The Efforts of Local Government in Achieving Sustainable Agriculture and Community Empowerment in Malang Regency, East Java, Indonesia

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บทคัดย่อ

การพัฒนาเกษตรแบบยั่งยืนเป็นแนวทางที่จะพัฒนาความอย่างยั่งยืนในภาคเกษตรกรรม ซึ่งมีความจำเป็นที่จะต้องมีการพัฒนาอย่างเท่าเทียมกันทางด้านเศรษฐกิจ ด้านสังคม และด้านสิ่งแวดล้อมเพื่อตอบสนองความต้องการของคนรุ่นต่อๆไป ซึ่งแนวทางนี้สามารถนำมาใช้ในการตอบคำถามเกี่ยวกับการเรียนรู้ในบริบทด้านธรรมชาติและด้านสังคม โดยมีสาระสำคัญจากการปฏิบัติเชิงปฏิบัติการพัฒนาการเกษตรที่ส่งผลแก่การพัฒนาด้านเศรษฐกิจโดยไม่คำนึงถึงการพัฒนาทางด้านสังคมและด้านสิ่งแวดล้อมควบคู่กัน ในแนวทาง

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การพัฒนาการเกษตรแบบยั่งยืนแสดงให้เห็นถึงความสำคัญของเกษตรกร ที่ต้องการการสนับสนุนงานด้านการพัฒนาการเกษตรของรัฐบาลท้องถิ่นเมืองกลาง ซึ่งได้ให้การสนับสนุนในการพัฒนาการเกษตรแบบยั่งยืนในเขตนั้นและยังนำไปสู่การเพิ่มขึ้นความสามารถของเกษตรกรท้องถิ่น

ผลจากการวิจัยนี้พบว่า การพัฒนาการเกษตรที่ด้านนั้นการโดยรัฐบาลท้องถิ่น สำนักงานวิจัยนี้การดำเนินการพัฒนาการเกษตรแบบยั่งยืนนั้นต้องการการปฏิบัติแบบรายบุคคลในเขตพื้นที่ยังคงใช้สารเคมีมากขึ้นเพื่อเพิ่มผลผลิตทางเกษตรกรรมมากกว่าการใช้สารเคมีที่ช่วยกระตุ้นการผลิต ยังไม่ปรากฏว่ามีมีแผนงานด้านการพัฒนาการเกษตรจังหวัดที่ไม่ได้นำไปสู่การเพิ่มขึ้นความสามารถของเกษตรกร ซึ่งรัฐบาลท้องถิ่นนี้มีการให้สนับสนุนเพิ่มเติมจากสภาพของเกษตรกรมากกว่าการจัดกิจกรรมแสดงความรู้สึกภักดี การพัฒนาการเกษตรอย่างยั่งยืนในเขตนี้ได้รับการสนับสนุนจากหลายปัจจัย เช่น การมีระบบเก็บเกี่ยว กฎหมายที่เข้มงวด และโครงสร้างพื้นฐานที่เพียงพอ แต่อย่างไรก็ตามมีหลายปัจจัยที่เป็นอุปสรรคการพัฒนาการเกษตรแบบยั่งยืนในเขตนี้ เช่น การขาดความรู้และความเชี่ยวชาญของเจ้าหน้าที่ของรัฐ ความร่วมมือในหน่วยงานทางการเกษตร รวมถึงด้านสังคม ด้านดัชนีการพัฒนาการเกษตรอีกด้วย

คำสำคัญ: การพัฒนาที่ยั่งยืน, การพัฒนาการเกษตร, รัฐบาล, นักวิจัย

Abstract

Sustainable agriculture development is a sustainable development approach in the field of agriculture sector which requires the economic, social, and environmental aspect to be considered equally in order to ensure the next generation’s ability in fulfilling their needs. This
approach is implemented to answer the degradations both in terms of natural and social caused by the implementation of green revolution. The approach has a close relation to farmer empowerment where the farmer as the main actor in agriculture sector needs to be developed in order to increase human resource quality and also to be more independent. This research is conducted with the purpose to know whether the agriculture development programs that has been conducted by Local Government of Malang District has supported the practice of sustainable agriculture development in this district and also has led to farmer empowerment.

The result of this research showed that most of the agriculture development programs that conducted by this local government more emphasize on the implementation of non-sustainable agriculture development. In addition, the green revolution is still implemented in this district by using more chemical input to increase agricultural production than using organic input that can preserve the nature. Furthermore, there are still many agriculture development programs that did not lead to farmer empowerment, even had a high potential in increasing farmer’s dependency toward local government by giving many grants than providing transfer of knowledge activities. The implementation of sustainable agriculture in this district has supported by several factors such as clear legal frameworks and sufficient infrastructures. However, there are also many factors that inhibit the implementation of sustainable agriculture development in this district such as lack of governmental employee’s commitment and knowledge, also cooperation among them; and also socio-cultural of the farmers.

**Keyword:** Sustainable Development, Sustainable Agriculture Development, Community Empowerment.
INTRODUCTION

Development is a process toward prosperity and should always be done and also one manifestation of the willingness and ability of a state to be more developed to the more advanced. Development concept basically aims to improve the welfare of citizen. Development, according to several economic development literatures is, often defined as a continuous process of increase in real income per capita by increasing the number and productivity of resources. This view led to the concepts of development as economic growth. One of new economic growth theories argues that investment in human resources through education and training and improving health status have a major impact on improving productivity. Economic development is aimed to improve the living conditions and welfare of the community. It is hoped to be able to achieve welfare better than before. One development in the economic field is carried out through development in the field of agriculture.

Along with the concept of economic development, an agriculture development has objectives to fulfill human necessities and to achieve welfare by increasing of productivity and using resources efficiently. To achieve these objectives, William Gaud, a former USAID director, introduced the Green Revolution in 1968. The Green Revolution is based on the four pillars: the provision of water through irrigation systems, an optimal use of chemical fertilizer, application of pesticides in accordance with the level of pests attack, and the use superior varieties for quality

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planting materials. This concept was also applied in Indonesia and made this country as a food self sufficiency country. Furthermore, The Green Revolution brought Indonesia into big changes, included farmer characteristics that moved from anti-technology to used-technology.

However the implementation of green revolution which only focused on economic growth has caused many negative impacts. In Indonesia, the green revolution also brought negative impacts such as environmental degradation and dependency of the farmer on the government for further agricultural development. This negative impacts still occur up to present time. The farmers are dependence to the chemical fertilizer from the government. Moreover, the use of synthetic chemical fertilizers and pesticides through time has caused an extinction of hundreds of local variety of paddy, various soil fertility organism are destroyed, declining soil fertility, soil and agriculture product contain pesticide, water and soil pollution, balance of ecosystem are damage, and also explosion of attack and amount of pest, even new kind of pest.

The emergence of negative impacts caused by the practice of green revolution lead to the practice of sustainable agriculture development as the implementation of sustainable development in agriculture sector. The concept of Sustainable Agriculture Development has aimed

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to increase agriculture productivity along with natural conservation and achieve the healthier life and environment. In Indonesia, this concept has been implemented by the government in national up to local level, including Malang Regency, and supports by several legal frameworks and the provision of infrastructure. Agriculture conditions in Indonesia are still alarming.

However, agriculture conditions in Indonesia are still experiencing some problems, both in the terms of quality and quantity. Almost 75% of agriculture land in Indonesia is critical because of declining soil fertility which is caused by the usage of high concentration of chemical fertilizer in high doses and longtime period continuously. In the other hand, the dependence of farmers, as the main subject and implementer on the governments is still very high. This can be seen from the lack of initiative of farmers in the development of agriculture lands, as in the provision of fertilizer, an irrigation management, and a compliance with seeds. Therefore, the agricultural development in Indonesia should be more focused on empowerment as an alternative concept of development by emphasizing on acquiring of skills, knowledge, and power.

Therefore, in this research, the writer aims to know about the efforts of local government in developing sustainable agricultural and whether those efforts have led to empowerment. In addition, the writer also wants

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to know about the factors that support and impede local governments to
developing sustainable agricultural.

SUSTAINABLE DEVELOPMENT

The approaches of development theory always move along with the
displacement of human and nature needs, and can be classified based
on the period of time. From the approach that focused only on increasing
economic aspect which has been proven causes some degradations
move to the approaches that focused not only on increasing economic
aspect, but also environmental and social aspect, namely sustainable
development. The definition of sustainable development was created for
the first time by The World Commission on Environment and Development
in 1987. The Brundtland Commission, The World Commission on
Environment and Development that was initiated by the General Assembly
of the United Nations in 1982 which was chaired by then Prime Minister
of Norway Gro Harlem Brundtland, gives brief definition of sustainable
development as the “ability to make development sustainable to ensure
that it meets the needs of the present without compromising the ability
of future generations to meet their own needs”.¹

Sustainable development concept emerges as a result of conflict
between environment and developments. This concept aims to maintain
ability of future generations to meet their own needs by sustaining the
environment and ecological system along with the development of social
and economic aspects.

¹ Robert W. Kates, Thomas M. Parris, and Anthony A. Leiserowitz. What is Sustainable
Development? Goals, Indicators, Values, and Practices. Issue of Environment:
Science and Policy for Sustainable Development. 47.3(2005): 2.
1. Economic progress is evaluated in terms of welfare or utility. An economically sustainable system must be able to produce goods and services on a continuing basis, to maintain manageable levels of government and external debt, and to avoid extreme sectoral imbalances which damage agricultural or industrial production.

2. An environmentally sustainable system must maintain a stable resource base, avoiding over-exploitation of renewable resource systems or environmental sink functions, and depleting non-renewable resources only to the extent that investment is made in adequate substitutes. This includes maintainance of biodiversity, atmospheric stability, and other ecosystem functions not ordinarily classed as economic resources.

3. A socially sustainable system must achieve distributional equity, adequate provision of social services including health and education, gender equity, and political accountability and participation.

SUSTAINABLE AGRICULTURE DEVELOPMENT

Along with the shift of development approach, the agriculture development trend also shifted from green revolution which emphasized on increasing economic aspect to sustainable agriculture development which tries to balance economic, social, and environmental aspects, also considering the ability of the next generation to fulfill their needs.

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Sustainable agriculture development as a subordination of sustainable development is defined by the Bruntlant Commision for the first time in 1987. Based on the definition of sustainable development from the Bruntlant Commision, the World Food Organization defines the sustainable agriculture as follows: management and conservation of the natural resources base and the orientation of technological and institutional changes in order to ensure the attainment and satisfying human needs both current and future generations. Sustainable agriculture development aims to conserve land, water, plant, and animal genetic resources, does not damage the environment, technically appropriate, economically viable and socially acceptable.\(^6\)

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\(^6\) Analysis of the Writter.

Sustainable agriculture development is a model of social economic organization based on equitable and participatory vision, which confirms that the natural resources and environment is the basis of economic activity. Agriculture will be sustainable when it also concern on ecological, economically feasible, can be accountable socially and appropriate with the culture, which is based on a holistic scientific approach. Sustainable agriculture is one of a whole system approach of food, feed, and other fiber products which is balance with security environmental, social equality, and economic viability among all sectors in the community, including international community and across generation. Inherent in this definition is the idea that sustainability should be broadened not only at the global level but also in terms of time scales and towards all living organism (including human).\textsuperscript{10}

According to Agung Hendriadi and Trip Alihamsyah, sustainable agriculture was addressed by Congress in the 1999 “Farm Bill” \textsuperscript{11} Under such law, sustainable agriculture is meant to an integrated system of plant and animal productions practices having a site-specific application that will, over the long term:

a. Satisfying human foods and fiber needs

b. Enhancing environmental quality and natural resources based upon which the agriculture economy depends;


c. Making the most efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and control;

d. Sustaining the economic viability of farms operation;

e. Enhancing the quality of life for the farmers and society as a whole.

EMPOWERMENT

Empowerment is one of the most important factors that influence the success of development. This is because the empowerment activities are able to increase the people abilities and make them strong enough to participate in a variety of control over, and the influence of events and institutions that affect their lives by emphasizing on the acquiring of skills, knowledge, and power which is quite affecting their lives and the lives of others who become their concer.\(^\text{12}\) Empowerment should not contain people into the trap of dependency (charity), but should deliver the community to the process or stage of independence.

Definition of empowerment can be seen from the objectives, process, and ways of empowerment\(^\text{13}\):

1. Empowerment aims to increase the power of people who are weak or unlucky.

2. Empowerment is a process by which people become strong enough to participate in a variety of control over, and the influence of


\(^{13}\) Edi Suharto. *op.cit.* pp. 221 - 224.
events and institutions that affect their lives. It emphasizes that people acquire skills, knowledge, and power which is quite affecting their lives and the lives of others who become their concern.

3. Empowerment refers to the re-allocation efforts of power in a changing social structure.

4. Empowerment is a way with the name of people, organizations, and community directed to be able to control or power over life.

THE EFFORTS OF LOCAL GOVERNMENT IN ACHIEVING SUSTAINABLE AGRICULTURE AND COMMUNITY EMPOWERMENT

Malang Regency promotes sustainable agriculture development as the implementation of sustainable development in agriculture sector. This is as stated in the Middle Term Development Planning of Malang Regency 2010-2015, which is in chapter VI point 6.3 section 8c number 1 of this document stated that the principles of sustainable development is mainstreamed into all areas of development. The requirement to promote and implement sustainable development also stated in other legal frameworks such as Local Regulation of Malang Regency Number 7 of 2010 on Control of Pollution and Environmental Damage, and also Local Regulation of Malang Regency Number 6 of 2008 concerning Long Term Development Planning 2005-2025. It means that this regency must implement sustainable development in all development sectors including agriculture.

Sustainable agriculture development requires integration of the three aspects, namely economic, social and environmental aspects. In practice of development which is conducted by local government this requirement automatically gives consequence that there must be a good
relationship and cooperation among all components of governmental structure, especially the components that have a main task related to certain matter of development, for example is in the matter of agriculture development. This relationship and cooperation is the most important thing in order to be able to run development and governmental affairs properly.

In Malang Regency, the agriculture sector development is the responsibility of 4 departments as a unity that cannot be separated namely Department of Agriculture and Plantation, Department of Animal Husbandry and Health, Department of Forestry, and Department of Marine and Fishery. In addition that sustainable agriculture development requires the integration and consideration of economic, social, and environmental aspect equally, so there are at least one more department and 2 agencies which have responsibility in promoting sustainable agriculture in this regency, namely Department of Irrigation, Environment Agency, and Food Security and Counseling Implementer Agency. Food Security and Counseling Implementer Agency is a local governmental working unit which has a main responsibility in empowering farmer community. This agency is established as the command of national government as mandated by National Government through National Regulation Number 16 of 2006 concerning the grouping of counselor into a certain local governmental working unit, with a consideration that farmer empowerment is one of very important factor that influences the success of sustainable agriculture, including in Malang Regency.

However, those departments and agencies do not cooperate well. Those related local governmental working unit concentrate more on their own job only. They formulate their own development program without
coordination among all related departments and agencies. This condition results many programs that are overlapping and sometimes the program that should be conducted by 2 departments while in fact only conducted by one department. With the reference to this condition, it can almost be ensured that the sustainable agriculture in Malang Regency cannot be implemented maximally so that the goal of sustainable agriculture development itself cannot be fully achieved.

In order to promote sustainable development in Malang Regency as stated in the document of Middle-Term Development Planning of this Regency, Local Government entrust the implementation of sustainable development in the field of agriculture toward several related departments and agencies which have responsibilities in this matters.

As the parties who are entrusted by the Local Government of Malang Regency to promote sustainable agriculture development in this Regency, those related departments and agencies made several efforts which contained in their development programs and activities. However, in the practice of agriculture activities in this district, chemical input still dominates, especially in the term of fertilizer. Chemical fertilizer usage in this regency is around 94% of the total chemical usage, while the rest of it, around 6% is organic fertilizer. It can be seen that the high input of chemical fertilizer in this district will cause soil fertility degradation. It is ironic when this district tries to achieve sustainable agriculture development while in fact the chemical input is still used in a high amount to increase the productivity and ignoring the environmental aspect.
In addition, during 2011, Local Government of Malang Regency through five departments and two agencies has implemented fifty one agriculture development programs. However, with the consideration that sustainable agriculture development requires the equal concern on economic, environmental, and social aspects; most of those programs do not support the implementation of sustainable agriculture in this regency. Most of those departments and agencies more emphasize on non-sustainable agriculture development programs.

14 Analysis of the Writer.
Sustainable and Non-Sustainable Agriculture Development Program

Conducted by Related Departments and Agencies\(^{15}\)

<table>
<thead>
<tr>
<th>No.</th>
<th>Department/Agency</th>
<th>Sustainable Agriculture Programs</th>
<th>Non-Sustainable Agriculture Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture and Plantation</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Forestry</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Animal Husbandry and Health</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>Marine and Fisheries</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Irrigation</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Environment Agency</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>Food Security and Counseling Implementer Agency</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>23</td>
<td>28</td>
</tr>
</tbody>
</table>

From the table above, it can be seen that from fifty one agriculture development programs conducted by all related department and agencies, there are only 23 programs that support the practice of sustainable agriculture while the rest, namely 28 programs do not support sustainable agriculture development practice. Department of Forestry is a department which conducted many sustainable agriculture programs in the field of forestry.

Moreover, taking a consideration that farmer empowerment is the most important factor in achieving sustainable agriculture development,

\(^{15}\) ibid.
where through empowerment process, the farmer's capacity can be increased by giving education and training so that they can address the development and environmental issues, there is only a little programs of this local government in achieving sustainable agriculture which leads to farmer empowerment. Most of those program even do not involves the farmers in their implementation. Local Government of Malang Regency is more concerned on giving capital assistance as a grant which has a potential in increasing the farmer’s dependency toward the local government than giving education and training which can make the farmers to be more independent.

### Empowerment and Un-empowerment Agriculture Development Programs

*Created and Implemented by Related Departments and Agencies*  

<table>
<thead>
<tr>
<th>No.</th>
<th>Department/ Agency</th>
<th>Empowerment Programs</th>
<th>Un-Empowerment Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture and Plantation</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Forestry</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Animal Husbandry and Health</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Marine and Fisheries</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Irrigation</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Environment Agency</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Food Security and Counseling</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implementer Agency</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total:** 16  35

*16 ibid.*
The table above shows that most of departments and agencies conducted un-empowerment programs. From the total fifty one agriculture development programs that is conducted by all related departments and agencies, there are only 16 programs that lead to farmer empowerment, while the rest of them tend to un-empowerment programs.

In addition, every agriculture development programs that conducted by Local Government of Malang Regency through its related departments and agencies can be determined whether it support the practice of sustainable agriculture development and lead to farmer empowerment or not. In another words, every program will have two categories as seen in the table below.

### Categorization of Agriculture Development Programs conducted by All Related Departments and Agencies

<table>
<thead>
<tr>
<th>No.</th>
<th>Department/ Agency</th>
<th>S-E</th>
<th>S-UE</th>
<th>NS-E</th>
<th>NS-UE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Department of Agriculture and Plantation</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Department of Forestry</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Department of Animal Husbandry and Animal Health</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Department of Marine and Fishery</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Environment Agency</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Department of Irrigation</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Food Security and Counseling Implementer Agency</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>7</td>
<td>16</td>
<td>8</td>
<td>22</td>
</tr>
</tbody>
</table>

Note: S-E=Sustainable and Empowerment, S-UE=Sustainable and Un-Empowerment, NS-E=Non-sustainable and Empowerment, NS-UE=Non-sustainable and Un-empowerment

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\textsuperscript{17} Ibid.
From the table above, it can be seen that Local Government of Malang Regency only conducted 7 programs that are appropriate with sustainable agriculture principles and also lead to farmer empowerment, while most of those programs, namely 22 programs are not appropriate with the requirement of sustainable agriculture and also do not lead to farmer empowerment. Furthermore, it can be concluded that the implementation of sustainable agriculture development in Malang Regency has not be able to be implemented well and does not lead to farmer empowerment.

The practice of sustainable agriculture development as the implementation of sustainable development in agriculture sector in Malang Regency actually has been supported by several factors. The Local Government of Malang Regency has formulated clear legal framework in the form of Local Regulation as guidance for all related department and agencies in conducting their works and responsibilities. For example, Regent Regulation Number 7 of 2010 concerning Control of Pollution and Environmental Damage, and Local Regulation of Malang Regency Number 6 of 2008 concerning Long-Term Development Planning 2005-2025 which requires that sustainable development should be implemented in all development sectors, including agriculture sector. Even the government of this regency has provided appropriate and sufficient working infrastructure for all related departments and agencies. These two supporting factors are enough to make those related departments and agencies able to implement their work and responsibility safely and properly in developing sustainable agriculture in this regency.

However, there are still many factors that impede the practice of sustainable development in this regency. Those inhibiting factors are:
1. Lack of Commitment
The employees of those related departments and agencies have no strong commitment to implement the programs because they will receive the same amount of salary as before even though they try so hard to really implement those programs to be successful.

2. Separation of Counselor from Each Department
The separation of counselor from each departments make those departments, pass through long process and procedure for coordination with Food Security and Counseling Implementer Agency as the agency which has main responsibility in empowering the farmer community. This condition causes the implementation of programs, especially empowerment program difficult and late to be conducted.

3. Lack of Cooperation
Every local governmental working unit is running their own program separately by themselves because they have made their own program and the have their own target that should be achieved in their work periods.

4. Socio-culture of the farmers
Good condition of Malang Regency for agriculture activities makes the farmers lazy to develop agricultural technology. The laziness of the farmers in developing agriculture technology makes the progress of agriculture sector very slow.
The Percentage of Educational Level of Malang Regency's Society

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Finish Elementary School</td>
<td>23.98%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>36.44%</td>
</tr>
<tr>
<td>Junior High School</td>
<td>19.09%</td>
</tr>
<tr>
<td>Senior High School</td>
<td>15.98%</td>
</tr>
<tr>
<td>Diploma</td>
<td>1.15%</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>3.35%</td>
</tr>
</tbody>
</table>

In addition, the human resources quality of the farmers is still low; this condition makes them only think about economy in the short term, not about environment and social development. Most of the society in Malang Regency only acquires education only in Elementary School, even 23.89% of the society do not finish their education in elementary school, while most of them has job in agriculture sectors.

5. Insufficient Number of the Employees

The number of employee in those departments and agencies are not appropriate with their work load and need more employees to help them in finishing their work.

6. Limited Budget and Inaccuracy of Data

The inaccuracy data is caused by the limited budget from the government for every local governmental working unit for updating the data, and also because every department uses different method in data collection process. It result different data even for the same kind of specification data.
CONCLUSION

The Local Government of Malang Regency through its local governmental working units that consist of five departments and agencies, namely Department of Agriculture and Plantation; Department of Forestry; Department of Animal Husbandry and Animal Health; Department of Marine and Fisheries; Department of Irrigation; Environment Agency; and Food Security and Counseling Implementer Agency has conducted fifty one agriculture development programs during the period of year 2011.

Sustainable agriculture development basically tries to increase economic aspect while preserving the nature so that the practice of agriculture activities can be sustainable up to the next generation and gives positive impacts toward social aspect of the community, especially farmer community. Moreover, education is very important in promoting sustainable agriculture development because education can increase the human capacity to be able to think better and address environment and development issues, while increasing the human capacity through education is the essence of empowerment approach.

Based on the argument above, the programs that have been conducted by all related departments and agencies in Malang Regency can be classified into sustainable and non-sustainable agriculture development, and also can be classified into empowerment and un-empowerment programs. However, most of those programs do not lead to sustainable agriculture development because chemical input still dominates the implementation of those programs. Moreover, there is only little concern on natural preservation. This condition can cause natural and social degradation that dangers the ability of the next generation in fulfilling their needs. Most of related departments and agencies
more emphasize on the implementation of non-sustainable agriculture development programs.

This condition is compounded of the implementation of programs that do not lead to empowerment in order to develop human resources quality of the farmers so that they can be more independent. The Local Government of Malang Regency through its related departments and agencies provides only little education and training programs, otherwise, this local government gives a lot of grants to the farmers. The lack of programs leading to the empowerment of the farmers increases the potential of dependency of the farmers toward local governments, and also they cannot understand the importance of sustainable agriculture practice for their life and their next generation’s life.

The practice of sustainable agriculture development in Malang Regency as the implementation of sustainable development in agriculture sector has been supported by many clear legal frameworks, such as Regent Regulation Number 7 of 2010 concerning Control of Pollution and Environmental Damage, and also Local Regulation of Malang Regency Number 6 of 2008 concerning Long-Term Development Planning 2005-2025 which requires to implement sustainable development in all development sector, including agriculture sector.

However, all related department and agencies still face some obstacles in implementing sustainable development in this regency which comes from all related departments and agencies, and also from farmers themselves, such as lack of commitment of the related departments and agencies, lack of coordination among all related departments and agencies, and also low-human resources quality of the farmers.
References


