



Jurnal Ilmu Sosial Mamangan
Volume 12, Issue 2, July-December, 2023

Analysis of Communication System for Community Empowerment Based On Integrated Plant Management Implementation Movement Program (GPPTT)

Author (s) : Selly Oktarina, Norhazlina Fairuz Musa Kutty, Eko Purwanto, Mirza Shahreza, Abdul Basit
Source : Jurnal Ilmu Sosial Mamangan, Volume 12, Issue 2, December, 2023
Publisher : Sociology Education Department of PGRI Universitas PGRI Sumatera Barat
Doi : <http://dx.doi.org/10.22202/mamangan.v12i1.6655>

To Cite This Article:

Oktarina *et al.*, 2023. *Analysis of communication system for community empowerment based on integrated plant management implementation movement program (GPPTT)*. Jurnal Ilmu Sosial Mamangan, Volume 12, Issue 2, June-December, 2023, 169-179.

Copyright © 2023, Jurnal Ilmu Sosial Mamangan
ISSN: 2301-8496 (Print) & 2503-1570 (Online)

Sociology Education Department of
Universitas PGRI Sumatera Barat



Analysis of Communication System for Community Empowerment Based on Integrated Plant Management Implementation Movement Program (GPPTT)

Selly Oktarina^{1*}, Norhazlina Fairuz Musa Kutty², Eko Purwanto³, Mirza Shahreza⁴, Abdul Basit⁵

^{1*}Program Study of Agribusiness, Faculty of Agriculture, Sriwijaya University, Palembang, Indonesia

Email: sellyoktarina@unsri.ac.id

²National Defence University of Malaysia, Malaysia

Email: nfairuz@upnm.edu.my

³Department of Communication, Tangerang Muhammadiyah University, Tangerang, Indonesia

Email: ekopurwanto24434@gmail.com

⁴Department of Communication, Tangerang Muhammadiyah University, Tangerang, Indonesia

Email: mirezashahreza@gmail.com

⁵Department of Communication, Tangerang Muhammadiyah University, Tangerang, Indonesia

Email: basit.umt@email.com

ABSTRACT

Empowerment communication is important so the people become empowered through effective communication. The effectiveness of communication is inseparable from the role of the institutions involved in program implementation. This study aims to analyze the communication system in empowering the community the “jajar legowo” cropping system in the Integrated Plant Management Implementation Movement (GPPTT) program. The theory used in this study is the adoption of innovation. The research method is qualitative in nature, namely based on the results of field observations supported by literature studies of related journals. Data were analyzed descriptively by providing understanding and explanation so that it was easy to understand. The focus of the study was carried out in Ogan Ilir Regency, South Sumatra, as one of the implementers of the GPPTT and as a Food Barn. The communication system based on black box analysis shows that community empowerment based on the GPPTT Program is good, it is carried out based on five elements consisting of environmental input, controlled input, uncontrolled input, desired input and unwanted input. The pattern of analysis of the GPPTT program system is based on the existence of GPPPT policies, empowerment strategies and technical guidelines that affect the empowerment of farmers in adopting the jajar legowo cropping system so as to produce a paradigm shift in empowerment communication. A community empowerment communication system based on the GPPTT program based on black box analysis is a problem solving solution for farmers to adopt technology to be independent.

Keywords: Communication, Empowerment, GPPTT

History:

Received : 17 Februari 2023

Revised : 08 Agustus 2023

Accepted : 12 September 2023

Published : 01 Desember 2023

INTRODUCTION

Empowerment program Public-based Movement Application Management Plant Integrated (GPPTT) is a government program that aims to increase the behavior, and well-being of farmers (Irwan, Mobo, *et al.* 2022); [2]. In implementation, the GPPTT program cannot be separated from the role of the institutions involved, as a form of success in agricultural development which is mostly carried out in rural areas. The mechanism for implementing the GPPTT program involves the government, the community, and the private sector so that development can be carried out effectively, and efficiently. Technically, the implementation of the GPPTT program at the central government level is carried out by the Ministry of Agriculture (MOA) (M. A. Putri *et al.* 2022); (Irwan, Mobo, *et al.* 2022).

So far, the institutions formed are underdeveloped and there are many obstacles in implementation due to ineffective communication between farmers (communities) and institutions. This causes farmers not to be responsive, and understand the programs and roles of existing institutions (Anantanyu, 2011; Rahmadani, 2017; Akbar 2018). The successful development of the GPPTT program requires the need for effective communication so that the programs implemented are following the aspirations and needs of the community. The development will run well if there is effective communication between existing institutions and farmers, namely the creation of a common understanding so that changes in farmer behavior occur (Irwan, Zusmelia, *et al.* 2022); (Irwan Irwan *et al.* 2022).

The institutions involved are required to be able to communicate the program of activities to the community, resulting in changes in the behavior and welfare of farmers. Good program institutions are institutions that can grow *common ownership* and make village communities the main actors.

In 2017 the government plans to be self-sufficient in food to meet domestic food needs. Food self-sufficiency is achieved through the GPPTT (Integrated Crop Management Application Movement) program launched by the government in 2015. The GPPTT program is a continuation of the SL-PTT (Integrated Crop Management Field School) program which has been implemented since 2008. The focus of the GPPTT is rice, corn and soybeans. This program is a simultaneous rice planting program by implementing Integrated Crop Management (PTT) in managing farming to increase productivity, farmers' income, and environmental sustainability [9]; [10]; (Irwan Irwan, Shahreza *et al.* 2022).

On the system, GPPTT program planting used the system *jajar legowo*. This system has many benefits that are application system *jajar legowo* could utilize radiation sun on plants on the edge map so that the expected whole planting gets effect edge (*border effect*), taking advantage of the effect turbulence of the air when combined with system irrigation wet-dry intermittent so could lift sour organic dangerous land_for plant from part lower to part up (evaporate), increase content carbon dioxide (CO₂) and result photosynthesis plants, easy in fertilization and control mice, as well increase population plants per unit broad (Tabloid Sinar Tani, 2015). The success of the *jajar legowo* planting system is the success of the institutions involved in the diffusion of innovations in the GPPT program. Therefore, it is interesting to study the community empowerment communication system based GPPTT program [12]; [13].

The implementation of the GPPTT program cannot be separated from the role of institutions, business people, farmer groups and other supporting facilities and infrastructure institutions. The existence of a development program given to farmers will invite a sense of ownership so that they can develop into better institutions. Therefore, it is necessary to have effective communication between farmers and institutions involved in institutional development in the GPPTT Program. The implementation of development programs such as the GPPTT program, shows the importance of effective communication in the implementation of activities. Research Oktarina *et al.* (2008), state that the effectiveness of communication describes the level of farmer acceptance of the material agreed upon, and accepted. The effectiveness of communication is seen from three aspects, namely perceptions, attitudes and actions of farmers toward the program.

South Sumatra as one of the food storage provinces, has a large area of paddy fields as a rice producer. One of the districts that has the potential and has received many development programs is Ogan Ilir Regency. There are still many problems faced by farmers, so it is necessary to solve problems with the communication system through black box analysis to find a strategy based on the five elements. About the background above, an interesting problem to analyze is how the communication

system empowers the community about the jajar legowo cropping system in the Integrated Plant Management Implementation Movement (GPPTT) program through system analysis (black box).

METHOD

This study used a qualitative approach based on field observations and literature studies. Field observations were carried out at locations that carried out the jajar legowo system, namely in Soak Batok, Pemulutan Ulu, Ulak Segelung, Muara Penimbung, and Kota Daro Villages, Ogan Ilir Regency. The focus of the study was carried out in Ogan Ilir Regency, South Sumatra, as one of the implementers of the Movement for the Implementation of Integrated Crop Management (GPPTT) and Food Barns. The data collection method was carried out through interviews and direct observation of 10 respondents by purposive sampling. The data collected are primary data and secondary data. Primary data is data obtained based on interviews through a list of questions (Questioner) and field observations. Secondary data were obtained from agencies related to information and data to strengthen this research in addition to literature studies. A literature study is carried out by collecting data or sources related to the study. In addition, to enrich this study also sourced from related journals. The data obtained is analyzed descriptively which does not only describe but provides understanding and explanation so that it is easy to understand. The data obtained from the field was processed by tabulation and described descriptively.

RESULT AND DISCUSSION

Overview of the Integrated Crop Management Application Movement (GPPTT)

The Integrated Plant Management Implementation Movement Program (GPPTT) is an advanced government program, namely the SL-PTT (Integrated Plant Management Field School). SL-PTT is a school program for farmers where the teaching and learning process takes place in paddy fields. The rice fields that are used as a place for the learning process are called Field Laboratory (FL) while the fields of the SL-PTT program participants are called Field School (FS) fields. The difference between the SL-PTT program and the GPPTT program is that the SL-PTT program gets infrastructure assistance for full production, such as seeds and fertilizers on FL land, while SL land does not receive full production assistance. The GPPTT program does not have FS and FL land but directly applies it to each farmer's land with each farmer getting input for production assistance.

The SL-PTT and GPPTT programs apply the PTT (Integrated Plant Management) recommendation. PTT is an innovative approach that aims to increase crop efficiency by combining various selected components and paying attention to the use of natural resources that influence rice growth and productivity. Integrated into PTT means that there is a match between technology and existing land conditions, there is a match between the technology applied and the ability of farmers, and there is a link between one technology and another. In addition, integrated here means paying attention to the use of natural resources through processing land, water, plants, OPT (Plant Pest Organisms), and climate in an integrated manner where farmers do not use chemicals to support farming activities ranging from fertilization to pest eradication.

Based on the field, farmers still use chemical-based products for pest eradication such as the use of pesticides which should use natural enemies that can eradicate pests. When viewed from the technology applied, it is under the conditions of the farmers' land, namely the Lebak swamp. The lowland swamp land used by farmers in the GP-PTT program starts from the embankment to the middle. Based on the Direktorat Jenderal Tanaman Pangan (2015), the recommended PTT for lowland swamps consists of two components, namely the basic component and the optional component. The basic components include the use of modern varieties (VUB, PH, PTB), quality and healthy seeds, fertilization of N granules, P and K based on PUTS, and IPM according to target pests. Optional components include crop management covering population and planting methods (legowo, larikan, etc.), seedling age, water management, integrated weed control, and harvest and post-harvest handling.

The GP-PTT program in Ogan Ilir Regency has been carried out by several farmer groups which is applied to an area of 201 ha. Some farmers have participated in the SL-PTT program in the previous

year such as 2011, 2012, 2013, and 2014 but some farmers are participating in the GP-PTT program for the first time. Farmers think that participating in government programs has the advantage of providing input for production inputs. This program is run jointly with the help of extension workers, Gapoktan and Babinsa (Village Development Officer). Babinsa is in charge of assisting and supervising the course of program activities.

The GP-PTT program is a simultaneous rice planting program but based on the field the planting is not carried out simultaneously because the types of land owned by farmers are different. Farmers who have bund-type land can immediately plant while the middle type must wait for the water to recede a little. This program aims to lure farmers to be motivated in improving their farming through the provision of superior seeds and balanced fertilizers. Another reason is that farmers are expected to leave the conventional planting system (tile) and switch to using a modern planting system, namely jajar legowo. Results study Effendy & Pratiwi (2020) stated wrong efforts so that farmers adopt system row legowo is with utilize system information and increase quality counseling.

Jajar legowo is an attempt to manipulate the planting location with a pattern of several rows of plants interspersed with an empty row. Plants planted in empty rows are transferred as inserts in rows. The jajar legowo planting system in the direction of the outermost row of plants provides a looser growing space as well as a higher population. This planting system can provide air circulation and optimal utilization of sunlight for planting. In addition, efforts to control weeds and fertilization can be done more easily. The row legowo system used by farmers in Ogan Ilir Regency is a 2:1, and 4:1 system type 1. The 2:1 system is a planting system that regulates every two rows and is interspersed with empty rows while the 4:1 system type 1 is a planting system that arranges insertion plants into rows and interspersed with empty rows. Based on the results of the research, the cropping system that produces high production is 4:1, and those that produce quality grain use a 2:1 cropping system. Research by Kurniawan *et al.*, (2021); Megasari *et al.* (2021) stated that the treatment of jajar legowo spacing affected panicle length and dry grain yields with the highest yield spacing of 2:1. According to Sari *et al.*, (2014); Misran (2014), the number of tillers produced from the 2:1 type was 28.48 stems, 25 productive stems and the weight of dry milled grain (GKG) was 66.16 g per clump and the difference in GKG yield per plot was 50.43%.

Farming activities are usually carried out by farmers in April-August. Before the land cultivation process, farmers tend to control weeds or weeds on the land by using herbicides. After that, the land is left for 15 days and then start the land management process. The land is processed 2 times to break and smooth the soil. In the jajar legowo (jarwo) planting system, planting activities must be carried out together with the application of young seedlings (< 21 days) and the number of seedlings planted is no more than 3 stems per clump (1-3 stems per planting hole). Farmers generally do the seeding for 15-20 days. However, there are still farmers who use old seeds for more than 21 days. In planting activities, farmers plant with a tandur system (planting backward) by using a plunger to make holes in the soil where the seeds grow. In fertilization activities, the fertilizer given is adjusted to the spacing used with the recommended fertilizer composition is Urea fertilizer 150 kg/ha, NPK fertilizer 200 kg/ha, and SP-36 fertilizer 200 kg/ha. The more the plant population, the more doses of fertilizer are given. In fertilization activities, farmers generally do 3 times, the first is 3 days after planting, 15-18 days after planting, and 30-33 days after planting. In weeding activities, farmers use herbicides and pesticides such as fungicides and insecticides to deal with pests on the land. In harvesting activities, farmers do not use a tiling system as in the jajar legowo activity by counting per tile of grain produced but using a *combine harvester* which functions to harvest and thresh rice. This tool is considered efficient because it reduces the labor cost of harvesting.

The jajar legowo planting system was introduced to farmers in Ogan Ilir Regency through extension workers who served in the village. At first, the extension workers in the village taught how to plant jajar legowo to the head of the farmer group and then taught it to members of the farmer group. According to Zaky & Naufal (2017); Hanana *et al.* (2017); Oktarina *et al.* (2022), one of the effective communication media is group communication channels, which can build social relationships in the form of face-to-face communication.

Rice is the main livelihood of farmers in Soak Batok Village so that efforts are made as much as possible to be able to produce maximum production. If rice production is maximized, it is expected to increase farmers' income and also improve farmers' welfare. The jajar legowo planting system is one of

the solutions and innovations being implemented in several villages. It is hoped that this planting system can have a good impact on farmers' income. Results study Putri *et al.* (2013); Firmana & Nurmalina (2016); Oktarina *et al.* (2021) stated by the absolute SLPTT program is more profitable, big, and, efficient.

Analysis of Communication System Empowerment of Jajar Legowo Planting System in GPPTT Program

System analysis is used to review a subject [26]. For this purpose, it is necessary to know the information which is categorized into three groups, namely (1) Input, (2) Output. Can come from outside the system or environmental inputs and overt inputs originating from within the system consisting of (1) endogenous variables that can be controlled by the system manager and (2) uncontrolled endogenous variables. The output consists of the desired output, which is the expected result and the unwanted result, which is the expected result and the unwanted result is the by-product of the unexpected impact.

The systems approach is a way of solving problems that begin with identifying some needs so that they can produce an operation of the system that is considered effective. The system is defined as a set of elements or a set of interrelated entities, which are designed and organized to achieve one or more goals. Subsystems can interact with each other to achieve system goals. Interaction between subsystems (*interfaces*) occurs because the output of one system can establish input for other systems. If the interface between subsystems is disrupted, the transformation process of the system as a whole will be disrupted. The transformation process carried out in the elements of a system can be in the form of mathematical functions, logical operations, and operating processes which in systems science are known as the black box *concept*. The black box concept can be used as a way of identifying social systems. The black box is used to observe what happens and not know about how the transformation occurs. A systems approach is used to identify farmer empowerment systems for the jajar legowo planting system Sarbaitinil, (2019); Azhima *et al.* (2022); Santoso *et al.* (2022). A systems approach is used to identify farmer empowerment systems for the jajar legowo planting system. Identification of input variables and output variables that affect farmer empowerment on the jajar legowo planting system in the GPPTT program can be seen in Figure 2.

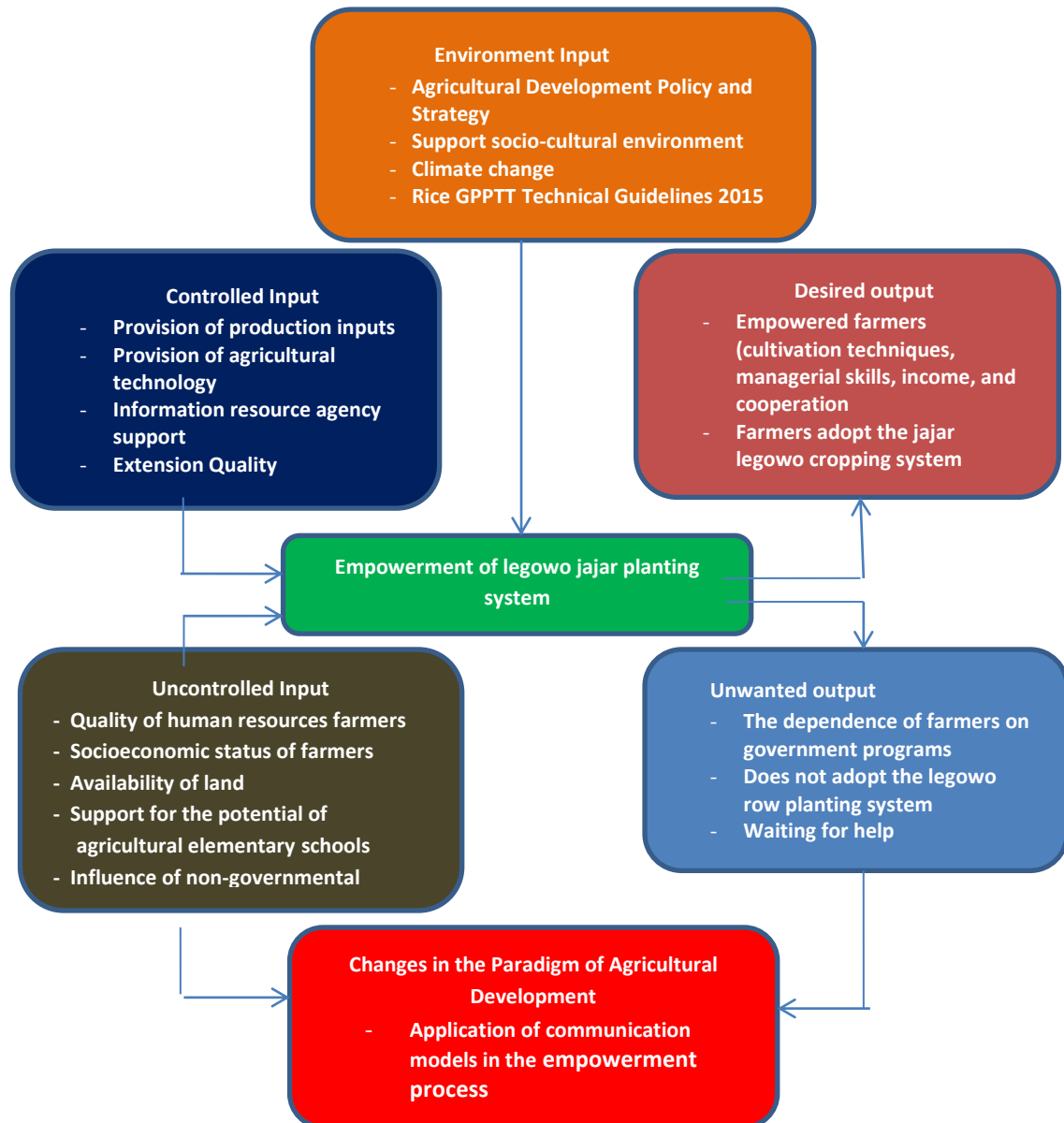


Figure 1. Analysis of Black Box Communication System Empowerment Publicbased on GPPTT Program

According to Rahmawati *et al.* (2011); Talahatu & Silahooy (2014); Nurawan *et al.* (2014); Intisari & Halik (2017), the implementation of SL-PTT has been effective marked by changes in behavior (knowledge, skills, and attitudes) of farmers which have increased after attending field schools effectively counseling methods in an effort to accelerate the adoption of PTT rice innovations. Based on the description of the implementation of the GPPTT program on the empowerment of the jajar legowo planting system from the aspect of the communication system, several aspects can be analyzed including:

- Cognitive aspect: farmers know and understand the jajar legowo planting system and the GPPTT program. This means that communication on the empowerment of the jajar legowo planting system of technology and counseling degrees is considered quite effective as a communication medium for empowerment. The empowerment communication is support for increasing farmers' knowledge about rice farming with the jajar legowo planting system. Study Ismilaili *et al.* (2015) stated the perception of the farmer to PTT innovations includes criteria high where the farmer already has evaluated and a good understanding to given

technology. In addition, the results of research by Malik *et al.* (2015) showed that farmers were enthusiastic about the SL-PTT.

- The affective aspect is seen from the carrying capacity, accepting, liking, and enthusiasm. Farmers support, accept, like, and are enthusiastic that the activities programmed by PTT have been able to increase knowledge and change farmers' attitudes in carrying out rice farming with the jajar legowo planting system. Hakim & Oktarina (2015) research results that the changes that occur enough many behavior farmers in the implementation of the jajar legowo program influential on income farmers. Research by Prihono & Murdani, (2020) that farmers have a positive attitude in implementing the SL-PTT program.
- In conative or behavioral aspects, farmers accept and have applied rice farming technology with the jajar legowo planting system recommended by extension workers following the government program, namely the GPPTT program. According to Muchtar *et al.* (2015); Saidah *et al.* (2015); Pertiwi & Yani (2016); Saeroji (2018), this causes farmers to want to apply SLPTT technology because could increase the production of paddy through sustainability. In addition, according to Kinanthi *et al.* (2014); Mulyani & Jumiati (2014); Andayani & Sanira (2015), the application of PTT technology is still low, but has been able to increase the productivity and income of rice farming, which there are differences income between before and after the SL-PTT program for rice farmers.

Based on the pattern of a system using a black box diagram of the jajar legowo planting system program in the GPPTT program based on the empowerment policies and strategies and technical guidelines for GPPTT rice that affect the empowerment of farmers in adopting the jajar legowo planting system. Regarding environmental inputs, climate change is an environmental issue that needs to be watched out for because it is related to the ecological rights of farmers (Anggreta, 2012; Arifin, 2012). This is influenced by controlled inputs and uncontrolled inputs. Controlled input has a very role important in changing performance systems. Controlled inputs consist of the provision of production inputs, the provision of agricultural technology, the support of information source institutions, and the quality of companions. For the supply of production inputs and technology, agriculture can provided not only just wait for the program and not become obstacle. Institutional support sources of information and quality of mentors during this already there is stay to do coordination and cooperation as form independent society. Where support and quality from institution companion are not doubtful again. Research results Oktarina et al. (2012), that controlled inputs as strengths include access, human resources, the role of institutions and training. Research by Ningsih et al. (2014); Tamrin et al. (2018), the extension worker acts as a dynamist in forming group organizations, meeting materials, field observations, giving PTT examples, and discussions.

For uncontrolled inputs consisting of the quality of farmer's human resources, the socio-economic status of farmers, the availability of land, the support of potential sources of agricultural power, and the influence of non-governmental organizations. Uncontrolled input is required for the system to work that is have influence straight away. The number of government programs, slowly impact the change quality of farmer as program recipient. Quality of farmer's human resources experience enhancement along with a lot of experience gained. This thing impacts the increase in the social status of farmers' economy. Availability of land as the main capital farmer in do cultivation of paddy jajar legowo could be utilized through rent and as a result no becomes an obstacle.

The existence of farmer empowerment with the jajar legowo planting the system will produce the desired output and the unwanted output. The desired output consists of empowered farmers in terms of cultivation techniques, income management, and cooperation, in addition, farmers adopt the jajar legowo planting system. According to Looviani et al. (2014), the PTT technology component can already be applied by farmers, although not in its entirety. A study Asyiek & Oktarina (2016) that farmers implemented jajar legowo planting the system under the advice of PPL. Hakim & Oktarina (2016) stated farmers who have applied the system plant row legowo are already enough prosperous. For uncontrolled output consisting of farmers' dependence on government programs, farmers do not adopt the jajar legowo system and wait for assistance. One effort that can conduct to minimize unnecessary output is desired by applying for the empowerment program jajar legowo not on program time only. According to Hanapi (2015), farmer education through SL-PTT is expected to be

able to increase farmers' knowledge and skills in integrated and sustainable cultivation of food crops, the SL-PTT approach is one of the strategies that is expected to be able to make a real and bigger contribution to national food production. Application of the program jajar legowo could be conducted after seeing success experience farmer others. Where with the input and output this will make a paradigm shift in empowerment with the formation of an empowerment communication model.

CONCLUSION

The community empowerment communication system based on the GPPTT program based on black box analysis shows that with policies and technical guidelines, farmers are empowered by adopting the jajar legowo system. This has an impact on changing the behavior and income of farmers so that farmers become independent. Therefore, it is necessary to carry out coaching and training related to the program so that changes occur continuously.

REFERENCES

- [1] I. Irwan *et al.*, "Rural community resilience in dealing with a land disaster avalanche : Talamau Kanagarian study Pasaman Barat District," vol. 25, no. 24, pp. 15–19, 2022.
- [2] N. Hakim and S. Oktarina, "Tingkat Kesejahteraan Petani Padi Program Jajar Legowo di Desa Pelabuhan Dalam Kecamatan Pemulutan Kabupaten Ogan Ilir," in *Prosiding Seminar Nasional dalam Rangka Dies Natalis ke-53 Fakultas Pertanian Universitas Sriwijaya*, 2016.
- [3] M. A. Putri, S. Sarbaitinil, and I. Irwan, "Motivasi Wisatawan Domestik Berkunjung Ke Objek Wisata Pantai Family Nagari Muara Kandis Punggasan Linggo Sari Baganti Pesisir Selatan," *AURELIA J. Penelit. dan Pengabd. Masy. Indones.*, vol. 1, no. 1, pp. 127–135, 2022, doi: 10.57235/aurelia.v1i1.72.
- [4] S. Anantanyu, "Kelembagaan Petani : Peran dan Strategi Pengembangan Kapasitasnya," *Sepa*, vol. 7, no. 2, pp. 102–109, 2011.
- [5] S. Rahmadani, "Bersiasat Dengan Sumber Pendapatan Ganda Petani Miskin Sawah Nagari Batipuah Baruah, Kab. Tanah," *J. Ilmu Sos. Mamangan*, vol. 6, no. 1, pp. 11–22, 2017.
- [6] W. K. Akbar, "Socio-economic Dependence of Peasant to Local Collector on Rice Farming System," *J. Ilmu Sos. Mamangan*, vol. 7, no. 1, pp. 23–31, 2018, doi: 10.22202/mamangan.2508.
- [7] I. Irwan, Z. Zusmelia, D. Virginia, A. Amelia, and K. W. A. Siahaan, "Resilience of Rubber Farmers' Households Due to Aslide Disaster in the Danau Village, Nalo District, Tantan Merangin Jambi Province," *Int. J. Multidiscip. Appl. Bus. Educ. Res.*, vol. 3, no. 12, pp. 2686–2691, 2022, doi: 10.11594/ijmaber.03.12.20.
- [8] Irwan Irwan, E. Damanik, Y. Melia, E. Elvawati, and L. I. Jannah, "Sosialisasi Penguatan dan Pengembangan Kabupaten / Kota Layak Anak di Kabupaten Pasaman Barat," *PakMas (Jurnal Pengabd. Kpd. Masyarakat)*, vol. 2, no. 2, pp. 398–403, 2022, doi: 10.54259/pakmas.v2i2.1243.
- [9] Direktorat Jenderal Tanaman Pangan, *Pedoman Teknis GP-PTT Padi 2015*. Jakarta (ID): Kementerian Pertanian, 2015.
- [10] E. Widya Kurnia, Irwan Irwan, "Edukasi untuk penanggulangan kekerasan seksual dan fisik pada anak di kampung kb bangau putih kota padang," *J. Pengabd. Masy.*, vol. 1, no. 3, pp. 160–164, 2022.
- [11] M. Irwan Irwan, Shahreza, Y. Melia, T. Widiyanarti, H. Saputra, and A. Hidayah, "Pelatihan pembuatan kerajinan daur ulang sampah di bank sampah sri rejeki kelurahan benda baru kecamatan pamulang tangerang selatan," *Indones. Collab. J. Community Serv.*, vol. 2, no. 2, pp. 100–106, 2022.
- [12] E. E. Egi Yulianda, Irwan Irwan, "Livelihood Strategies of Fishing Labor Households in Air Bangis Village , West Sumatra Strategi Mata Pencaharian Rumah Tangga Buruh Nelayan di Desa Air Bangis Sumatera Barat," *Pendidik. Sociol. dan Hum.*, vol. 14, no. 01, pp. 42–51, 2023, doi: 10.26418/j-psh.v14i1.61035.
- [13] O. Oktaviani, Zusmelia, and Irwan, "Dinamika Modal Sosial dan Ketahanan Sosial Rumah Tangga Pedagang Sayur Keliling di Mahakarya Kampung 2 Kecamatan Luhak Nan Duo Kabupaten Pasaman Barat," vol. 5, no. 2, pp. 189–198, 2021.

- [14] S. Oktarina, S. Sumardjo, and E. Rustiadi, "Keefektivan Komunikasi dalam Pengembangan Peran-Peran Kelembagaan Agropolitan," *J. Komun. Pembang.*, vol. 06, no. 2, 2008.
- [15] L. Effendy and S. D. Pratiwi, "Tingkat Adopsi Teknologi Sistem Jajar Legowo Padi Sawah Di Kecamatan Cigasong Kabupaten Majalengka," *J. Agrica Ekstensia*, vol. 14, no. 1, pp. 81–85, 2020.
- [16] I. Kurniawan, L. Kristina, and R. Awiyantini, "Pengaruh Model Jarak Tanam Jajar Legowo terhadap Pertumbuhan dan Hasil Padi (*Oryza sativa*) Varietas IPB 3S," *Daun J. Ilm. Pertan. dan Kehutan.*, vol. 8, no. 2, pp. 98–109, 2021, doi: 10.33084/daun.v8i2.2865.
- [17] R. Megasari, R. Asmuliani, M. Darmawan, M. I. Sudiarta, and D. Andrian, "Uji Beberapa Sistem Tanam Jajar Legowo terhadap Pertumbuhan dan Produksi Padi Varietas Ponele (*Oryza sativa* L.)," *J. Pertan. Berkelanjutan*, vol. 9, no. 1, pp. 1–9, 2021.
- [18] D. N. Sari, S. Sumardi, and E. Suprijono, "Pengujian Berbagai Tipe Tanam Jajar Legowo terhadap Hasil Padi Sawah," *Akta Agrosia*, vol. 17, no. 2, pp. 115–124, 2014, doi: 10.31186/aa.17.2.115-124.
- [19] M. Misran, "Studi Sistem Tanam Jajar Legowo terhadap Peningkatan Produktivitas Padi Sawah," *J. Penelit. Pertan. Terap.*, vol. 14, no. 2, pp. 106–110, 2014, doi: 10.25181/jppt.v14i2.148.
- [20] A. Zaky and M. Naufal, "The Analysis of Electronic Journal Utilization In Learning Process: Technology Acceptance Model And Information System Success," *J. Ilmu Sos. Mamangan*, vol. 6, no. 2, pp. 97–106, 2017, doi: 10.22202/mamangan.v6i2.2358.
- [21] A. Hanana, N. Elian, and R. Marta, "Strategi Komunikasi Persuasif Dalam Menciptakan Masyarakat Sadar Wisata Di Kawasan Wisata Pantai Padang, Kota Padang," *J. Ilmu Sos. Mamangan*, vol. 6, no. 1, pp. 34–46, 2017, doi: 10.22202/mamangan.v6i1.1886.
- [22] S. Oktarina, S. Sumardjo, N. Purnaningsih, and D. R. Hapsari, "Participatory Communication and Affecting Factors on Empowering Women Farmers in The Urban Farming Program at Bogor City and Bogor Regency," *Nyimak J. Commun.*, vol. 6, no. 1, pp. 77–93, 2022.
- [23] T. L. Putri, D. A. H. Lestari, and A. Nugraha, "Pendapatan dan Kesejahteraan Petani Padi Organik Peserta Sekolah Lapang Pengelolaan Tanaman Terpadu (SL-PTT) di Kecamatan Pagelaran Kabupaten Pringsewu," *JIIA*, vol. 1, no. 3, pp. 210–217, 2013.
- [24] F. Firmana and R. Nurmalina, "Dampak Penerapan Program SLPTT terhadap Pendapatan Usahatani Padi di Kecamatan Telagasari Kabupaten Karawang," *Agrikultura*, vol. 27, no. 1, pp. 38–48, 2016, doi: 10.24198/agrikultura.v27i1.8475.
- [25] S. Oktarina, H. Malini, and R. Wahyuni, "Farmers Perception And Sustainability Strategy On Agricultural Development Program In Rural," *J. Soc. Econ. Agric.*, vol. 10, no. 1, pp. 11–22, 2021, doi: 10.26418/j.sea.v10i1.45007.
- [26] Haeruman and Eriyatno, *Kemitraan dalam Pengembangan Ekonomi Lokal*. Jakarta (ID): Yayasan Mitra Pembangunan Desa-Kota dan BIC Indonesia., 2001. doi: 10.30588/jmp.v5i1.151.
- [27] S. Sarbaitinil, "Development of Tourism Based on Empowerment of Community in Mandeh Tourism Area of Pesisir Selatan West Sumatra," *J. Ilmu Sos. Mamangan*, vol. 8, no. 2, pp. 60–70, 2019, doi: 10.22202/mamangan.v8i2.4167.
- [28] M. N. Azhima, E. Elfitra, and I. Indraddin, "Application Of The Three Rothman Empowerment Models In Community Empowerment Activities By Three NGOs In West Sumatera," *J. Ilmu Sos. Mamangan*, vol. 11, no. 2, pp. 107–116, 2022, doi: 10.22202/mamangan.v11i2.6152.
- [29] H. Santoso, W. B. Priatna, and S. Oktarina, "Implementation Of The Digital Communication Model For Agro-Based Tourism Villages In Balongrejo Village And Pesudukuh Village, Nganjuk Regency," *Int. J. Progress. Sci. Technol.*, vol. 35, no. 1, pp. 458–467, 2022.
- [30] Rahmawati, S. Bulkis, and N. Agus, "Evaluasi Program Sekolah Lapang Pengelolaan Tanaman Terpadu (SL-PTT) Padi di Kabupaten Bantaeng," pp. 1–14, 2011.
- [31] H. D. Talahatu and C. Silahooy, "Evaluasi Pelaksanaan Sekolah Lapang Pengelolaan Tanaman Kairatu Kabupaten Seram Bagian Barat," *J. Budid. Pertan.*, vol. 10, no. 1, pp. 21–29, 2014.
- [32] A. Nurawan, A. Rachman, and I. Ishaq, "Pengaruh pendampingan sl-ptt dalam peningkatan produksi padi, respons petani untuk menunjang program P2BN di jawa barat," *Bul. Has. Kaji.*, vol. 4, no. 04, pp. 34–38, 2014.
- [33] I. Intisari and H. A. Halik, "Analisis Sikap Petani Terhadap Program Sekolah Lapang Pengelolaan Tanaman Terpadu (SL-PTT) Padi di Kota Palopo," *J. TABARO*, vol. 1, no. 2, pp. 86–94, 2017.
- [34] I. Ismilaili, N. Purnaningsih, and P. S. Asngari, "Tingkat Adopsi Inovasi Pengelolaan Tanaman

- Terpadu (PTT) Padi Sawah di Kecamatan Leuwiliang, Kabupaten Bogor,” *J. Penyul.*, vol. 11, no. 1, pp. 49–59, 2015, doi: 10.25015/penyuluhan.v11i1.9931.
- [35] A. Malik, R. Rosyani, and E. Elwamendri, “Tingkat Respon Petani terhadap Pelaksanaan Teknologi SL-PTT Padi Sawah di Kecamatan Limun Kabupaten Sarolangun,” *Sosio Ekon. Bisnis*, vol. 18, no. 1, pp. 5–24, 2015.
- [36] N. Hakim and S. Oktarina, “Analisis perilaku petani dan hubungannya dengan tingkat pendapatan petani padi peserta Sekolah Lapangan Pengelolaan Tanaman Terpadu (SLPTT) Di Kabupaten Ogan Ilir,” in *Seminar Nasional Lahan Sub Optimal*, 2015, no. November, pp. 293–299.
- [37] P. Prihono and M. Murdani, “Analisis sikap petani terhadap pelaksanaan sekolah lapang pengelolaan tanaman terpadu (SL-PTT) dan peningkatan produksi padi,” *Agromix*, vol. 11, no. 1, pp. 101–114, 2020, doi: 10.35891/agx.v11i1.1925.
- [38] K. Muchtar, N. Purnaningsih, and D. Susanto, “Adopsi Teknologi Petani pada Sekolah Lapangan Pengelolaan Tanaman Terpadu (SL-PTT) Adoption,” *J. Penyul.*, vol. 11, no. 2, pp. 176–185, 2015.
- [39] S. Saidah, S. Syafruddin, and R. Pangestuti, “Daya hasil padi sawah varietas Inpari 24 di beberapa lokasi SL-PTT di Sulawesi Tengah,” *PROS SEM NAS MASY BIODIV INDON*, vol. 1, no. 5, pp. 1147–1150, 2015, doi: 10.13057/psnmbi/m010531.
- [40] P. R. Pertiwi and D. E. Yani, “Keragaan Tingkat Penerapan Metode SLPTT Padi di Kecamatan Ciawi Bogor,” *J. Mat. Saint, dan Teknol.*, vol. 17, no. 2, pp. 60–67, 2016.
- [41] S. Saeroji, “Analisis Adopsi Inovasi Program Sekolah Lapang Pengelolaan Tanaman Tepadu (SL-PTT) Untuk Peningkatan Produktivitas Padi,” *J. Ilmu-Ilmu Pertan.*, pp. 57–67, 2018.
- [42] A. Kinanthi, A. Kilat Adhi, and D. Rachmina, “Implementasi Teknologi Pengelolaan Tanaman Terpadu (Ptt) Pada Usahatani Padi Di Kabupaten Cianjur,” *Forum Agribisnis*, vol. 4, no. 1, pp. 85–100, 2014, doi: 10.29244/fagb.4.1.85-100.
- [43] S. I. Mulyani and E. Jumiaty, “Peningkatan Produktivitas Padi Melalui Pendekatan Sekolah Lapang Pengelolaan Tanaman Terpadu (SLPTT) di Kecamatan Sesayap Hilir Kabupaten Tana Tidung,” *J. AGRIFOR*, vol. XIII, no. 1, pp. 75–84, 2014.
- [44] S. A. Andayani and S. Sanira, “Pendapatan Usahatani Padi Sawah Berdasarkan Penerapan Sekolah Lapang Pengelolaan Tanaman Terpadu,” *J. Ilmu Pertan. dan Peternak.*, vol. 3, no. 2, pp. 42–59, 2015.
- [45] D. K. Anggreta, “Perjuangan Hak Ekologis Komunitas Petani,” *J. Ilmu Sos. Mamangan*, vol. 1, no. 1, pp. 51–68, 2012, doi: 10.22202/mamangan.v1i1.92.
- [46] Z. Arifin, “POLITIK EKOLOGI: Ramah Lingkungan Sebagai Pembetulan,” *J. Ilmu Sos. Mamangan*, vol. 1, no. 1, pp. 11–16, 2012, doi: 10.22202/mamangan.v1i1.88.
- [47] S. Oktarina, N. Hakim, and Y. Junaidi, “The Level of Farmer Self Reliance and Institutional Strengthness Strategy in Empowerment of Lowland Rice in Ogan Ilir Regency South Sumatera Indonesia,” in *International Conference on Environment, Energy and Biotechnology*, 2012, pp. 189–193.
- [48] R. Ningsih, I. Effendi, and S. Sadar, “Peranan Penyuluh sebagai Dinamisator dalam Bimbingan Teknologi SL-PTT (Sekolah Lapangan Pengelolaan Tanaman Terpadu) Padi Inhibrida di Desa Tegal Yoso Kecamatan Purbolinggo Kabupaten Lampung Timur,” *JIIA*, vol. 2, no. 2, pp. 133–141, 2014.
- [49] T. Tamrin, Z. Zulfadli, A. Asrinaldi, and A. Zetra, “Planning For Participative Development Based On Local Values: Case Study of Kelurahan Lambuang Bukik, Kota Padang,” *J. Ilmu Sos. Mamangan*, vol. 7, no. 1, pp. 40–50, 2018, doi: 10.22202/mamangan.2566.
- [50] H. Looviani, A. H. A. Yusra, and A. Suyatno, “Evaluasi Penerapan Teknologi pada Program Sekolah Lapangan Pengelolaan Tanaman Terpadu (SLPTT) Padi di Kecamatan Benua Kayong Kabupaten Ketapang,” *J. Soc. Econ. Agric.*, vol. 3, no. 1, pp. 37–44, 2014.
- [51] F. Asyiek and S. Oktarina, “Proses Komunikasi dan Tingkat Adopsi Inovasi Padi Organik Oleh Petani Ogan Komering Ilir,” *Komunikasi dan Penyuluhan Pembangunan*. Malang (ID), pp. 121–128, 2016.
- [52] S. Hanapi, “Proses Pendidikan Petani Melalui Sekolah Lapang Pengelolaan Tanaman Terpadu (SL-PTT) Di Sumatera Selatan,” *Semin. Nas. “Pembangunan Karakter Melalui Pendidik. dan Pembelajaran” 2015*, pp. 183–188, 2015.