The Development of Non Corporate Industry Through Integrative Participative Model toward Competitiveness Character Building

(A Study of Cananga Aetheric Oil Industry in Blitar, East Java - Indonesia)

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Abstract

This research is considered as ‘action research’ which was held by combination of several discipline such as Sociology of Industry, Agriculture Technology, Agribusiness which was tried to analyze the problems of aetheric oil industry made of Cananga flower. Research was held in Blitar Regency, East Java, as one of center aetheric oil production in Indonesia, which has potential to increase its production up to international scale. Based on this perspective, it was important to build such community empowerment based on integrative-participative model through business industry groups with basic characteristic non-corporate as suitable alternative for the development of Cananga farmer community. The main activities of this research were enhance distillation process, dealing with the waste from the deistillation process, expanding the business unit of aroma therapy as the main product and also improving business mentality through some training activity for business motivation and competitiveness.

Keywords: integrative-participative, non-corporate industry, competitiveness character

A. Introduction

“Developing Integrative Participative non-Corporate Industry” is a model of action research contains with several research activities focused on non-manufacture industry based on society, whereas the meaning of integrative participative in the title of this research refer to a model of society empowerment which involving all groups such like community, industrial actors and government. The topic of this writing build based on an experimental research on aetheric oil production in Blitar District in East Java Province, Indonesia especially aetheric oil
which processed from *Cananga* flower. Based on Directorate of Chemical Industry and Material Building under Indonesian Ministry of Industry in 2009, aetheric oil was one of 32 commodities that become national priority to develop by cluster strategy. Indonesia is one of important countries that produces several kind of aetheric oil dominates international market. Therefore this action research attempt to developing national character building with competitiveness through developing human resources that has high motivation to increase *Cananga* aetheric oil production in international era. Indonesia has for about 40 variant aetheric oil from the whole 80 variant which has been trading in international market. Indonesia is one of the big ten countries that dominates aetheric trading. Those countries are United States, France, Brazil, Britain, China, Argentina, German, Italy and India. For further information related the description aetheric oil production in Indonesia can be trace as follow:

<table>
<thead>
<tr>
<th>Province</th>
<th>Center</th>
<th>Variant of Aetheric Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAD</td>
<td>10</td>
<td>Patchouli, nutmeg</td>
</tr>
<tr>
<td>Sumatra Utara</td>
<td>14</td>
<td>Patchouli</td>
</tr>
<tr>
<td>Sumatra Barat</td>
<td>6</td>
<td>Nutmeg, Patchouli, vanillie</td>
</tr>
<tr>
<td>Lampung</td>
<td>2</td>
<td>Patchouli, fragrant betel</td>
</tr>
<tr>
<td>Bengkulu</td>
<td>4</td>
<td>Patchouli, ginger oil</td>
</tr>
<tr>
<td>Jawa Barat</td>
<td>7</td>
<td>Fragrant root, nutmeg, fragrant betel, clove, <em>cananga</em>, terpentin</td>
</tr>
<tr>
<td>Jawa Tengah</td>
<td>12</td>
<td>Clove, <em>cananga</em>, cajuput, fragrant betel, Patchouli, terpentin</td>
</tr>
<tr>
<td>Jawa Timur</td>
<td>4</td>
<td><em>cananga</em>, clove, cajuput, fragrant betel</td>
</tr>
<tr>
<td>DI Jogjakarta</td>
<td>2</td>
<td>Clove, <em>cananga</em></td>
</tr>
<tr>
<td>Sulawesi selatan</td>
<td>2</td>
<td>Clove</td>
</tr>
<tr>
<td>Maluku</td>
<td>28</td>
<td>Cajuput, nutmeg</td>
</tr>
<tr>
<td>Papua</td>
<td>3</td>
<td>Lawang oil, cajuput oil</td>
</tr>
</tbody>
</table>

In the case of East Indonesia, center of aetheric production lies on Blitar district which has develop through the Putri Kencana Program (*the excellence industrial program in district level*) for further information you see in the table below:

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>TK</th>
<th>AMOUNT OF PRODUCTION (KG/YEAR)</th>
<th>VALUE (IDR)</th>
<th>PRODUCTION</th>
<th>INVESTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kec. Srengat :</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kel. Togogan</td>
<td>5</td>
<td>7.500</td>
<td>1,500,000,000</td>
<td>200,000,000</td>
<td></td>
</tr>
<tr>
<td>Ds. Darmojayan</td>
<td>4</td>
<td>4,000</td>
<td>800,000,000</td>
<td>125,000,000</td>
<td></td>
</tr>
</tbody>
</table>
The Data of the table above shows that the center of cananga aetheric oil industry in Blitar district is produced by 8 villages with total investment about 1.325.000.000 IDR or 4.416.667 bath. It means that economic value of aetheric oil is high. It shows that aetheric oil from Blitar is very potential, but the development of aetheric industry in Blitar facing several problems. Those problems that blocked the development of this industry are (a.) the process of aetheric oil using in efficient technology especially distilling process that took to many times (62 hours) and using ineffective material in burning process, (b) traditional management and product marketing (c) lack of partnership and cooperation between actors in aetheric industry, government and other partner, and (d) the low quality of human resources especially in motivation and innovation aspect, (e) the limitation of sensitivity and ability to maximize business opportunity based on local capability.

Based on the description of the problems, it is necessary to applying the social and technological engineering to overcome the problems. Social engineering conceptually discussed by Jallaludin Rahmad (2000:49) related to the concept of development. Development defined as planned and engineered social process through economic innovation as the part of social engineering. The economic engineering in this program focused on the members of society which become actors in aetheric industry (non-corporate). The aim of the program is increasing productivity and extending the market for Cananga aetheric oil. In the aspect of social engineering, the program’s aim to mentality of the society with competitive character as nation. Last but not least, the technological engineering focus on the objectives to increasing quality, quantity and continuity of aetheric oil production in order to increasing profit or income in this business. The program also needs to empowering society through introducing new technology and social intervention to increase the...
e quality of human resources, process of production and marketing in order to meet the targets of the District Government of Blitar as well as the demand of national and international market. Th e implementation of the program eventually enable to (1) increasing motivation of the actors of Cananga aetheric industry, (2) increasing the quality as well as quantity of aetheric oil and (3) str engthening social institution through developing industrial cluster in the level of farmer commun ity.

B. Research Method

Approach in this research is society empowerment through integrative participative mod el means that the process of empowerment in this research based on the integrated society involv ement. To meet the specific problems in field, this research using SWOT analysis and Need Asse ssment for the first step. The activities in this research held as comprehensive activities from earl y point of the production process until the end of the process, but the main concern of this resear ch actually are the production process and the post production. The next step consists of pre-train ing socialization, perfection of distillation equipment by introducing steam system, managing sol id waste from the distillation process. The last step of the research is marketing assistance.

All the activities in this research fully involving society or the actors in aetheric industr y as themain focus of this research including society, Cananga farmer, and industrial actors in th e cluster of aetheric oil agro-industry by integrative way. Integrative it this case consist of several aspects such technology, financial, managerial, marketing and social engineering. The need of s ocial engineering based on the lack of managerial and technological aspect, besides the continuitt y of this business depends on the quality of human resources especially the actors in the frontline of this industry.

The research activities run effectively by several procedures as follow:

1. **Searching Information and Scientific Literature.** This step related the literature research on t he technology of Cananga oil production, social aspect of the industry, economic and cultur al aspect, and also geographic identification of the region related with the potency of human resources in aetheric oil agro-industry.

2. **Field Survey, Observation and Study of Technological Process.** In these activities, researche r studying several aspects related to the condition of production process, facility and equipm
ent belongs to the society as the part of technological audit (Djajaningrat, et al., 2007) in producing aetheric oil. Survey was done in Blitar. Other than observation, data collecting technique also done by interview with some subject research, such 1 industrial actor, 3 collectors, and farmers also picker and seller for about 44 people.

3. The study of alternative technological improvement method. In this step, researcher done some research related with possible alternative to improving aetheric oil production and several things that was necessary to be implemented to improving production.

The main orientation of this research was arranged based on the reason that to get social re-engineering in several aspects of empowerment of the society which plays as the direct actors in aetheric oil industry done by life skills and cluster business approach. In this case, participation and integrated network that involved several institution such as academic institution, exporter, business association and government, as regulator, are needed.

Community empowerment is a concept of economic development which has inherent social values. This concept describe development perspective according to Robert Chambers (1995), “more concerning toward society, participative, strengthening and sustainable” different from the early perspective that dominan in development theory based on the growth theory according to W.W Rostow this theory basically such one variant of modernization theory and development with the basic assumption in human factor as the main factor in development. Growth theory is a form of modernization theory which assume that social change as a process of evolution from traditional toward modern. Growth theory according to Rostow very famous by the five stage scheme (five stage of economic development). Another theory about development are The Achievement Motive in Economic Growth from McClelland, this theory depart from perspective of social psychology, giving the basic assumption about sociisety psychological and attitude related with social change.

The other popular theory in development is Basic Needs Theory by Mahbub Ul Haq from the World Bank and James Grant, the president of The Overseas Development Council. Basic needs approach sees as a set of principles to organize ideas and effort in development. The aim of this approach is the fulfillment of basic needs for all people wherever they are live (Mansour Fahkih, 2001: 55-65). In the implementation development program in several countries, all the strategy lean on those theory and proven that still facing so many problems in implementation or does n’t meet the target as the theory says in literature.
C. Community Empowerment through Participative-Integrative Model

According to Prijono and Pranaka (Prijono & Pranaka; 1996) the concept of empowerment builds as the antithesis toward development model with focus on behalf of the interest of society. The logic framework of this concept such as: (1) the process of power centering start from the centering of productive factors, (2) the process of power centering will produce labour society and marginal entrepreneur, (3) power will produce supra-structure based on the system of knowledge, politics, ideology that manipulate society to strengthen legitimacy and (4) the implementation of such system of knowledge, politics, and ideology will create two groups in society consist of; the first competitive one and the non-competitive others.

The group of non-competitive society becomes the main concern of the empowerment program as the implementation of various concept and approach in empowerment study. The definition of empowerment based on Friedman (1992) stated that the empowerment process emphasized on political aspect through the autonomy of decision making for the protection the benefit of the people based on the personal resources and participation.

The definition of integrative participatory model taken from an early research titled Empowerment of the Women in Productive Age Through Development of Life Skills Model in the Basic of Local Potency by Vina Salviana D.S (Vina Salviana, 2008:55-57). The definition covering engagement with some actors to cope the goal of empowerment in giving such an skill and consciousness and also empowerment related with increasing motivation and productive entrepreneur ship skills in order to improving prosperity and assistance also life security.

Sulistyani, Ambar Teguh (2004) states that the empowerment learning process must be passed through three stages as mentioned in these points:

1. The stage of consciousness and the process of conscious behavior building and cares feeling to enhance the need of self capacity. At this stage, the actors of empowerment program must be able to create such precondition for the society to support effectively the empowerment program. The main objective in the first stage lies on cognitive aspect of the society, building such desire for new ideas to change offered by the empowerment program or actors. It is important for any actors in empowerment program to recognize the early condition of the society well.
1. The stage of transformation of the ability to insight knowledge. In this stage, actors able to transform their basic ability and knowledge into strategic insight to take the role in development process. If the early stage as mentioned before done very well, this stage of empowerment would be runs well. The society enters the phase of learning to acknowledge some skill and knowledge that relevant with their demand of needs based on the actual situation. In this stage society still playing as followers or object in development process, yet an active subject.

3. The stage of intellectual improvement, skills and knowledge that could be transforms into initiative and innovative behavior which supporting self-reliance. It is can be said that this third stage as enrichment. Self-reliance can be measured based on the social ability to create some initiative and innovation in their environment. In this stage, society already considered as an active subject in development, though the empowerment program still continued, because the society needs such protection.

So, the empowerment consists of primary and secondary tendencies. The primary tendency lies more on the process for providing, giving or transform the power into society in order to make the society in charge. This process may equipped by material assets to support the development of self-reliance, for instance through organization. The secondary tendency can be define as tendency for stimulate, to enhance or to motivate individual independency in the case of determining the life purpose through the dialogue process. Either primary or secondary tendencies cannot be separated. (Sumodiningrat, 2002).

D. Institutionalization Strategy in Industrialization toward National Character Building

The specific character of industry in this research is industry with special focus on local potency, efficient, environmental friendly, competitive support by local actors and sustainably rely on local potency. The point of sustainability means how the industry has strong continuity based on social and economic aspect. Moreover, it is support by asset and technological capacity own by Blitar district which has increased year after year. According to BAPPEDA Blitar, the regional gross domestic product consistently increase every years from 4.571.721.77 million (2006), to 4.836.193.26 million (2007), 5.124.833,34 million (2008) and 5.394.900,38 million (2009). Meanwhile, the value of Human Development Index for Indonesia also increase; 69,49 (2006), 72,28 (2007).
Therefore, it is necessary to held social engineering with high recognition to time and resources efficiency in order to obtain income improvement for actors in aetheric industry through the introduction of distillation technology, training innovation in formulation of Cananga oil product into perfume or scrub oil, training in packaging, motivation building as an entrepreneur, mediation in marketing to local traders, exporters, or major industry of herbal medicine and cosmetics. In addition, this empowerment program also already integrated with industrial policy stated in strategic plan of Blitar Government. Integrative approach also indicate the strong cooperation among societal actors with the government and others institution a showed in PHBM program (Community Forest Management). This integrative approach also in line with the objectives of Putri Kenca Program in Blitar District such as (1) tackling poverty, reducing unemployment, and improving level of prosperity through economic growth and expanding new job opportunity especially for the rural area, (2) creating equitable distribution and lessen the gap through mutual relations between rural areas in each sub district, (3) encourage harmonious relations between government, business community and society based on the principle of mutual benefit.

According to the constitution No. 32/2004 about local government, there are some obligations stated for the local government to support the local independency of society in the case of natural resources management in effective and efficient way in order to build national competitiveness. The importance of technological innovation in processing to obtain higher quantity and quality of the product. Those strategies offered in this research considered as the alternative for the old perspective of industry which is always related with massive manufacture and factory. This strategy also supportive to strengthening of national character building, full respect to the local values, and showing such continuity of competitive power.

E. Research Result and Discussion

Based on the result of initial survey in order to problem identification using Need Assessment Approach through discussion with local actors, the problems can be mentioned as follow:

1. Cananga flower as annual plant, quite scarce in number and vulnerable from pest attack.
2. The changing seasons often affect the quality of flowers rendemen
3. Traditional values in Javanese related with effective working time affect the distillation activity
4. The high expectation of the price Cananga flower in farmers level
5. The lack of common understanding in the level farmers, pickers, merchant, and distiller, about the significance of Cananga oil as an important export commodity.
6. The strong control of exporter in aetheric oil price.
7. The lack of solid management waste in distillation process
8. The lack innovation in product diversities in aetheric oil.
9. The active role of government as a mediator or price buffer between local actors in aetheric oil industry and the exporter.
10. The chain production of Cananga aetheric oil can be described as follow:

From the problems defining above, thus this research organised in several program to overcome the problem in production process in aetheric industry, as follows:

1. **Motivation Building Training**

   This training attended by farmers, pickers, merchant, and distiller, all the main actors in this industry. Objectives of this training lies on the importance to build strong motivation of all the actors in this business to increasing their concern toward Cananga flower. The initial trainin
g also very important because survey indicated that their concern toward Cananga continually diminishing. This activities resulting greater awareness from all the participant regarding preservation of Cananga flower and industrial sector based on Cananga flower through cooperation and synergi.

2. **Training for Improvement Human Resources, Financial Management, and Business Feasibility**

The quality of human resources become such important concern in this research, because it needs unity in thinking and goal in order to maintain the sustainability of this business in Bilitar District. In these activities, trainee comes from person who works as distiller, plant owner, picker and merchant. The activity aims to provide simple knowledge about how to manage business by staying at home. Main course of this activity consist of the importance of business group, networking, how to build networking etc. In this activity participants also get the knowledge about how to analyze business feasibility.

3. **The Improvement of Distillation Process by Steaming System**

These activities aim to improving distillation technology that already owned by refiners. The old model has some weaknesses either in the matter of fuel consumption and human power that need in process. Improvement in technological aspect implemented in modification of boiling equipment that supplies the heat to the refining equipment. This improvement brought to benefit for the process, the first, fuel saving and the second is reducing the time processing thus obtaining efficiency.

![Rekayasa boiler di pengrajin](image)

Photo: boiler for cananga aetheric oil distillation
Product from this process of distillation, through some exporter in Surabaya and Medan export to many countries in the world. Price level of aetheric oil average IDR 425,000,- (equal to 1400 Baht or 152 Ringgit). Most of the exporters neglecting the quality of the aetheric oil because in destination country, this product will be re-treatment according international standar and demand.

4. Training in Producing Organic Fertilizer

Training in organic fertilizer making attended by nearly all the frontline actors in this business such farmers, pickers, merchants etc, training took place in the house one of distiller in Togogan, Blitar District. The importance of this training is to build such skill in making organic fertilizer, both in liquid form and solid from. This training using several methods and procedures such: 1. Socialization about environmental awareness and the specific technique in making fertilizer, 2. Practicing how to make fertilizer. By this program, all the actors in this business aware about how to recycle and reuse the used materials to get the more value added. In reality, during the time there are so many goods being wasted because the lack of knowledge to optimize that.

5. Training in Producing Rub Oil and the Formula of Aroma Therapy Oil

Traditional medicine can be define as ingredients or formulation of some ingredients extract from plants, animal, mineral, etc use in society as a wisdom or knowledge based on experience. Traditional or herbal medicine industry can be defined as manufacturing industry in traditional medicine formulated and produced for direct consumption without any brand or name product.
F. Non-Corporate Industry toward the Development of Nations Character with Competitiveness through Participative Integrative Model

During this research, formed three small groups based on non-corporate membership, but based on the farmer community, pickers and the other community either they interested in producing fertilizer, rub oil or aroma therapy from Cananga oil. Two groups in this session joint with a group of refiner in this industry, and the rest of the group joint with another group of refiner from other areas. This group cooperation becomes the main corner stone of cluster building in the next process to strengthen local economic institutionalization.

Scheme:

The Development of Non-Corporate Industrial based on Participative Integrative Toward Nations Character with Competitiveness

<table>
<thead>
<tr>
<th>INPUT</th>
<th>PROSES</th>
<th>OUTPUT</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>society</td>
<td>Empowerment strategies equipped by trainings</td>
<td>Society highly motivated &amp; skilled</td>
<td>Productive groups, increasing income, competitive</td>
</tr>
</tbody>
</table>

Integrative assistance

mapping & consultative

(University, Local Government, Indonesian Aetheric Board)

monev → participative assistance

(University, Local Government, Indonesian Aetheric Board)
Aetheric oil industry community needs to synergize their cooperation with the farmers, merchants, pickers, and also refiner. Besides, consultative and assistance activities must be continued among University, Local Government and Indonesian Aetheric Board.

G. Conclusion

This empowerment of society through participative-integrative in non-corporate industry based on Cananga in sub district Srengat in Blitar, East Java (Indonesia) considered as a model of empowerment that suitable for rural development especially in industry. This model build engagement between actors in Cananga industry such as farmer, picker, seller, etc, cooperate with local government toward same goal to increasing production both quantity and quality. Some activities in this research consists of providing technological perfection in distillation machine, in boiler part, that help to obtain efficiency in distillation process in the matter time of processing and in the aspect of fuel consumption as a part of technological engineering. Training in waste management especially waste that has produce during distillation process as a part of environmental sensitivity. In other case, building some group of cooperation between communities among producers in rub oil or aroma therapy as a part of strengthening economic organization in non-corporate level. Assistances continually during the research activities in order to improving the competitiveness, confidence, and nation character of the industrial community both in the level national and international.

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Non Buku:
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