**MARCAPADA: JURNAL KEBIJAKAN PERTANAHAN**
**Sekolah Tinggi Pertanahan Nasional, Yogyakarta**
Available at: https://jurnalmarcapada.stpn.ac.id

**Policy Forum**

# Land Injection Vs Land Conversion: Seeking the Solution to the Discontinuity of Agricultural Land Provision

**Dwi Wulan Pujiriyani[1]* and Endriatmo Soetarto[2]**

[1]Sekolah Tinggi Pertanahan Nasional, Yogyakarta, Indonesia
[2]IPB University, Bogor, Indonesia
* Correspondent: lucia_wulan@yahoo.com

**ARTICLE INFO**

**Date log:**
Received: March 29, 2022
Reviewed: April 8, 2022
Accepted: April 27, 2022
Published: April 28, 2022

**To cite this article:**
Pujiriyani, D.W., Soetarto, E. (2022). Land Injection VS Land Conversion: Seeking the Solution to the Discontinuity of Agricultural Land Provision, *Marcapada: Jurnal Kebijakan Pertanahan*, 1(2), 172-179. DOI: https://doi.org/10.31292/mj.v1i2.19

**EXECUTIVE SUMMARY**

Land conversion takes place more rapidly than the addition of new land. This paper attempts to investigate these two events by offering a more sensible solution to answer the need for land provision which over time continues to clash with various interests in land. The best solution to land provision is to give recognition to the 'living space and the farming profession' by stating that the agricultural profession is the noblest profession, the most realistic profession, and constitutionally justified. They are a group of people whose profession is on going, or continuing, and it only requires political commitment as well as recognition of their living space and their profession that farmers and farming are a profession as well as a right to life. Local initiatives such as those emerging in the Kasepuhan community, the Subak tradition in Bali, and the determination of Sedulur Sikep community with their farming traditions should have earned their right not to be 'disturbed' but to be let live and get recognition and protection. Protecting these existing and sustainable forms of local farming initiatives is a real manifestation of the solution to the deadlock of the search for new agricultural land that faces various obstacles. Recognition should not only be given to indigenous groups as it has been done, but also to food farmer communities that have independently developed their agriculture in a sustainable manner.

## A. Introduction

The natural and eternal relationship between human and land becomes an important value where land is the origin of the source of life ('panguripan'). The existentialist relationship or bond between 'land' and 'farmer' is the eternal bond within which an agrarian civilization grows and takes root. Land allows farmers to earn enough living or money to live in dignity (Saragih, 2013).

Indonesia as an agrarian country has a high dependence on land resources. The land becomes a pillar to ensure that the agricultural sector remains able to produce food products to meet the need for food of the community. In this context, as suggested by Ritung et al (2015), the need for food cannot rely on productivity alone without being balanced by the expansion or addition of new areas. In the context of agrarian society, land becomes an important food production base for farmers to achieve welfare. Without land, farmers will not be able to produce independently, be marginalized, not be self-determined, and fail to define and maintain their identity as food producers.

The trend for land provision and farmer welfare in Indonesia shows less encouraging symptoms. There is a great inequality of land ownership structures. There are 0.2 percent of the population who control 56% of national assets in the form of land ownership. Although it is said that the Gini index decreased from 0.41 in March 2015 to 0.39 in March 2016, this number was actually only calculated based on the household consumption and did not account for the concentration of ownership of agrarian assets. If the concentration of ownership of agrarian assets were calculated, the inequality index would be greater and might reach 0.7 (Shohibuddin, 2018).

If there is no adequate way out to overcome land ownership at the farmer level, eventually the agricultural sector will be left behind to become a 'slum' sector that is pressured by various extractive economy and industry sectors accelerated by the land grabbing process through various forms of land procurement for infrastructure development or other investments. The number of lands that can be accessed for people's agricultural activities is less than the lands allocated for non-agricultural purposes. On the other hand, it turns out that land provision for various 'development' projects takes and converts many of the existing agricultural lands (Bachriadi & Wiradi, 2011).

In the exact statistical calculations, we can depict the fate of our farmers. When the process of deagrarianization continues, the struggle to lay 'sustainable welfare' as an achievement of the certainty and ability of the country in providing these agricultural lands needs to be reevaluated. This statistical calculation must be confronted with qualitative considerations regarding our economic development schemes. Development schemes should already integrate land provision for farmers with their supportive economic and infrastructure systems. The cause of discontinuity of land injection schemes needs to be reviewed in relation to the subject, location, accompanying infrastructure, advocacy, and so on.

Furthermore, this paper attempts to grasp the reality of the depreciation of food agricultural land which is faced with a solution namely the agricultural land injection. In this case, land injection is the addition of new agricultural land, which can also be called agricultural extensification. This condition is certainly ironic with the fact that the rate of land conversion occurs more rapidly than the addition of new land. This paper attempts to investigate these two events by offering a more sensible solution to answer the need for land provision which over time continues to clash with various interests in land.

## B. Land Depreciation and Its Impact on Poverty

Continuous reduction of agricultural land is a condition that will threaten the existence of agriculture and its farmers. This condition will have a further impact on the welfare at the farmer level. By 2020, the Ministry of Agriculture estimates the land deficit to increase to 2.21 million hectares and will continue to increase to 5.38 million hectares by 2030. The average area of rice fields is reduced by 650 thousand hectares per year or the equivalent of 6.5 million tons of rice, assuming rice production of 10 tons per year (Kementerian Pertanian, 2020). This situation is certainly a very difficult homework because in 2045, it takes 2 million more hectares of land to be able to secure the food of 270 million Indonesian people. Efforts to open new agricultural areas that have been carried out have not been able to keep up with the more rapid land conversion so that the production balance remains negative. The deficit of agricultural land in Indonesia will continue to increase.

The current situation shows that the rate of agricultural land conversion is concerning with 100,000 hectares per year, while the ability of the government and community to open rice fields is less than 30,000 hectares per year (Djoni; Suprianto; Eri Cahrial, 2016). The data show that every year, there is an agricultural land (rice field) conversion around 100 thousand hectares. Meanwhile, the

ability to open new agricultural areas (rice field) is only 40 thousand to 50 thousand hectares. The massive land conversions occurred in Java for the last ten years (2003-2013) reached 508,287 hectares: Central Java 202,202 hectares, East Java 167,864 hectares, Banten 71,519 hectares, West Java 36,389 hectares, and Special Region of Yogyakarta 30,302 hectares (Santosa, 2016). In fact, after the land conversion occurs, it takes about 10 years for agricultural land to be functioned as it was.

Given the high rate of land depreciation, it is not surprising that poverty remains widespread in rural areas. The increase in the percentage of small farmers whose proportion is already large (more than 40%) and the growth in the number of farming households that do not own lands are two of the main conditions that contribute to the widespread poverty in rural areas of Indonesia. According to the data on the poor population in Indonesia, which amounts to 28.55 million, 62.8% of whom are farmers with an average monthly income of Rp1,03 million. The processes of deruralization, depeasantization, and deagrarianization occur extensively. The rice field villages turn into plantation villages which eliminates the role of the village as a source of food and farming for the villagers themselves (Soetarto, Agusta, 2012). The role of villagers as providers of food has deteriorated due to changes in the ecology of rice fields to dryland ecology. Over a period of 10 years from 2003-2013, an average of 500,000 farmer families/year were uprooted from their agricultural land.

Agriculture or villages are no longer a place to find a comfortable source of livelihood. Agriculture and villages become 'hometowns' to go home to, but not a place to find a source of income. This situation can be seen from the decreasing number of people working in the agricultural sector. The Central Bureau of Statistics data from 1986-2016 show that the workforce in the agricultural sector continued to decline from 58.9% in 1986; 43.4% in 1996; 43.3% in 2006; to 31.8% in 2016. This situation shows that over the past 40 years, there has been a decrease of 27.1% in the number of workers in the agricultural sector. This situation is different from the workforce in the manufacturing (industry) and service sectors which continues to increase. In the manufacturing (industry) sector, the total workforce in 1986 was 8.9%; in 1996 18.2%; in 2006 18.3%, and in 2016 21.2%. There has been an increase in the workforce in the manufacturing sector by a total of 12.3%. Meanwhile, in the service sector, there has been an increase in the workforce by 14.8% with the addition of each year: in 1986 it amounted to 32.2%; in 1996 38.54%; in 2006 38.5%, and in 2016 47%.

Being marginalized, supporting the welfare of farmers through access to agricultural land must be done. This boils down to agriculture as an agrarian sector which is an important pillar for the sovereignty of the nation. Without land, farmers lose their agrarian citizenship. Their right to acquire agrarian citizenship can only be realized if farmers are sovereign over land and able to recover their identity as food producers (sovereign over food).

The need for new agricultural lands is a problem that is always intertwined with various forms of land injection as a solution. The land sources for land injection can be obtained from abandoned lands, forest land release, the 20% allocation of Right to Cultivate land, legalization of occupied lands, and so on. There are 9 million hectares of land that are ready to be distributed to overcome the inequality of land ownership consisting of the legalization of assets of 4.5 million hectares (uncertified transmigration land of 0.6 million hectares and legalization of assets of 3.9 million hectares) and the land redistribution of 4.5 million hectares (depleted Right to Use and abandoned land of 0.41 million hectares and forest land release of 4.1 million hectares) (Kementerian Agraria dan Tata Ruang/BPNRI, 2022).

Other potential land sources are not yet a priority, such as Right to Use lands in Java which should not need to be maintained anymore given the growing population, industrial centers, urban areas, and others. These lands can be given in the name of restoring the rights of the local population who

in the past were forced to give up their lands because of the coercion by the colonial regime. Quantitatively, the data regarding the availability of these lands is in the government's domain which should be able to be opened and accessed to then be formulated as a solution for immediate execution. In fact, qualitatively, the availability of these 'new' lands clashes with many things, such as authority arrangement, overlap of interests, legality, technical release, ecological considerations, and so on.

**C. Protection of Communities Supporting Agriculture**

The 9 million hectares land for agrarian reform program mentions land redistribution schemes from former Right to Use land, abandoned land, state land, forest land release, and production forest for conversion. These lands are intended for farm workers, small farmers, indigenous peoples, fishermen, youths, and women. The schemes of land injection given to farming households or indigenous community units should give great hope to a solution to the problem of land provision. If all of these runs properly, the concern due to agricultural land depreciation can be reduced by the certainty that there are still many lands available for use. Nevertheless, it is worth considering the capability of land injection schemes is determined in that whether it is in line with the conversion that occurs or not.

If the conversion occurs faster than the land injection scheme, another solution that is more effective and more possible to run will be needed. Moreover, land injection schemes, such as redistribution, require the preparation of new physical and social infrastructures that will certainly take time to integrate with the already developed economic system. It should be investigated whether it is possible that the new recipients of land redistribution are directly integrated with the existing economic system and whether development schemes are also inclusive and stand with these farmers. This macro and micro context is an important consideration so that land injection schemes do not become pointless because the lands eventually switch ownership (sold/reconcentrated) or support inappropriate infrastructures.

In the midst of various threats of land grabbing in the name of industrial, urban, development, and other interests, it becomes very important and more possible to maintain the existence of farmers who have been struggling to sustain their economies to continue to grow. These farmers must be defended without seeing them merely as a pillar for food centers for the benefit of national food security. Among the portraits of the harmony of civilizations of agrarian communities that are still well maintained and preserved today can be found in the Subak community in Bali (Geria et al., 2019) or the Kasepuhan community in West Java (Ikmaludin et al., 2018) (Prabowo & Sudrajat, 2021). Sedulur Sikep community in Pati, for example, maintain very strong values to prevent the transition from agriculture to non-agriculture. This similar condition should not be perceived as a resistance but rather as a community capital that must be kept alive (Pujiriyani & Soetarto, 2018); (Pujiriyani, D.W.; Soetarto, E.; Santosa, D.A.; Agusta, 2019). These are communities or entities that show that farmers who are 'sovereign over land' are able to build and show a strong identity as food producers. They are the ones who will be able to preserve the farming culture in Indonesia as an important basis of sustainable farmer welfare (Wahono, 2011).

Therefore, an initiative is needed to identify forms of local self-resilience of farmers in maintaining farming traditions on the lands they already own. Some local communities have been shown to have high livelihood and independence to maintain their farming traditions and agricultural land. Such communities are more vulnerable to losing their independence if policy interventions are not able to see all of this local self-resilience. Local initiatives such as those emerging in the Kasepuhan

community, the Subak tradition in Bali, and the determination of Sedulur Sikep community with their farming traditions should have earned their right not to be 'disturbed' but to be let live and get recognition and protection.

Protecting these existing and sustainable forms of local farming initiatives is a real manifestation of the solution to the deadlock of the search for new agricultural land that faces various obstacles. Recognition should not only be given to indigenous groups as it has been done, but also to food farmer communities that have independently developed their agriculture in a sustainable manner. Independence in cultivating their own seeds and agricultural production facilities as well as building local food barns is proof that welfare can be achieved by taking care of existing farming traditions.

Figure 1. Harvest in one of the fields belonging to the Sikep people
Source: Personal documentation, 2017

This existing local farmer entity must be protected through the creation of an integrated spatial and social landscape and supporting farmers to continue their farming tradition in a sustainable manner. The form of protection for farmers with independent farming culture can be done through distribution channels through non-capitalistic markets, industrial areas that utilize agricultural products from local farmers, collective incentive and protection systems from the government (for example: cooperatives), as well as guarantees for land conversion through integration in spatial planning. This is in line with the importance of emphasis on community-based action and the development of strategies that consider the human dimension as well as the relationship between social ecological and economic systems (Zakaria, 2013).

Nurturing and maintaining the existence of farmers is very important because their existence is very vulnerable with various pressures and policies that are unfair. Various threats to land conversion and control in an instant or at any time can replace rice fields and fertile agricultural lands that have been managed well from generation to generation into housing, monoculture plantations, factories, and so on. Finding new lands is possible, but it requires a long and complicated process.

Sustainable welfare of farmers is only possible through the creation of spaces that allow them to stay alive and not be left alone to deal openly with various forms of extractive or predatory and capitalistic based industries. Farmers in their capacity must be recognized and protected that they do 'exist' and have contributed not only to themselves but also to the agrarian sector in this country. 'Protecting the existing land' is the most strategic and most likely way to explore before seeking new

lands that are often abandoned or not managed properly. The experience of the failure of the million hectares peatland project in Kalimantan or various forms of conflict and ecological damage to the MIFEE project in Papua are real examples that we must be good at maintaining and caring for what already exists rather than sacrificing a socio-cultural entity on land that is supposedly called 'new' but has grown and developed with its own culture which is actually sufficient for its community.

**D. Conclusion**

It is time to start reviewing what has been done so far to ensure that fertile land that can be developed for agricultural activities is indeed available to our farmers and that they can have access to develop their livelihoods and welfare. The area and number of fertile agricultural land that has been converted and the area of new agricultural land must be calculated and compared. It is important to rank quantitatively the data regarding the rate at which the land conversion 'already' occurs and the predictions of how many more conversion 'will' soon occur.

Land conversion is not just a land transition, but rather a condition that shows the breakdown of the natural and eternal relationship between human and land. When it is said that land injection is able to answer or accommodate land conversion, it is necessary to question the integration between the development and the marginalized community. Those who are accommodated through new programs/land injection will become new socio-economic communities or units that must of course be equipped with appropriate development schemes.

It is worth reiterating that our agricultural sector is a sector that still has to accommodate a lot of workforces. With such a rapid land conversion process, it is necessary to think about the sustainability of the agricultural sector in the future. The service sector and industrial sector, in fact, have not been able to absorb the workforce significantly. Therefore, the best solution to land provision is to give recognition to the 'living space and the farming profession' by stating that the agricultural profession is the noblest profession, the most realistic profession, and constitutionally justified. They are a group of people whose profession is on going, or continuing, and it only requires political commitment as well as recognition of their living space and their profession that farmers and farming are a profession as well as a right to life.

**E. Recommendation**

Soil or land is an important means of production for farmers. The availability of agricultural land is an absolute prerequisite for the sustainability of farmers and the agricultural sector in this country. This paper reminds that the availability of land or agricultural land must also pay attention to the existence of farmers. The problems at the farmer level are not only related to development projects that ultimately force them to give up their agricultural land, but also to the dynamics of the problems that must be faced to survive with their livelihood as farmers. This paper recommends several things, namely:

1 Re-evaluating land provision for development and meeting non-food needs that have the potential to convert productive food agricultural land;
2 Calculating the achievement of food production resulting from the opening of new food agricultural land (for example: new rice field program);
3 Making a moratorium on the addition or expansion of food agricultural land in areas with very low potential harvest production;
4 Developing incentive programs for community-based food farmers;
5 Minimizing policy interventions in agricultural communities that are already self-resilient;

6 Providing protection guarantees of pre-production, production, and post-production through agricultural business insurance, as well as;
7 Integrating the protection of food agricultural land with welfare guarantees at the producer (food farmer) level.

**References**

Bachriadi, D., & Wiradi, G. (2011). *Enam Dekade Ketimpangan: Masalah Penguasaan Tanah di Indonesia*. 82.

Djoni; Suprianto; Eri Cahrial. (2016). Kajian Alih Fungsi Lahan Pertanian Pangan di Kota Tasikmalaya. *Mimbar Agribisnis*, *1*(3), 233–244.

Geria, I. M., Sumardjo, N., Sutjahjo, S. H., Widiatmaka, N., & Kurniawan, R. (2019). Subak sebagai Benteng Konservasi Peradaban Bali. *Amerta*, *37*(1), 39. https://doi.org/10.24832/amt.v37i1.39-54

Ikmaludin, I., Kusmana, C., & Amirudin, S. (2018). Tipologi Sistem Budidaya Pertanian Dan Keberlanjutan Ketersediaan Pangan Pada Masyarakat Adat Kasepuhan Ciptagelar Sukabumi. *RISALAH KEBIJAKAN PERTANIAN DAN LINGKUNGAN Rumusan Kajian Strategis Bidang Pertanian Dan Lingkungan*, *5*(1), 14–26. https://doi.org/10.29244/jkebijakan.v5i1.28756

Kementerian Agraria dan Tata Ruang/BPNRI. (2022). *Pelaksanaan Reforma Agraria 2015-2020*. https://sigtora.atrbpn.go.id/

Kementerian Pertanian. (2020, January). Warta Pertanian. *Volume XIII/Edisi Januari*, 1–49.

Prabowo, Y. B., & Sudrajat, S. (2021). Kearifan Lokal Kasepuhan Ciptagelar: Pertanian Sebagai Simbol Budaya & Keselarasan Alam. *Jurnal Adat Dan Budaya Indonesia*, *3*(1), 6. https://doi.org/10.23887/jabi.v3i1.31102

Pujiriyani, D.W.; Soetarto, E.; Santosa, D.A.; Agusta, I. (2019). Deagrarianization and Local Food Security Strategy for Peasant Communities in Rural Central Java. *Komunitas: International Journal of Indonesian Society and Culture*, *11*(2), 231–241. https://doi.org/10.15294/komunitas.v11i2.20209

Pujiriyani, D. W., & Soetarto, E. (2018). The existence of agriculture and the autonomy of peasant community. *IOP Conference Series: Earth and Environmental Science*, *196*(1). https://doi.org/10.1088/1755-1315/196/1/012045

Ritung, Sofyan; Suryani, Erna; Subardja, D; Sukarman; Nugroho, Kusumo; Hikmatullah; Mulyani, Anny; Tafakresnanto, Chendy; Sulaeman, Yiyi; Subandiono, Rudi Eko; Wahyunto; Ponidi; Prasodjo, Noto; Suryana, Usep; Hidayat, Hapid; Priyono, Adi; Supriatna, W. (2015). *Sumberdaya lahan pertanian indonesia: luas penyebaran dan potensi ketersediaan (in Bahasa)* (D. Husen, Edi; Agus, Fahmuddin; Nursyamsi (ed.); Issue October).

Santosa, D. A. (2016). *Aspek Agraris dari Usaha Mencapai Kedaulatan Pangan*.

Saragih, H. (2013). Transformasi Pedesaan. In *Rural Talks: Ikhtiar Memahami Transformasi Sosial-Ekonomi Masyarakat Desa*. Indonesian Human Rights Committe for Social Justice.

Shohibuddin, M. (2018). Reforma agraria untuk keamanan tenurial. *GATRA*, *January 2017*, 1–5.

Soetarto, Endriatmo; Agusta, I. (2012). Arah Baru Penurunan Ketahanan Pangan: Deruralization, Depesantization, Deagrarianization.pdf. In B. Fariyanti, Anna; Rifin Amzul; Jahroh, Siti; Krisnamurthi (Ed.), *Pangan Rakyat: Soal Hidup atau Mati, 60 Tahun Kemudian* (pp. 449–460). Departemen Agribisnis, FEM-IPB dan PERHEPI.

Wahono, F. dkk. (2011). *Ekonomi Politik Pangan: Kembali ke Basis: Dari Ketergantungan ke*

*Kedaulatan*. Bina Desa, Cinde Books.

Zakaria, A. K. B. R. (2013). Implementasi Sosialisasi Insentif Ekonomi Dalam Pelaksanaan Program Perlindungan Lahan Pertanian Pangan Berkelanjutan (PLP2B). *Forum Penelitian Agro Ekonomi*, *31*(2), 139–149. http://ejurnal.litbang.pertanian.go.id/index.php/fae/article/view/3835/3183