

## Conference

# Empowering Farmers to Encourage Social Change During the COVID-19 Pandemic in Banten Province

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**Abstract.** This research examined the efforts carried out by the Banten Provincial Government in empowering farmers to encourage social change during the COVID-19 pandemic. Qualitative methods were used with an exploratory approach. Data were collected by interview and documentation methods. The results showed that the Banten Provincial Government tried to empower farmers by: providing support for food production in the form of seeds, fertilizers, and agricultural machinery; assisting agricultural production through “field school” activities that included providing education and direct field practice to farmer groups; and enabling farmers to actively participate in agricultural production activities through conducting continuous monitoring and evaluation of various assistance and activity programs that have been provided to farmers in need. These efforts to empower farmers led to an increase in food production in Banten Province, especially for rice commodities. Another impact was increased social changes experienced by farmers through the use of appropriate technology and agricultural mechanization, which encouraged agricultural production to become more efficient, thereby increasing the Banten Province farmer’s exchange rate. Farmer empowerment will have a major impact on food availability, especially during the pandemic, and therefore social changes for farmers in the use of agricultural technology are important.

**Keywords:** empowerment, farmer, social change

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Published 15 March 2022

Publishing services provided by Knowledge E

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Selection and Peer-review under the responsibility of the IAPA Conference Committee.

## 1. Introduction

Food is one of the main human needs in life. Without food, human life will not last long. For all human food needs, the issue of food always develops and becomes a discourse that will never be finished. Farmers as the main actors in agriculture certainly have a very central role in agriculture. Its existence and existence greatly affect the condition of food in an area. In the availability study of food, farmers are one of the main factors in the availability of food as well as agricultural land. The availability of extensive agricultural land will not be optimal if it is not cultivated productively by farmers.

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Banten Province is an area that has good potential in agriculture. Data released by the Central Statistics Agency (BPS) shows that Banten Province is ranked ninth nationally in 2020 in rice production. This is of course supported by the available resources. Banten Province has also produced 1,655,170 tons of milled dry unhulled rice or the equivalent of 937,815 tons of rice with a total harvested area of 325,333 ha (BPS, 2019). These various achievements further support Banten Province as one of the largest food potentials in Indonesia.

The emergence of Covid-19 in Indonesia, which began in March 2020, has largely reduced productivity and profits in various sectors, but in contrast to the agricultural sector, which is still running as usual. Including Banten Province with all the potential, during the pandemic it reached a surplus of rice. Data released by the Banten Provincial Agriculture Service shows that the basic needs of rice after Covid-19 entered Indonesia can still be met, even experiencing a surplus of around 160,132 tons from April to October 2020 (Agriculture Department, 2020). This is interesting because the agricultural sector in Banten during the pandemic did not show a decline in productivity and even exceeded the target and reached a surplus. This also strengthens Banten Province as one of the national rice granaries.

But with all the potential that exists, Banten Province still has various kinds of problems in the agricultural sector. The first problem is the degeneration of farmers. The shift of the profession of farmers to other sectors is one of the causes of this problem. The BPS survey results show data that there has been a decrease in the number of farmers from 650 thousand to only 500 thousand farmers at the end of 2019 (BPS, 2019). The second problem is the ownership status of agricultural production land. In general, in Banten, farmers do not have independent agricultural land in producing food commodities. Existing farmers tend to be sharecroppers who carry out agricultural production on other people's agricultural land. This practice is certainly detrimental to farmers, especially economically because it allows for a profit-sharing system after harvest with the landowner. The third problem is that there are still many farmers who are less competitive in agricultural production. This can be seen from the fact that there are still many crop failures that are influenced by the low skills and competencies of farmers, so there need to be empowerment efforts made so that farmers can produce better agricultural products. (1)

Community empowerment in this case to farmers is one of the tasks of the government. In encouraging farmer empowerment, the government is required to implement programs that effectively encourage increased competitiveness of farmers. Moreover, the conditions in the field, there are still many farmers who are still unable to adapt to

agricultural technology amid the incessant society 5.0. The conception of society 5.0 when based on (Pereira, Lima, & Charrua-santos, 2020) by linking the issue of farmers can be interpreted as an era that demands changes in farmer behavior to be more adaptive in utilizing technology to support agricultural production. Concerning farmer empowerment, empowerment efforts carried out by the government are also aimed at encouraging social change for farmers towards society 5.0. (2)

This research captures the empowerment efforts carried out by the Banten Provincial Government for farmers in encouraging social change in society 5.0 during the COVID-19 pandemic. If you examine previous studies, this article has a difference from previous research, such as the study conducted by (Iryana, 2018; Loedy, 2019; Mangowal, 2013; Mustangin, 2018; Suhu & Wance, 2019) focusing on the issue of empowering farming communities in developing economy and improve the quality of life. Then the study (Darmansyah, Badjido, & Samad, 2014) tried to examine the role of the government while the study (Moento, Kusumah, Betaubun, & Oja, 2020) was based on efforts to strengthen farmer groups. On this basis, we try to offer the issue of empowering farming communities in the context of society 5.0 that has not been done by previous researchers. (3) (4) (5) (6) (7) (8) (9)

The theory used in this research is the empowerment theory from Sugiarto which explains that empowerment is carried out in three ways, namely: (a) meeting production needs; (b) increasing productive resources through skills and competencies that can increase profits from production activities; (c) actively participate in the activation process through mentoring and evaluation (Sugiarto, 2005). This theory will analyze this research more comprehensively. Meanwhile, the urgency of this research is that the issue of farmer empowerment will have a major influence on food availability in an area. The need for high food, especially during the current pandemic, demands the existence of farmers in agricultural productivity to continue. (10) (11)

## 2. Methods

A qualitative approach is used to further explore and understand the hidden meaning behind social or humanitarian problems (Creswell, 2015: 4). Qualitative research is very suitable to explore social phenomena with efforts such as asking questions to informants. The data collection process was carried out by in-depth interviews and documentation methods. In-depth interviews are needed to dig up data from key informants who have been determined previously and selected by a purposive mechanism. In addition, data collection was carried out using the Focus Group Discussion (FGD)

method. Simply put, FGD is a systematic process of collecting data and information about the problems that occur to obtain specific data through group discussions.

The data in this study were sourced from primary and secondary data. Secondary data was obtained from journals, data from Government Agencies such as BPS and Banten Provincial Government, as well as documentation from private parties. After the data is collected, data validation is carried out by triangulation of all data and facts that have been obtained during field research (Creswell, 2017: 283)

### 3. Results and Discussion

The results of the field findings provide some data and facts related to farmer empowerment efforts carried out by the Banten Provincial Government to encourage food production, especially during the Covid-19 pandemic. The results of the field findings will be discussed in greater depth, especially the empowerment that has been carried out whether it encourages social change in farmers.

Efforts to empower farmers by the Banten Provincial Government are carried out with various programs and activities carried out simultaneously. There are several main activities carried out specifically to accelerate the empowerment of farmers which will encourage increased agricultural productivity and have an impact on the national economic recovery which is one of the Indonesian government's achievement targets during the Covid-19 pandemic.

*The first activity is Community Empowerment through demonstration farming and demonstration plot*

Through this effort, farmers are expected to have the ability to manage their potential comprehensively. The impact is that farmers will have more skills that will help them in developing their products to improve the economy as farmers. Good farming skills are a determining factor in achieving successful cultivation. Technically, many think that lowland rice cultivation is not that difficult, but the possibility of crop failure still occurs in rice production, especially in farmer groups in Banten Province. This activity is carried out in various stages, namely verifying the Farmer Group, then guiding them in farming production practices, to evaluating activities as a form of assessment and input on activities that have been carried out previously. The development of rice crops (paddy fields and farms) is aimed at increasing the availability of rice that can meet the needs of the population in Banten Province. The problem faced is the amount of production that is not proportional to the area of rice cultivation. This limitation is the basis for making efforts to empower officers and all components in the Banten Province that

support the success of increasing production, especially in Banten Province through the Demonstration farming for Intensification of Rice Fields and Farms.

### **3.1. The second activity is to carry out "Field Schools" (SL) Good Agriculture Practice**

This activity aims to encourage food production in Banten Province, especially during the Covid-19 pandemic. Technically, this activity is carried out in various stages, namely carrying out verification of prospective farmer groups who will be given the "Field School" program or commonly abbreviated as SL. Then the implementation is carried out ten times with a span of a week. The material provided by the field school to farmers is material on cultivation and food production as well as assistance when carrying out the direct practice of food production on agricultural land for farmer groups. To support food production in this activity, the Banten Provincial Government provided fertilizer assistance and agricultural equipment to farmer groups (Interview with Aslihat and Sobirin, 2021). To make this program successful, the Banten Provincial Government collaborated with agricultural extension workers and the Agricultural Technology Assessment Agency (BPTP) to jointly assist farmer groups. This activity has the target of achieving an increase in food production which will encourage food availability in Banten Province, as well as to increase the Farmer's Exchange Rate which will better describe the welfare position of Farmers in Banten Province.

### **3.2. The third activity is Extension and Formation of Horticultural Farmer Groups**

This activity aims to increase the added value and competitiveness of farmers. The result achieved in this activity is an increase in chili and onion production in Banten Province so that the production achievement always exceeds the RPJMD achievement target every year. Other commodities such as Durian also increased by 140% from this activity (Interview with Hudri, 2021).

Looking at the various activities carried out by the Banten Provincial Government in empowering farmers, especially during the pandemic, field findings confirm that there have been various increases in agricultural production which have made food availability in Banten Province a surplus, and the exchange rate of farmers has increased. This shows that farmers are more competitive in agriculture because the target of this activity is farmer groups who still have criteria as farmer groups that are not yet

empowered so that assistance is needed. Through various activities and assistance carried out by empowering demonstration farming, field schools (SL), and agricultural group counseling, farmers can improve skills and competencies to be more competitive and more productive. The high productivity of farmers during the pandemic will have an impact on economic recovery, which has plummeted after Covid-19 entered Indonesia.

From the field findings obtained, discussions through empowerment carried out by the Banten Provincial government will be analyzed using the concept of empowerment from (Sugiarto, 2005) which explains that empowerment is carried out in three ways, namely: (a) meeting production needs; (b) increasing productive resources through skills and competencies that can increase profits from production activities; (c) actively participate in the activation process through mentoring and evaluation.

### 3.3. Fulfillment of production needs

Empowerment efforts in fulfilling the needs of farmers carried out by the Banten Provincial Government are by providing various assistance to support agricultural production. The provision of this assistance aims to help farmers with limited access to agricultural equipment which is one of the inhibiting factors for agricultural production. Limited equipment and production needs make farmers less empowered. Some of the assistance that has been given to farmers includes the provision of seeds and fertilizers. The following is data on the allocation of subsidized seeds and fertilizers in Banten Province in 2020:

TABLE 1: Data on the Allocation of Rice Seeds and Fertilizers in Banten Province in 2020

No	Region	Total (HA)
1	Pandeglang Regency	48.860
2	Lebak Regency	32.925
3	Serang Regency	37.500
4	Tangerang Regency	25.000
5	Serang Municipality	3.730
6	Cilegon Municipality	300
	Total	148.315

Source: (Banten Provincial Agriculture Office, 2021)

The provision of seed and fertilizer assistance is to ease the burden on farmers in carrying out agricultural production. The high cost of agricultural production has an impact on the reduced profits of post-harvest farmers. In addition, assistance is also intended for adaptation to technological developments for farmers to use superior seeds so that productivity can increase. The risk of crop failure that is a concern for

farmers may occur, one of which is also due to the use of seeds and fertilizers that are not per production needs. So this assistance is given to provide easy access for farmers to higher quality seeds and fertilizers.

In addition to seed and fertilizer assistance, the provision of assistance is also carried out by providing agricultural machinery for both pre-harvest and post-harvest. Pre-harvest machinery is provided in the form of a tractor. In 2021, 120 tractors have been given to farmer groups that have been verified and then distributed in Pandeglang Regency as many as 33 farmer groups, Lebak Regency as many as 34 farmer groups, Serang Regency as many as 31 farmer groups, Tangerang Regency as many as 18 farmer groups, and the City of Attack as many as 4 farmer groups (Interview with Sobirin, 2021). Alsintan is an important part of agricultural production today. The use of agricultural machinery by farmers is a form of utilization and transformation of technology that encourages the creation of efficiency and quality resulting from the agricultural process. Alsintan also encourages a more modern agricultural model with agricultural mechanization and is better for the environment.

### **3.4. Increasing productive resources through skills and competencies**

The main point of the empowerment process is to change farmers who were previously less empowered into farmers who are competitive and able to participate in food production. Making farmers more competitive is done by providing skills and competencies that were not previously owned by farmers. The practice of "field schools" designed in such a way to achieve farmer empowerment is carried out effectively in the field. Farmers are given counseling and materials by resource persons who have expertise in agricultural production. To maximize the presentation of the material, during the "field school" program, farmers are directly asked to practice agricultural production activities, which are directly accompanied by agricultural extension workers and elements from the Banten Provincial Agriculture Office and/or Regency/City Government elements. Ten meetings in ten weeks is a very long and sufficient time for farmer groups to successfully practice what they have learned during the "Field School" of Good Agriculture Practice (SL GAP). The achievement of these programs and activities is an increase in food production which shows that farmer groups have succeeded in practicing good food production. Increased production consists of increases in various food commodities such as rice, plantations, and horticulture. The following is data on rice production in Banten Province in 2020:

TABLE 2: Rice Production Data in Banten Province in 2020

No	Region	Production (Ton)
1	Pandeglang Regency	444.026
2	Lebak Regency	402.871
3	Tangerang Regency	328,820
4	Serang Regency	391.973
5	Tangerang Municipality	4.747
6	Cilegon Municipality	9.714
7	Serang Municipality	73.014
8	Tangerang Selatan Municipality	5
	Total	1.655.170

Source: (Banten Provincial Agriculture Office, 2021)

Meanwhile, in the plantation sector, there was also an increase in production in 2020. Priority commodities such as rubber, oil palm, coffee, and cloves experienced an increase in production. Complete data can be seen in the table below:

TABLE 3: Plantation Production Data in Banten Province in 2020

No	Kommodity	Total (Ton)
1	Rubber	6.136
2	Oil Palm	3.288
3	Coffee	1.928
4	Clove	2.869

Source: (Dinas Pertanian Provinsi Banten, 2021)

Food commodities from the horticultural sector also experienced an increase in production in 2020. Chili, onion, and durian are commodities that experienced a significant increase in production, in fact, these three commodities always exceeded the production targets recorded in the RPJMD. Horticultural production data can be seen in the table below:

TABLE 4: Horticultural Production Data in Banten Province in 2020

No	Criteria	Production (Ku)
1	Chili	69.469
2	Onion	15.446
3	Durian	324.882

Source: (Banten Provincial Agriculture Office, 2021)

The figures shown by the tables above confirm that there has been an increase in food production in Banten Province for various food commodities. In addition to increasing production, crop failure rates can be further suppressed because at the agricultural production stage, farmer groups are always accompanied by elements from expert



extension workers who know various agricultural production problems so that they can provide theoretical and practical knowledge to farmer groups.

### **3.5. Participate in the Development Process**

In the process of empowerment, the Banten Provincial Agriculture Office always participates directly in this activity. The direct mentoring process is carried out to ensure that this activity is carried out according to its objectives. Direct involvement is also to directly evaluate the practice in the field of this activity. The problems found in the field will be more easily identified and used as input to provide improvements to further activities that will be carried out in the following year. Apart from that, direct active involvement is also a form of special attention and seriousness aimed at farmer groups so that farmer groups who are the target targets of this activity can appreciate and be more serious in implementing this program.

### **3.6. Farmers' Social Changes in the Era of Society 5.0**

As we all know that the times and technology have resulted in changes that require all people to continue to adapt, especially in the use of technology. Currently, the world has entered the era of Society 5.0 as a higher level than before, namely 4.0. The era of society 4.0 requires humans to be able to use technology to get faster and more accurate information to actualize themselves and support more modern life processes. Meanwhile, in the era of Society 5.0, (Pereira et al., 2020) emphasized that humans are no longer only able to use technology alone in finding information and facilitating life processes but are also required to be part of the technology itself. The internet is not only used as a source of information but humans are also required to create new value through technological developments which ultimately have an impact on reducing economic inequality in humans because all are required to be able to utilize technology in a competitive environment. (3)

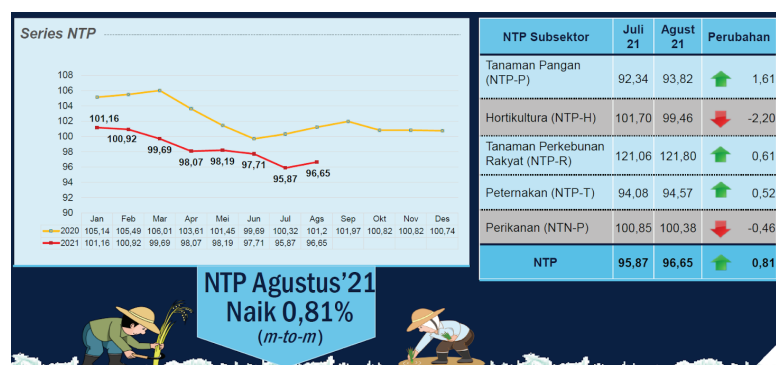
In the case of agriculture, especially in Banten Province, with all the efforts to empower farmers, social changes have been seen that lead to society 5.0. The provision of seeds, fertilizers, and agricultural machinery has made farmers themselves more adaptive and able to utilize agricultural technology to encourage increased agricultural production. Mechanization in agriculture that reduces human resources is more profitable for farmers because it can reduce production costs.

In addition, the Banten Provincial Government's efforts to embody society 5.0 in farmer and agricultural governance in Banten Province initiated the presence of an Agricultural BUMD named PT AgroBisnis Banten Mandiri (Perseroda) which further facilitated the "AGRO BANTEN" application as a tool that makes it easier for buyers and sellers to transact. agricultural products will be able to answer the challenges and opportunities in the era of social change for farmers in the era of Society 5.0. The following is the display of the AGRO Banten website:



**Figure 1:** The AGRO BANTEN application managed by the Banten Province Regional Owned Enterprise. (Source: (Processed by the Research Team, 2021))

This efficiency then makes farmers more able to get a lot of profits after harvesting. The increase in production and higher incomes ultimately encourages an increase in the Farmer's Exchange Rate (NTP), which clearly describes the welfare position of farmers, which in August 2021 NTP in Banten rose 0.81%. The following is data on the development of NTP Banten 2020-2021:



**Figure 2:** Data on the Development of NTP in Banten Province in 2020-2021. (Source: (Central Bureau of Statistics of Banten Province, 2021))

Furthermore, if we look at the agricultural process from upstream to downstream, in the marketing process, currently farmers in Banten Province with the habituation to the use of technology through the provision of counseling, assistance, and assistance to support agricultural production, farmers become more adaptive in seeing the opportunities that arise. there is. Various farmer groups have emerged which in doing marketing have utilized technology, namely by managing the marketplace. The use of marketplaces in marketing by farmers shows how farmers have started to be directly involved in the use of technology primarily to support their competitiveness in this globalized economy. This opportunity that can be utilized if it consistently continues to grow and develop in the province of Banten will certainly produce more positive added value for the lives of farmers in the future.

#### 4. Conclusion

The Banten Provincial Government through the Department of Agriculture has carried out various efforts to empower farmers which were simultaneously carried out by doing three things, namely providing support for food production in the form of seeds, fertilizers, and agricultural machinery. Empowerment is also carried out by assisting in agricultural production through field school activities that have the substance of learning and direct field practice to farmer groups. Another empowerment is by actively participating in agricultural production activities by conducting continuous monitoring and evaluation of various assistance and activities that have been provided to farmers in need. The results of the empowerment carried out have an impact on increasing food production in Banten Province, especially for rice commodities. Another impact of the empowerment carried out is the occurrence of social changes experienced by farmers through the use of appropriate technology and agricultural mechanization which encourages agricultural production to become more efficient to increase the Banten Province Farmer's Exchange Rate.

#### References

- [1] Dinas Pertanian Provinsi Banten. Laporan kinerja. Provinsi Banten. 2020.
- [2] Pereira AG, Lima TM, Charrua-Santos F. Industry 4.0 and society 5.0: Opportunities and threats. *International Journal Of Recent Technology And Engineering*. 2020;8(5):3305–3308. <https://doi.org/10.35940/Ijrte.D8764.018520>

- [3] Iryana AB. Pemberdayaan masyarakat petani dalam meningkatkan kesejahteraan hidup di kecamatan compreng kabupaten subang. *Jurnal Academia Praja*. 2018;1(2):125–140. <https://doi.org/10.36859/Jap.V1i02.69>
- [4] Loedy FH. Pemberdayaan masyarakat petani di kota padang. *Jurnal Mahasiswa Ilmu Administrasi Publik*. 2018;1(4):20-27.
- [5] Mangowal J. Pemberdayaan masyarakat petani dalam meningkatkan pengembangan ekonomi pedesaan di desa tumani kecamatan maesaan kabupaten minahasa selatan. *Governance*. 2013;5(1):90-97.
- [6] Mustangin M. Hasil pemberdayaan masyarakat oleh koperasi sebagai upaya mewujudkan kesejahteraan masyarakat petani daerah cepogo. *Share: Social Work Journal*. 2018;8(1):46. <https://doi.org/10.24198/Share.V8i1.16343>
- [7] Suhu BL, Wance M. Pemberdayaan masyarakat petani rumput laut di kabupaten halmahera selatan (studi desa mano kecamatan obi selatan). *Journal of Government*. 2019;4(2):156–172.
- [8] Darmansyah D, Badjido MY, Samad A. Peran pemerintah daerah dalam pemberdayaan masyarakat petani kakao di desa kayuangin kecamatan malunda kabupaten majene. *Otoritas: Jurnal Ilmu Pemerintahan*. 2014;4(1):45–54. <https://doi.org/10.26618/Ojip.V4i1.81>
- [9] Moento PA, Kusumah R, Betaubun A, Oja H. Penguatan kelompok usaha tani berbasis pemberdayaan masyarakat petani padi. *Societas: Jurnal Ilmu Administrasi & Sosial*. 2020;9(1):25–34.
- [10] Sugarto E. *Membangun masyarakat memberdayakan rakyat kajian strategis pembangunan kesejahteraan sosial dan pekerja sosial*. Bandung: Pt Ravika Adimatama;