

**PRELIMINARY SURVEY
OF AGROFORESTRY AND SUSTAINABLE
VEGETABLE
PRODUCTION AND MARKETING
IN NANGGUNG SUB DISTRICT, WEST JAVA**

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A. Introduction

This survey covered three farmer groups (Cepak Nangka, Lestari and Sekarsari) as representative of three villages (Kp. Nyuncung-Malasari, Cisarua and Parakan Muncang) in Nanggung Sub-district area. Survey used Participatory Approach with farmers, farmer groups, community leader and market actors.

Table 1. Marketing information of Vegetables in Nanggung Sub-district

| No | Information | Cepak Nangka | Sekarsari | Lestari |
|----|--|--|--|--|
| 1 | Vegetables/ Tree-garden farmers | <ul style="list-style-type: none"> • Bu Yati • Bu Rina (farmer/waroeng owners) • Prayit • Gapuy/Riki | <ul style="list-style-type: none"> • Pa Atim (farmer) • Pa Adang (Mentimun, Kacang Panjang) • Pa Mursyid (Cabe keriting) • Saleh | <ul style="list-style-type: none"> • Pa Ujang Parta • Pa Adek • Pa Agus • Pa Kodang • Pa Yono • H. Enoch |
| 2 | Vegetables that grown in Villages | <ul style="list-style-type: none"> • Kacang Merah (• String bean (<i>Phaseolus vulgaris</i>) • Cabe rawit (<i>Capsicum annum</i>) • Bakung (Daun bawang) • Tomat (• Jagung • Kangkung, Bayam dan Daun Singkong (jumlah banyak sehingga biasanya tdk dibeli) • Small potatoes (<i>Kumili</i>) | <ul style="list-style-type: none"> • <u>Kacang panjang</u> • <u>Kacang buncis</u> • Cabe • <u>Mentimun</u> • Terong lokal • Jagung manis • Jagung sayur • Daun sereh | <ul style="list-style-type: none"> • Kacang panjang • Kacang buncis • Cabe merah • Mentimun • Ceisin |
| 3 | Indigenous Vegetables that grown in Villages | Jotan/Pahang, Antanan; Jamolo/patre; Genjer; Jonge; Eceng kecil; Pok-pohan; tekokak | Katuk, Pok-pohan, rebung, honje, jamborong, ????? | Leuca, rebung, honje, tekokak, jantung pisang. ??? |
| 4 | Fruit Tree- Vegetables that grown in Villages | Pete (<i>Parkia Speciosa</i>) Melinjo (<i>Gnetum gnemon</i>) Katuk | <ul style="list-style-type: none"> • Jackfruit (<i>Artocarpus heterophyllus</i>) • Pete (<i>Parkia Speciosa</i>) • Melinjo (<i>Gnetum gnemon</i>) • Jengkol • Katuk | <ul style="list-style-type: none"> • Nangka • Pete • Melinjo • Jengkol • Katuk |

| | | | | |
|----|--|---|---|---|
| 5 | Market Agents | <ul style="list-style-type: none"> • Mang Ompong (vegetables); • Mang Omar (fermented casava/<i>tape</i> processor); • Bu Manot from Rengganis; Bu Ratna and Pa Ardasin • Khotibul Imam • Pa Biraeni (Kaler) | H. Ending – Sadeng Kolot (katuk) | Pa Kodang Pa Agus |
| 6. | Total quantities and qualities being sold | <ul style="list-style-type: none"> • Small quantities of the farmers' product was sold because of farmers grow vegetables in small-scale area (50-150m²) of their <i>kebun</i>. | <ul style="list-style-type: none"> • Some of farmers cultivated in PT.Hevindo (formerly planted rubber tree) and Perum Perhutani area with 0.2 – 1.0 ha width. Although they have opportunities with land access, farmers can not produce in huge numbers of vegetables in good quality. | |
| 7 | Market Channel used by farmers | <p>Channel A. (80%) Farmers → Neighbors/local household (Mentimun)</p> <p>Channel B. (15 %) Farmers → Traditional/local market (Cibeber and Nanggung) for Jagung manis/sayur and Mentimun</p> <p>Channel C. (5%) Farmers → Local Collectors/traders → Traditional/local market (Cibeber/ Nanggung)</p> | <p>Channel A. (80%) Farmers → Neighbors/local household (Mentimun)</p> <p>Channel B. (10%) Farmers → Traditional/local market (Cibeber and Nanggung) for Jagung manis/sayur and Mentimun</p> <p>Channel C. (10%) Farmers → Local Collectors/traders → Traditional/local market (Cibeber/ Nanggung)</p> | <p>Channel A. (70%) Channel B. (5 %) Channel C. (20%) Channel D. (5%) Farmers → Traditional/local market → Outside of Nanggung Sub-District/Regional Market (Leuwiliang, Ps.Bogor, Ps.Warung Jambu, Ps. Yasmin, etc</p> |
| 8 | Species being sold and Price/species at farmers level | <ul style="list-style-type: none"> • Mentimun: Rp750 – 1000/kg (Type B, C) • Pok-pohan: Rp.300-500/ikat (Type B, C) | <ul style="list-style-type: none"> • Mentimun: Rp750 – 1000/kg (Type B, C) • Cabe: Rp. ?/kg | <ul style="list-style-type: none"> • Chili • Mentimun • Ceisin • Kacang buncis |
| 9 | Seasonality/continuity | <p>When Fasting Month coming, 80% of farmer who grows vegetables planted Mentimun</p> <p>Demand of melinjo was increase</p> | <ul style="list-style-type: none"> • Fasting Month farmers planting Mentimun and Kacang panjang • Demand of the Chili was very high and its price in the local/regional market increase until 50-80%, but farmers did not plant chili because limited of cultivation knowledge and inputs/capitals | <ul style="list-style-type: none"> • Fasting Month farmers usually planting Mentimun and Kacang buncis and chili |

| | | | | |
|----|--|---|---|---|
| 10 | How should farmers products be distributed | <ul style="list-style-type: none"> Farmer used vegetables for their daily need (80%) and market to their neighbors (10%) Farmers try to sell their tree garden products (pok-pohan) to outside area (Pa Omar), but the price was very low and transportation cost was very expensive Kacang Buncis and mentimun was sold when the fast-month coming; in this season farmers can harvest 2 times/week There in no market segmentation for vegetables and wholesaler do not exist | <ul style="list-style-type: none"> The situation in this village almost same with Nyuncung sub-village, but especially in fasting month farmers more focused to planting vegetables for market oriented. Even the road condition does not good, Parigi located close to traditional/local market that implied to transportation cost (cheaper). | <ul style="list-style-type: none"> Farmers in Parakan Muncang have more varies marketing channel consider to their location |
| 11 | Factors consider to deciding marketing channels | <p>Farmers in this area do not consider with marketing channel because of</p> <ol style="list-style-type: none"> Almost 90% of their tree-garden products are for subsistence/ consumption by themselves. Roads condition are difficult for car to access the village Quantities is very small Quality of the vegetables is only meet the local demand (household and neighbors) | - idem - | <ul style="list-style-type: none"> Farmers in this village shown more consider with market information and market channel. Some of them sold their products directly to consumer in local market and regional market (catering). Access to and from market is easy. |
| 12 | Post harvest practice | <ul style="list-style-type: none"> Very traditional, farmer do not consider for the quality of the vegetables, used of plastic sack and string from bamboo to wrap/fasten the vegetables. | - idem - | - idem - |
| 13 | Common Commodities that farmers bought | <p>Kol, Mentimun, wortel, toge, kentang, tempe (kedelai), jengkol, jagung muda, buah melinjo, pete. (Some of the tree-vegetables farmers bought when off-season for those tree-vegetables fruiting)</p> | - idem - | <p>Bayam, Tauge, Kol, kentang, wortel, buncis</p> |

B. Problem faced by farmers and market agents

- **Geographic and climate factors;**
Most of the farmers' *kebun* are located in steep slope; farmers need an extra time in *kebun* land preparation, also maintenance especially at dry season, which is water supply is limited. Areas at upstream landscapes do not have many problems with dry season and water supply, but this problem exist for farmers in middle-stream and down-stream area. Distances of farmers' *kebun* from their house for some farmers are far enough, so it has become a problem for farmers in harvesting and deliver the products to the local households and or nearby markets.
- **Availability of transports** (access to and from villages to market).
Transportation cost is expensive with range from Rp 6000 – Rp 7000 to the nearby market (Pasar Cibeber). If farmers in this area want to sell their products to the Nanggung/Leuwiliang markets its cost Rp 8000 – 1000 per one way. Farmers in Nyuncung sub-village and Parigi-Cisarua can be reaching only by motor-taxi; there are no regularly cars to and back from these areas. Different situation can be seen in Parakan Muncang village; farmers easily to sell their products directly to the market or through local collectors/traders. Parakan Muncang village located along the main road; only two kilometers to access local market (Pasar Nanggung)



Figure 1. Farmer difficult to deliver their product to market because of un-develop road, cost of transportation become very expensive

- **Agronomic problems (land condition, high quality of seeds, fertilizer, pesticides)**
Farmers have limited access to professional technical assistance that would enable them to enhance their tree garden management capacity. Because their land resources are limited and under-productive, many local communities are forced to openly or surreptitiously use neighboring lands to help meet their livelihoods needs (Roshetko et al. 2003). Limited assistance from Bogor Agriculture Officers caused farmers knowledge, skills and experience in vegetables cultivation and marketing are very limited. Farmer planted their *kebun* only by their experiences; they do not encourage trying adopt a new information and technology.

- **Credit Access:**
Farmer in Nanggung sub-district especially Sekarsari FG linkages with PUPUK (*Pendampingan Untuk Pengembangan Usaha Kecil*) in providing *kebun* input such as chemical fertilizer, vegetable seeds and pesticides. Farmers provide their labor time to manage their *kebun* starting from land preparation, maintenances until harvesting. Marketing of the products will be handling by PUPUK and or farmers. Farmers should pay monthly installment for inputs to PUPUK as credit payment after harvesting. Farmer do not have formal farming contract with PUPUK, so farmers do not recognize their rights and obligations eventhough they have informal agreement.
- **Sources of market information used by farmers**
Farmers do not pay attention on the vegetables prices, market channel, high demand of vegetables in Jakarta and Bogor area and other opportunities because of 80% of their product is consume by themselves and neighbors; not market oriented. Collectors/traders have more access for market information.



Figure 2. Most of the Nanggung farmers only sell their product to middlemen or to local market.

C. Opportunities for Nanggung farmers

- Farmers in Nanggung sub-district consume vegetables around 2-3 days per week. Leaf of cassava, kangkung and indigenous vegetables are their main consumption of vegetables as *lalaban*. Farmers agree and want to consume vegetables every day, but they do not have money to buy it. Within SANREM project farmers in Nanggung sub-district have opportunities to planting vegetables in their *kebun* for subsistence and for market oriented.
- There are 4-7 traders (*pedagang pikulan*) exist in every village; they sell non-existing vegetables in village such as kol, mentimun, wortel, tauge, kentang, tempe (kedelai), jengkol, jagung muda, buah melinjo, pete and etc. *Pedagang pikulan* usually bought the vegetables from Pasar Cibeber then sell it to the communities. Vegetables can used as alternative income for short-term.

- Only 1-3 hours from Bogor and Jakarta, Nanggung has an advantageous location to provide vegetables for Jabotabek market. Agricultural and forestry professionals, traders and farmers agree that tree gardens in Nanggung hold great market potential. Although this situation is promising, Nanggung farmers are poorly linked to commercial markets.



Figure 3. Communities planting vegetables only for their daily need (sub-sisten oriented)



Figure 4. One group of Farmers in Cisarua Village standing with *Pikulan Trader* agree that vegetables was very important