers (PPL) surrounding Garut
- 5 14 November 2019: TSS Capacity Building, Technology Adoption, and Field Visit at Ewindo in Purwakarta for Researchers and Lecturers Nationwide. A joint activity with EWINDO and PERIPI (Indonesian Plant Breeding Science Society)



Field Visit TSS Technology Adoption at EWINDO Purwakarta



Development of TSS Trial - from transplanting to harvest



TSS Trial at SMK Garut



STRENGTHENING link and match

To promote agriculture and agribusiness as promising livelihood strategy and to improve the image of farming for the young.



26 November 2019: Expo and Knowledge Transfer at SMKN 2 Subang :
Product promoters EWINDO, Students, and Farmers discuss GAP together.

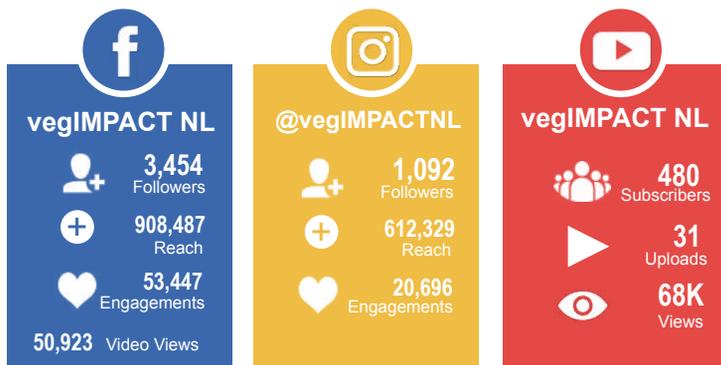
“Applying Good Agricultural Practices in Strengthening Link and Match of Vocational Education and Training in Agriculture”.

Attended by **360** participants of farmers, students, teachers, agriculture extension officers, organizations, and private sectors. Activities included visit to demo farms (4,400 sqm were planted with 36 varieties of vegetable crops) and KT stands, ceremonial harvest, and GAP knowledge transfer to students and farmers utilizing vegIMPACT NL training materials.



DIGITAL INFORMATION AND SOCIAL MEDIA (DISM)

To create and elevate awareness of the vegIMPACT NL project digitally, we used 3 most utilize digital media in Indonesia, i.e, Facebook, Instagram and YouTube. We develop these platforms and combine our strategic program messages with visually-engaging media such as tips and tricks, instruction videos, as well as animated videos from the above said materials on Knowledge Transfer Track.



+ TOTAL FOLLOWERS
7,377
 From 3 social media :
 Facebook, Instagram, YouTube

TOTAL ENGAGEMENTS
134,148
 Engagements include likes,
 comments and shares on posts

TOTAL REACH
1,020,898
 Reach is when a post is visible
 in a social feed. This is how
 many people saw
 vegIMPACT NL across all social
 media channels

The SDG and Our Contribution



WHAT OUR FARMERS SAID

Agustinus Faidiban is one of our farmers in Biak, Papua. His father is a long life learning farmer but as time goes by, the father is getting older. Even though Agustinus has no background in agriculture because he studied nursing, now he wants to help his father by taking care of their land and successfully involving the neighbours to learn agriculture by holding an Expo.

Agustinus Faidiban, S. Kep
*Kampung Kajasbo, Distrik Biak
Papua*



“
Sebagai anak petani,
seharusnya kita
menggantikan orang tua
bekerja di lahan, terutama
jika umur mereka sudah di
atas 50 tahun.

Agustinus Faidiban, S. Kep
Kampung Kajasbo, Distrik
Biak Timur, Papua

Before becoming a farmer, Willy Neolaka was a motorbike driver in his village in Soe, East Nusa Tenggara. But since the monthly income was not balanced, he decided to join the Binatani Sejahtera farmer's group. Months after months he realized that being a farmer is a fulltime job which can fulfill his household needs. Even better, he could now send the kids to school and his life was getting way much better.

Willy Neolaka
Soe, NTT



“
Hasil bertani yang kami
psarkan, digunakan untuk
memenuhi kebutuhan
rumah tangga dan
menyekolahkan anak-
anak kami
menanam hortikultura
dapat sangat
menjanjikanbagi masa
depan kehidupan kita

Martinus Longa was an annual crop farmer back then. After Yayasan Bina Tani Sejahtera came to his village in Toliwang, North Maluku, he decided to change his farming from annual crops to produce vegetables instead. From that point, he has more crops to sell to the market as well as for his daily needs.

Martinus Longa
*Desa Toliwang, Kab Kao Barat
Maluku*



“
Mari kita sama-sama beralih
dari petani kopra* ke
petani hortikultura, supaya
kedepannya dapat menunjang
kebutuhan keluarga kita

We are vegIMPACT NL



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Project Coordinator



YOUTH

07

A decreasing agricultural labour force and lack of well educated or skilled human resources are a great barrier for both the private and public sector to develop the horticultural sector in Indonesia, now and in the future. Many rural young migrate to urban areas searching for employment opportunities and prosperity. While in 1991 more than **50%** of Indonesia's population was employed in agriculture, currently it is **30%**.

The image of farming is rapidly deteriorating and considered physically heavy, little attractive and lacking behind in applying the latest technologies. Aimed at making green education more attractive for the young, it should focus at improving the image of farming and promoting farming as a viable means to make a living under the rural young.

Through emphasizing on the agribusiness side and technological innovations, the image of farming is presented as an attractive proposition to the young. In addition, it also addresses gender in agricultural value chain, and it connects organizations with similar goals to combat aging in agriculture.

Source: Inception Report vegIMPACT NL



KNOWLEDGE TRANSFER

Youth Enohonis – Cendana – South Central Timor

Livelihood Opportunities for the Youth

Being a farmer might not be attractive to some people, especially young people. They prefer to seek jobs in town or even go abroad for a fortune. This was the situation of a youth group in Cendana village, until a local Church pastor gathered and motivated them to work something productive.

These youth, 25 of young men and women, previously had various jobs, such as Ojek (motorbike taxi) driver and shopkeepers. After seeing around their village there was a farmer group who succeeded in vegetable farming with good production and income, they were even more motivated to follow such success.

This youth group was working together starting with a decent tomatoes demo plot of 560 square meters with 1600 plants under technical guidance from YBTS field staff. For this crop season they earned Rp 6,175,000 (US \$ 457). They saw this result as quite promising furthering livelihood at their own village. They see profound opportunity in vegetable production to bring improvement in the economic life of farmers. They continue to work together as a group and any member can start his/her own with the support of respected elders. They then proposed to the local government asking for a favor in arranging marketing channels for their products.



SMK PGRI KILOBESA, Boentuka Village, Timor Tengah Selatan *Vocational Agriculture Students: Teaching Farm*



Teaching Farm for the Students

The 47 students with 12 teachers at the SMK PGRI (a vocational agriculture secondary school) are so engrossed in learning and practicing about vegetable production. The school and YBTS team established crop demo plots (tomatoes, cucumbers, chili, eggplant and kangkong) as a kind of Teaching Farm

They succeeded in earning income of IDR 9,290,000. The students told this story to their respected parents who feel very happy and proud of their children. They continue to learn and practice by applying good techniques recommended by YBTS field staff.

SMK N 1 KADEMANGAN, Blitar, East Java. Farming practices based on the application of Sipindo Powered by SMARTseeds

In today's digital era, communication using Android continues to increase in cities and villages, as well as for young people. Internet-based communication provides easy and smooth information in all fields, including agriculture. As the development of agricultural science must be easily obtained and accurate, the Sipindo Powered by SMARTseeds application is a supporter of agricultural information.

SMK N 1 Kademangan, Blitar, East Java, majoring in agriculture was introduced to the Sipindo Powered by SMARTseeds application. An explanation of the features and fertilizer calculations was given by YBTS Field Staff.

After gaining knowledge, the students also experimented with the cucumber varieties Zatavy F1. They did cultivation following the Sipindo Powered by SMARTseeds application guide. After harvesting, school teachers felt helped by the Sipindo Powered by SMARTseeds application. Students get information faster and improved harvest by following guidelines in the Sipindo Powered by SMARTseeds and learning from previous cultivation. Increased harvest by 20% and fertilizer costs decreased by 30%.



MUSA WAYENI, Nabire



While most people in his village choose to become traditional fishermen and do jobs that could directly earn money, Musa Wayeni who was born on February 27, 1982 saw a great opportunity to earn income from growing vegetables in his village, Waharia Village, Teluk Kimi, Nabire Regency. He started to grow vegetable in early 2019 after he joined a training of farmers (ToF) program from Yayasan Bina Tani Sejahtera. He applied the Good Agriculture Practices to his land such as : land preparation, how to select the high quality seeds, how to make a proper seedling nursery, fertilization and how to use pesticide safely.

Beside his job as a government officer, he started his vegetable farming with Kangkong, Spinach and Eggplant Crops in 500 sqm land. After 4 months, he calculated all the income and got more than 10 million profit from growing spinach and kangkong in 3 cycles, and eggplant. He bought a cultivator from his profit of growing vegetables. With that cultivator, he is sure that it will be helpful in making the beds and soil preparation. He also inspired the surrounding youth that through vegetable farming he got the additional income. Now, more than 10 youth farmers have been supervised by Om Musa in growing leafy vegetables, chili and tomato.





Bunga Mangold
MAHARANI



SAMBUT PETAH
YANG BELAKANG

For A Sustainable
Community

08

The Spirit of Tarakani Orphanage in Togawa Besi Village, South Galela, North Halmahera

Early 2019, YBTS began assisting the children and officers of Tarakani Orphanage, after they attended a horticultural expo of Pomakomote farmer group, by giving training of GAP and practicing at their backyard demoplot of 750 sqm . For the first attempt, they planted long beans, melons, watermelons, bird pepper, tomatoes, bitter melon and leafies. The first harvest was only for their consumption. But the next ones turned out to be very good that they also gave some of the harvests to neighbours and sold in the village. Government officers visited the demoplot and posted on social media.

Giving the high enthusiasm, YBTS and Pomakomote group agreed to hold another horticultural expo at the Tarakani. The officers were fully responsible for maintaining the crops and the children helped to watering the crops in the afternoon after school. Out of 21 crop varieties, Lokananta F1 shallot, Madesta F1 Melon, and Sehati F1 cabbage were the main ones. More than 120 people were present. To date they continue growing vegetables and YBTS actively assists them by sharing GAP, so when they leave Tarakani they will have skill and knowledge of GAP.



Community Police – Farming Can Support Public Order

AKP Jakob Nomnafa (57 years old) is a Kasat Binmas in South Central Timor. After his daily duty, he also does farming which he has been doing since in junior high school, 1977.

“

When attending school in Soe 1, there were 40 students joined a farmer group to grow vegetables after school. The yield was enough to pay for my tuition ”



After finishing school, Jakob applied to become a police officer. He did not necessarily leave his hobby of farming. While on duty, he continues to practice agriculture. As a police officer, my duties are always changing. Even so I still do farming. Even in office, he does it by using polybags and eventually his colleagues started to become interested in farming.

Jakob met YBTS in 2017 and he was encouraged to become a motivator in farmer groups in Soe. In the collaboration between Babinkamtibnas (Bintara Pembina Kamtibnas) and YBTS, he saw many community groups became interested in planting vegetables. Some are even willing to make a statement to be delisted from the list of pre-prosperous family. YBTS is extraordinary in guiding people to be successful, he said proudly. The police department itself supports farmers in various ways, i.e. an open and direct communication to support the needs of farming communities.

Farming can support public order. Jakob advised to keep promoting agricultural programs to help maintain the order and security in Soe.

Diversification of Crops Sustain Farmers Income: Vegetable Benefits Complement Coconut Farm

Evidence from Telaga Mato Farmers Group

Telaga Mato, a farmer group of 20 farmers from Peleri Village, North Halmahera was formed in 2019. Most members are active coconut farmers, whose coconuts are processed to make copra. Early 2017 the price of copra was significantly reduced from 850 USD/ha to 250 USD/ha and it really hit their economy. On February 2019, they visited a Bina Tani Field Day in Sabaleh Village where they became interested in vegetable farming. They started to plant chili and other vegetables on a 2,500 sqm land. Different with coconut, they had to work on their farm every day. However in 25 days they already earned their first income from harvesting chaisim, kangkong, and spinach. Then in 3 months from chilli, tomato, and shallots. They applied GAP, i.e. land management, nursery, fertilization, pest and disease identification, integrated pest management, and water management (drip irrigation).

At harvest time they were very happy because the chili yielded 600 kg, with price of 4 USD/kg, so the total sales of chili was 2,400 USD. Telaga Mato as pioneer has influenced the surrounding farmers (also women and youth) to plant vegetable crops in their village. They now have understanding that growing vegetable crops can improve income and get a better livelihood.



Mr. Dominggus is an annual farmer (copra) in Wotay Village, Central Moluccas

A harvest season every 4 months with an uncertain price made him unhappy. After meeting with the staff of “Yayasan Bina Tani Sejahtera”, with the intention to earn income in between harvesting season for copra, he was willing to accept suggestions from YBTS and tried to plant sweet corn (Bonanza F1), tomatoes (Servo F1), and eggplant (Laguna F1) which could be harvested in 3 months. Besides that, he also planted cucumbers (Misano F1) with 45-day harvest. He realizes now that by planting vegetables, he is quicker to get income compared to being a copra farmer.



Amalun Ali is a coconut farmer in Bobawa Village, North Halmahera, whose coconuts are processed into copra. Because the price of copra decreased in 2018 from USD 840/kg to USD 210/kg, he switched to planting cayenne pepper. The harvest was very satisfying. He started planting on a 300 square meter land with a population of 700 plants and earned a total income of USD 1,470 in one season. Until now he still grows chillies and tomatoes because he can get more income from growing vegetables on a narrower land, thus a better livelihood.



Farmers Group's Reading Hut in Biak



Simson Warnares, commonly called Mr. Simson, one of key farmers of Bina Tani Sejahtera Foundation. He is the leader of an inspiring farmer group in Afefbo village, East Biak subdistrict, Biak Numfor regency. This forty-six-year old man is able to coordinate his group to grow crops in a modern way while still upholding the local wisdom. Not only giving directions to his group, he along with the YBTS officer and the government field staff also initiated the establishment of a farmer reading hut.

This was done in order to increase the farmers knowledge and their interest in reading. He said that with the establishment of a special reading hut for farmers, I hope other farmers can learn and eventually indirectly improve their economy. The farmer reading hut was built around Mr Simson yard not far from his house. In this reading hut there are several books about agriculture and also posters about GAP as an educational material for farmers. These facilities and media are supported by the Bina Tani Sejahtera Foundation, vegIMPACT NL and the local agriculture department. The reading hut will later function as a place of learning for all farmers in the Eastern Biak subdistrict. Besides being provided with books, in the reading hut visitors can also consult about the GAP to key farmers or field facilitators.

Mr. Simson and his group now have a 1500 sqm land to grow celery and cabbage crops. In the last cycle, He was able to produce about 200 kg of cabbage and 50 kg of celery. According to him, implementing GAP enables a large economic impact for the community including his family. From this success, the man who originally only planted taro plants is now growing vegetables as his main income.

Furthermore, according to Mr. Simson with the existence of agricultural programs such as mentoring and the provision of books will greatly help him and farmers to improve knowledge about vegetable GAP.

"The lake does look dry, but the water is still there"
Guarding Our Water Sources



In the field of the Jerusalem Farmer Group in South Central Timor, there is a small lake that is almost dry. However, it has been the source of water for watering their crops. "The lake does look dry, but the water is still there," said Melchizedek Salem, from the Farmer Group.

Since early 2018, this group has set up water reservoir around the lake by applying 3M method introduced by YBTS (Mengisi, Menyimpan, Menggunakan) – that is Filling, Storing, and Using water. In the past during July-August, the lake dried up. Nowadays the reservoir can still provide the water needed for the crops. Since then, the farmer group has developed and so does their farming business. The 3M is applied continuously, despite that the reservoir is still full, the group keeps making infiltration holes for filling the reservoir with water.

"We used to do farming traditionally, only one to two beds, maintenance was not optimal, and the yield was low. After getting assistance from YBTS, the yields are much better. Now we can plant tomatoes up to 1,000 trees," said Melchizedek. This group has plans to expand their fields. "We also hope that the government will support us in developing farming business and the 3M activity, we hope that our 11 farmers can have their own farmland and the yields can be marketed outside the district. For this we hope that YBTS will stay with us until our plans are realized," hoped Melchizedek.





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