

Investment Potential of Vetiver Root Oil Agribusiness



Garut is one of area level in west java that has level of a real god soil fertility, therefore area Garut is suitable to cultivating various crop types, either agriculture commodity, plantation and also forestry.

Fragrant root commodity exchange is one of a real potential plantation product commodity to be developed in Garut Regency area so that is is the existing many labored by public.

Fragrant root commodity exchange is commerce word is recognized by the name of Vetiver Root Oil (Java Vetiver Root Oil). This commodity exchange many having aroma which smooth and soft which caused by chemical compound called Vertiverol.

Fragrant root commodity exchange widely applied for parfume making, material cosmetics, soap deodorant and drugs, exterminator and insect inhibitor. Beside gives pleasing aroma, old wearable fragrant root commodity exchange incorporated and the same time functioning and fastener because having fixation energy that is strong enough.

Efforts for fragrant root commodity exchange agribusiness have been started executed long time back in Garut residence. That is since Second World War, precisely starts in 1918 fragrant root commodity exchange commodities in Indonesia noted as export commodity. In 1960 the Garut entrepreneurs starts tries builds distillation, although with a real simple equipments but result of its can be exported. Fragrant root commodity exchange from Garut Regency has a real good quality causing gets epithet “ Golden Java Vertiver Oil”.

Commodity exchange is small industrial product based on local resource orienting export market. Causing is expected can overcome monetary crisis negativity impact influence knocking over Indonesian nation. When increasingly strong of American dollar conversion value to rupiah, be challenge at the same time opportunity which must be exploited optimally.

At the height of demand of word around 360 tons/year, its become challenge for Garut Regency which is pledge exporter area of fragrant root commodity exchange in Indonesia. Condition of natural resources area in Garut Regency with carrying capacity agro climates is very well, very enables to increase product fragrant root Oil either the quality and also amount.

Pegging of expansion area of fragrant root production with a width of 2400 ha trough decision of Residence Garut No. 520 the year 1990, and pegging of inwrought conservation of fragrant root production with a width of 730 Ha inGarut Regency, and existence of cooperation with BPPT and ITB in testing quality of also of developing of labor intensive program for the schedule of conservation of fragrant root agricultural land. This thing is done to produce fragrant root can grow more amount.

Characteristic and technical Production

Copping pattern of fragrant root in general monoculture and intercropping fragrant root crop will growing well at height between 700-1600 meters above sea level. The soil which good to growth of fragrant root is soil that is not solid (friable) or sandy soil that containing volcanic ash. At such a soil of fragrant root will growth carefully and easy to be abstracted when crop that doesn't leave root pickings in soil.

Soil which too loamy solid not good to be cultivated fragrant root because besides is root will difficult to be abstracted, also will yield rendement of commodity exchange that is low relative. And this crop not good growled at calm place because blocked its assimilation process, and growth of fragrant root would depend on other crop root.

Truncation of leaf when crop age 5 (five) month will have an affect on both for root growth for one crops clumps can form that its root will be consisted of small roots of which very many and rust colored of light.

Seed

Seed planted is a root that coming from flowers crop with crop distance usually between 0,5m x 0,75 m, so that for one farm hectares is required by seed counted approximately 10000 clumps.

Fertilizer

Fertilizer applied is urea fertilizer type, TSP and ZA with close each is 200 Kg/ha. Cultivation of fragrant root in Garut Residence in general is planted in hilly mountainside by having tilt that is big enough (15 %) generally four 's around drainage basin (DAS CIMANUK).

Production Engineering

Fragrant root crop area in West Java these days potential selenium in 3 (three) Sub-Province that is Bandung, Garut and Sumedang broadly areal entirely with a width of 3600 ha.

Fragrant root crop harvested by average age between 12 to 14 months, because if the crop in crop at the age of more or less from the age, hence will have an in with rendement causing influential also to quality and its amount.

Fragrant Root Production Process

To obtain result of fragrant root commodity exchange can be gone trough 3 (three) way of distillation (distillation) :

- Distillation with water ;
- Distillation with direct vapour ;
- Distillation with water and paviour (steamed)

Farm Wide and Realization of Production

Wide areal fragrant root crop in Garut Residence is with a width of 2500 acre. If we see from average of production of fragrant root per acre that is between 9,56-10 tons broadly entirely 2500 acre, than we can calculate produce of fragrant root will reach around 25000 tons. Fits average rendement 0,7%, then it will yield fragrant root commodity 122,5 tons.

But really result is earning we calculate for one just boilers having capacity 1600 kgs with then result of countable per year $20 \times 12 \text{ months} \times 11,2 \text{ Kgs} = 2688$ fragrant root (for one distillation units).

Rendement 0,7 hence obtainable of commodity exchange incorporated 11,2 Kgs/ the wok. If 1 month is calculated 20 work days, then result of countable per year (for one distillation units).

Profile of Fragrant Root

Project Name : Fragrant Root
 Capacity : 1 Ha
 Location : South of Garut
 Areas Status : 1 Ha (sample)

Investment Forecast

Fixed Capital : 154.000.000/Ha
 Circulating Capital : -
 Total : 154.000.000/Ha

Labor Needs

Permanent workers : 2 People
Part time worker : 438 People
Total : 440 People

Study Support

Study of Investment Opportunity (Opportunity Study) : ✓ (available)
Project Feasibility Pre-Study (pre Feasibility Study) : ✓ (available)
Project Feasibility Study (FS) : ✓ (available)

Financial Profitability :

BEP = Rp 237.982.574

NPV = Rp. 79.629.940

PAYBACK PERIOD = 2,8 year

IRR = 24,72%

ROI =33 % (rounded up)