



Coffee Roasted Java Kemiren Jaran Goyang Banyuwangi

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Abstract. The purpose of the community service partnership program (PKM) are training and mentoring of roasted coffee production with green beans coffee, used coffee bean base on wet proses (WP) and dry proses (DP) by primary and secondary production into powder coffee production used coffee roasting machine automatic machine for Small Medium Enterprise. Assistance and training are intended to improve the quality of powdered coffee products of previous methods using traditional roasting with a modern roasting method using a digital roasting machine. Increased production and quality of 200% perceived business owners with an average of coffee production before only 2kg per batch with traditional methods that take 3 hours processing to 4kg per 1 hour processing using a digital roaster machine. Price of coffee powder per 200gram java kemiren jaran goyang IDR 35,000 ,. for WP coffee beans and IDR. 45.000., Type DP Coffee beans. Production of coffee powder 20 packs per day, average income Rp. 700,000 ,. per day. In addition to increasing production capacity, roasted coffee products produced can provide value added roasted coffee profiles based on buyer demand, including; medium roast, fullcity roast, dark roast, italian roast with digital temperature settings found on the roaster machine.

1. Introduction

Coffee is a plant that produces a type of drink. The drink is obtained from steeping coffee in the form of coarse, fine powder or coffee beans [3]. Ground coffee is produces by roasted coffee beans, ground into fine powder based on powder mesh size. Before the coffee is used as a beverage, a roasting process is performed to form the roasted coffee profile according to the desired flavor. The coffee flavor produced during the roasting process depends on the type of green coffee used, the method of processing coffee beans, roasting, grinding, storage and brewing methods will determine the taste of coffee [2].

The national coffee processing industry is not optimal because only 20% of total coffee production in Indonesia is processed into processed coffee (ground coffee, instant coffee, mixed coffee), and 80% in the form of coffee beans. A small percentage of the 20% are producers of processed coffee, either individuals or small groups with quality products and low prices. This condition is experienced by SMEs (small medium enterprises) "OMAH KOPI" Patrang District, Jember Regency with the main product is focus on Kemiren Arabica Coffee Jaran Goyang Banyuwangi(fig.1 and fig. 2), where the roasted product still uses traditional methods, resulting in inconsistent roasting color, charred aroma and complete coffee flavor. The result is powdered coffee with uneven texture. [1] The cause of this condition is the limited information about the

technology of processed coffee making machines that can be used to process coffee harvested by farmers into processed coffee products that have high quality and selling value. This has an impact on the quality and selling price of traditional ground coffee which is relatively low and the expected added value is very small so that it does not have a significant influence on farmers' income.



Figure 1. Coffee beans
Horn Skin



Figure 2. Sorted Coffee Beans



Figure 3. Applied Technology

Current production using a digital roaster machine is able to produce 20 packaged ready-to-sell ground coffee, the price per package is IDR. 35,000 net 150gram per package. Average income per day up to IDR. 700,000. According to partners with the presence of a coffee roaster machine can tie up the production capacity up to 100% from before only being able to traditional roast a maximum of 2kg per batch for 3 hours, with this machine capable of 4kg per hour.

2. Output And Target

Based on the results of the implementation of the partner locations that have been implemented in this PKM Program, the provision of technology packages for modern coffee roaster machines and standard operating procedures for the use of coffee roaster machines that meet the standards of organoleptic testing. The quality of the product produced is ground coffee with roasting target of Kemiren Arabica Coffee Jaran Goyang Banyuwangi which fulfills the testing of texture, aroma and taste so that it has the potential to obtain Indonesian National Standard for roasted coffee. The first output targets produced are (1) Availability of coffee roasting machines for indirect roasting data with a production capacity of 4 kg / hour and manual for operating manuals, (2) standard operating procedure documents or SOPs regarding the stages of roasting coffee diversification consisting of raw material preparation main, preparation of auxiliary raw materials, preparation of additional raw materials, preparation of equipment and packaging materials, frying processes, packaging and labeling, and product storage. Coffee Roaster Machine is shown in Figure 3 with components consisting of: heater, digital thermometer, fan, cyclone separator, product storage bottle, drying chamber, thermocontrol and switch on heater and fan.

Output targets that will be produced are (1) a financial management model that applies SMEs accounting standards as a model rule that can be accepted by both partners according to the cooperation contract document, (2) a model for developing marketing strategies in established online networks such as online sales networks in stalls online, (2) financial and marketing SOP documents, (3) business units providing powdered coffee diversification with modern business management, and (4) Increasing the income of coffee farmers in both partners. Table 1. Shown accounting models.

Table.1 Accounting Models

| Method | Rule Models |
|------------|--|
| Accounting | 1. Recording of proof of transaction both expenditure and receipt |
| | 2. Making general journals |
| | 3. Post to ledger and trial balance |
| | 4. Making adjusting journals |
| | 5. Making financial statements in the form of balance sheets, profit and loss, changes in capital and cash flows |

3. Metode

Based on the solutions and output targets proposed in the Community Partnership Program (PKM), the stages in carrying out the solutions in the field of production activities are shown in Table 2, the activities of financial and marketing management are shown in Table 3.

Table 2. Production Activity

| Solution | Output | Prosedure |
|---|-----------------------------------|--|
| Providing Coffee Roaster Machine Technology Packages | Coffee Roasting Machine | 1. Identify and explore partner data. 2. Make a draft coffee machine. 3. Shop for machine components and other supporting tools 4. Assemble components by design. 5. Testing engine performance 6. Organoleptic testing of the quality of industrial coffee products. |
| | SOPs Modul | 1. Making SOPs for the preparation of materials and production equipment. 2. Making a SOPs of the ndustr coffee production process from raw coffee beans. 3. Making a SOPs for the coffee production process for nustustr 4. Making SOPs for product packaging and storage. 5. Make a SOPs for the maintenance of production machines. |
| Program Training and mentoring of roasted coffee production | Knowledge, skills | 1. Determine the location of training / mentoring sites and preparation of materials and production equipment at partner locations 2. Socialization of the use of dried seed coffee, to the raw material supply partners and members as Banyuwangi coffee producers. 3. Training in coffee diversification production practices by partners. |
| | Independent production capability | 1. Continuous monitoring of skills participants and implementation of production activities in the form of field visits or periodic reports. 2. Evaluation of the level of achievement of the target program by pretest / post-test and periodic guidance to be independent. |

Table 3. Activities of financial and marketing management

| Solution | Output | Prosedure |
|---|-------------------|--|
| Rule provision program Financial and marketing models, and implementation training | Rules Model | <ol style="list-style-type: none"> 1. Creat a standard recording of purchase cycle transactions, 2. production, sales, payroll and reporting standards. 3. Make a financial and marketing model design 4. Analysis of the application of financial and marketing models tailored to the business profile of partners. |
| | SOP document | <ol style="list-style-type: none"> 1. Making SOPs for preparing and applying financial models with accounting principles 2. Making SOPs for preparing and implementing marketing models on the basis of retail networks |
| | Business unit | <ol style="list-style-type: none"> 1. Bookkeeping or financial administration training based on SOPs. 2. Training on the implementation of marketing models according to SOPs. 3. Management of business licenses at the Office of Cooperatives and SMEs 4. Assisting access to capital, coaching related agencies. |
| | Increased revenue | <ol style="list-style-type: none"> 1. Determination of both online and off line marketing strategies 2. market segmentation, distribution channels, advertising, selling prices, market share. 3. Assistance in the implementation of industrial finance to generate profits. 4. Monitoring the development of businesses to build entrepreneurial independence. |

4. Discussion

Based on the solutions and output targets discussion this resaearch by Determination of the selection of raw materials for roasted coffee (figure 4). Making machines based on need (figure 5).



Fig 4. Raw Material Coffee Beans



Fig 5. Develop Machine Coffee Roaster

5. Conclusion

The conclusion in this service activity is that there is an increase in roasted coffee production using machines compared to the previous traditional method. Figure 6. Show training using roasting machines in partner locations. The results of the capacity increase up to 100% from before only 2kg in 2 hours of processing, can be 4kg in 1 hour process, the average income is up to Rp. 700,000, - for 20 packs of 250Gram packaged coffee.



Fig 6. Training use the machine roaster coffee.

6. References

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