

FACT SHEET

WEST JAVA HIGH VALUE HORTICULTURE MARKET LINKAGES



Beefsteak Tomato in Garut, West Java



Green Bean (bush type) harvest at Cibodas Bandung



New Technology of Hand tractor for horticulture land preparation

Activity: West Java High Value Horticulture Market Linkages

Locations: (1) Lembang and Rancabali, Bandung; (2) Samarang, Tarogong, Cisarupan, and Cigedug, Garut; (3) Argapura, Majalengka; and (4) IVEGRI office in Lembang

Partners: (1) Indonesian Vegetable Research Institute (IVEGRI), (2) Indonesian Vegetables and Fruits Exporters Association (IVFEA), (3) CV Bimandiri, (4) ASGITA (5) PT. Momena Agrikultura, (6) PT. Alamanda Sejati Utama, (7) LPPM UNPAD, (8) Agriculture Office of Bandung Regency, (9) Agriculture Office of Garut Regency, (10) Agriculture Office of West Java Province, (11) Indonesian Retailers Merchants Association (APRINDO), (12) Eco Pesantren Daarut Tauhid, (13) Lyco Farms, (14) PT. Mandiri Jaya Flora, (15) Syngenta Foundation, (16) PT. Sumber Tani Horti, (17) Badan Pelaksana Penyuluhan Pertanian, Perikanan dan Kehutanan (BP4K), (18) Agriculture Office of West Bandung Regency, (19) Maja Agriculture Vocational School (SMKN 4 Maja), (20) PT. Bank Jabar Banten

Beneficiaries: 3.207 farmers from 97 farmer's groups; five specialized wholesalers supplying supermarkets with approximately 400 employees

Activity Background: Supermarkets in Indonesia import around 80% of the fruits and 20% of the vegetables they sell. There is an opportunity for farmers to meet the domestic supply; however they need to address a multitude of supply chain issues, including: quality improvements, rejection rates, increasing shelf life, quantity and flexibility of volumes supplied, food safety standards, certification, and payment terms.

In order to address these challenges, AMARTA conducts various trainings in collaboration with the Government (both national and provincial), private sector partners, farmer groups, and other international development support agencies. There are three group activities: (1) Demonstration plots to improve productivity, product quality, and farmers income; (2) collaboration with government institutions to improve farmer's research, extension, and development linkages; and (3) collaboration with universities in farmers and other actors on capacity building.

AMARTA has focused efforts on improving produce for the domestic market. Through numerous discussions with wholesalers and buyers, as well as producing recommendations from a consultant report, "Bridging the Gap between Farmers and Supermarkets" conducted in the four cities of Bandung, Cianjur, Cirebon and Garut in January 2008, AMARTA established a number of on-farm demonstration plots for fruits and vegetables.

AMARTA West Java also focused on penetrating export market for horticulture products, especially for Singapore and Malaysia. Collaboration with VCC LPPM-UNPAD and some Exporter's companies resulted in establishment of Indonesian



AMARTA carrot demplot in Garut



Brastagi Carrot introduced in West Java



Potoatoes Screen house in Garut)

Vegetables and Fruits Exporters Association (IVFEA), a national association which will promote increasing Indonesian vegetables and fruits (horticulture) export consistency, quality and quantities.

AMARTA Technical Intervention were undertaken:

- to **improve production on Tomato at Garut**, AMARTA introducing a new Variety of Beefsteak Tomat;
- to introduce **Plant Grafting Technique for tomatoes** to improve plant resistant from soil borne disease;
- **Irrigation / Fertigation technique and rain protection** using plastic covers;
- **Improved Production on green beans**, AMARTA introduced a new variety-Kenyan Beans, a bush beans type,- as requested by exporters for Singapore and Malaysia markets.;
- **AMARTA also introduced land tillage (preparation) with mini hand tractors**, to reduced labor cost for land preparation.;
- **Improved production on carrots** in Garut, by introducing a variety developed in Berastagi that produced similar quality (tuber size, color and taste) with imported carrots and Sugar Snax and a baby carrot variety with the sweetest taste, and for fresh consumption.;
- **An Improved Nursery for vegetables** at Garut, using trays, sterilized soil/media and screen house with Mist Irrigation, to produce good quality seedlings / transplants, this activity could be a new business for farmer groups.
- **A broccoli program in West Bandung** area has started from land preparation with soil treatments to control Club Root disease,
- **Road Drip Irrigation;**
- **Improved Post Harvest Handling** – Top Icing as pre-cooler for broccoli, to extend freshness, and shelf life; and
- **Introduction of a new variety of MD-2 Pineapple** in low land area at West Java, AMARTA has produced transplants by tissue culture technique. This activity has been undertaken with a number of partners including: the West Java Province Agriculture Office, University Farm IPB, PT. Alamanda Sejati Utama, PT. Momenta Agrickultura, and CV. Bimandiri with Tasikmalaya Agriculture Office, who agreed to receive transplants and will planting at partner's land.

Post-harvest Training in collaboration with IVEGRI and the Indonesian Retail Merchants Association: In collaboration with the Indonesian Retail Association (APRINDO), essentially the supermarket association, AMARTA and IVEGRI conducted fresh vegetable handling training techniques to



Field Day Event at IVEGRI 2010



Training on MD-2 Pineapple Seedling /
Transplants / Sucker Production



Plastic and or remay cover for Broccoli at
Lembang

match supermarket standards. In addition to sorting and grading, IVEGRI also introduced sterilization equipment to kill bacteria and reduce pesticide residue.

3rd Year Collaboration AMARTA - IVEGRI: Trainings were conducted in the last year of collaboration with IVEGRI focusing on 5 (five) trainings on potato seed production, green Beans production technique, and disease on green beans and other vegetables. Two demonstration plots were completed by IVEGRI on Potato Seed Production G0 (in screen house) – G3 (Open Field Production), and green bean production introducing 4 (four) new varieties of green beans. As preparation for Field day events, IVEGRI presented in-house demonstration plots on green leafy lettuce, green beans, potato, broccoli, tomato, sweet corn, hot pepper (chilli), and other crops research.

Field days event in collaboration with IVEGRI and Syngenta Foundation: In collaboration with the **Syngenta Foundation**, AMARTA and IVEGRI on October 12-13, 2010 conducted Field days with the objective of introducing new varieties and technology innovation in vegetables and market oriented products. A total of 215 participants attended the event, all participants were given the opportunity to visit demonstration plots in vegetables such as: potatoes, Berastagi carrots, sweet corn, green beans, tomatoes, peppers, and broccoli. AMARTA also demonstrated shade cover for tomatoes and broccoli, drip irrigation, and using hand tractors for land preparation. On the second day a seminar was held focusing on selecting the proper varieties of vegetables crops, good use of pesticides, post harvest handling, and marketing.

Bimandiri Packing Facility: AMARTA assisted CV Bimandiri, a supermarket specialized wholesaler, with its pack-house located in Garut. Due to increases in oil prices Bimandiri changed their operational strategy by diversifying its target markets. It is currently supplying Carrefour and other supermarkets. As a result of this activity 135 farmers are beginning to work with Bimandiri.

AMARTA also supported farmer's groups in post-harvest handling and cold storage for strawberries and introduced improved varieties of carrots for supermarkets.

Second Year Collaboration with IVEGRI: Trainings were conducted in the second year of collaboration with IVEGRI on cultivation techniques for broccoli, Chinese cabbage, green leafy vegetables, tomatoes, carrots, and potato seeds. In addition, AMARTA provided pack-house operation management for fresh vegetables. Over 300 participants attended the trainings and have increased quality and yields.

Demonstration plots (demplots) were established to disseminate IVEGRI's research results, especially related to environmentally friendly technologies. There are two types of demplots, on-farm (at the farmer's fields) and IVEGRI's in-house demplots.

AMARTA-Padjadjaran University [UNPAD] Collaboration in Round Table Discussions, Farm Management Trainings, Focus Group Discussions, and Business Plan Training:



Broccoli farmer in Garut, West Java with his harvest



Tutorial on Farm Record Keeping at Kawanasih FG, Bandung Barat

The West Java Agribusiness Action Group- Value Chain Center established by AMARTA in collaboration with the LPPM- UNPAD has facilitated the establishment of the Indonesian Fruits and Vegetables Exporters Association. To sustain and improve the capacity and contribution of the West Java Agribusiness Action Group- Value Chain Center and to improve capacity and contribution to regional agribusiness development, AMARTA in collaboration with LPPM UNPAD conducted round table discussions, farm management trainings, Focus Group Discussion for four commodities, agribusiness plan training, created a training manual, and wrote a paper on “West Java Horticulture Value Chain Development”.

Farm Management Training at Bandung, West Bandung, Garut and Majalengka:

Farm Management Training was conducted for nine FGs in Bandung, West Bandung, Garut and Majalengka. In total, 405 farmers participants, 41 Extension Agents, 34 Agriculture Vocational School Teachers and 9 students, joined the trainings. Training for Extension Agents at BP4K Garut and Agriculture Vocational School Teachers in Majalengka was used Training of Trainer (ToT) method. They will be trainers for farmers or students at this area. Farm record keeping can be used to calculate cost, revenue, cost of goods sold and total profits. During the training all participants practiced preparing one year farm budgets and learned how to determine the financial position of their farms. AMARTA also made revisions and prepared new handbook to provide more information to farmers to ensure they understand on farm record keeping.

As part of Farm Management Training, AMARTA also held a Workshop on Access to Banking Farm Financing which was a follow-up of the activities of Farm Management Training. In this workshop, AMARTA brought speakers from the Bank of West Java, Banten (BJB), which described the process of obtaining loans from the banks. There were 8 farmers who were interested and directly applied for credit through its Small and Medium Enterprises (UKM).

Farmer Group Strengthening in Garut:

AMARTA has also provided assistance to Dirgantara FG Sukatani and Mulus Rahayu FG Cigedug focused on potatoes and beef tomatoes. In November 2010, AMARTA facilitated the preparation of by-laws and regulations for each FG to strengthen their institutional capacity.