

**"CROSSING BOUNDARIES TOWARDS
MODERN AGRICULTURE :
Science and Technology, Economic
and Social Welfare in Developing
Countries"**

INTERNATIONAL CONFERENCE ON AGRICULTURE

Proceedings



International
Conference
on
Agriculture

I C A 2013

Surabaya, October 10-11, 2013

Published by UPN "Veteran" JAWA TIMUR
ISBN: 978-602-9372-57-1



Editorial Board

Michael Reed, Prof. PhD. (University of Kentucky, USA)

Fabrice Renaud, PhD. (University of United Nation, Germany)

Katayama Takeshi, Prof. PhD. (University of Kagawa, Japan)

Sukendah, Dr, Ir MSc. (University of Pembangunan Nasional "Veteran" East Java, Indonesia)

Editor
Indriya Radiyanto
Yonny Koentjoro
Wahyu Santosso

Proceeding design :
Wahyu Santoso

Copyright : June 2014
Published by : UPN "Veteran" East Java, Indonesia

Held in between :

- Faculty of Agriculture & Postgraduate UPN Veteran" East Java, Indonesia
Perhimpunan Ekonomi Pertanian Indonesia (PERHEPI)
General Consulate of United State of America
Philippine Society for The Study of Nature (PSSN), Philippines
Indonesian Society for The Study of Nature (PSSN),



FOREWORD

Dear ICA-2013 Conference Participants:

I am pleased to present you with the "Proceedings" of the 2013 International Conference on Agriculture (ICA), which met in Surabaya on October 10-11, 2013. Those of you who attended know what an extraordinary event it was and will enjoy reading this document to recapture parts of that meeting. The others with an interest in global agriculture and research will find essential elements of this event collected in the pages that follow. I commend this to you as an important book documenting this major international conference. ICA 2013 conference participants came from various countries, such as Singapore, the Philippines, China, Japan, USA, Canada, Germany, Georgia and Indonesia. While Indonesian participants came from various institutions, governments, research centers, private companies, universities, students and entrepreneurs.

The conference resulted in several ideas, such as: the need for a change in technology that is efficient, environmentally friendly, accelerates the welfare of farmers, and increasing the role of government. The formulation of the subject of this conference for the second ICA will be held in 2015 in Surabaya.

On this occasion I would like to thank you to Professor Michael Reed from Kentucky University (USA), Professor Fabrice Renaud from the United Nations University (Germany), Professor Masyhuri from Gadjah Mada University (Indonesia), and Dr. Sukendah from Pembangunan Nasional "veteran" University East Java (Indonesia) which has been reviewing the papers in these proceedings.

Finally, I also would like to thank you and an apology for the delay in this publication.

Surabaya, June 2014

Head of Committee
Endang Yektiningsih



LIST OF CONTENT

Title and Authors	Page
SUB-THEME AGROTECHNOLOGY	
1. Response of Soybean Varieties to Top Pruning <i>Juli Santoso and Djarwatiningsih</i>	1
2. Lavan-3- Ol Callus Camellia Sinensis Production for Supporting Health and Agriculture Field <i>Sutini, Nana Dyah Siswati, M. Rasjad Indra and Djoko Agus Purwanto</i>	9
3. Acclimatize and Propagation Orchid Species in Tissue Culture <i>Titiek Purbiati and Melia Puspitasari</i>	17
4. The Study of Some Varieties shallot Production by liquid Organic Fertilizer Application <i>Nurul Istiqomah dan Amik Krismawati</i>	24
5. Effect of N Fertilization on Some Types of Corn Intercropping with Soybean In Upland <i>Zainal Arifin and Indriana Ratna Dewi</i>	30
6. Performance of Growth and Yield on Some Superior Variety of Soybean in Lowland and Upland <i>Zainal Arifin and Indriana Ratna Dewi</i>	38
7. Experimental Project in Argentina to Use Native Plant to Create New Ornamental Plants, Results And Perspective <i>Tomohiro Kamogawa</i>	47
8. Eastern Samar's Techno Gabay Program: Accelerating Dissemination of Agricultural Technology <i>Sharon B. Singzon, Imelda C. Casillano, Eva P. Palada and Edmundo A. Campoto</i>	54
9. Contributions of Pontoscolex Corethrurus on N Mineralization of Organic Matters From Sugar Agro-Industry Waste In Different Quality <i>Nurhidayati and Abdul Basit</i>	64
10 Fertilizer Effectiveness Test on Plant Growth and Yield Kangkong (<i>Ipomoea Reptans Foir</i>). <i>Amik Krismawati and Nurul Istiqomah</i>	73



11	Prediction and Mapping of Rice Production Using Mamdani Fuzzy Logic and Topsis (Technique for Order Preference By Similarity to Ideal Solution) Method. <i>Diana Rahmawati</i>	89
12	The Effect of 2,4 Dichlorophenoxyacetic Acid (2,4 D) Hormone of Callus Induction on Cassava (<i>Manihot esculentum</i>) <i>Didik Pudji Restanto, Slameto and Dwi Setyati</i>	100
13	The Forages Adaptation Test on Social Forest Area in East Java <i>Dini Hardini</i>	105
14	Conversion of Scratched Cassava Tuber Waste Meal in Various Ph Treatment to Bioetanol <i>I Putu Ngurah Wijaya and Peryanto</i>	113
15	Profile Analysis of Whole Protein of <i>Salmonella Typhi</i> that Resistant and Sensitive to Chloramphenicol <i>Supiana Dian Nurtjahyani</i>	121
16	Introduction Rhizobacteria of <i>Pseudomonad Fluorescens</i> and Its Effect on Seedling Growth of Pepper Plants in the Field <i>Yenny Wuryandari, Sri Wiyatiningsih, Agus Sulistyono</i>	129

SUB-THEME SOCIO-ECONOMICS AGRICULTURE

17	Identification of Cacao Farmer Characteristics in Pidie Jaya District of Aceh Province <i>Rita Ariani</i>	137
18	Agricultural Marketing System Development and Its Implications for Indonesia <i>Michael Reed</i>	148
19	Relative Economic Efficiency of Beef Cattle Farms in East Kalimantan, Central Sulawesi and South Sulawesi <i>Bahari Jokosusilo</i>	170
20	The Decision of Woman Farmers in Implementing Urban Farming Program in Surabaya <i>Endang Yektiningsih and Wahyu Santoso</i>	183
21	The Motivation of Farmers on Galangal Cultivation in Sumenep Regency <i>Ida Ekawati and Hari Sudarmadji</i>	193
22	Implementation of Gender Mainstreaming in the Optimalization of Forest Fire Management <i>Sri Wahyuni</i>	197



23	Farmers' Adaptation Strategy on Climate Change Impacts and Technical Efficiency of Rainfed Lowland in Organic Rice in Tanggamus Regency, Lampung Province <i>Ktut Murniati, Jangkung Handoyo Mulyo, Irham, and Slamet Hartono</i>	213
24	Cocoa Farming and Analysis of Economic Community Farmers State in East Java <i>Pawana Nur Indah</i>	224
26	Market Institutional Roles on Rice Farmer's Income <i>Raharto, S.</i>	235
27	Contract Farming Syariah as a Social Business Model: Lesson From Local Wisdom Experience <i>Sumartono</i>	250
28	Relative Economy Efficiency of Coffee Farmer in Belantih Village Kintamani Sub-District Bangli Regency <i>Hariyati, Y.</i>	260
29	Analysis of Coffee Secondary Agro-Industry as Superior Products in Bondowoso Regency <i>Mustapit and Evita Soliha Hani</i>	274
30	The Effectiveness of Gene Transformation Sosps 1 Using Plasmid Psmab-Sosps 1 Construct in Sugarcane (<i>Saccharum Officinarum</i> L.) <i>Parawita Dewanti, Purnama Okviandari, Yunianzi Tiara Prima and Bambang Sugiharto</i>	281
31	Analysis Of Factors Influencing Beef Supply Chain in Jember District <i>Joni Murti Mulyo Aji, Titin Agustiana and Annona Emhar</i>	291
32	Agriculture Sector Human Resource Overlook in Indonesia (Overview of The Agricultural Sector Human Resource Alignment in Merauke – Papua) <i>Aldon Sinaga, Umi Rofiatin, Asnah, Ana Arifatus S. and Taufik Iskandar</i>	313
33	The Involvement of The Institution on The Dynamics of Revenue Resources Based on P3A Farmers Members Opinion in Psetk Activity (A Survey On Citaal Irrigation Regency Kecamatan Ciwaru Kabupaten Kuningan) <i>Dedi Sufyadi</i>	332



- much as 2%, 8% high school, vocational school 9% and 71% SD - SMP. Distribution of educational levels will depend on the positions in the industry. The higher the position, the higher the level of qualification required of education
- c. In general, 71% of human resources from within the city, 19% are from outside the area but still within the province, while the rest (10%) came from outside the province. Most human resources derived from the study area, especially for the lower levels of education (primary and junior)
- 2 Based on the descriptive analysis of the data available, it can be concluded plantation labor needs will be projected on the following considerations :
- a. Infrastructure provision rate
 - b. Availability of skilled Manpower
- 3 Fullfilment Index generally suggests that the FI value tends to be high for some parts of the company such as Warehouse (0.84), and Equipment / Engineering (0.78). FI tends to be low for the parts Plantation / Production (0.67), General Affair (0.67) and Personnel (0.54)

REFERENCE

- Annoymous, 2012. Tantangan Penyediaan SDM Kompeten dalam Mendukung Pembangunan Perkebunan Indonesia. Direktorat Jenderal Perkebunan. Kementan. 25 September 2012. <http://ditjenbun.deptan.go.id/berita-270-tantangan-penyediaan-sdm-kompeten-dalam-mendukung-pembangunan-perkebunan-di-indonesia.html>
- César Martínez-Olvera (2011). Quantifying the Demand Fulfillment Capability of a Manufacturing Organization, Supply Chain Management, Dr. pengzhong Li (Ed.), ISBN: 978-953-307-184-8, InTech, Available from: <http://www.intechopen.com/books/supply-chain-management/quantifying-the-demand-fulfillment-capability-of-a-manufacturing-organization>
- Quantifying the Demand Fulfillment Capability of a Manufacturing Organization. Suply Chain Management. InTech
- FAO, 2010. Word Agriculture : Toward 2010. An FAO study. Office of Director General FAO of the United Nations
- Firdaus, M, 2013. Mau Jadi Apa Setelah Lulus Sarjana Pertanian ?. Info Kontributor Website Dirjen DIKTI, Kemendiknas. 25 February 2013. <http://www.dikti.go.id/?p=8273&lang=id>.
- Sinaga, Aldon, Umi Rofiatin, Agustin Wulandari, Suhudi., 2011. Laporan Pemetaan Permintaan SDM berdasarkan Dimensi Kuantitas, Kualitas, Lokasi dan Waktu di Kota Surabaya. Ditjen PAUDNI, Kemendiknas.



**THE INVOLVEMENT OF THE INSTITUTION ON THE DYNAMICS OF REVENUE
RESOURCES BASED ON P3A FARMERS MEMBERS OPINION IN PSETK
ACTIVITY**

**(A survey on Citaal Irrigation regency Kecamatan Ciwaru
Kabupaten Kuningan)**

Dedi Sufyadi

Lecture in the Faculty of Agriculture of Siliwangi University
Jl. Siliwangi No. 24 Pos 164 Tasikmalaya Telp.(0265)330634

ABSTRACT

This research shows the institution role and developing and cultivating the irrigation through Social Economy Institution Technique Profil (PSETK). It particularly determines the correlation between the member of P3A (The water dependent usage farmer) in Citaal Regency Ciwaru Kabupaten Kuningan. The research method done in this research is by surveying the P3A farmers who joined GP3A Saluyu in Citaal regency Kecamatan Ciwaru Kabupaten Kuningan. The location is decided by purposive technique and the technique of taking the sample is done by using multistage random sampling. The hyphotesis that will be answered is the more active of the role of the institution can make the work besides farming lower, the lower of the production cost will influence the routine outcome lower per day; the higher of the revenue per day; and the revenue per day based on the P3A farmers member opinion. The statistic examination used in this research is the correlation rank sperman method. The result of the research shows that the involvement of the institution in the activity of PSETK can reduce the work besides farming, the cost of the production, and the routine outcome per day. In the contradictory, the involvement of the institution in the activity of PSETK can increase the income per day and revenue per day, although the increase has not been known yet in the real number.

Keywords : Institution, revenue indicator; farmers' opinion.

INTRODUCTION

Since 2006, in the development and cultivation participative Irrigation system (PPSIP) process has done the Participatory Irrigation Sector Project (PISP) programme in the several regencies in west Java such as in Garut, Cirebon, and Kuningan. PSIP is one of the programmes that can give the support to the society for the economic development and agricultur in the some districts.

Kuningan district is one of the best districts in water resources in west Java and trusted to do its program since 2006. The implementation of PISP program in Kuningan done by involving many parties that focus in the development of the institution capacity in irrigation cultivation.



The biggest irrigation in Kuningan and supervised directly by the Province government is in Citaal. The farming land area in Citaal is located in Ciwaru Kecamatan Ciwaru. The amount of the farmer are 995 that joined and separated in six P3A and one GP3A. Its GP3A named by Saluyu. The farmer who handle the institution consists of 65 people. There are many problem aspects that raise in Saluyu GP3A. The problems are social economic, irrigation technique, the local resources aspect, institution aspect and the farmer entrepreneurship.

In the context of PSETK itself, the writer wants to know the correlation between the involvement of institution with the dynamic of several revenue factors based on the P3A farmers' opinion. For that reason, the research done to the P3A farmer member joined in GP3A Saluyu di Citaal Ciwaru Kabupaten Kuningan.

Based on the expalanation above, the writer can identify the problems as follows; how the involvement of the institution in the activity PSETK with the dynamic from several revenue factors based on P3A farmer member opinion is and is there any correlation between the involvement of the institution on the dynamic of the several revenue indicator based on the P3A farmer member.

The purpose of this research is to know the involvement of the institution on PSETK with the several dynamic revenue factors based on the P3A member farmer and to know the relationship between the involvements of the institution with the several dynamic revenue factors based on the P3A member farmer.

The writer hopes that this research can be useful in the development of profesions and knowledge, mainly in agriculture knowledge development; and as a media to search justification for the development and cultivation participative irrigation wisdom, mainly in the relation with the effort of the farmer society welfare development.

The goal of PSETK is to supply data or information about the social economy condition, technique, and institution needed in the programme of the participative irrigation development in one particular regency. In addition, the purpose of PSETK is to get the exact and actual data and information as a suggestion in the technique programme planning, the farming work institution, and the other economy profesion in one district based on the local resources potential through the profile arrangement and other (Depdagri 2009)

According to Soehardjo and Dahlan Patong (1973), the production cost consists of fix cost and variable cost. Mubyarto (1989), said that the fix cost is a kind



of the cost which its amount can't be influenced with the amount of production and the variable cost is a kind of cost that its amount has relation with the less more of the production.

The cost has strong relation with the farmer revenue. So, With the existence of the irrigation can be a signalment of the developing of farmer revenue. All can be called as farmer revenue indicator(www.litbang.go.id) The other indicator such as other profession beside farmer can be explained to those who cultivate the tourism, small market owner, fertilizer maker, cultivating fish, and cattle; local other profession development (www.e-dukasi.net). Other research in the city can not be inserted with the profession beside farming.

Based on Agus Parwono (2004), the group of fisherman average revenue per day is Rp. 76.000 and other is Rp. 54.000,-. This case proves that the strengthen of farming institution is a welfare for farmers (the www.pdfchaser.com statement)

Pakpahan, A (1991) said that the form of the institution influence on the work production ability, input usage, job vacancy, result acquisition, and environment acquisition. How far the involvement of the institution received by society depend on the authority, individual necessity, society condition, custom and culture.

According to Chrisman Silitonga (1995), the institution is an important factor that determine the agrobusiness success. In addition Tuhpawana PS (1995) said that the improvement of the marketing is a strategy to educate the farmer not only smart in the production but also smart in selling www.Abdulmutholib.com said that the strengthen of farmer institution has been done in moving the society in the cultivating the irrigation to raise the income and farmer welfare.

Based on the explanation above, the identification of the first problem can not take hypothesis because will be analysed with descriptive way. The second identification of the problem can be taken a hypothesis as follow, the more active of the role of the institution can make the work besides farming lower, the lower of the production cost will influence the routine outcome lower per day; the higher of the revenue per day; and the revenue per day.

MATERIAL AND METHODS

This research has been done in GP3A Saluyu in Citaal Kecamatan Ciwaru Kabupaten Kuningan with survey method. The writer uses multistage random sampling as taking of the sample in this research. The collected data consist of



primer and secunder data. The research variable covers the involvement of the institution, that is the form and the function of the government institution (Bappeda, Diperta, Dinas PSDA). Society (KPI, Komir, GP3A); farmer (P3A, farmer group) that is involved in PSETK activity. Rusidi (1992) said the the potential of the society institution is not only the existence of the variety of the kind and style of the institution, but also about talking about the function order in achieving goal. So that. To determine the function of the that institution in PSETK activity can be seen in the following table below:

Table 1. Scoring of the Involvement of the Institution in PSETK activity

Kinds of institution	completeness	Institution functionality		
		Functional	Transition	Infunction
Government	complete	6	5	4
	incomplete	3	2	1
society	complete	6	5	4
	incomplete	2	2	1
farmer	complete	6	5	4
	incomplete	3	2	1

Then the measurement of the institution variable indicators (Harun Al Rasyid, 1995) by using the following category:

Classification = $\frac{skor_{max} - skor_{min}}{jumlah\ kategori}$, so the involvement of the institution can be classified :

high = 13 – 18
 medium = 8 – 12
 low = 3 – 7

The dynamics of the profession kind besides farming is the fluctuation of the kind of the profesion besides farming P3A farmer member which is limited on the kind of the profesion that has worker after PSETK activity, by classification:

High = after PSETK activity higher than the first condition, scoring : 3

Medium = After PSETK activity same as with the first condition, scoring : 2

Low = After PSETK activity lower than the first condition, scoring: 1

The cost production is the fluctuation of the farming cost in one plant season after PSETK activity

High = after PSETK activity higher than the first condition, scoring : 3

Medium = After PSETK activity same as with the first condition, scoring : 2



Low = After PSETK activity lower than the first condition, scoring: 1

The outcome routine dynamics per day is the fluctuation of the routine outcome after PSETK activity

High = after PSETK activity higher than the first condition, scoring : 3

Medium = After PSETK activity same as with the first condition, scoring : 2

Low = After PSETK activity lower than the first condition, scoring: 1

The dynamics of bruto revenue perday is the fluctuation of the farmer income total perday after PSETK activity;

High = after PSETK activity higher than the first condition, scoring : 3

Medium = After PSETK activity same as with the first condition, scoring : 2

Low = After PSETK activity lower than the first condition, scoring: 1

The income dynamic perday is the fluctuation of the netto revenue perday of the P3A farmer; that comes from theirs farming work and comes from other resources;

High = after PSETK activity higher than the first condition, scoring : 3

Medium = After PSETK activity same as with the first condition, scoring : 2

Low = After PSETK activity lower than the first condition, scoring: 1

The involvement of the institution and the dynamic of the several revenue indicators based on the P3A farmer group opinion, analysed by using compared equality value, using the following formula:

$$NT = \frac{\text{achieving score}}{\text{ideal score}} \times 100\%$$

The ideal scor is the highest score from variable and indicator, based on the question item in the questionnaire, while the achieving score comes from variable score and it indicators obtained from the responden answer (Djoni, 1998)

The propose research hyphotesis, examined by rank sperman correlation.

To big sample if $N > 10$, the signification decision rs examined by:

$$t_{hit} = r_s \sqrt{N - 2 / 1 - (r_s)^2}$$

with:

r_s = Rank Sperman correlation

N = The number of the sample

t_{hit} = testing tool



To the proposed hypothesis that examined by above formula, the next will be compared with t_{tab} , $db = N - 2$.

The following is the proposed hypothesis:

$H_0 : \rho = 0$: There is no correlation between the involvement (the structural and function) of the institution in PSETK activity with the dynamics of the several revenue P3A farmer indicator factors (the other work besides farming, the routine outcome perday, the bruto revenue perday, the real revenue perday.

$H_1 : \rho \neq 0$: There is a correlation between the involvement (the structural and function) of the institution in PSETK activity with the dynamics of the several revenue P3A farmer indicator factors (the other work besides farming, the routine outcome perday, the bruto revenue perday, the real revenue perday.

The examining test used to fix the decision of the hypothesis is accept or neglect H_1 , if $t_{hit} < t_{tab}$

Neglect H_0 or accept H_1 , if $t_{hit} \geq t_{tab}$.

RESULT AND DISCUSSION

The state of the age of respondents in this study belong to the average working age , in line with the opinion Said Rusli (1984) which states that the productive age population is the population aged 15 to 64 years .At the age of respondents is still possible to be able to respond to new innovations that will positively affect the progress of the business being operated

. P3A management of farmers' perceptions of the role of institutions in PSETK activities include both categories, with NT at 85 persen.Hal this means either the completeness or institutional function in activities PSETK in DI Citaal been running well baik.Kelengkapan means existence of agencies involved in enough activities PSETK much like the PSDA, Distan, Komir, KPI and P3A, his course under better institutional coordination Bappeda.Fungsi certainly can be interpreted as an existing institution that has implemented organizational goals.

P3A management of farmers 'perceptions of the dynamics of income indicators such as: types of business other than farming, production costs; expenditures / day; gross income / day' income / day category were: by NT respectively 64 percent, 50 percent, 50 percent , 50 percent.



It means that after both types of business activities PSETK than farming, production costs; expenditures / day; gross income / day or earnings / day and did not increase or decrease aliassama only.

Based on the partial Spearman rank analysis, the relationship between institutional role PSETK the dynamics of the whole income indicators have a very real (highly significant). For more details can be seen in Table 2 in follow.

Table 2. Relationships between Study Variables .

No	Variable	Ts	Level of significance
1	Business Type Besides farmers	- 0,88	Very real , level 0.01
2	cost of Production	- 0,89	Very real, level 0,01
3	Expenditures Routine / Day	- 0,89	Very real, level 0,01
4	Gross Income / Day	0,89	Very real, level 0,01
5	Income / Day	0,89	Very real, level 0,01

From Table-4.1. een that the variable type of business other than farming, production costs; expenditures per day; gross income per day; earnings per day have a very real relationship with the variable institutional role in the activity level PSETK 0.01. In this case there are two forms of relationship that is, a variable type of business other than farming, production costs, and expenditures per day was negatively correlated with variables PSETK institutional role in the activity, while the variable gross income per day and revenue per day was positively correlated with variables in the institutional role PSETK activities.

Thus it can be said is that, the role of institutions in activities PSETK possible to improve the welfare of the farmers. According to www.bappenas.go.id strong agricultural community needs and to increase farmers' income. This is evidenced by the institutional development of the dairy farmers to increase incomes of dairy farmers (www.unhas.ac.id).

Variable types of business other than farming basically is closely related to off farm activities. Do no other activities aimed at increasing revenue. Thus, it appears that the higher the institutional role in PSETK activities, the business type activities decreased bertani. Memang addition, institutional strengthening farmers can improve the bargaining position of agriculture (www.info.stppmedan.ac.id). Variable production costs is primarily the negative side of the variable income. This means high production costs will reduce earnings. According biotani.bogspot.com that can



increase the cost efficiency of farming farmer's income. In this case, the higher the institutional role in the activities PSETK apparently decreased production costs.

Variable expenditures per day are essentially the same as the cost of production is negative on income. Meaning its expenditures per day higher will reduce earnings. In this case, the higher the institutional role in the activities PSETK turns expenditures per day more menurun. Variabel gross income per day was basically everything to do with variable pendapatan. Artinya gross income per day which enables high income variables are also high.

In this case, the higher the institutional role in the activities PSETK, apparently the higher the gross income per day .. The variable income per day is basically the same as the gross income per day which has close links with variable income. Meaning its high revenue per day also allows variables in total income is high. In this case, the higher the institutional role in the activities PSETK, apparently the higher the income per day, it should be in the review, it is not too high as a result of the increase in revenues was its institutional role in this activity was made possible by PSETK still lacking any coordination among its poorly coordinated Institusi. Penyakit growing in our society due to his existing sectoral ego of each agency have an impact on the behavior of the farmers themselves are becoming less participatory as a result of excessive indulgence.

CONCLUSIONS

Based on these results, we can conclude that, all respondents follow all stages PSETK activities such as training, network search; preparation of the report. So did all the respondents knew about the benefits of such activities PSETK. Namun was not until 17 percent of respondents were concerned with the problems of farmers in the management of P3A PSETK. Persepsi activity against PSETK institutional role in the activities of either category, with about 85 per cent of NT. This means either the completeness or the function of the dynamics of institutional P3A income indicators such as type of business other than farming, production costs; expenditures per day; gross income per PSETK activities in DI Citaal been running well. But the farmer's perception of the dynamics of the board P3A income indicators such as the type of business other than farming, production costs; expenditures per day; gross income per day; revenue per day was categorized by NT respectively 64 percent, 50 percent, 50 percent; and 50 percent. This may imply



that, once there kegiata PSETK indicators above income does not increase or decrease and tend stagnant.

REFERENCES

- Agus Purwono, 2004. Effect of Institutional Assessment Of Income Level Fishermen (Case in Tanjung Pakis. District Pakis victorious. District karawang.).
Chrisman Silitonga. 1995. Role of Institutional Development Seminar PERHEPI Agribisnis.
- Direktorat General Department for Regional Development. 2009. User Profile Socio-Economic Technical Institutions (PSETK) in the framework of Development and Participatory Irrigation Management System (PPSIP).
Harun Al Rashid. 1991. Sampling Techniques and Technical Preparation Scale. Ministry of Education and Culture & Kopertis Region IV. Bandung.
Mubyarto. 1989. Introduction to Agricultural Economics. Bina script. Jakarta.
Pakpahan, A. Analytical Framework for Research on social engineering. Economic Perspective, Institutions .Proceedings of the Rural Institutional Evaluation. Socio-Economic Research Centre of Agriculture. Bogor.
- Soehardjo and Dahlan Patong. 1973. Joints Basic Sciences Farm. Department of Social Sciences, Economics. Faculty of Agriculture. IPB.
Tuhpawana PS. Institutional role in the development of agribisnis. Presented at the Seminar Perhepi - Unpad
- [www.abdulumtholib. Co.id](http://www.abdulumtholib.Co.id) akses 18/12-2010.
- www.pdf chaser.com akses 18/12-2010.
- www.litbang deptan.go.id akses 18/5-2011.
- www.e-dukasi.net akses 18/5-2011.