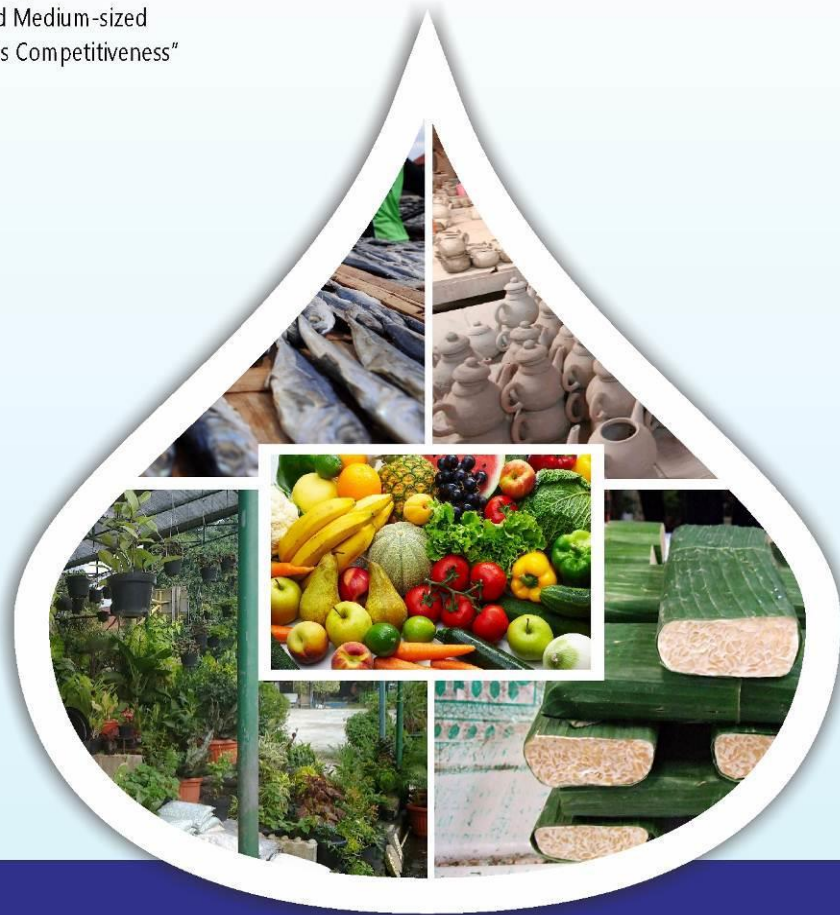




2016

"Small and Medium-sized
Enterprises Competitiveness"

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Agribusiness Development for Human Welfare



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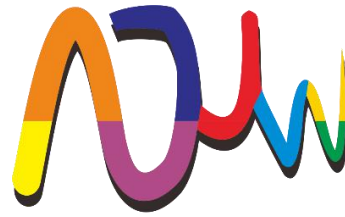
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AGRIBUSINESS
DEVELOPMENT FOR
HUMAN WELFARE

*“Small and Medium-sized
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EDITOR TEAM

Siti Yusi Rusimah
Achmad Fachruddin
Rohandi Aziz
Dara Rosalia

ADDRESS

Agribusiness Department
Agriculture Faculty
Universitas Muhammadiyah Yogyakarta

Jl. Lingkar Selatan, Tamantirto, Kasihan, Bantul, Yogyakarta, 55183
Phone. 0274-387656 (ext. 201) Fax. 0274-387646
e-mail: adhw2016@umy.ac.id

EDITOR FOREWORD

The economic integrations by ASEAN certainly have given a major influence on Small and Medium-sized Enterprises (SMEs). Beside economic integration in the form of free trade area (FTA) that has been going on since the early 2000s, economic integration in the form of ASEAN Economic Community (AEC) has been ongoing since the beginning of 2016. Through this integration, SMEs have opportunity to expand access to markets, technology, and capital. But at the same time SMEs are required to improve their competitiveness in order to survive in the market.

In order to explore ideas, concept, and innovations related to the competitiveness of SMEs, International Conference on Agribusiness Development for Human Welfare (ADHW 2016) was held in Yogyakarta on May 14, 2016. The conference organized by Department of Agribusiness Universitas Muhammadiyah Yogyakarta, in collaboration with Department of Agribusiness and Information System Universiti Putra Malaysia, Department of Agro-Industrial Technology Kasetsart University, Department of Agriculture Socio-Economics Universitas Gadjah Mada, Department of Agriculture Socio-Economics of Universitas Brawijaya, Indonesian Society of Agriculture Economics, Agribusiness Association of Indonesia. Hopefully proceedings of ADHW 2016 provide stimulus for increasing competitiveness of SMEs in ASEAN, especially in Indonesia.

Furthermore, we are grateful to Allah, the Sustainer of all word, who always makes it easy for our affairs. We would like to acknowledge with thanks to all the institution and individual who joined with resources and efforts in organizing the conference that resulted in the papers which are published in this proceeding. Special thanks to all authors and discussants who contributed with their intellectual capital and responded to our call papers. Thanks and acknowledgment are also due to all reviewers of the conference who helped in evaluating submitted papers; and to the members of the Organization Committee, who ensured smooth execution of the event.

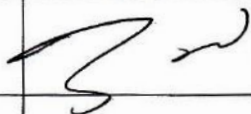
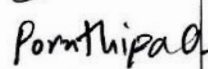

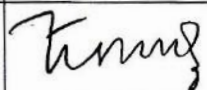
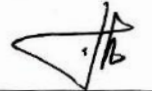
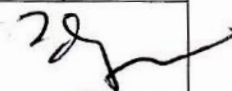
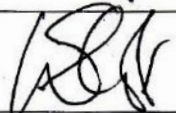
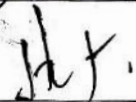
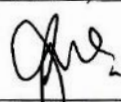

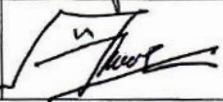
May 30, 2016

Editor

LIST OF REVIEWERS

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2. Prof. Dr. Zaenal Abidin Mohamed (Universiti Putra Malaysia)
3. Dr. Ismail Abd. Latif (Universiti Putra Malaysia)
4. Dr. Juwaidah Sharifudin (Universiti Putra Malaysia)
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14. Subejo, SP, M.Sc., Ph.D. (Universitas Gadjah Mada)
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17. Wisynu Ari Gutama, S.P., M.MA. (Universitas Brawijaya)
18. Hery Toiba, S.P., M.P., Ph.D. (Universitas Brawijaya)
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23. Dr. Ir. Widodo, MP. (Universitas Muhammadiyah Yogyakarta)
24. Dr. Ir. Indardi, M.Sc. (Universitas Muhammadiyah Yogyakarta)
25. Dr. Ir. Triwara BS, MP. (Universitas Muhammadiyah Yogyakarta)
26. Dr. Aris Slamet Widodo, SP. MSc. (Universitas Muhammadiyah Yogyakarta)

ATTENDED REVIEWER

NO	NAME	INSTITUTION	SIGNATURE
1	Prof. Dr. Zaenal Abidin Mohamed	UPM	
2	Assistant. Prof. Dr. Pornthipa Ongkunaruk	Kasetsart University	
3	Prof. Dr. Ir. Irham, M.Sc	UGM	
4	Dr. Jangkung HM, SP. M.Ec	UGM	
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6	Ir.Edy Dwi Cahyono, M.Sc., PhD	UNIBRAW	
7	Wisnyu Ari Gutama, S.P, M.MA	UNIBRAW	
8	Hery Toiba, S.P.,M.P.,Ph.D	UNIBRAW	
9	Yuniar Khasanah, M.Sc	LIPI	
10	Lusty Istiqamah, M.Biotech	LIPI	
11	Ir. M. Kismuntono	LIPI	

PREFACE

Assalaamualaikum, Warahmatullaahi., Wabarakaatuh.
Dear Honorable Governor of Yogyakarta Special Province
Dear respectable Prof. Dr. Zainal Abidin Mohamed
Dear respectable Asist. Prof. Pornthipa Ongkunaruk
Dear respectable Rector of UMY Prof. Dr. Bambang Cipto, MA.
Dear all invited Guests, Speakers, and Participants of International seminar of ADHW 2016.

Alhamdulillah, all praise be to the Almighty God, so that we can be gathering here today at Muhammadiyah University of Yogyakarta in order to attend the Conference on Agribusiness Development for Human Welfare (ADHW) 2016.

Ladies and Gentlemen,

On behalf of the committee, I would like to say welcome to this International Conference on ADHW 2016 and thank you for attending our invitation.

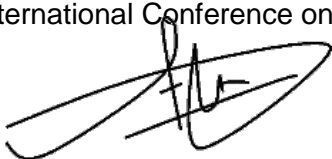
Especially, we are grateful to invited speakers, Prof. Zainal Abidin Mohamed and Asist. Prof. Pornthipa Ongkunaruk, for their willingness to share information and thoughts in this conference. As a bit report, that this conference has been attended by 85 speakers coming from five countries.

This conference entitled "Small and Medium-sized Enterprise Competitiveness". ASEAN Economic Community is the largest economic integration that is going to be implemented at the beginning of 2016 (December 31, 2015). Through this integration, SMEs will have opportunity to expand access to markets, technology, and capital. But at the same time SMEs are required to improve their competitiveness in order to survive in the market. We expect that this seminar is capable of producing thoughts building SMEs within ASEAN, especially Indonesia, to face the free trade.

This event can be done by support and efforts from all sides. Therefore, I would like to say thank you to all committee members having worked hard to conduct this event. We, as the organizer committee, do apologize when there is a shortage in conducting this event.

Wassalamualaikum, Warahmatullaahi., Wabarakaatuh.

Chairman
International Conference on ADHW 2016



Dr. Aris Slamet Widodo, SP., MSc.

WORDS OF WELCOME

Assalamu'alaikum warahmatullahi wabarakatuh

Alhamdulillah, all praise be to Allah SWT, who has given us His blessings so that this International Seminar of Agribusiness Development for Human Welfare (ADHW) 2016 entitled "Small and Medium-sized Enterprises Competitiveness" can be conducted. This International Conference is held in cooperation among Agribusiness Study Program of Muhammadiyah University of Yogyakarta with Putra University of Malaysia (UPM), Kasetsart University (KU), Association of Indonesian Agricultural Economy (PERHEPI), and Agribusiness Association of Indonesia (AAI), Universitas Gadjah Mada (UGM) and Universitas Brawijaya (UB).

Countries of ASEAN members like Indonesia, Malaysia, and Thailand have more than 90% Small and Medium-sized Enterprises (SMEs). In general, SMEs play important role in economic developments such as in terms of employment, added value, improve foreign exchange, and economic growth. For Indonesia, the role of SMEs is limited to employment and added value, while the foreign exchange from SMEs is still low. According to the General Director of SMEs of Industrial Ministry, in 2013 the total SMEs being able to pass through export market is just under 5 percent. For that required many breakthrough and innovation so that the role of SMEs becomes real economic development, especially in Indonesia, and generally in ASEAN countries.

On behalf of Agribusiness Department of Universitas Muhammadiyah Yogyakarta, we would like to express our gratitude Putra University of Malaysia (UPM), Kasetsart University (KU), Association of Indonesian Agricultural Economy (PERHEPI), Agribusiness Association of Indonesia (AAI), Universitas Gadjah Mada (UGM) and Universitas Brawijaya (UB) for all supports, sponsors, and all committee members having worked so hard that this International Conference can be conducted.

Hopefully, these synergies coming from various parties can provide contribution for developing SMEs in Indonesia and other ASEAN countries as well.

Wassalamu'alaikum warahmatullahi wabarakatuh

Head of Agribusiness Department
Universitas Muhammadiyah Yogyakarta



Ir. Eni Istiyanti, MP.



Gubernur

Daerah Istimewa Yogyakarta

Sambutan
KONFERENSI INTERNASIONAL
“AGRIBUSINESS DEVELOPMENT FOR HUMAN WELFARE”
Yogyakarta, 14 Mei 2016

Assalamu'alaikum Wr. Wb.

Salam sejahtera untuk kita semua.

Yang Saya hormati :

- Rektor Universitas Muhammadiyah Yogyakarta;
- Para Narasumber;
- Hadirin dan Para Peserta yang berbahagia,

Puji dan syukur marilah kita panjatkan kehadirat Allah SWT karena hanya atas limpahan rahmat serta karunia-Nya, kita dapat hadir pada kesempatan acara **Konferensi Internasional “Agribusiness Development For Human Welfare”** ini dalam keadaan sehat wal’afiat.

Pada kesempatan kali ini, secara ringkas Saya akan menyampaikan mengenai industri kecil menengah nasional yang menjadi tema pada pembukaan Seminar Internasional “Agribusiness Development For Human Welfare” ini.

Hadirin dan Saudara-saudara sekalian yang Saya hormati,

Berdasarkan data BPS, pertumbuhan industri pengolahan nonmigas pada tahun 2015 secara kumulatif sebesar 5,04%; lebih tinggi dari pertumbuhan ekonomi (PDB) pada periode yang sama sebesar 4,79%. Pada periode Januari-Desember 2015, nilai ekspor produk industri pengolahan nonmigas mencapai USD 106,63 Milyar, dan nilai impor mencapai USD 108,95 milyar, sehingga neraca perdagangan industri pengolahan nonmigas pada periode yang sama sebesar USD 2,32 milyar (neraca defisit).

Usaha pemerintah untuk memperkecil defisit di atas, salah satunya dengan cara memberdayakan Industri Kecil dan Menengah (IKM) yang merupakan bagian penting dalam perkembangan industri nasional. Sampai saat ini, Industri Kecil dan Menengah

telah berkontribusi sebesar 34,82% terhadap pertumbuhan industri pengolahan nonmigas secara keseluruhan.

Angka ini dapat tercapai karena dukungan lebih kurang 3,6 juta unit usaha, yang merupakan 90 persen dari total unit usaha insutri nasional. Jumlah unit usaha tersebut telah mampu menyerap tenaga kerja sebesar 8,7 juta orang, yang tentunya berdampak pada meningkatnya ekonomi nasional serta mengurangi kemiskinan.

Industri Kecil dan Menengah (IKM) memiliki peran yang strategis dalam perekonomian nasional. Hal ini sejalan dengan Visi Pemerintah dalam Rencana Pembangunan Nasional Jangka Menengah (RPJMN) 2015-2019 yaitu *“Terwujudnya Indonesia yang berdaulat, mandiri, dan berkepribadian berlandaskan gotong royong”*.

Untuk lebih meningkatkan peran tersebut, Penumbuhan dan Pengembangan Industri Kecil dan Menengah diarahkan untuk memiliki tujuan jangka menengah guna mewujudkan industri kecil dan industri menengah yang berdaya saing, berperan signifikan dalam penguatan struktur industri nasional, pengentasan kemiskinan dan perluasan kesempatan kerja, serta menghasilkan barang dan/atau jasa Industri untuk keperluan ekspor.

Hadirin dan Saudara-saudara sekalian,

Awal tahun ini, kita telah memasuki era Masyarakat Ekonomi ASEAN (MEA). Dengan demikian, perekonomian nasional akan langsung bersaing dengan para pelaku pasar di kawasan ASEAN. Produk dan jasa termasuk investasi negara-negara anggota telas bebas memasuki pasar di kawasan ASEAN.

Dalam rangka menghadapi hal tersebut, Pemerintah mengambil langkah-langkah strategis berupa peningkatan daya saing industri dan mendorong investasi di sektor industri; di mana peningkatan daya saing industri itu sendiri dilakukan melalui penguatan struktur industri dengan melengkapi struktur industri yang masih kosong serta menyiapkan strategi ofensif dan defensif dalam akses pasar.

Pemerintah telah melakukan Penguatan Sektor IKM dengan strategi ofensif dan defensifnya melalui beberapa program pelaksanaan, diantaranya antara lain: Penumbuhan Wirausaha Baru; Pengembangan IKM melalui Pengembangan Produk IKM serta Peningkatan Kemampuan Sentra dan UPT; Pemberian Bantuan Mesin dan Peralatan Produksi; Perluasan Akses Pasar melalui Promosi dan Pameran; Fasilitasi Pendaftaran Hak Kekayaan Intelektual; Fasilitasi Sertifikasi Mutu Produk dan Kemasan; serta Fasilitasi Pembiayaan melalui Skema Kredit Usaha Rakyat (KUR).

Saya berharap agar berbagai program-program pemerintah tersebut dapat didukung secara sinergis oleh seluruh komponen masyarakat. Untuk itu, Saya berpesan kepada Saudara-saudara sekalian agar semua program pemerintah dalam bidang

Industri, khususnya dalam program pemberdayaan Industri Kecil dan Menengah, didukung dengan sepenuh hati, agar dapat lebih bermanfaat bagi masyarakat dalam rangka pengembangan industri kecil menengah.

Hadirin dan Saudara-saudara sekalian yang Saya hormati,

Demikian beberapa hal yang dapat Saya sampaikan. Akhirnya dengan memohon ridho Allah Subhanahu Wata'ala, seraya mengucap "*Bismilahirrahmanirrahim*", **Konferensi Internasional "Agribusiness Development For Human Welfare"** dengan ini secara resmi Saya nyatakan dibuka. Semoga Allah SWT memberikan petunjuk, bimbingan, perlindungan dan kemudahan dalam setiap langkah dan upaya kita. Amien.

Sekian dan terima kasih.

Wassalamu'alaikum Wr. Wb.

Yogyakarta, 14 Mei 2016
GUBERNUR
DAERAH ISTIMEWA YOGYAKARTA



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THE FARMER'S PERCEPTION TO THE USING OF TECHNOLOGY AFTER PADDY'S HARVEST IN SOUTH SULAWESI

Irmayani¹, Hariyono¹, Nur Rahmah Safarina Hamzah¹

¹)Department of Agribusiness, Faculty of Agriculture, Muhammadiyah University of
Parepare, Indonesia

Jl. Jend. Ahmad Yani KM 6, Parepare

*corresponding author's : nrahmah.safarina@gmail.com

Abstract

This research aid to know the farmer's perception to the using of technology after paddy's harvest and the relation of the farmer's perception to the using of technology after paddy's harvest in Watang Pulu subdistric Sidenreng Rappang regency.

This research is worked on March till August 2015. The determining sample is worked with insidental sampling method, from 4.453 of farmers are decided into 44 people. Type of data that used in this research consist of primer data and sekunder data. Than quantitative descriptive analysis technique and statistic technique.

The result of this research that the averange of score of farmer's perception to the using of technology after harvest, the internal factor (X1) is about 3.84 and the external factor (X2) is about 3.74 and each averange score is the interval 3.41-4.20 with category "good" there is also the result of double linear regency test based on the result of T test and F test statment that Ho is refused and Ha is accepted, which mean taht in partially (individual) or stimulat (together) give effect in significantly to the using of technology after paddy's harvest in Watang Pulu subdistric Sidenreng Rappang regency.

Keywords: perception, paddy's harvest, technology

INTRODUCTION

Post-Harvest is a series of activities which include harvesting, processing, until the results are ready for consumption. Postharvest handling aims to reduce yield loss, improve quality, shelf life, usability agricultural commodities, expand employment opportunities and improve the added value. In this regard, the rice postharvest activities include: (1) harvesting, (2) threshing, (3) transporting, (4) drying, (5) milling, and (6) Storage

In agricultural sector, especially rice plants, the technology serves to facilitate the farmers in the rice postharvest activities. Ease given agricultural technology led to be more diverse and increased. So not surprisied, many farmers are begin to switch rice processing agricultural technology. Rice postharvest technology developed in farmers' lives quickly. The development of post-harvest technology in the globalization era is very profitable for farmers to facilitate the process of post-harvest. In addition, to facilitate the farmers, rice postharvest technology such

as grain threshing machine, dryer machine and grinding machines, can accelerate the process of post-harvest paddy into rice compared with using traditional techniques. This of course brings a great advantage than using traditional techniques. more dependent on seasonal conditions and the environment.

Rice post-harvest technology has been utilized in a variety of agricultural production processes, for example the use of rice milling. Rice milling machine that replaces traditional techniques has facilitated the rice milling process using concise time. This process has accelerated rice production to meet the public demand faster anyway. All these activities have played the role of technology in facilitating the process of rice production. Almost all of the rice post-harvest activities have not been spared from the use of technology products.

Post-harvest handling of rice is very strategic efforts in order to support the increase in rice production. Postharvest handling contributes to increasing rice production can be reflected in a decrease

in yield loss and quality achievement grain / rice corresponding quality requirements. Post-harvest handling is necessary to increase agricultural output, especially at this stage of post-harvest rice. Postharvest technology is needed to reduce the loss of rice yields, the perception of farmers on post-harvest technology may affect the use of rice post-harvest technology. In this case the researcher try to find out is the use of technology in paddy's harvest will be agreed by farmers.

METHOD

Determining of location specified in the District Watang Pulu Sidenreng Rappang, with consideration of many farmers who are already using modern technology particularly in post-harvest activities in these locations. This research was conducted in March to downy mildew in August 2015.

The population in this study is a food crop farmers (especially those of paddy) in Sub Watang Pulu Sidenreng Rappang are 4,453 farmers. The samples are then used incidental sampling method, the sampling technique based on chance, that anyone who by chance met with investigators can be used as a sample, when viewed people who happened to be found suitable as a data source. Samples are taken as much as 15% of the population, the total sample of 44 people.

Determining the value of the independent variable (X) and the dependent variable (Y), then used a Likert scale. Likert scale is a psychometric scale commonly used in the questionnaire. Likert Scale used to measure attitudes, opinions, and perceptions of a person or a group of social phenomenon.

RESULTS AND DISCUSSION

Data analysis

The data analysis technique used to measure the perception of farmers on the use of post-harvest technology of rice in the District Watang Pulu Sidenreng Rappang is by using descriptive data analysis , the description in the form of a picture to explain answers that respondents in the questionnaire , data

collected includes respondents data and the research data presented in the form of a single table

Perceptions of the indicators of internal factors on postharvest technology
Farmers' perceptions of indicators of internal factors that include several things such as income, experiences, needs and assessment, researchers will describe data from the observation made through pacification questionnaires to farmers in Sub Watang Pulu Sidenreng Rappang. Table with exposure and the conclusion of the statement filed answers through questionnaires can be seen in Table 1 :

Table 1. Farmer perception based on the income of farmer in Watang Pulu District.

Farmer income (Rp)	Frequency	Percentage %
< Rp. 1 million	0	0
Rp. 1million - Rp. 5 million	6	13
Rp. 6 million – Rp. 10 million	5	11,4
Rp. 11 million – Rp. 15 million	5	11,4
>Rp. 15 million	28	63,6
Sum	44	100

Source : Primary Data after processed , 2015

Table 1 shows that 28 (63.6 %) of respondents have an income above Rp . 15,000,000 and may imply that farmers considered particularly agree if that income can affect the use of rice postharvest technology in the District Watang Pulu. Sidenreng Rappang.

Table 2. Farmer perception based on the experience of farmer toward technology in Watang Pulu District.

Farming experience (Year)	Frequency	Percentage %
< 5	1	2,2
5-7	7	16
8-10	6	13,6
11-15	9	20,5
>15	21	47,7
Sum	44	100%

Source : Primary Data Once processed , 2015

Table 2 indicating that 21 people or 47.7 % of respondents have experience of over 15 years and is considered the farmers strongly agree that the experience may affect the use of rice postharvest technology in the District Watang Pulu Sidenreng Rappang.

Table 3. Farmer perception based on the post-harvest technology needed of farmer in Watang Pulu District.

Response	Frequency	Percentage %
Disagree	0	0
Almost Agree	5	11
Agree Enough	11	25
Agree	27	61,4
Most Agree	1	2,2
Sum	44	100%

Source : Primary Data after processed , 2015

Table 3 shows that 27 (61.4 %) respondents agree and may imply that the rice postharvest technology in the District Watang Pulu Sidenreng Rappang has become a necessity in agricultural activities because the rice postharvest technology is needed in agriculture .

Table 4. Perceptions of farmers assessment of the use of rice postharvest technology in the District Watang Pulu

Response	Frequency	Percentage %
Disagree	1	2,2
Almost Agree	1	2,2
Agree Enough	15	34
Agree	25	57
Most Agree	2	4,6
Sum	44	100%

Source : Primary Data after processed , 2015

Table 4 shows that 25 people or 57 % of respondents agree and may imply that rice farmers in the district Watang Pulu Sidenreng Rappang already agreed to use post-harvest technology. The reason for postharvest technology already facilitate the postharvest activities, does not require much time and effort of farmers

Perceptions of the indicators of external factors on postharvest technology The farmer's perception of the external factors that influence from outside the farmer as the perceived benefits , ease of implementation , the availability of information, compliance with the conditions of agriculture on the use of post-harvest technology that has been used and perceived by respondents in the farming business activity.

The author will unravel in tabular form accompanied by the conclusion of the presentation and the answers of the affidavit filed through a questionnaire may table 5

Table 5 Perceptions of farmers based on the perceived benefits of the use of rice postharvest technology postharvest technology in the District Watang Pulu

Response	Frequenc y	Percentage %
Disagree	0	0
Almost Agree	0	0
Agree Enough	13	30
Agree	31	70
Most Agree	0	0
Sum	44	100%

Source : Primary Data after processed , 2015

Table 5 shows that 31 people (70 %) respondents agree and may imply that farmers had already agreed on the use of rice post-harvest technology. The reason is because farmers feel a lot of advantages in the use of post-harvest technology as improve yields, do not spend a lot of effort and money.

Multiple Regression Test

Multiple linear regression tests to determine whether there is influence of independent variables on the dependent variable. The amount of influence the dependent variable . The magnitude of the effect of independent variables on the dependent variable together can be calculated through a multiple regression equation. The results of multiple regression process testing make use of SPSS 22 For Window can be seen in Table 6 .

Variable	Coefficient Score
Constant	1,118
Internal Factor	0,341
External Factor	0,435

Source : Primary Data after processed , 2015

Table 6 shows the regression test shows measurements obtained by $Y = 1.118 + 0.341 X_1 + 0.435 X_2$ regression equations, constants (β_0) is equal to 1,118 this means that if there is no internal factor of farmers (X_1) income, experiences, needs, assessment, and external factors of farmers (X_2) as the perceived benefits, ease of implementation, availability of information, and compliance with the conditions of agriculture, the use of rice

postharvest technology in the District Watang Pulu Sidenreng Rappang at 1.118 .

Determination Coefficient

Determine coefficients analysis do for showing how high variable percentage an effect internal factor like acquisition, experience, need, score and external factor like feel from acquisition, benefit from the activity, information available and related with agriculture condition with the use of post-harvest technology.

Model	R	R Square
1	0.895 ^a	0,800

Test T (Persial)

Testing partially (t test) was conducted to determine whether the effect of variable internal factors farmers income, experiences, needs and assessment. the external factors of farmers as the perceived benefits, ease of implementation, the availability of information, compliance with the conditions of agricultural influential and significant to the use of post-harvest technology,

No	Variable	Correlation	Score T	Sig
1	Constant Internal Factor	0,780	7,252	0,000
2	External Factor	0,738	6,277	0,000

Test F (Simultaneous)

This test was conducted to examine whether there is positive and significant correlation between internal factors like earnings, experience, needs, assessment and external factors of farmers as the perceived benefits, ease of implementation, information availability, suitability to farming conditions on the use of post-harvest technology together.

Simultaneous test gives an idea if the two independent variables internal factors such as income, experiences, needs, assessment and external factors of farmers as the perceived benefits, ease of implementation, the availability of information, compliance with the

conditions of agriculture combined would have a positive effect whether or not the use of post-harvest technology.

Conclusion and Recommendations

Conclusion:

Perception of farmers on the use of post-harvest technology of rice in the District Watang Pulu Sidenreng Rappang in categories good. it shown that 31 people (70 %) respondents agree and may imply that farmers had already agreed on the use of rice post-harvest technology.

Recommendations :

For the next research recommended to research another variabel that possibly effect on the use of rice postharvest technology in the District Watang Pulu Sidenreng Rappang. That make the farmer more easier in harvesting with concise time.

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DISCUSSION FROM PARALLEL SESSION

PAPER TITTLE	THE FARMER'S PERCEPTION TO THE USING OF TECHNOLOGY AFTER PADDY'S HARVEST IN SOUTH SULAWESI
AUTHOR	Irmayani, Hariyono, Nur Rahmah Safarina Hamzah
DISCUSSION	
QUESTION	<ol style="list-style-type: none"> 1. $R^2 = 0.8$ what this number means? 2. Farmers have no rent the rice milling, does this step not popular in the location? 3. Could you explain another variable? 4. What are the parameters of the variables?
ANSWER	<ol style="list-style-type: none"> 1. The farmers group collected 2. Another
SUGGESTION	<ol style="list-style-type: none"> 1. Make point for the slide 2. Please summarize the introduction 3. Need to explain more about the data of statistic



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SECRETARIAT OFFICE

F3 Ground Floor, Agribusiness Department,
Universitas Muhammadiyah Yogyakarta
Jalan Lingkar Selatan Tamantirto,
Bantul. D.I.Yogyakarta 55183
Phone +62274 387656 (Ext 201)
Fax +62274 387646

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