


ANNUAL REPORT 2016

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YAYASAN BINA TANI SEJAHTERA

Jakarta - Indonesia

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REMARKS

Chairman, Board of Trustees,
Bina Tani Sejahtera Foundation

Bina Tani Sejahtera

A CELEBRATION OF PROGRESS AND SUPPORT

It is inspiring to look back at all that the Foundation has achieved over the last year, and we want to take the time to recognize those who contributed to 2016's success. This report is a celebration of that progress and showcases our Foundation's commitment to doing good in Indonesia.

We get genuinely excited about the Foundation's passion for supporting and sharing knowledge. It is rewarding to see the results of the work with Indonesian vegetable farmers, and we pride ourselves on the efforts of our enthusiastic employees who work shoulder-to-shoulder with them.

Nothing gives us more satisfaction than seeing the profound impact our shared knowledge can have 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 the weather, market information, and offering our advisory services.

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 in Indonesia. Only with the support of the Government of Indonesia could we achieved what we have in the last three decades. We would like to recognize the increasing support shown by the Indonesian Government in its effort to provide high-quality vegetables for all. By championing healthier diets and nutrition, the government is promoting the true value of fresh fruit and vegetables to an increasing population. A worthy cause.

Finally, the Foundation has actively been encouraging the recent trend in urban farming. By providing valuable inputs and support, we have helped turn the initiative from an idea into a reality. We look forward to watching the growth of urban farming through the coming years.

Joost Pekelharing
Chairman, Board of Trustees,
Bina Tani Sejahtera Foundation

FOREWORD

Managing Director,
East West Seed Indonesia

Bina Tani Sejahtera

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

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

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

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

Yours sincerely,
Glenn Pardede
Managing Director
PT East West Seed Indonesia

INTRODUCTION

Caretakers Bina Tani Sejahtera Foundation

FARMERS ARE AT THE CENTER OF OUR SERVICE

Farmers are at the center of our service. We do our efforts to increase farmers' welfare through extension and knowledge transfer. By acquiring knowledge on good farming practices and by applying them, farmers will be able to improve their crop production by adopting good quality seeds with good crop management.

As an extension arm of PT East West Seed Indonesia (EWINDO), YBTS provides the extension service in assisting farmer to deliver their own goal. Our works in the field facilitates farmers to learn and practice, to acquire new knowledge and information, and to share experiences among themselves. In YBTS we translate extension into concrete set of activities: setting crop demo-plot, training of farmers, organizing farmer field day and technology expo, and disseminating information, knowledge & extension tools. Recently, YBTS also work with partners in linking or integrating extension with other type of interventions such as soil and water conservation, climate-smart farming, water access, and geo-data and information service.

With a total of 14 staffs in year 2016, YBTS reached 2,247 farmers as direct beneficiaries (participation in training and demo-plot learning and practice) through extension and knowledge transfer activities in Nusa Tenggara Timur, North Maluku, and West Papua provinces. Apart from that, YBTS continues administering role of VegIMPACT Knowledge Transfer work package within EWINDO since year 2014 until end of 2016 by providing extension tools such as crop guides, flip-charts, pH meters and other tools to 137 field staffs of the company.

On this occasion, YBTS would like to thanks EWINDO for the full support and access to resources in order that YBTS can deliver its mandate. We would also convey thanks to partners VegIMPACT, KARINA and Cordaid, PRISMA, and ICCO Cooperation for the support and partnership. With the support and collaboration, we do see and continue to hope that many more small-holder farmers in Indonesia are benefitting with our service.

Thank you.

Edwin S. Saragih
Chairman of YBTS Caretaker

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TENTANG KAMI
About Us

BINA TANI SEJAHTERA FOUNDATION

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 (http://www.panahmerah.id/).

Kami meyakini bahwa penghidupan petani dapat ditingkatkan antara lain dengan transfer pengetahuan dan teknologi guna meningkatkan kapasitas petani dalam berusaha tani. Yayasan memberikan layanan penyuluhan dan konsultasi, melakukan pelatihan budidaya dan usaha pertanian, serta mengusahakan pembibitan.

Bina Tani Sejahtera Foundation (YBTS) work to assist farmers' livelihood improvement. The foundation establishment is a part of PT. East West Seed Indonesia (http://www.panahmerah.id/) strategy for corporate social responsibility.

We believe that farmers' livelihood can be improved among others through transfer of knowledge and technology to increase farmers capacity and farming productivity. The foundation provide agricultural extension and consultation services, conduct training courses on cultivation and agribusiness, and establish

Program Yayasan menyasar pada para petani skala kecil di Indonesia, khususnya bagi mereka yang masih rendah atau terbatas akses pada pendampingan teknis dan pelayanan penyuluhan.

Kami juga memberikan perhatian dan pelayanan pada pengelolaan dan penggunaan sumber daya alam dan lingkungan secara berkelanjutan.

Yayasan ini didirikan pada bulan April 2009 oleh para pendiri yakni Piet Mazereew, Simon N. Groot dan Kurniawan Sutedja. Yayasan BTS berkedudukan di Purwakarta. Dewan Pembina Yayasan Bina Tani Sejahtera saat ini adalah Piet Mazereew

nursery. The foundation targets small-holder farmers in Indonesia, especially for farmers with limited access to technical assistance and extension services. We also pay attention and provide service in sustainable use and management of natural resources and environment.

The foundation was founded in April 2009 in Purwakarta by Piet Mazereew, Simon N. Groot and Kurniawan Sutedja. Currently, Board of Trustees of the foundation are Piet Mazereew and Joost Pekelharing.

Since its establishment until year 2013, YBTS was led by Atmadi Saleh. During this period, foundation main

dan Joost Pekelharing.

Sejak berdirinya hingga tahun 2013, YBTS dipimpin oleh Atmadi Saleh. Kegiatan utama Yayasan selama periode tersebut adalah mendirikan dan menyelenggarakan pelatihan hortikultura di Lembang, Jawa Barat; memberikan kursus budidaya dan usaha pertanian kepada petani dan masyarakat, memberikan layanan penyediaan bibit dan benih tanaman sayuran dan bunga.

Mulai tahun 2014, Yayasan diketuai oleh Dr. Ir. Edwin S. Saragih.

activities were establishing and conducting horticulture training in Lembang, West Java; providing training courses on agriculture cultivation and business to farmers and interested people; establishing vegetable and flowers seeds and seedlings service.

Starting in year 2014, the foundation is chaired by Dr. Ir. Edwin S. Saragih.

Petani di Soe, Nusa Tenggara Timur sedang menyiapkan semaian cabai keriting

Farmers in Soe, Nusa Tenggara Timur are preparing the seedling of curly pepper

VISI, MISI, & PENDEKATAN TAKTIS
Vision, Mission, and Tactical Approach

Visi

Sebagai extension arm of EWINDO, visi YBTS menginduk pada visi EWINDO: Kami percaya pada benih sayuran berkualitas tinggi untuk hidup yang lebih baik.

Dengan visi ini kami dapat mendukung perbaikan penghidupan petani agar lebih sejahtera, seraya peduli pada isu-isu sosial dan lingkungan.

Misi

Misi kami adalah melakukan tugas untuk pemenuhan visi tersebut dengan cara memberikan penyuluhan pertanian, alih pengetahuan dan teknologi, konsultasi di bidang pertanian, pelatihan budidaya dan usaha pertanian.

Vision

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

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

Mission

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

Pendekatan Taktis

- Perbaikan Teknis Budidaya

  Transfer pengetahuan dan teknologi serta penerapan cara budidaya yang baik agar para petani menjadi lebih produktif dan efisien dalam berusaha tani

- Nilai Tambah dan Akses Pasar

  Memampukan petani untuk mendapat penghasilan tambahan dan nilai tambah dari produk mereka melalui kualitas produk dan akses pasar yang lebih baik

- Nilai Nutrisi

  Mengangkat nilai nutrisi yang lebih baik melalui konsumsi sayuran yang lebih tinggi dan tanaman atau produk yang sehat lainnya

- Menciptakan Sinergi

  Mendorong nilai tambah melalui kerja sama, yaitu dengan dukungan/ keahlian dari mitra seperti universitas, perusahaan swasta, LSM, badan internasional, dan lain-lain.

Tactical Approach

- On-Farm Improvement

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

- Off-Farm Value and Linkages

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

- Nutrition Value

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

- Creating Synergy

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

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PENDEKATAN DAN KEGIATAN ALIH PENGETAHUAN

Knowledge Transfer Approach and Activities

ARAH STRATEGI DAN PENDEKATAN PENYULUHAN
STRATEGY DIRECTION AND EXTENSION APPROACH

ARAH STRATEGI

Arah strategi dari EWINDO:

- YBTS sebagai YBTS perpanjangan tangan dari perusahaan yang berarti sebagai penyedia layanan penyuluhan swasta

STRATEGY DIRECTION

Strategy direction from EWINDO:

- YBTS as an extension arm of the company, meaning a private-led extension service

Farmers are the center of our service

- Menjangkau wilayah Indonesia bagian timur
- Bekerjasama dan berkolaborasi dengan pihak lain untuk menambah nilai

PENDEKATAN PENYULHAN

- Membuat demoplot
- Farmers Field Day & Gelar Teknologi
- Pelatihan menyediakan materi dan alat penyuluhan
- Memadukan dengan intervensi lain, seperti:
  - Akses air
  - Konservasi/ climate-smart agriculture
  - Layanan informasi

- Go eastern part of Indonesia
- Partnership and collaboration with other parties adding value

EXTENSION APPROACHES

- Setting Demplot
- Farmers Field Day & Technology Expo
- Training provide knowledge materials & extension tools
- Integrate with other interventions, such as:
  - Water access
  - Conservation/ climate-smart agriculture
  - Information service

Petani sedang mengikat tanaman tomat agar tumbuhnya tegak

A farmer is binding the tomato plants for a straight growth

Ketua YBTS dan Sekda Kabupaten TTS mengunjungi lahan demo plot Gelar Teknologi Sayuran di Desa Niki-niki

YBTS chairman and Regional Secretary of TTS regency are visiting the demo field of Vegetables Expo in Niki-niki village

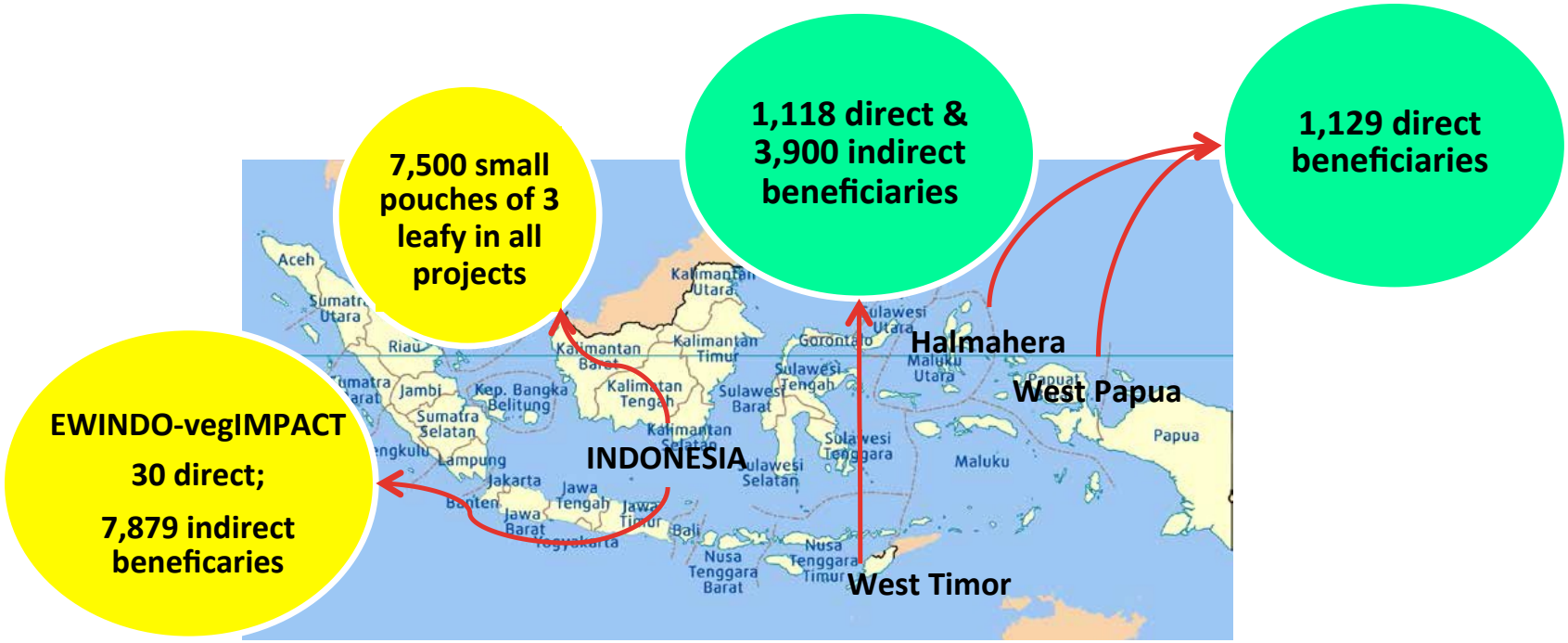
Petani sedang melakukan perawatan pada tanaman caisim miliknya

A farmer is taking care of his choisum plants

PENCAPAIAN TAHUN 2016
2016 RESULTS

- 2.247 petani sebagai penerima manfaat langsung (mengikuti training dan studi banding demoplot);
- > 10.000 sebagai penerima manfaat tidak langsung (menerima alat/ materi penyuluhan) sebagian besar merupakan petani penerima panduan budidaya;
- Total 14.168 penerima manfaat
- 14 staff YBTS: 6 staff tetap, 8 staff kontrak

- 2,247 farmers as direct beneficiaries (participation in training & demplot learning visits);
- > 10,000 as indirect beneficiaries (receiving knowledge materials/tools) mainly farmers who received crop guide;
- Total of 14,168 beneficiaries
- 14 staffs: 6 staffs with permanent status, 8 staffs with contract status.



Penyebaran area kerja YBTS dan pencapaian di tahun 2016

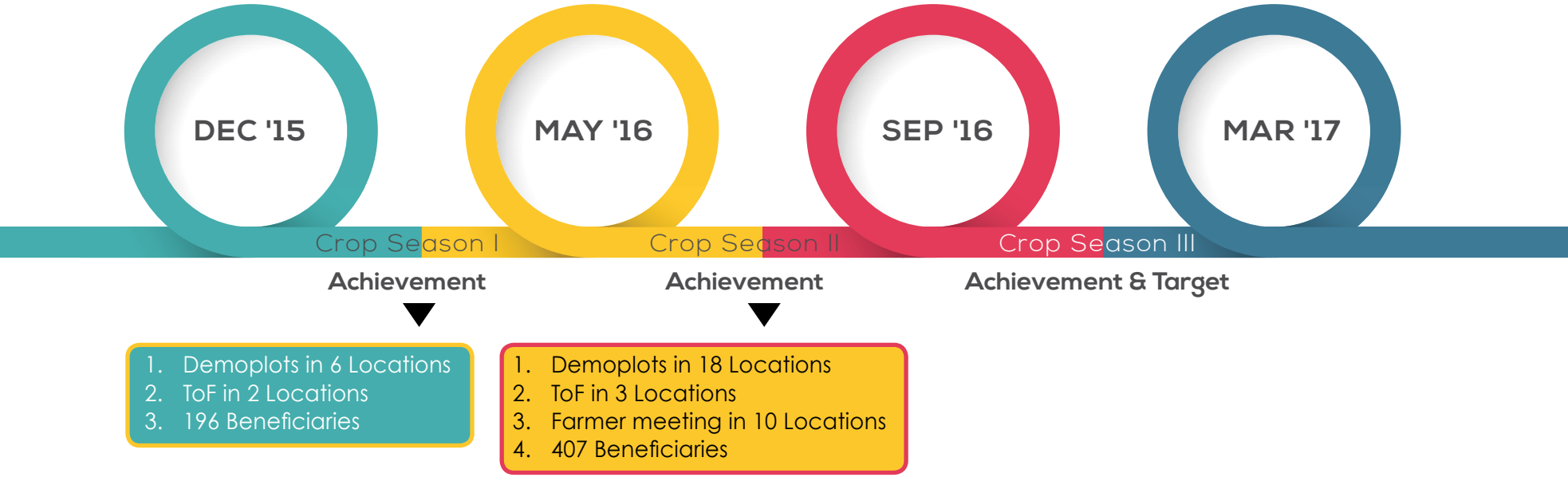
YBTS working area and the results in 2016

KNOWLEDGE TRANSFER IN WEST PAPUA

Transfer Pengetahuan di Papua Barat

Sejak akhir tahun 2015, YBTS telah mulai melakukan kegiatan penyuluhan dan alih pengetahuan di daerah Manokwari, propinsi Papua Barat, dan kemudian diikuti dengan kegiatan yang sama di kabupaten Pegunungan Arfak. Sejumlah demplot berbagai jenis sayuran telah dilakukan bersama petani. Kegiatan pelatihan dan penyuluhan ToF dilaksanakan sesuai dengan kebutuhan para petani akan informasi baru untuk menngatasi permasalahan yang mereka hadapi. Sebanyak 628 petani telah beroleh manfaat dari kegiatan yang YBTS lakukan.

Since the end of year 2015, YBTS started implementing extension and knowledge transfer activities in Manokwari regency, West Papua province. And followed by similar activities in Pegunungan Arfak regency in year 2016. 24 demoplots with various kind of vegetables were established together with key farmers. Training and extension activities ToF were conducted in line with farmers needs on new information to solve problems they face. As many as 628 farmers have got the benefit of YBTS activities.



Demoplot Result: West Papua

Crop + Varieties	Nb Records	Plant pop/0.1 Ha	Cost/0.1 Ha	Return/0.1 Ha	Benefit/0.1 Ha	Avg yield/0.1 Ha	remark
Choisum (Dakota)	1	3,571	435,714	2,807,143	2,371,429	714	Bunch/0.1 Ha
Bittergourd (Raden F1)	1	480	728,000	5,760,000	5,032,000	1,152	Bunch/0.1 Ha
Chili (Gada F1)	1	800	1,178,000	5,962,667	4,784,667	300	Kg/0.1 Ha
Cauliflower (PM 126)	1	1,111	1,514,000	6,444,444	4,930,444	258	Kg/0.1 Ha
Lettuce (Grand Rapids)	1	33 gram seeds	558,333	1,240,000	681,667	207	Bunch/0.1 Ha
Watermelon (Palguna F1)	1	250	975,000	5,040,000	4,065,000	360	Kg/0.1 Ha
Eggplant (Laguna F1)	1	1,000	866,667	5,760,000	4,893,333	1,920	Bunch/0.1 Ha
Bittergourd (Lipa F1)	2	229	**927083**	**3,121,666**	**2194583**	**546**	**bunch/0.1 Ha**

List of activities and number of benefit recepients

Activity	number of activities	number of beneficiaries
Crop demoplot	18	122
Farmers training	3	51
Farmers meeting	7	154
Farmers comparative visit	2	37
Farmers field day	1	43
Dissemination of information and knowledge materials	14	221
Total		628

Kegiatan-kegiatan tersebut dilakukan di Distrik (kecamatan) Prafi, Masni, Sidey, dan Warmare di Kabupaten Manokwari; dan Distrik Anggi (Kabupaten Pegunungan Arfak)

These activities were conducted in districts: Prafi, Masni, Sidey, and Warmare (Manokwari regency); and Anggi district (Arfak highland)

Danta, petugas lapangan YBTS memberikan penyuluhan mengenai GAP (Good Agricultural Practices) kepada petani di Prafi, Manokwari

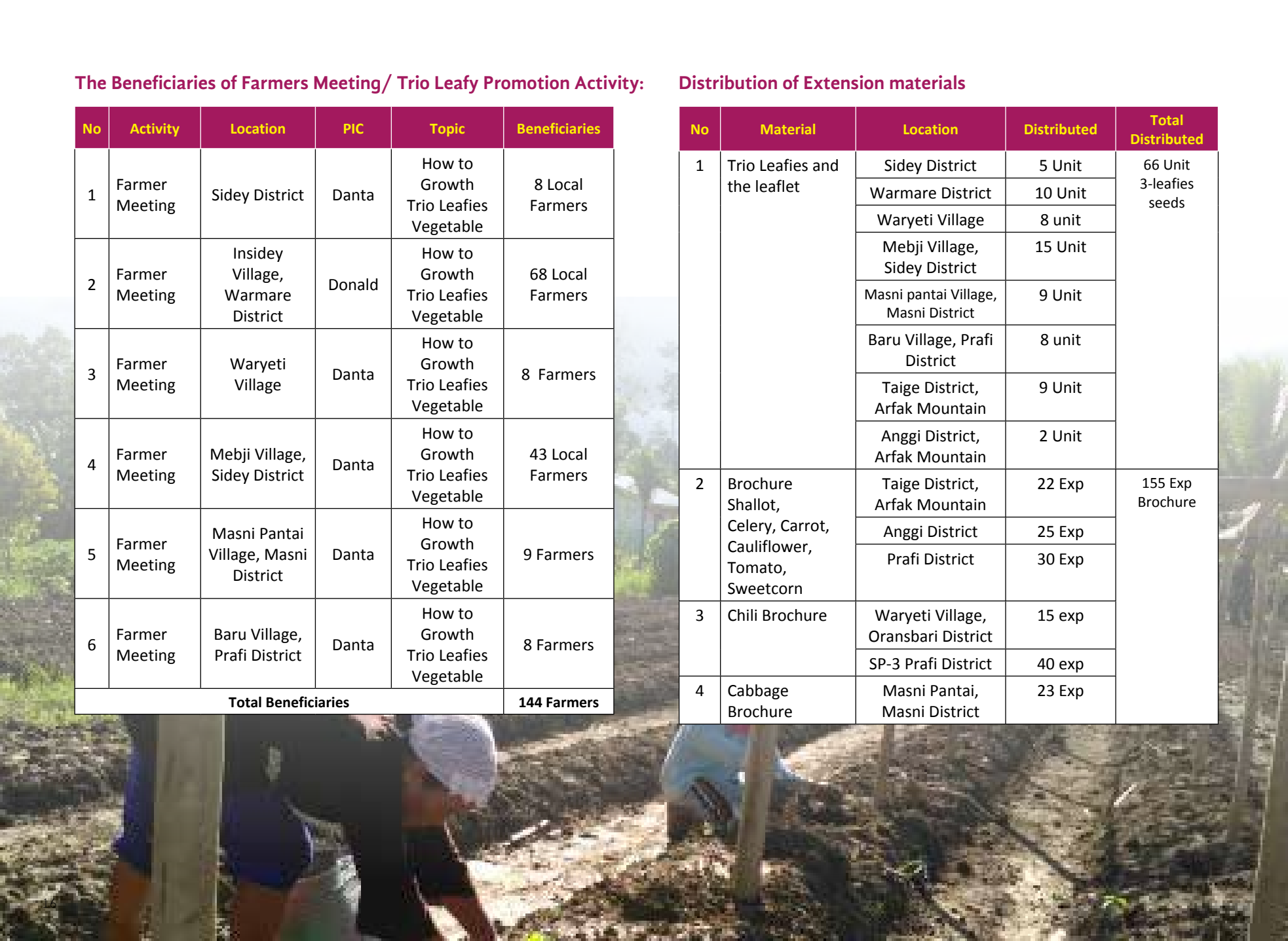
Danta, as a YBTS field staff is doing a extension service about GAP (Good Agricultural Practices) for farmers in Prafi, Manokwari

The Beneficiaries of Farmers Meeting/ Trio Leafy Promotion Activity:

No	Activity	Location	PIC	Topic	Beneficiaries
1	Farmer Meeting	Sidey District	Danta	How to Growth Trio Leafies Vegetable	8 Local Farmers
2	Farmer Meeting	Insidey Village, Warmare District	Donald	How to Growth Trio Leafies Vegetable	68 Local Farmers
3	Farmer Meeting	Waryeti Village	Danta	How to Growth Trio Leafies Vegetable	8 Farmers
4	Farmer Meeting	Mebji Village, Sidey District	Danta	How to Growth Trio Leafies Vegetable	43 Local Farmers
5	Farmer Meeting	Masni Pantai Village, Masni District	Danta	How to Growth Trio Leafies Vegetable	9 Farmers
6	Farmer Meeting	Baru Village, Prafi District	Danta	How to Growth Trio Leafies Vegetable	8 Farmers
Total Beneficiaries					**144 Farmers**

Distribution of Extension materials

No	Material	Location	Distributed	Total Distributed
1	Trio Leafies and the leaflet	Sidey District	5 Unit	66 Unit 3-leafies seeds
		Warmare District	10 Unit	
		Waryeti Village	8 unit	
		Mebji Village, Sidey District	15 Unit	
		Masni pantai Village, Masni District	9 Unit	
		Baru Village, Prafi District	8 unit	
		Taige District, Arfak Mountain	9 Unit	
		Anggi District, Arfak Mountain	2 Unit	
2	Brochure Shallot, Celery, Carrot, Cauliflower, Tomato, Sweetcorn	Taige District, Arfak Mountain	22 Exp	155 Exp Brochure
		Anggi District	25 Exp	
		Prafi District	30 Exp	
3	Chili Brochure	Waryeti Village, Oransbari District	15 exp	
		SP-3 Prafi District	40 exp	
4	Cabbage Brochure	Masni Pantai, Masni District	23 Exp	



KNOWLEDGE TRANSFER ACTIVITY IN NORTH HALMAHERA

Kegiatan Alih Pengetahuan di Halmahera Utara

Pada tahun 2016, Yayasan Bina Tani Sejahtera mengintensifkan kegiatan pendampingan petani di Halmahera Utara. YBTS aktif mempromosikan pertanian sayuran pada petani dan masyarakat, mulai dari pemilihan benih yang baik, pemupukan serta analisis usaha tani dan penanganan pasca panen. YBTS juga aktif memperkenalkan tiga sayuran daun yaitu kangkung, bayam dan caisim. Kelompok wanita tani pengetahuan mengenai penerapan GAP (*Good Agricultural Practices*) dan nutrisi yang terkandung dalam sayuran tersebut.

Yayasan Bina Tani Sejahtera juga mengadakan kerjasama dengan LSM lain yaitu Yayasan WVI (Wahana Visi Indonesia). Bersama dengan Yayasan WVI, YBTS membina kelompok wanita tani di Desa Kira, Galela Barat, Halmahera Utara. Mereka diperkenalkan cara bertani sayuran yang baik dan benar, khususnya dengan memanfaatkan lahan pekarangan. Para anggota kelompok wanita tani juga diberikan pelatihan untuk membuat pupuk organik yang juga digunakan untuk pemupukan pada demo plot milik kelompok. Pada bulan Juli, para anggota melakukan panen perdana kangkung pada usia satu bulan. Hasilnya mereka

In 2016, Yayasan Bina Tani Sejahtera intensified farmers' assistance in North Halmahera. YBTS actively promoted vegetables farming to farmers and communities, start from seed selection, fertilizing, farming analysis and also post harvest management. YBTS also promoted about trio leafy vegetables (kangkoong, choisum and spinach). Women farmers group acquired knowledge on GAP/ Good Agricultural Practices and their nutrition value.

Yayasan Bina Tani Sejahtera also collaborated with other NGO namely Yayasan WVI (Wahana Visi Indonesia). Together with Yayasan WVI, YBTS accompanied a women group in Kira village, West Galela, North Halmahera. They were introduced about how to grow leafy vegetables houseyard. They were also trained on how to make organic fertilizer. This organic fertilizer was applied to their vegetables demo plot. In July 2016, the group members did the first harvesting of kangkoong. After that, they sold them in the market with the average price Rp 4.000,-/ bunch. They got good price. They collected the money

jual di pasar dengan harga Rp4.000,-/ ikat. Kangkung cabut yang dijual memiliki harga yang bagus di pasaran. Hasil penjualan mereka kumpulkan dan digunakan kembali untuk membeli benih yang akan ditanam lagi.

Selain kelompok wanita tani, para petani yang didampingi oleh Yayasan Bina Tani Sejahtera merasakan manfaat dari hasil kegiatan alih teknologi dan pengetahuan. Menurut mereka, berkat pendampingan yang dilakukan, kini pendapatan rumah tangga meningkat karena hasil penjualan sayuran, selain itu kebutuhan sayur untuk keluarga juga tercukupi.

Di wilayah Halmahera Utara, selain pendampingan di tingkat petani dan kelompok tani, YBTS juga melakukan pengenalan dan pendampingan pada siswa-siswi dan tenaga pendidik di institusi lain, yaitu: SMK Pertanian Malifut, Politeknik Padamara dan Yayasan Tangan Pengharapan.

and used them to buy another seeds.

Beside the women group, the other farmers that assisted by Yayasan Bina Tani Sejahtera team also got the benefit from these knowledge and technology transfer activities. They told that they got better income from vegetables they sell. They also can suffice the vegetables supply for their families.

In North Halmahera area, YBTS also introduced agriculture to students and teachers in other institutions, which are: SMK Pertanian Malifut, Politeknik Padamara and Yayasan Tangan Pengharapan.

Di Halmahera, YBTS juga memperkenalkan pertanian kepada siswa-siswa sekolah dasar

In Halmahera, YBTS also introduce about agriculture for elementary students

Rika, staff lapangan YBTS memberikan penyuluhan tentang GAP (Good Agricultural Practices) di Halmahera

Rika, as a YBTS field staff is doing an extension activities about GAP (Good Agricultural Practices) in Halmahera

Table of Demo plot performance and result in North Halmahera, November 2016

No	Crop	Variety	Size (sqm)	Plant Population	Harvest quantity (kg)	Cost (Rp)	Revenue (Rp)	Profit (Rp)
1	Bitter gourd	Raden F1	220	880	990	500.000	6.930.000	6.430.000
2	Trio Leafies	Mira, Shinta, Salina	412		972	100.000	4.860.000	4.760.000
3	Long bean	Parade	400	1600	1000	500.000	5.000.000	4.500.000
4	Eggplant	Largo F1	400	1600	1800	500.000	7.200.000	6.700.000
5	Bean	Perkasa	400	1600	1800	500.000	10.800.000	10.300.000
6	Cucumber	Misano F1	400	1600	1440	500.000	5.760.000	5.260.000

Rika dan ibu Nurbaena (Desa Kira, Galela, Halmahera Utara) salah seorang petani memanen kangkung bersama

Rika and Nurbaena (Kira Village, Galela, North Halmahera) are harvesting kangkoong together

Berdasarkan analisis performa demplot, petani memperoleh keuntungan yang signifikan. Dari lahan sempit (hanya 400 m2) yang ditanami sayuran, paria, kacang panjang, terong, buncis dan timun, petani bisa menghasilkan keuntungan Rp 4.500.000 hingga Rp 10.300.000

Based on demoplot perfomance analysis, farmers got significant amount of profit. From small plots (only 400 square meters) of leafy vegetables, bitter gourd, long bean, eggplant, french bean and cucumber, farmers earned profit from Rp 4.5 million up to Rp 10.3 million.

3

KEGIATAN TRAINING OF TRAINER

Training of Trainer Activities

KEGIATAN TRAINING OF TRAINER DI INDONESIA
TRAINING OF TRAINER ACTIVITIES IN INDONESIA

Kegiatan Training of Trainer (ToT) telah diselenggarakan di 4 lokasi selama tahun 2013 hingga 2014. Narasumber pada kegiatan ini adalah Mr. Herman de Putter (APR-WUR) dan Dr. Witono Adiyoga (BALITSA). ToT diselenggarakan di Purwakarta (2013), Malang (2014), Makassar (2014) dan Lampung (2014). Total peserta training sebanyak 137 orang yang Product Promotor EWINDO dan staff lapangan YBTS.

Selama 3 hari kegiatan ToT, masing-masing peserta mendapatkan tiga modul yang disusun oleh APR-WUR dan BALITSA. Pada modul pertama, topik yang diusung mengenai agroekosistem, manajemen pembibitan (*seedling*) dan persiapan laham. Modul kedua berisi materi tentang pupuk, pemupukan dan pengenalan hama dan penyakit. Pada modul kedua, peserta mencoba menganalisis kandungan Nitrogen pada *sample* tanah menggunakan alat N-check. Modul ketiga berisi materi tentang cara kerja pestisida, teknik penyemprotan dan pengendalian hama dan penyakit. Pada modul terakhir ini, peserta mengunjungi

Training of Trainer (ToT) activities have been held in 4 (four) locations between 2013 and 2014. The trainers are Mr. Herman de Putter (WUR) and Mr. Witono Adiyoga (IVEGRI). We held ToT in Purwakarta (2013), Malang (2014), Makassar (2014), and Lampung (2014). The total numbers of trainers that have been trained are 137 EWINDO and YBTS field taff.

In 3 days of ToT activity, every participant got 3 (three) modules that was developed by APR-WUR and IVEGRI. In the 1st module, the topics are about Agro ecosystem, Seedling Management, and Land Preparation. The 2nd module is about Fertilizer, Fertilization, and Pest & Disease introduction. In the 2nd module, the participants tried to analysis the Nitrogen contents in the soil sample using N-Check tools. The 3rd module is about Pesticide Mode of Action (MoA), Spraying Technique, and Pest & Disease Management. In the last module, the participants went to farmers' farm to create farm record, pest & disease identification, and also spraying practice.

Dr. Witono Adiyoga, trainer dari BALITSA memberikan pengarahan tentang rekomendasi pemupukan

Dr. Witono Adiyoga, a trainer from IVEGRI is giving assistant for fertilizer recommendation

lahan petani untuk membuat pencatatan lahan/ usahatani, identifikasi hama dan penyakit, serta praktek teknik penyemprotan.

Dengan *training* ini para petugas lapangan dapat meningkatkan pengetahuannya mengenai praktek manajemen budidaya tanaman. Informasi mengenai pergiliran pestisida, penggunaan pestisida yang aman, kandungan Nitrogan dan pH tanah perlu disampaikan pada para petani oleh petugas di lapangan. Pada akhirnya, petani mendapatkan hasil yang lebih baik dan mengurangi biaya produksi seiring penggunaan pestisida dan pupuk yang lebih efisien.

Melalui *training* ini setiap petugas lapangan dibekali dengan pH meter, *water sensitive paper,* dan masker. Selain itu bagi setiap perwakilan area difasilitasi dengan 1 unit N check + strips, pH air dan *flipchart*. Alat-alat tersebut digunakan untuk kegiatan ToF.

Selanjutnya EWINDO dan Yayasan Bina Tani Sejahtera (YBTS) mengadakan 2 sesi pelatihan *Training of Trainer (ToT) Champion* pada tahun 2016. Kegiatan ini diperuntukkan bagi peserta ToT terpilih dari sesi sebelumnya.

Sesi I dilaksanakan pada September 20-22, 2016

dan sesi II pada December 6-8, 2016. Peserta berjumlah 30 orang terdiri dari 25 orang

Product Promotor EWINDO, 4 peserta dari staf lapang YBTS , dan seorang peserta dari EWS Knowledge Transfer (Thailand).

Para peserta Champion diperlengkapi dengan pengetahuan dan alat tambahan, sehingga mereka dapat berperan sebagai narasumber bagi rekan-rekannya dan para petani di wilayah masing-masing.

The output of this training is the field staffs are able to improve their knowledge about crop management practices. The information about pesticide rotation, fertilization, safety pesticide use, soil pH and nitrogen content should be implemented to the farmers by field staff. At the end, the farmer will get better yield and reduce production cost due to pesticide and fertilizer efficiency.

By this training, every field staff is provided with a pH meter, water sensitive papers, and mask. Besides that, we also provide 1 unit N check + strips, water pH, and flipchart in marketing representative area. All of those tools are used by field staff in ToF Practice.

Futher EWINDO and Yayasan Bina Tani Sejahtera (YBTS) conducted 2 sessions of Training of Trainer (ToT) Champion in 2016. ToT champion was held

Penyerahan secara simbolis perangkat tablet kepada peserta ToT champion

A symbolic submission of tablet to the ToT champion participants

for the selected participants of the previous training. The 1st session was held on September 20-22, 2016 and the 2nd session was held on December 6-8, 2016. The total participants are 30 people. They comprised of 25 selected participants from the Ewindo's Product Promotor, 4 participants from YBTS Field staff, and one participant from EWS Knowledge Transfer (Thailand).

As these Champions were equipped with more advanced knowledge and tools, they will serve as resource person for peers and farmers in their respected areas.

Salah seorang peserta ToT champion menunjukkan teknik penyemprotan yang benar

A participant of ToT champion is showing the right spraying technique

Para peserta ToT melakukan praktek penyemprotan

ToT participants are doing spraying practice

Praktek pengamatan tanaman oleh peserta ToT ke lahan petani

ToT participants are visiting farmer's field Document fonts

Para peserta ToT champion bersama trainer setelah kunjungan ke lahan petani di Cikampek

ToT champion participants and trainer after visiting farmer's field in Cikampek

Herman de Putter, trainer dari Wageningen University memberikan penjelasan mengenai seedling

Herman de Putter, a trainer from Wageningen University is giving explanation about seedling

Para peserta ToT champion melakukan identifikasi ekosistem di lahan petani

ToT champion participants are identifying ecosystem in the farmer's field

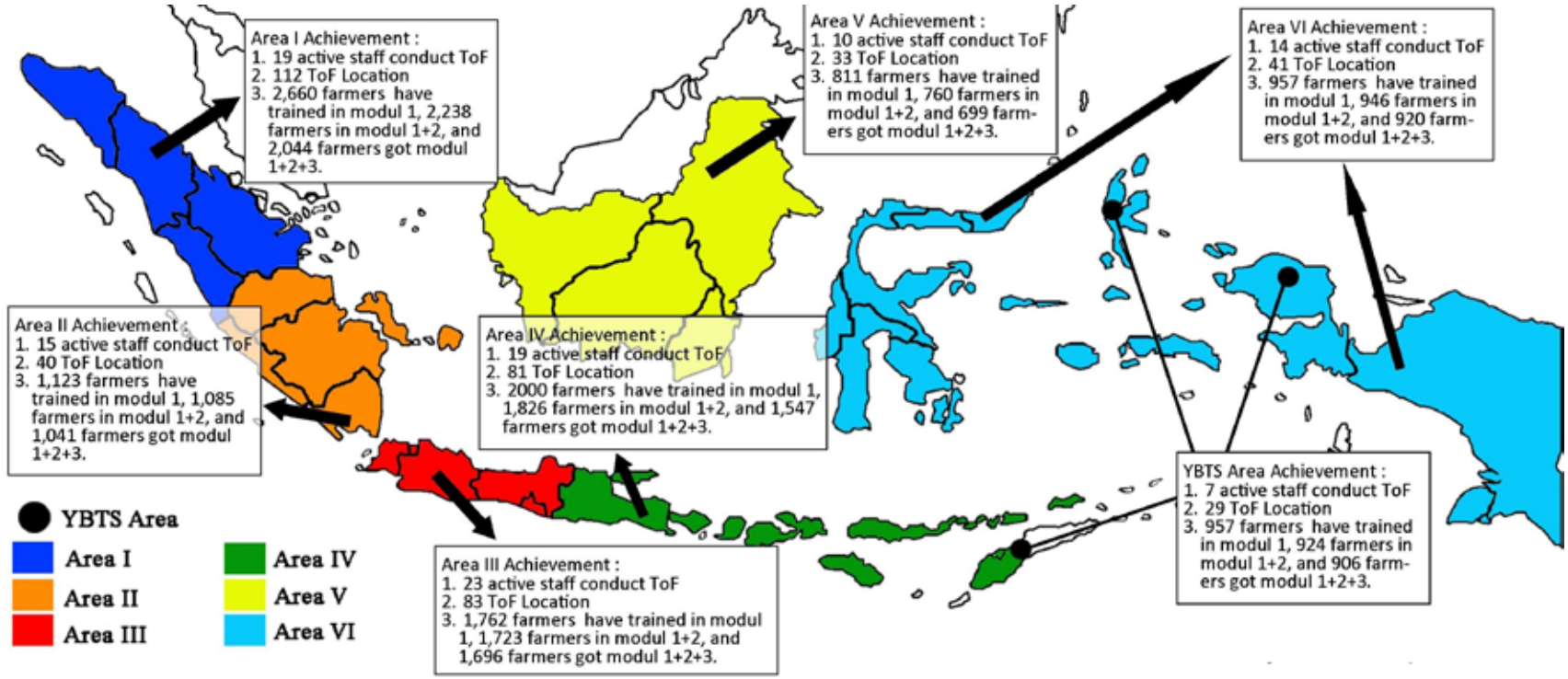
Contoh aplikasi penyemprotan yang baik pada permukaan

The example of good spraying application

4

KEGIATAN TRAINING OF FARMERS DALAM PROGRAM VEGIMPACT

Training of Farmers Activities within vegIMPACT Program



Pencapaian kegiatan ToF di wilayah kerja YBTS dan EWINDO

ToF activities outreach in YBTS and EWINDO working area

KEGIATAN TRAINING OF FARMERS TAHUN 2014-2016
TRAINING OF FARMERS ACTIVITY IN 2014-2016

Dimulai pada penghujung tahun 2014, tim *marketing* EWINDO dan Yayasan Bina Tani Sejahtera (YBTS) mulai melakukan transfer pengetahuan pada para petani melalui kegiatan yang disebut *Trainer of Farmers* (ToF). ToF merupakan pelatihan yang harus dilakukan oleh para petugas lapangan setelah mengikuti *Training of Trainer* (ToT). Sebanyak 137 petugas lapangan EWINDO dan YBTS telah menyelasaikan modul ToT.

Starting in the end of 2014, EWINDO Marketing and Yayasan Bina Tani Sejahtera (YBTS) Team started a Knowledge transfer to the farmer that was called Training of Farmers (ToF). ToF is the training event that the field staffs have to do after they completed Training of Trainer (ToT). As many as 137 field staff of EWINDO and YBTS has finished the ToT Modul.

Kami memiliki tiga modul yang dapat mendukung para petugas lapangan untuk melaksanakan kegiatan ToF. Modul pertama mengenai agro ekosistem, manajemenen pembibitan (*seedling*) dan persiapan lahan. Modul kedua berisi tentang materi pupuk, pemupukan dan pengenalan hama dan penyakit tanaman, sedangkan modul ketiga membahas tentang tipe cara kerja pestisida, teknik penyemprotan, serta pengendalian hama dan penyakit tanaman. Ketiga modul tersebut harus disampaikan kepada para petani selama tiga hari pelatihan. Pelatihan dilakukan di dalam ruangan (penyampaian teori) dan di lapangan (praktek).

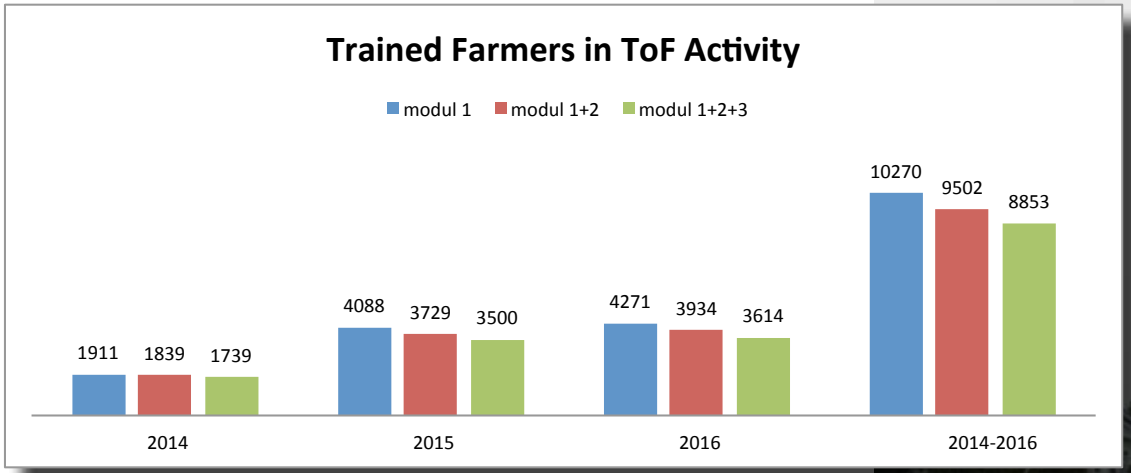
Petugas lapangan juga menyediakan alat-alat untuk mendukung kegiatan training, yaitu: pH meter, *water sensitive paper* dan masker. Selain itu tiap perwakilan area juga

We have 3 (three) modules to support the field staff to conduct the ToF activity. The 1st module's topics are about Agro ecosystem, Seedling Management, and Land Preparation. The 2nd module is about Fertilizer, Fertilization, and Pest and Disease introduction while the 3rd module is about Pesticide MoA, Spraying Technique, and Pest & Disease Management. Those three modules have to be delivered to the farmers by the field staff in 3 (three) days training. The trainings are conducted in the room (theoretical) and also in the farm (practical).

The field staffs also provided the tools to support the activity. Every field staff have pH meter, water sensitive paper, and mask. Besides that, we also provide 1 unit N check + strips, water pH, and flipchart in the marketing

Salah seorang Product Promotor EWINDO melakukan kegiatan ToF
A Product Promotor of EWINDO is doing the ToF activity

Para peserta ToF melakukan kegiatan praktek di lapangan
ToF participants are doing field practices



dibekali dengan 1 unit N-check + strips, pH air, dan flipchart. Semua alat dapat digunakan pada praktek ToF. Alat-alat ini membantu petani memahami dan mempraktekkan materi yang disampaikan.

Hingga Desember 2016 para petugas lapangan telah memberikan pelatihan kepada 10.270 petani untuk modul 1, 9.502 petani untuk modul 1 dan 2, dan 8.853 petani untuk modul 1, 2 dan 3. Sebanyak

representative area. All of those tools are usually used by the field staff in ToF Practice. The tools help the farmers learn and practice what the field staff has delivered.

Until December 2016, the field staff has trained 10.270 farmers for module 1, 9.502 farmers for module 1+2, and 8.853 farmers for module 1+2+3. As many as 107 staff from YBTS and Marketing was active in conducting the ToF

Product promotor EWINDO wilayah Lombok (Nuralim) memberikan penjelasan tentang teknik penyemprotan pestisida

Product promotor of Ewindo in Lombok area (Nuralim) is explaining about spraying technique

107 staff lapangan baik dari EWINDO maupun YBTS secara aktif melakukan kegiatan ToF. YBTS juga mengadakan simulasi kegiatan kolaborasi bersama tim EWINDO.

Berdasarkan jumah petani yang telah mengikui pelatihan pada tabel berikut, area 1 (Sumatera bagian utara) memiliki jumlah terbanyak, yaitu 2.044 petani telah mengikuti training modul 1,2, dan 3. Sebanyak 19 petugas lapangan telah melakukan kegiatan ToF di 112 lokasi. Jumlah lokasi terbanyak selama tahun 2014 hingga 2016. Wilayah lain juga memiliki pencapaian yang baik dalah hal jumlah petani peserta, karena tiap *Product Promoter* harus mencapai target 100 petani.

Jumlah petani yang mengikuti ToF semakin bertambah dari tahun ke tahun. Pada tahun 2014, hanya 1.911 petani untuk modul 1, 1.839 petani untuk modul 1 dan , serta 1.739 petani untuk ketiga modul. Pada tahun 2015, jumlahnya meningkat secara signifikan, yatu 4.088 petani untuk modul 1, 3.729 petani untuk modul 1 dan 2 serta 3.500 petani untuk ketiga modul. Tahun 2016, jumlahnya terus meningkat di mana 4.271 petani mengikuti training modul 1, 3.934 petani untuk modul 1 dan 2 serta 3.614 petani untuk ketiga modul. Pencapaian ini merupakan hasil dari dukungan para staff YBTS dan EWINDO.

for the farmers. YBTS also did ToF Simulation in collaboration event with EWINDO Team.

Regarding the number of Trained Farmer Data in the table, Sales Area 1 (Northern Sumatera) has the most farmer total than the others. A total of 2.044 farmers have been trained in module 1, 2, 3 by the team in that area. As many as 19 staffs did ToF activity in 112 locations. It is also the most ToF location total since 2014 until 2016. The other areas also have a good achievement in the number of trained farmers, because every Product Promoters have a target to achieve 100 trained farmers in their area.

Our trained farmers always grow year by year. In 2014, we only trained 1.911 farmers in 1st module, 1.839 farmers in 1st and 2nd module, and 1.739 farmers in all modules. In 2015, the number raised significantly since we trained 4.088 farmers in 1st module, 3.729 farmers in 1st and 2nd module, and 3.500 farmers got all modules. Last year (2016), we are still growing and we are able to reach 4.271 farmers in 1st module, 3.934 farmers in 1st and 2nd module, and 3.614 farmers got all modules. This achievement is supported by EWINDO marketing staff and YBTS field staff.

Para peserta ToF di wilayah Sigi, Sulawesi Tengah mendapatkan buku panduan praktis budidaya sayuran

The ToF participants in Sigli, Central Sulawesi get the guidance books of vegetable farming

Pengukuran pH air untuk aplikasi penyemprotan

Measuring water pH for spraying application

Para peserta ToF melakukan praktek mengenai teknik penyemprotan pestisida

ToF participants are practicing about pesticide spraying technique

Kegiatan ToF di wilayah Banyuwangi, Jawa Timur

ToF activities in Banyuwangi area, East Java

Kegiatan ToF di wilayah Banyuwangi, Jawa Timur

Kegiatan ToF di wilayah Banyuwangi, Jawa Timur

Peralatan pengujian sample tanah

Soil sample test kit

Pengujian sample tanah

Soil sample test

Hasil aplikasi penyemprotan yang berbeda pada permukaan kertas sensitif air (WPS)

The result of the different spraying application on water sensitive paper (WPS)

5

PENGUATAN KAPASITAS SECARA TERPADU

Integrated Capacity Building

PROGRAM PENGUATAN KAPASITAS PETANI SECARA TERPADU BAGI PENINGKATAN PENGHIDUPAN PETANI KABUPATEN TIMOR TENGAH SELATAN, PROVINSI NUSA TENGGARA TIMUR

INTEGRATED CAPACITY BUILDING FOR FARMERS LIVELIHOOD IMPROVEMENT IN TIMOR TENGAH SELATAN DISTRICT, NUSA TENGGARA TIMUR PROVINCE

Peningkatan kapasitas terpadu yang dilakukan bertujuan meningkatkan penghidupan petani yang lebih tahan risiko (risk-proof) melalui intervensi bersama kelompok masyarakat. Secara gamblang pendekatan terpadu yang dilakukan digambarkan pada bagan berikut:

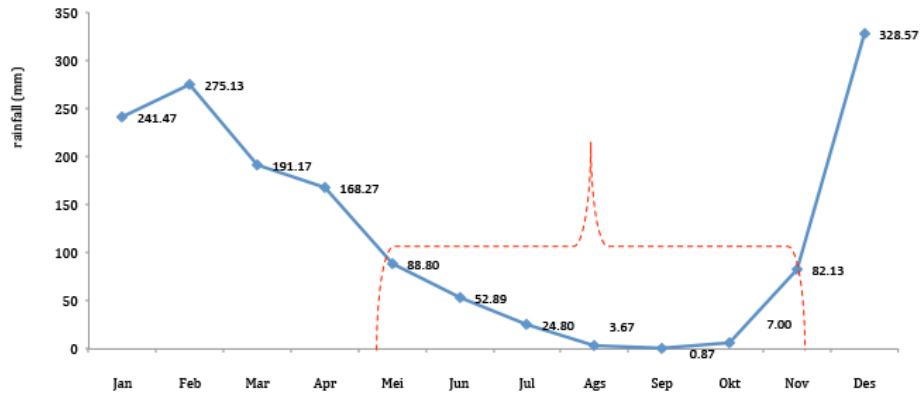
Peningkatan kapasitas terpadu yang dilakukan bertujuan meningkatkan penghidupan petani yang lebih tahan risiko (risk-proof) melalui intervensi bersama kelompok masyarakat. Secara gamblang pendekatan terpadu yang dilakukan digambarkan pada bagan berikut:

Intervensi terpadu untuk penguatan penghidupan petani
Integrated intervention for farmers' livelihood improvement

Para petani di 7 desa dihadapkan pada ancaman kekeringan, terlihat dari pola hujan dimana 6-7 bulan terdiri dari bulan kering.

Para petani di 7 desa dihadapkan pada ancaman kekeringan, terlihat dari pola hujan dimana 6-7 bulan terdiri dari bulan kering.

Rata-rata Curah Hujan Bulanan di 7 Desa Dampingan YBTS, Kab. TTS - NTT
The average of monthly rainfall in 7 assisted villages of YBTS, TTS regency, NTT province



Salah satu petani di Soe, NTT (A farmer in Soe, NTT)
Farmer and his tomatoes field in Soe, NTT

Kegiatan penyuluhan GAP di Soe, NTT
GAP training in Soe, NTT

APA YANG KAMI LAKUKAN?

Transfer Pengetahuan Budidaya Tanaman Sayuran yang Baik

Kami membantu kelompok tani melalui serangkaian pelatihan dengan konsep demo-plot : pengenalan dan pemilihan benih unggul yang baik termasuk varietas tahan kering, pelatihan persemaian, pemupukan yang efesien, pengendalian hama dan penyakit tanaman secara terpadu dan pembuatan pupuk organik cair. Para petani mendapatkan layanan penyuluhan , sehingga pengetahuan serta skill mereka juga meningkat. Kami juga mempromosikan 3 jenis sayuran daun (bayam, kangkung,dan caisim)untuk konsumsi dan peningkatan nutrisi keluarga.

WHAT WE DO?

Knowledge transfer of good vegetables cultivation

We help FG through series of training by demo plot concept: Introducing and choosing high quality seeds including drought resistant variety, nursery training, effective fertilizing, integrated pest and disease management, and producing organic liquid fertilizer. Farmers get extension service, so that their knowledge and skill will improve. We also promote trio leafy (spinach, kangkoong and choisum) for consumption and family nutrition improvement.

Konservasi lahan dan sumber mata air

Kami mendorong swadaya masyarakat untuk membangun mini-dam, sumur resapan, jebakan-jebakan air serta menanam anakan pohon di sumber-sumber mata air dan wilayah tangkapan. Prinsip 3 M (mengisi, menampung, dan menggunakan kembali) tersebut dilakukan agar terhindar dari bencana kekeringan di musim kemarau. Para petani juga dianjurkan membuat tersering pada lahan-lahan miring agar potensi erosi dan longsor berkurang, dan air dapat terserap ke dalam tanah.

Kontruksi sarana akses air untuk pertanian sayuran

Kami membantu kelompok tani mendapatkan akses air untuk pertanian melalui pompanisasi, vakumisasi, PAH (penampung air hujan), penggalian sumur, dan peningkatan air secara gravitasi dari penangkapan mata air ke bak atau tampungan plastik UV lahan.

Land and water resources conservation

We encourage communities to build mini reservoirs, wells, water traps and also plant tree seedlings around the water sources and water catchment areas to harvest water in the rainy season, using the 3R principles (recharging, retaining, and reusing) to avoid drought in the dry season. Farmers are also advised to make terraces on sloping area to reduce erosion and increase water absorption into the soil.

Water access facility construction for vegetables farming

We help farmer groups get water access for farming through building irrigation infrastructure: pump, vacuum, rain catchment, wells and gravity (water source/ wells – pipe – reservoir and UV plastic catchment in the field).

Peningkatan pendapatan petani

Kami memfasilitasi masyarakat mendapatkan akses informasi iklim dan prakiraan curah hujan, serta mendapatkan informasi harga komoditas, serta mandapatkan informasi harga komoditas. Dengan cara ini petani mampu menyusun kalender pasar dan kalender tanam serta pola tanam untuk mendapatkan panen dengan harga jual yang lebih baik di pasar. Kami mendorong masyarakat menetapkan produk unggulan setiap desa; memfasilitasi pelatihan dan pendampingan pengolahan dan pengemasan produk unutuk meningkatkan nilai tambah produk pertanian.

Increasing farmers' income

We facilitate communities to get climate information and access to rainfall forecast, arrange market calendar and planting calendar and also cropping patterns to get better selling price, introduce each villages' featured product; facilitate processing and packaging of product training and assistance to increase added value of agricultural product.

Lahan tomat milik petani di Soe, NTT
Farmer's tomatoes field in Soe, NTT

Berdasarkan analisis performa demo-plot, petani memperoleh keuntungan yang signifikan berkisar dari Rp Rp 810.000 untuk jagung manis hingga Rp 13.365.000 untuk cabai hanya dari luasan plot lahan yang kecil yang ditanami petani.

Based on demoplot performance analysis, farmers gained significant profit ranged from Rp 810,000 for sweet corn up to Rp 13,365,000 for chili from a small plot of farm cultivated by farmers.

East Nusa Tenggara (NTT-TTS)

Crop + Varieties	Nb Records	Land Size m2	*Cost $ / 1000 m2	Return $ / 1000 m2	Benefit $ / 1000 m2	Avg yield kg/0.1 hect
Choisum	38	73	300	760	460	630
Kangkong	6	97	184	504	319	443
Broccoli	1	900	82	375	293	71
Chili	5	180	279	1268	990	917
Cauliflower	3	1833	415	1158	742	1909
Shallot	1	50	426	1350	924	1,200
Sweetcorn	3	2,833	21	81	60	110
Tomato	2	750	274	700	426	2,000

***cost includes family labor**

A model of Market Calendar and Planting Calendar example for Soe and Cluster

Kami mengajak kelompok tani melakukan survei dan pencatatan harga-harga komoditas sayuran di pasar Soe. Dengan informasi harga tersebut, kami memfasilitasi kelompok tani menyusun kalender pasar. Hasilnya disajikan dalam suatu tabel yang menunjukkan harga yang baik pada bulan-bulan tertentu.

We invited farmer groups to survey and record prices of vegetable commodities in the Soe market. With that price information, we facilitated farmer groups to develop a market calendar. The results are presented in a table that shows a good price in certain months.

Market calendar based on prediction of commodity price in Soe cluster

Market location	Prediction of good price for selected commodity at local market for year 2016												
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Remarks
Soe market	To	To	To	To	To							To	Tomato
	Ch	Ch	Ch	Ch	Ch						Ch	Ch	Chili
	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Melon
	Cf	Cf	Cf	Cf	Cf	Cf	Cf	Cf	Cf	Cf	Cf	Cf	Cauliflower
	Br	Br	Br	Br	Br	Br	Br	Br	Br	Br	Br	Br	Broccoli
					Cu	Cu	Cu	Cu	Cu	Cu			Cucumber
	Wm	Wm	Wm	Wm	Wm	Wm	Wm	Wm	Wm	Wm	Wm		Watermelon
	Ca	Ca	Ca	Ca	Ca							Ca	Carrot
	Le	Le	Le	Le	Le							Le	Leafies
	ShSh	Sh	Sh	Sh	Sh	Sh						Sh	Shallot
	Bg	Bg	Bg	Bg	Bg	Bg	Bg	Bg	Bg	Bg	Bg	Bg	Bittergourd
	Fb	Fb	Fb	Fb							Fb	Fb	French beans

Rainfall pattern in Tubuhue village (used to represent Soe cluster, therefore applicable to Tublopo, Mnelallete and Kuatae villages)

Weather	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall	XXXX	XXXX	XXX	X						X	XX	XXX
Wind	XX	XXXX		X			XX	XX		XX		

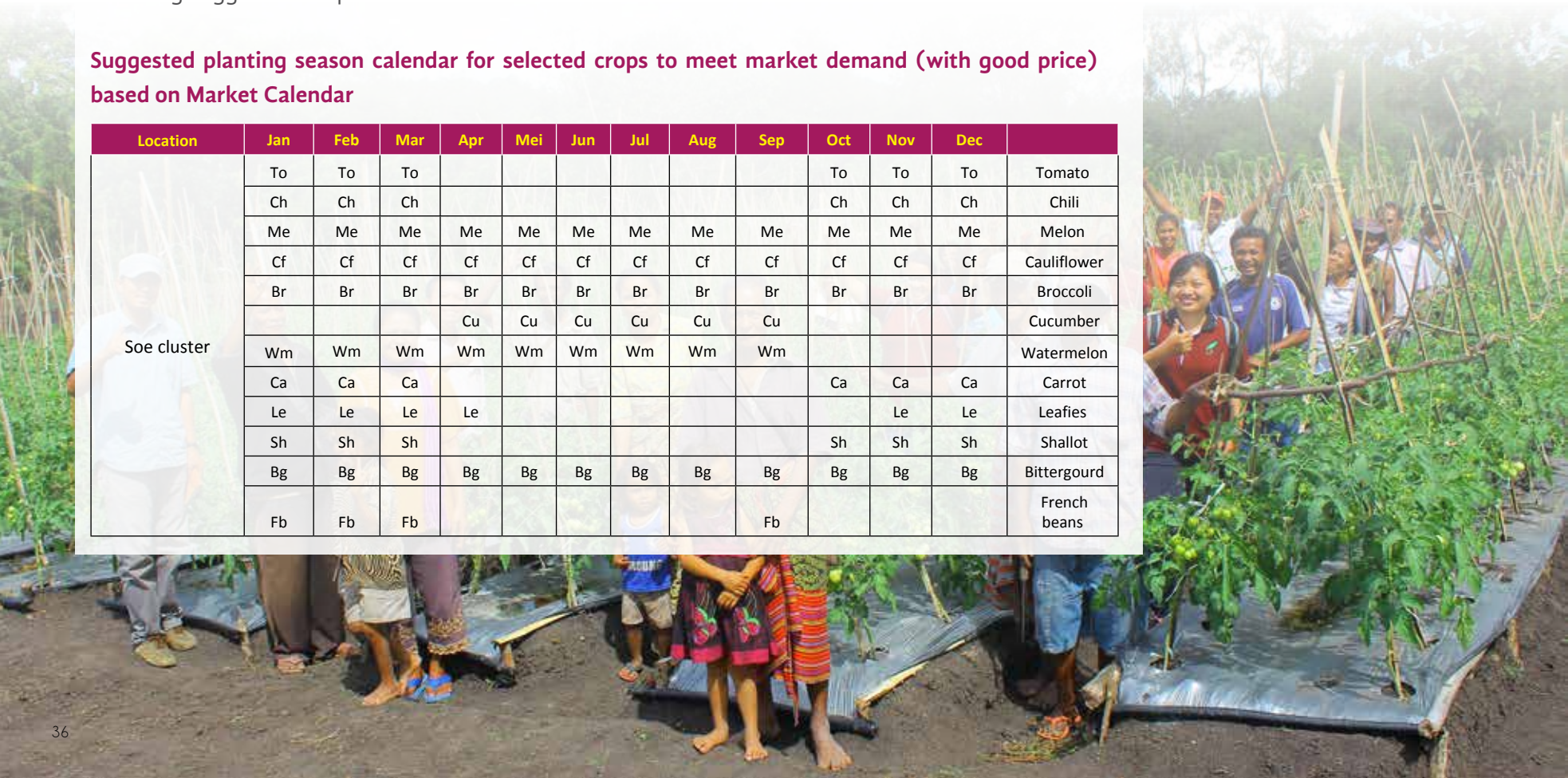
Remarks: blank = no rain or less than 50mm; X = around 50mm; XX = 50 – 100 mm; XXX = 100 – 150 mm; XXXX > 150 mm

Kemudian berdasarkan kalender pasar di atas, kami menyarankan para petani agar melakukan pola tanam berbagai tanaman sayuran. Dalam hal ini kelompok tani melakukan pengaturan sendiri di dalam kelompok mengenai pembagian jenis tanaman sayuran yang ditanam oleh masing-masing anggota kelompok.

Then based on the above market calendar, we advised farmers to do the planting patterns of various vegetable crops. In this case the farmer groups make their own arrangements within the group regarding the distribution of vegetable crops kind grown by each group member.

Suggested planting season calendar for selected crops to meet market demand (with good price) based on Market Calendar

Location	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Soe cluster	To	To	To							To	To	To	Tomato
	Ch	Ch	Ch							Ch	Ch	Ch	Chili
	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Me	Melon
	Cf	Cf	Cf	Cf	Cf	Cf	Cf	Cf	Cf	Cf	Cf	Cf	Cauliflower
	Br	Br	Br	Br	Br	Br	Br	Br	Br	Br	Br	Br	Broccoli
				Cu	Cu	Cu	Cu	Cu	Cu				Cucumber
	Wm	Wm	Wm	Wm	Wm	Wm	Wm	Wm	Wm				Watermelon
	Ca	Ca	Ca							Ca	Ca	Ca	Carrot
	Le	Le	Le	Le							Le	Le	Leafies
	Sh	Sh	Sh							Sh	Sh	Sh	Shallot
	Bg	Bg	Bg	Bg	Bg	Bg	Bg	Bg	Bg	Bg	Bg	Bg	Bittergourd
	Fb	Fb	Fb						Fb				French beans



APLIKASI 3 M:
MENGGUNAKAN AIR SECARA BIJAK

3R APPLICATION:
USING WATER WISELY

Instalasi pipa di demplot bersaudara Nobi-Nobi
Pipe installation in Bersaudara farmer group's demo plot, Nobi-nobi village

APA ITU 3M?

3M adalah praktik sederhana mengisi air ke dalam tanah, menyimpan dan menggunakan kembali air. Praktik ini penting bagi budidaya pertanian berkelanjutan, serta juga menjadi bagian dari pengurangan risiko bencana, adaptasi perubahan iklim, dan pelestarian lingkungan.

WHAT IS 3R?

3R is simple practice of filling water into soil, retaining and reducing water. This practice is important to sustaining agriculture cultivation, and also as the part of decreasing disaster risk, climate change adaption and environment preservation.

Aplikasi 3M sangat penting dilakukan agar petani dapat memanfaatkan air hujan semaksimal mungkin, mencegah penggunanan air secara berlebihan di sumber-sumber air, meningkatkan kapasitas peresapan air ke dalam tanah, mencegah terjadinya konsentrasi aliran permukaan dan melakukan upaya penghematan air dengan menggunakan kembali air. Dengan mengaplikasikan praktik 3M, petani dapat mencegah terjadinya ancaman kekeringan, longsor, erosi dan banjir yang bisa berdampak pada usaha pertanian.

3R application is very important to do, so that farmers can utilize the benefit of raindrops, prevent over using of water from the water sources, increase water absorption capacity, prevent run off concentration and save water by reusing it. By applying 3R practice, farmers can prevent drought, erosion and flood that can give impact to agriculture.

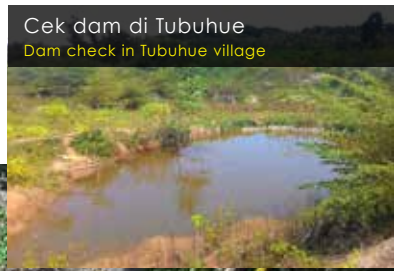
Drainase di Bersaudara Nobi-Nobi
Drainage in Bersaudara FG, Nobi-nobi village

M1 (Mengisi kembali/ Resapan)

Pengisian kembali air ke dalam tanah membuat sirkulasi dan keberlanjutan air tetap terjaga. Proses ini dapat dilakukan secara alami seperti daerah resapan hujan di kawasan hutan serta lahan terbuka hijau lainnya, ataupun dilakukan secara buatan seperti dengan membangun parit, terasering, lubang resapan dan lain sebagainya.

R1 (Recharge)

Recharging water into soil can make the circulation and sustainability of water exist. This process can be done naturally such as rain collecting area in forest and other green open fields, and also can be artificially done, for example: building trenches, stone terracing on the hillside, filtering hole, and others.



Cek dam di Tubuhue
Dam check in Tubuhue village

Integrasi demplot dan 3R di Sehati Nobi-Nobi
Integrated demo plot and 3R practices in Sehati FG, Nobi-nobi village

M2 (Menampung atau menyimpan/ Penyimpanan)

Proses menyimpan atau menahan air dilakukan guna pemanfaatan air pada waktu-waktu berikutnya. Penyimpanan seperti ini dapat memperlambat aliran air tanah secara horizontal, sehingga membantu mengumpulkan air tanah sekaligus menciptakan penahan "basah" (wet buffer) dalam jumlah yang besar. Kegiatan mengambil dan mengedarkan air pun menjadi lebih mudah. Metode ini juga memungkinkan untuk memperluas rantai penggunnaan air dan meningkatkan air tanah di area permukaan.

Integrasi demplot dan 3R di Tubuhue
Integrated demo plot and 3R practices in Tubuhue village

R2 (Retention)

Retaining water aims to utilize water for future uses. This process can slow down water flow horizontally, so that water can be retained and also act as a wet buffer in large number. The process of taking and circulating the water becomes easier. This method also make it possible extend the chain of water use and improve the ground water on the surface area.

Jebakan air di Kuatae
water trap in Kuatae

M3 (Menggunakan Kembali/ Penggunaan Kembali)

Metode 3M bertujuuan untuk melestarikan sekaligus mengoptimalkan ketersediaan air yang ada. Perlu penanganan khusus supaya sirkulasi atau daun air berjalan lebih lama sehingga lebih optimal dan banyak kegunaannya. Langkah pertama adalah mengnelola air agar tidak menguap. Air yang sudah menguap "meninggalkan" sistem dan tidak dapat disirkulasikan ke dalam sistem ini. Contoh lainnya: pengelolaan kualitas air sehingga air yang sudah dipakai dapat kembali digunakan untuk berbagai kebutuhan. Penerapan penggunaan kembali antara lain: membangun kebun keluarga, rumah kaca, irigasi bersambung, terasering (dengan penyerapan), dan lain sebagainya.

R3 (Reuse)

A 3R method is aimed to conserve and also optimize the water availability. We need a special treatment to make water circulation or water recycling process can runs longer, so that it can be more optimal and beneficial. The first step is to manage water so that it does not evaporate. Water that has evaporated will be exit of this system. Another example is: water quality management so that the used water could be reused for various needs. The reuses of water application for examples are: establish private garden, green house, integrated irrigation, terracing (with absorption), etc.

DENGAN 3M PETANI DAN KELOMPOK TANI LEBIH TANGGUH

Melalui pelaksanaan konservasi air dan lingkungan dengan praktik 3M, petani akan mampu menjadi petani yang tangguh terhadap bencana khususnya ancaman kekeringan

THROUGH 3R, FARMERS AND FARMER GROUPS BECOME MORE RESILIENT

By applying 3R the water and environment conservation by, farmers are able to withstand disaster, especially drought.

Konstruksi sumur vakum di Lais Leko Tetaf
Vacuum well construction in Lais Leka Tetaf

6

KONSUMSI SAYURAN

Vegetable Consumption

KONSUMSI SAYURAN DI KABUPATEN TIMOR TENGAH SELATAN MENINGKAT
VEGETABLES CONSUMPTION INCREASE IN TIMOR TENGAH SELATAN DISTRICT

Menurut pengamatan YBTS sejak tahun 2013, berita gizi buruk dan ketidakseimbangan asupan makanan merupakan berita yang berulang setiap tahunnya di NTT.

Salah satu penyebab gizi buruk di NTT dan juga di daerah-daerah lainnya di Indonesia adalah masih sangat rendah konsumsi buah dan sayur. Kenyataannya, rata-rata suplai dan konsumsi sayuran di Indonesia bagian timur umumnya masih berada di bawah rata-rata suplai dan konsumsi sayuran nasional.

Based on the YBTS research, since 2013, malnutrition and unbalanced food supply news are continuously repeated in NTT province.

The malnutrition in NTT province and other areas in Indonesia is one caused by the low consumption of fruits and vegetables. As a mattter of fact, average of vegetable supply and consumption in eastern part of Indonesia are well below national average of vegetable supplu and consumption.

Penyuluhan trio-leafies, sidey
Trio leafy promotion in Sidey, Manokwari

Dalam kegiatan kami di TTS, kami mendorong agar masyarakat gemar mengkonsumsi sayuran agar semua anggota keluarga memperoleh asupan gizi yang seimbang.

Pada tahun 2016 bersamaan dengan kegiatan terpadu peningkatan penghidupan dan resiliensi, kami dorong keluarga petani untuk melakukan budidaya sayuran dengan beragam jenis seperti jenis sayuran daun, sayuran berbuah seperti tomat, terong dan timun. Selain hasil budidaya sayuran yang utamanya

Through our program in Timor Tengah Selatan (TTS) district, we encourage communities to be fond of vegetable consumption, so that their family will get a balance nutrition supply.

In 2016, integrated to the sustainable resilience and livelihood improvement program, we encourage farmer' house holds to do vegetable farming such as leafy, tomato, eggplant and cucumber. We also do campaign for vegetable consumption beside of the

mereka jual untuk sumber pendapatan keluarga, kami juga mengkampanyekan agar keluarga petani menyisihkan hasil sayuran yang mereka tanam tersebut untuk dikonsumsi.

Kami melihat ada peningkatan konsumsi sayuran oleh anggota keluarga sebagai nilai tambah oleh petani. Dai 505 petani yang kami wawancarai mengenai konsumsi sayuran di tingkat rumah tangga, tiap rumah tangga mengonsumsi rerata 500 – 3.000 gram per hari.

Konsumsi sayuran tertinggi adalah 551 gram/kapita/hari, yaitu di Desa Tetaf, sementara yang terendah adalah 301 gram/kapita/hari. Pada tabel dapat dilihat dampak positif dengan adanya intervensi yang kami lakukan: peningkatan level konsumsi masyarakat terhadap sayuran segar mendekati level standar yang ditetapkan FAO.

economic value of vegetables for farmers. They have to take some of the yield to be consumed.

We looked at increase in vegetable consumption by household members as an additional benefit acquired by farmers. From 505 farmers interviewed on how much consumption of vegetables per HH, we found a range of daily average 500 grams – 3,000 grams per HH per day.

The highest level of consumption of vegetables per day per capita of 551 grams was found in Tetaf village, while the lowest was found in Tublopo village with average of daily consumption 301 grams per capita per day. Table shows positive impact of our intervention: increased levels of community consumption for fresh vegetable to a level that meets FAO standard.

Penyuluhan trio leafies di Halmahera
Trio leafies promotion in Halmahera

Average of daily vegetable consumption each village (in gram) & corresponding figures for 7 villages

Cluster	Vilage	Sub-District	Average consumption per HH/day (gram)	Average family member (persons)	Average of daily vegetable consumption (gr per capita)
Soe	Tubuhue	Amanuban Barat	1872,38	3,5	534,97
	Tublopo	Amanuban Barat	1504,55	5,0	300,91
	Kuatae	Amanuban Barat	1968,75	4,0	492,19
Niki-Niki	Mnelalete	Kota Soe	1638,30	3,6	455,08
	Nobi-nobi	Amanuban Tengah	2093,92	3,8	551,03
	Lakat	Kuatnana	1932,00	4,4	439,09
	Tetaf	Kuatnana	2240,43	4,4	509,19

BERDASARKAN BERITA ANTARA NTT

(http://kupang.antaranews.com/): Data dari Kementrian Kesehatan menyebutkan bahwa pada tahun 2016 jumlah masyarakat Indonesia yang mengonsumsi buah dan sayuran tergolong rendah yaitu 57,1 gram per hari dan 33,5 gram/orang/hari.

FAO menyebutkan, idealnya konsumsi sayuran adalah 91,25 kilogram/kapita/tahun dan konsumsi buah-buahan adalah 73 kilogram/kapita/tahun. Berdasarkan hal tersebut, masyarakat Indonesia idealnya mengonsumsi 400 gram atau 0,4 kilogram sayuran dan buah-buahan tiap harinya. (http://etalasebintaro.com/).

ACCORDING TO BERITA ANTARA NTT

(http://kupang.antaranews.com/): Data from the Ministry of Health shows for the year 2016 the number of Indonesian people who consume fruits and vegetables remained low at 57.1 grams per day and 33, 5 grams per person per day.

FAO mention, ideally vegetable consumption was 91.25 kg per capita per year and the fruit of 73 kg per capita per year. Of this figure, ideally Indonesian people eat 400 grams of vegetables and fruits every day. Figures 400 grams means about 0.4 kilograms of vegetables and fruits (http://etalasebintaro.com/).

7

DATA DAN PELAYANAN INFORMASI

Data and Information Service

G4AW SMARTSEEDS – LAYANAN INFORMASI
G4AW SMARTSEEDS – INFORMATION SERVICE

Pada Oktober 2016, SMARTseeds Indonesia project (2016-2019) diluncurkan oleh beberapa mitra konsorsium.

Konsorsium SMARTseds terdiri dari 7 (tujuh) institusi publik dan swasta dengan keahlian masing-masing:

- Akvo (Belanda)
- Institut Pertanian Bogor- IPB (Indonesia)
- East West Seed Indonesia- EWINDO (Indonesia)
- ICCO South East Asia (Belanda/ Indonesia)
- Nelen & Schuurmans (Belanda)
- TTC Mobile (Belanda)
- Twente University- ITC (Belanda)

EWINDO menugaskan YBTS untuk mengimplementasikan komponen paket kerja pengguna dalam SMARTseeds.

In October 2016, SMARTseeds Indonesia project (2016-2019) was launched a consortium partners.

The SMARTseeds consortium consists of seven public and private organisations, each with their own expertise:

- Akvo (Netherlands)
- Bogor Agricultural University - IPB (Indonesia)
- East West Seed Indonesia - EWINDO (Indonesia)
- ICCO South East Asia (Netherlands/Indonesia)
- Nelen & Schuurmans (Netherlands)
- TTC Mobile (Netherlands)
- Twente University - ITC (Netherlands)

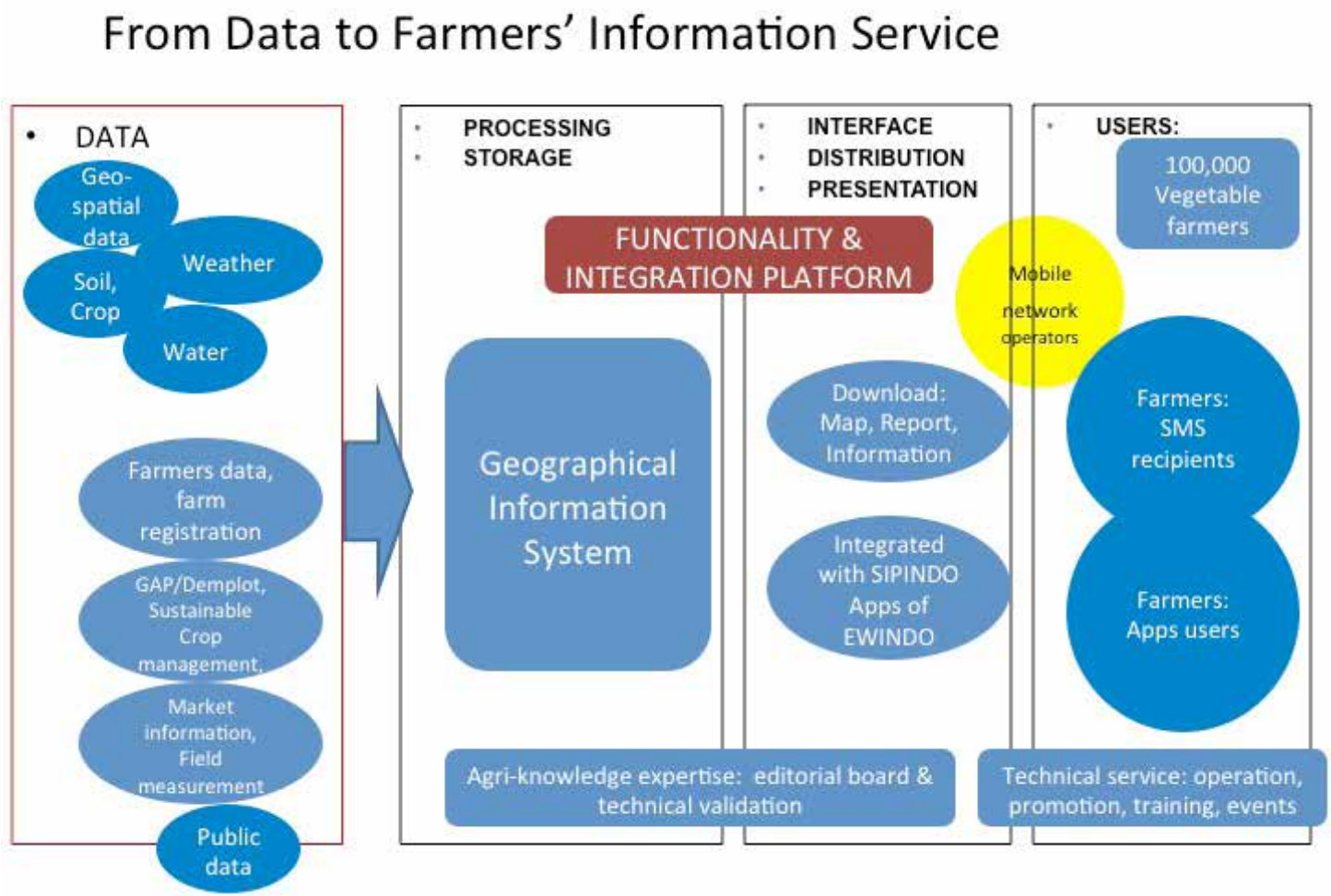
EWINDO assigned YBTS to implement User Engagement work package component within the SMARTseeds.

Layanan informasi menggunakan GIS (Geographic Information System/ Sistem Informasi Geografil), data di lapangan untuk menghasilkan anjuran dan informasi yang diterima melalui SMS dan/atau Apps petani dapat meningkatkan produksi, beroperasi secara lebih efisien dan meningkatkan pendapatan secara berkelanjutan....

1. SMARTseeds Kalendar tanam yang merekomendasikan jadwal tanam/pembibitan, dan
2. SMARTseeds anjuran Good Agricultural Practices (GAP) untuk pertanian sayuran yang merekomendasikan prakter spesifik lokasi pada: pemilihan benih, diagnosis dan pengendalian hama/ penyakit, irigasi, aplikasi pestisida, aplikasi pupuk berdasar hasil uji tanah keamanan kerja, penanganan panen dan pasca panen

Information Service use GIS – geodata, field data to generate farm advices & useful information delivered via SMS and/or Apps farmers can improve production, efficiently operate, and increase income in a sustainable way....

1. SMARTseeds Crop Calendar recommends planting/seeding schedules, and
2. SMARTseeds Good Agricultural Practices (GAP) advice for vegetable farming recommends site-specific practices on: seed selection, pest/disease diagnosis and treatment, irrigation, pesticide applications, fertilizer applications based on soil testing, workers' safety, harvesting and post-harvest handling.



3. SMARTseeds Informasi pasar yang menyediakan informasi terkini harga jual dan harga beli komoditas sayuran, menyediakan informasi pasar bagi para pedagang dan tengkulak untuk area (contoh: tipe, kualitas dan volume sayuran tersedia yang siap dijual).

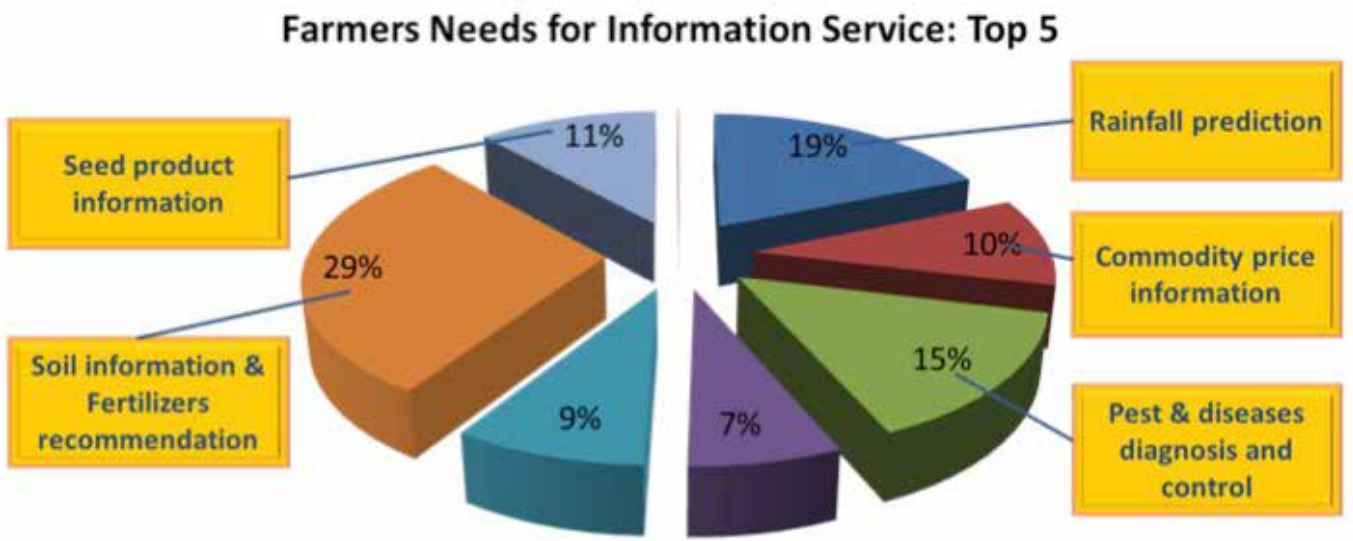
3. SMARTseeds Market information provides up-to-date buying and selling prices for vegetable crop; provides buyers/collectors with market information for a specific area: i.e. type, quality and volume of vegetables available for selling.

Ada kebutuhan konstan terhadap pembagian informasi dan pengetahuan untuk memenuhi kebutuhan petani. Kebutuhan tersebut disalurkan dalam bentuk-bentuk:

- Konvensional (panduan cetak, leaflet, grafik), audio/radio, visual/TV
- Video tutorial menggunakan alat pemutar video, tab, ... atau
- Digital melalui telepon selular/ smartphone

There is a constant need of sharing information and knowledge materials to cater farmers' need. The need is channeled in forms of:

- Conventional (printed guide, leaflet, chart), audio/radio, visual/TV
- Video tutorial through players, tab, ...or
- Digital through mobile phones / Smartphones (SMS, Apps,...)



Petani dan tomat hasil panennya
A farmer and his harvested tomatoes

Survey data petani secara digital
Digitalized farmers' data survey

Baseline survey di Jawa Tengah
Baseline survey in Central Java Area

Training geoshape plotting di Kulonprogo, Yogyakarta
Geoshape plotting training in Kulonprogo, Yogyakarta

Wawancara dengan petani cabai di Jawa Timur
interview with chili farmer in East Jave area

Tanaman cabai merah besar Gada F1 milik petani
Hot pepper Gada F1 plants in farmer's field

wawancara dengan petani di Lampung
interview with farmers in Lampung area

Baseline survey training di area Lampung
Baseline survey training in Lampung area

Wawancara dengan petani produksi di Jember
Interview with production farmers in Jember area






PROFIL TIM YBTS

YBTS Team Profile



Bina Tani Sejahtera












Edwin Sanso Saragih
(edwin.saragih@binatani.or.id)

Chairperson of YBTS, and Extension Manager

Edwin - after graduated in 1989 from Institut Pertanian Bogor - has a dynamic agriculture career, worked at crop protection and seed companies, and also in international development agencies. His experiences includes field assessing and improving crop growth, field demonstration of agro-chemical and seeds product, soil use, farmer trainings, and product testing and technology adoption, and also value chain assessment. He also had experiences in development of private-led extension services especially for smallholder farm extension management. Edwin joined PT. East West Seed Indonesia in year 2012 as Technology Transfer Manager, and since early 2014 had been assigned as Chairman of Yayasan Bina Tani Sejahtera.

Kurniawan Sutedja
(kurniawan_suteja@panahmerah.id)

Treasurer of YBTS

Kurniawan Sutedja, graduated from one of private high school in Lampung. He continued his studies at the Faculty of Economics at one of the colleges in Bandung. Kurniawan has been working for more than 20 years in PT. East West Seed Indonesia, and now gives his time and attention to Yayasan Bina Tani Sejahtera. He is interested in agriculture development, social, cultural, and rural sociology.

Fransiska Fortuna
(fransiska@panahmerah.id)

Secretary of YBTS

Fransiska has more than 15 years of experiences in leading organization development, project management and strategic planning. She has Industrial Engineering education background and Master of Human Resources Management from Atmajaya University, Jakarta. Prior to her previous role as a strategic consultant, she handled different types of companies include profit and non profit organization. Fransiska joined PT East West Seed Indonesia in year 2010 as Human Resources Manager and part of the strategic team in making strategic goals and initiatives for improving business performance and sustainability. Since early 2016, she had been assigned as Secretary of Yayasan Bina Tani Sejahtera.

Junike Susan Medah
(junike.sm@binatani.or.id)

Technical Program Supervisor

Junike graduated from bachelor program, Agricultural Socio Economic major, Universitas Nusa Cendana in 1994. Before joining Yayasan Bina Tani Sejahtera, she has many experiences in agricultural projects from other NGOs. In 2012 to 2016 she joined as a Monitoring and Evaluation officer at PT Fresh Dynamics Indonesia (vegIMPACT) in Jakarta and Rural Development project/ RDP phase III based in Dili, Timor Leste. She is also experienced as a Senior Program Officer in Livelihood program/ Disaster Risk Education at CWO in 2004 to 2012. She started join YBTS as a Technical Program Supervisor for Nusa Tenggara Timur region in November, 2016.

Febrianus Mado
(febrianus.mado@binatani.or.id)

Technology Transfer Officer

Febri graduated from Faculty of Agriculture, Nusa Cendana University, Kupang. He joined PT East West Seed Indonesia since April 2007 in the Seed Production Department. In 2013 he joined the Marketing Division as a Technology Transfer Officer in the same company. Since June 2014, he joined Bina Tani Sejahtera Foundation as Technology Transfer Officer for East Nusa Tenggara area, actively conducting vegetable farming training for farmers and community as part of Resilience and Livelihood Project supported by Cordaid and PfR (Partners for Resilience) and vegetable farming in Oebelo Farm.

Arga Wisnu Pradana
(arga.wisnu@binatani.or.id)

Technical Program Officer

Arga joined PT East West Seed Indonesia in March 2013 right after graduated from Institut Pertanian Bogor. Since June, 2014 he joined the Bina Tani Sejahtera Foundation as a Transfer Technology Officer for West Nusa Tenggara area. He has experience to make horticulture teaching farm that collaborated with university (IPB). He is now having responsibility for executing the Shallot Nursery Technology Transfers project that collaborated between PT East West Seed Indonesia and PRISMA in West Nusa Tenggara. He also monitors and evaluates YBTS projects and technically supports other foundation member to facilitate farmers. He became a Technical Program Officer since July 2016 and responsible for supervise YBTS program, especially in Halmahera and West Papua.

Ainunnisa El Fajrin
(ainunnisa.elfajrin@binatani.or.id)

Admin/Finance Officer

Graduate from Agribusiness major, Universitas Gadjah Mada on November 2014. She joined Yayasan Bina Tani Sejahtera since January 2015. Currently, she's working as an Administrative and Finance Officer of Yayasan Bina Tani Sejahtera, Jakarta.

Bryan Harry Andrew Victor Sitorus
(bryan@binatani.or.id)

Accounting Officer

Graduated from bachelor degree, Business Administrator - Accounting Major, Spicer Memorial College Affiliated to Griggs University, India. Bryan worked as an accounting staff in manufacture industry. He joined Yayasan Bina Tani Sejahtera since October, 2015 as an Administrative & Finance Officer, especially for accounting.

Roberd D CHR Abanat
(abanat@binatani.or.id)

Technical Field Officer

Graduated from Agriculture Faculty, Universitas Nusa Cendana, Kupang. He joined some agricultural training in NTT, such as organic farming and water analysis program. Before joining YBTS, he had also been a facilitator for some projects held by other foundation. He started to join YBTS a Technical Field Officer for Integrated Capacity Building for Farmers' Livelihood Improvement in Soe, Timor Tengah Selatan regency. Since December 2016, he is responsible for Increase Productivity of Vegetable through Good Agriculture Practices and Good Quality Seed Information Provision in Arfak highland, West Papua.

Rika Bhernike Sitepu
(rika.bhernike@binatani.or.id)

Technical Field Officer

Rika joined the Bina Tani Sejahtera Foundation in April 2014 as Project Officer in Resilience and Livelihood Project in Kupang, East Nusa Tenggara. She holds a Bachelors Degree in Agrotechnology from Padjadjaran University (UNPAD), Bandung. It was her responsibility to conduct extension activities in Halmahera Island, since February 2015.

Hermina K H Supadi
(hermina.supadi@binatani.or.id)

Project Officer

After completing her diploma degree majoring in Agriculture for Dry Environment in Nusa Cendana University in Kupang, Hermina has many working experience in the agriculture and community development. Prior to joining as Project Officer in Integrated Capacity Building for Farmers' Livelihood Improvement Project, she was a Coordinator in Innovation and Education Division in BK3S in East Nusa Tenggara as a coordinator, and many other projects in community development.

Hardianta TM Ginting
(hardianta@binatani.or.id)

Technical Field Officer

Danta graduated from master program, Human Resource Management, Universitas Teknologi Yogyakarta in 2015 and bachelor degree of Agricultural Extension and Communication, Universitas Gadjah Mada in 2011. Before joining YBTS, he had joined in some palm oil companies and Pertamina Pematang Siantar. He started to join as a *Technical Field Officer* for West Papua Project (based in Manokwari) on June 1st, 2016.

Sudiarto
(sudiarto@binatani.or.id)

Technical Field Officer/ Field Data Collection

Sudiarto graduated from bachelor program, Soil Science and Land Resources Departement, Institut Pertanian Bogor in 2016. During his study, he had experience in GIS (Geographical Information System) application and land survey. He started to join as a *GIS (Geographical Information System) officer* in September 2016 in Soe, Timor Tengah Selatan. In the next 2017, he will be responsible for Technical Field Officer (Field Data Collection) for G4AW Project in East Java area.

New Members in 2017

Sadhu Zukhruf Janottama
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Dominggus Sesfaot
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Technical Field Officer (West Papua)

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