

## DAFTAR PUSTAKA

- Abdulmajeed, A. M., and Qaderi, M. M. 2019. Differential effects of environmental stressors on physiological processes and methane emissions in pea (*Pisum sativum*) plants at various growth stages. *Plant Physiol. Biochem.*, 139, 715–723.
- Adriani, V., dan R. Karmila. 2019. Pengaruh temperatur terhadap kecepatan pertumbuhan kacang tolo (*Vigna sp.*). *Stigma* 12(1):49-53; Mei 2019
- Agrios, G.N. 1996. Ilmu Penyakit Tumbuhan, Gajah Mada University Press., Yogyakarta.
- Ambarsari, W., V, D, Y, B, Ismadi,. dan A, Setiadi. 2014. Analisis pendapatan dan profitabilitas usahatani padi (*Oryza sativa*) di Kabupaten Indramayu. *Jurnal Agri Wiralodra*. 6 (2) : 19-27.
- Angles, Chinnadurai, and Sundar. 2011. Awareness on impact of climate change on dryland agriculture and coping mechanisms of dryland farmers. *Indian Journal of Agricultural Economics*. Vol.66, hlm. 365-372.
- Anonymous. 1998. Environmental Factors That Affect Plant Growth. The University of Arizona.
- Badan Penelitian dan Pengembangan Pertanian. Kementerian Pertanian. FAO. 2005. "Impact of Climate Change and Diseases on Food Security and Poverty Reduction". Special event background document for the 31st session of the committee on world food security. Rome, 23-26 May 2005.
- Balai Besar Pengkajian dan Pengembangan Teknologi Pertanian. 2008. Teknologi Budidaya Lada. Balai Pengkajian Teknologi Pertanian Lampung. Lampung.
- Balai Penelitian Tanaman Rempah dan Obat (BALITTRO). 2012. Rencana Strategis Balai Penelitian Tanaman Rempah dan Obat Tahun 2012-2014.
- Bowers, J.H., dan Mitchell, D.J. 1990. Effect of Soil Water Matric Potential and Periodic Flooding on Mortality of Pepper caused by *Phytophthora capsici*. *Phytopathology*, 80(12):1447–1450.
- Budiastuti, M, T, S. 2020. Agroforestri Sebagai Bentuk Mitigasi Perubahan Iklim. Seminar Nasional Magister Agroteknologi Fakultas Pertanian UPN "Veteran" Jawa Timur. NST Proceedings. Volume 2020 pages 23-29. doi: 10.11594/nstp.2020.0603

- Bunyamin, Z. dan M. Aqil. 2010. Analisis Iklim Mikro Tanaman Jagung (*Zea mays* L.) Pada Sistem Tanam Sisip. Balai Penelitian Tanaman Serealia. Sulawesi Utara. Prosiding Pekan Serealia Nasional. 294-300.
- Devasahayam, D., J. Zacharairah, T., Jayashree, E., Kandiannan, K., Prasath, D., S.J. Eapen., Sasikumar, B., Srinivasan, V., and S. Bhai, R. 2015. Black Pepper. ICAR- Indian Institute of Spices Research. Kozhikode. Kerala.
- Faisal, H. N. 2015. Analisis pendapatan usahatani dan saluran pemasaran papaya (*Carica Papaya* L) di Kabupaten Tulungagung (studi kasus di Desa Bangoan, Kecamatan Kedunwaru, Kabupaten Tulungagung). Jurnal Agribisnis Fakultas Pertanian Unita. 11 (13) : 12-28
- Falco, C., Galeotti, M. & Olper, A. 2019. Climate change and migration: Is agriculture the main channel? Glob. Environ. Chang., 59, 101995.
- Festiani, R. A. 2011. Dampak perubahan iklim terhadap pendapatan dan faktor-faktor penentu adaptasi petani terhadap perubahan iklim : Studi kasus di Desa Kemukten, Kecamatan Kersana, Kabupaten Brebes. Departemen Ekonomi Sumberdaya dan Lingkungan Fakultas Ekonomi dan Manajemen, Institut Pertanian Bogor. Bogor.
- Fischer G, Shah M, Velthuisen HV. 2002. Climate Change and Agricultural Vulnerability. IIASA. Luxemburg, Austria.
- Gardner, F. P., R. B. Pearce, R.L. Mitchell. 1991. The Physiology of Crops (Fisiologi Tanaman Budidaya, Terjemahan : Herawati Susilo), Universitas Indonesia Press, Jakarta.
- Gomez, K. A., dan A, A, Gomez. 1995. Prosedur Statistik untuk Penelitian Pertanian. Penerjemah E. Sjamsuddin dan J. Baharsyah. UI Press. Jakarta.
- Gozali, I. 2016. Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23 (Edisi 8). Cetakan Ke VIII. Semarang. Badan Penerbit Universitas Diponegoro.
- Gustiyan, H. 2004. Analisis Pendapatan Usahatani untuk Produk Pertanian. Salemba empat: Jakarta
- Gutman GI, Csiszar, and Romanov P. 2000. Using NOAA/AVHRR products to monitor El Niño impacts: focus on Indonesia in 1997-98., Bull. Amer. Meteor. Soc., 81, 1189–1205
- Hadi, P.U., C. Saleh, A.S. Bagyo, R. Hendayana, Y. Marisa, dan I. Sadikin. 2000. Studi kebutuhan asuransi pertanian pada pertanian rakyat. Laporan Hasil Penelitian. Pusat Penelitian Sosial Ekonomi Pertanian. Bogor

- Haines A. 2003. Climate Change. *International Journal of Epidemiologi*. 32: 321-323.
- Handoko I, Sugiarto Y, Syaikat Y. 2008. Keterkaitan Perubahan Iklim dan Produksi Pangan Strategis. Telaah kebijakan independen bidang perdagangan dan pembangunan oleh Kemitraan/Partnership Indonesia. SEAMEO BIOTROP. Bogor.
- Hansen, J., M. Sato, and R. Ruedy. 2012. "PNAS Plus: Perception of climate change." *Proceedings of the National Academy of Sciences*. Available at: <http://www.pnas.org/cgi/doi/10.1073/pnas.1205276109> [Accessed September 11, 2012].
- Husni, A., K. Hidayah, Maskan. 2014. Analisis finansial usahatani cabai rawit (*Capsicum frutescens*) di Desa Purwajaya Kecamatan Loa Janan. *Jurnal Arifor*. 13 (1) : 49-52.
- Jumin, H, B,. 2010. *Dasar-dasar Agronomi (Edisi Revisi)*. Rajawali Pers: Jakarta.
- Kandiannan, K., Parthasarathy, U., Krishnamurthy, K. S., Thankamani, C. K., Srinivasan, V., & Aipe, K. C. 2011. Modeling the association of weather and black pepper yield. *Indian Journal of Horticulture*, 68(1), 96-102.
- Kasa, I, W,. 2019. Pemanasan Global Sebagai Akibat Ulah Manusia di Planet Bumi. *Simbiosis VII (1)* : 29– 33. Maret 2019.
- Keane, P.J., dan Kerr, A., 1997. Factors Affecting Disease Development. In J.F. Brown & H.J. Ogle, eds. *Plant Pathogen and Plant Disease* Rockvale Publications. Armidale. 287–298.
- Kementerian Negara Lingkungan Hidup. 2009. *Valuasi Ekonomi Dampak Perubahan Iklim*. KLH. Jakarta.
- Koesmaryono Y, Las I, Aldrian E, Runtunuwu E, Syahbuddin H, Apriyana Y, Ramadhani F, Trinugroho W. 2008. Laporan Hasil Kegiatan. Sensitivitas dan Dinamika Kalender Tanam Padi Terhadap Parameter ENSO (El-Nino Southern Oscillation) dan IOD (Indian Ocean Dipole) di Daerah Monsunal dan Equatorial. Laporan KKP3T. Litbang Deptan-IPB. (Tidak dipublikasi).
- Krishnamurthy, K. S., K. Kandiannan., C. Sibin., B. Chempakam., and S. J. Ankegowda. 2011. Trend in Climate and Productivity and Relationship Between Climatic Variables and Productivity in Black Pepper (*Piper nigrum*. L). *Indian Journal Agronomy*. 81 (8) : 729-733
- Laiya, R, H., A, Murtisari,. Y, Boekoesoe,. 2017. Analisis Keuntungan Petani pada Desa Daena, Kecamatan Limboto Barat Kabupaten Gorontalo. *Agrinesia: Jurnal Ilmiah Agribisnis* Vol 2. No 1. 2017.

- Las, I. 2007. Strategi dan Inovasi Antisipasi Perubahan Iklim. Balai Besar Sumberdaya Lahan Pertanian. Jakarta.
- Lee, B.S., dan Lum, K.Y., 2004. *Phytophthora* Diseases in Malaysia. In: Drenth A and Guest D.I (Eds). Diversity and Managements of *Phytophthora* in Southeast Asia. Australian Centre for Internasional Agricultural Research. Canberra.
- Li Z., Liu A., Wu H., Tan L., Long Y., Gou Y., Sun S., Sang L. 2010. Influence of temperature, light and plant growth regulators on germination of black pepper (*Piper nigrum* L.) seeds. African Journal of Biotechnology. 9:1354–1358.
- Maison., Samsidar., Nurhidayah., M, F, Afrianto. 2020. Penerapan pompa vakum untuk irigasi pertanian di Kelurahan Mudung Laut Kecamatan Pelayangan Kota Jambi. Jurnal Pengabdian Masyarakat Pinang Masak 1(1):8-12.
- Manohara, D., Wahyuno, D., dan Noveriza, R. 2005. Penyakit busuk pangkal batang lada dan strategi pengendaliannya. Perkembangan Teknologi Tanaman Rempah dan Obat 17: 41-51.
- Martin BA, Same M, Indrawati W. 2015. Pengaruh media pembibitan pada pertumbuhan stek lada (*Piper ningrum* L.). Jurnal Agro Industri Perkebunan. Vol 3(2) . Hal 94-107
- Mayasari dan Suroso. 2014. Identifikasi opsi adaptasi perubahan iklim bagi petani apel di Kota Batu. Jurnal Perencanaan Wilayah dan Kota AV1N2:418-427
- Moritz, C. and Agudo, R. 2019. The Future of Species Under Climate?. Science, 341(6145), 504-8.
- Natawidjaja, R.S., Supyandi, D., Tulloh, C., Tridakusumah, A.C., Calford, E.M., dan Ford, M., 2009. Climate Change, Food Security and Income Distribution: Adaptations of Small Rice Farmers. Crawford School of Economics and Government at The Australian National University, Canberra.
- Naylor, R.L., Battisti, D.S. , Vimont, D.J., Falcon, W.P., dan Burke, M.B., 2007. Assessing Risks of Climate Variability and Climate Change for Indonesian Rice Agriculture. Proceedings of the National Academy of Sciences of the United States of America. 104(19):7752-7757.
- Nengsih, Y., Marpaung, R., Alkori. 2016. Sultur panjang merupakan sumber stek terbaik untuk perbanyak bibit lada secara vegetatif. Jurnal Media Pertanian. Vol 1 (1). Hal 29-35

- OECD. 2001. *Measuring Capital: Measurement of, Capital Stocks, Consumption of Fixed Capital, and Capital Services*. OECD, Paris.
- Parthasarathy, V. A., B. Sasikumar., R. R. Nair., and K. J. George., 2017. *Black Pepper: Botany and Horticulture*. Horticultural Reviews, Volume 33. Edited by Jules Janick.
- Phahlevi, R. 2013. Faktor - faktor yang mempengaruhi pendapatan petani padi sawah di Kota Padang Panjang. Program Studi Ekonomi Fakultas Ekonomi Universitas Padang, Padang.
- Pradeepkumar, T., K. Vasanthakumar, K. C. Aipe, K. Kumaran, S. P. George, T. P. Manmohandas, and K. N. Anith. 1999. Studies on yielding behaviour of black pepper cv Panniyur-I. *Indian J. Arecanut, Spices Med. Plants* 1:88–90. Purseglove, J. W., E. G. Brown, C. L. Green, and S. R. J. Robbins. 1981. *Pepper*. p. 10–99. In: *Spices*. Vol. 1. Longman, London
- Pradeepkumar, T., Kumaran, K., Aipe, K. C., & Manomohandas, T. P. 1999. Influence of weather on the yield of pepper cv. panniyur 1 (*Piper nigrum* L.). *Journal of Tropical Agriculture*, 37(1&2), 56-59.
- Pratama, R., dan L, Parinduri,. 2019. Penanggulangan Pemanasan Global. *Buletin Utama Teknik* Vol. 15, No. 1, September 2019
- Rahman HA. 2009. Global climate change and its effects on human habitat and environment in Malaysia. *Malaysian Journal of environmental management*. 10 (2) : 17-32.
- Ravindran, P. N., K. Nirmal Babu, B. Sasikumar, and K. S. Krishnamurthy. 2000a. Botany and crop improvement of black pepper. p. 23–142. In: P. N. Ravindran (ed.), *Black pepper (Piper nigrum L.)*. Harwood Academic Publ., Amsterdam, The Netherlands.
- \_\_\_\_\_. 1990. Studies on black pepper and some of its wild relatives. Ph. D Thesis. Univ. Calicut, Kerala, India.
- \_\_\_\_\_, I. Balachandran, and B. Chempakam. 2000b. End uses of pepper. p.467–479. In: P. N. Ravindran (ed.), *Black pepper*. Harwood Academic Publ., Amsterdam, The Netherlands.
- Ruminta, Handoko, T. Nurmala. 2018. Indikasi Perubahan Iklim dan Dampaknya Terhadap Produksi Padi di Indonesia (Studi Kasus : Sumatera Selatan dan Malang Raya). *Jurnal Agro* 5(1)
- Saputra, M., dan S, Hendra. 2018. Kombinasi Pompa Vakum Dengan Hidrolik Ram (Hidram). *Jurnal Mekanova*. 4 (6) 1-9.

- Santoso, S. 2015. SPSS20 Pengolahan Data Statistik di Era Informasi. Jakarta. PT. Alex Media Komputindo, Kelompok Gramedia
- Sari, L. 2019. Analisis Pendapatan Petani di Desa Bontorappo Kecamatan Tarawang Kabupaten Jeneponto. Tesis (Tidak dipublikasikan). Fakultas Ekonomi. Universitas Negeri Makassar. Makassar.
- Sekaran, U. 2006. Metode Penelitian Bisnis. Salemba Empat Jakarta.
- Setiawan, E. 2009. Pemanfaatan Data Cuaca Untuk Pendugaan Produktifitas (Studi Kasus Tanaman Cabe Jamu Di Madura). BMG. Jakarta. *Agrovigor* 2(1):1-7.
- Sivaraman, K., Kandiannan, K., Peter, K. V., & Thankamani, C. K. 1999. Agronomy of black pepper (*Piper nigrum* L.) - A review. *Journal of Spices and Aromatic Crops*, 8(1), 01-18.
- Slingo JM, Challinor AJ, Hoskins, BJ, and Wheeler TR. 2005. Introduction: food crops in a changing climate. *Phil. Trans. R. Soc. B* 360, 1983-1989. (doi:10.1098/rstb.2005.1755).
- Soekartawi. 2006. Analisis Usahatani. Jakarta (ID): UI-Press.
- Srinivasan, K. 2007. Black pepper and its pungent principle-piperine: a review of diverse physiological effects. *Critical Reviews in Food Science and Nutrition*, 47(8), 735-748.
- Subandono, Budiman dan A. Firdaus. 2009. Menyiasati Perubahan Iklim di Wilayah Pesisir dan Pulau-pulau Kecil. Penerbit Buku Ilmiah Populer. Bogor.
- Suberjo, 2009. Adaptasi Pertanian dalam Pemanasan Global. Dosen Fakultas Pertanian UGM Yogyakarta dan Mahasiswa Doktoral The University of Tokyo. <http://subejo.staff.ugm.ac.id/?p=108>. Diakses pada 05 November 2020.
- Sugiyono. 2017. Metode Penelitian Kuantitatif, Kualitatif, dan Riset dan Develpoment . CV.Afabeta: Bandung.
- Sukirno, S. 2005. Pengantar Mikro Ekonomi, Jakarta: PT Raja Grafindo. Persada
- Sundari, M. T. 2011. Analisis dan pendapatan usahatani wortel di Kabupaten Karanganyar. *Jurnal SEPA*. 7 (2) : 119-126.
- Suprpto, dan Yani A. 2008. Teknologi Budidaya Lada. Bogor(ID): Balai Besar Pengkajian dan Pengembangan Teknologi Pertanian.

- Sushna, K. 2016. Influence of weather parameters on growth and yield of black pepper (*Piper nigrum* L.). Tesis. College of Horticulture, Vellanikkara. Diakses dari: <https://krishikosh.egranth.ac.in/handle/1/5810025064>.
- Syafruwardi, A., H, Fajeri,. dan Hamdani. 2012. Analisis finansial usahatani padi varietas unggul di Desa Guntung Ujung Kecamatan Gambut Kabupaten Banjar Kalimantan Selatan. *Jurnal Agribisnis*. 2 (3) : 181-192
- Syakir, M. 1994. Pengaruh naungan serta pemupukan P dan Mg terhadap pertumbuhan tanaman lada, *Piper nigrum* L. Bogor: IPB.
- Tjasyono, B. 2004. *Klimatologi Umum*. Institut Teknologi Bandung. ISBN 979-3507-05-5.
- Trenberth, Houghton, and Filho. The Climate Change System: an overview. In: *Climate Change 1995. The Science of Climate Change. Contribution of Working Group I to the 2nd Assessment Report of the Intergovernmental Panel on Climate Change*.
- Tumoka, N. 2013. Analisis pendapatan usahatani tomat di Kecamatan Kawangkoan Barat Kabupaten Minahasa. *Jurnal Emba*. 1 (3) : 345-354.
- Usman, 2004. Analisis Kepekaan Beberapa Metode Pendugaan Evapotranspirasi Potensial terhadap Perubahan Iklim. *Jurnal Natur Indonesia* 6(2):91-98.
- Utami, Jamhari, dan Suhatmini Hardyastuti. 2011. El Nino, La Nina dan Penawaran Pangan di Jawa, Indonesia. *Jurnal Ekonomi Pembangunan*. Vol. 12: 2, hlm. 257-271.
- Wijayanto, D. S., & Widiastuti, I. 2016. Pompa Air Bertenaga Hibrid untuk Irigasi Tanaman Buah Naga. *Vanos Journal of Mechanical Engineering Education*, 1(2) 169-178.
- Winarto, Y.T., K. Stigter, B Dwisatrio, M. Nurhaga, and A. Bowolaksono. 2013. Agrometeorological learning increasing farmers' knowledge in coping with climate change and unusual risks. *Southeast Asian Studies* 2(2):323-349.
- Wiraatmaja, I, W. 2017. Suhu, Energi Matahari, dan Air Dalam Hubungan Dengan Tanaman. Bahan Ajar. Program studi agroekoteknologi. Fakultas pertanian. Universitas Udayana. Bali.
- Wirantika, R., dan Hariyono, D. 2019. Studi perubahan curah hujan dan hubungannya dengan produktivitas tanaman lada (*Piper nigrum* L.) di Kabupaten Lampung Timur. *Jurnal Produksi Tanaman*, 7(4), 1271-1277.
- Wiyono, S. 2007. Perubahan Iklim dan Ledakan Hama dan Penyakit Tanaman. Makalah pada Seminar Keanekaragaman Hayati di Tengah

Perubahan Iklim: Tantangan Masa Depan Indonesia. KEHATI. Jakarta  
28 Juni 2007.

Yudiyanto., A. Rizali., A. Munif., D. Setiadi., and I. Qayim. 2014.  
Environmental Factors Affecting Productivity of Two Indonesian of  
Black Pepper (*Piper nigrum*. L). *Jurnal Agrivita*. 36 (3) : 22-42.

Yusdja, Y, C., Saleh., M. Amir., M. Arifin., A. S. Bagyo. 1991. Studi baseline  
aspek sosial ekonomi pengendalian hama terpadu. Pusat Penelitian Sosial  
Ekonomi Pertanian, Bogor.



Tabel Lampiran 1. Produktivitas tanaman lada sebelum terjadi perubahan iklim dan faktor iklim (suhu maksimum, suhu minimum, kelembaban dan curah hujan) selama 7 Tahun (2007-2013) di Kecamatan Towuti Kabupaten Luwu Timur

Tahun	Produktivitas (Y)	Suhu Maksimum (X <sub>1</sub> )	Suhu Minimum (X <sub>2</sub> )	Kelembaban (X <sub>3</sub> )	Curah Hujan (X <sub>4</sub> )
2007	0,36	28,91	17,29	77,11	1013,24
2008	0,67	28,57	17,24	78,20	1100,99
2009	0,47	28,88	16,99	77,67	1576,44
2010	0,48	28,31	18,20	83,55	3187,73
2011	0,36	25,05	13,63	83,38	2050,43
2012	0,56	24,85	13,41	83,23	1943,58
2013	0,67	24,87	14,38	83,71	2547,58

Tabel Lampiran 2. Data produktivitas tanaman lada sebelum terjadi perubahan iklim serta faktor iklim (suhu maksimum, suhu minimum, kelembaban udara dan curah hujan ) selama 7 Tahun (2007-2013) yang di In-kan

Tahun	Produktivitas (Y)	Suhu Maksimum (X <sub>1</sub> )	Suhu Minimum (X <sub>2</sub> )	Kelembaban (X <sub>3</sub> )	Curah Hujan (X <sub>4</sub> )
2007	-1,0217	3,36	2,85	4,35	6,92
2008	-0,4005	3,35	2,85	4,36	7,00
2009	-0,7550	3,36	2,83	4,35	7,36
2010	-0,7340	3,34	2,90	4,43	8,07
2011	-1,0217	3,22	2,61	4,42	7,63
2012	-0,5798	3,21	2,60	4,42	7,57
2013	-0,4005	3,21	2,67	4,43	7,84

Tabel Lampiran 3. Produktivitas tanaman lada setelah terjadi perubahan iklim dan faktor iklim (suhu maksimum, suhu minimum, kelembaban dan curah hujan) selama 7 Tahun (2014-2020) di Kecamatan Towuti Kabupaten Luwu Timur

Tahun	Produktivitas (Y)	Suhu Maksimum (X <sub>1</sub> )	Suhu Minimum (X <sub>2</sub> )	Kelembaban (X <sub>3</sub> )	Curah Hujan (X <sub>4</sub> )
2014	0,74	29,74	21,26	80,73	3177,40
2015	0,55	30,02	21,89	76,83	3012,00
2016	0,70	29,98	22,65	82,22	2584,00
2017	0,81	29,92	22,06	84,05	4164,00
2018	0,77	29,90	22,21	77,98	3315,00
2019	0,70	30,09	22,26	77,76	2972,00
2020	0,57	28,40	23,33	80,38	3883,00

Tabel Lampiran 4. Data produktivitas tanaman lada setelah terjadi perubahan iklim serta faktor iklim (suhu maksimum, suhu minimum, kelembaban udara dan curah hujan ) selama 7 Tahun (2014-2020) yang di In-kan

Tahun	Produktivitas (Y)	Suhu Maksimum (X <sub>1</sub> )	Suhu Minimum (X <sub>2</sub> )	Kelembaban (X <sub>3</sub> )	Curah Hujan (X <sub>4</sub> )
2014	-0,3011	3,39	3,06	4,39	8,06
2015	-0,5978	3,40	3,09	4,34	8,01
2016	-0,3567	3,40	3,12	4,41	7,86
2017	-0,2107	3,40	3,09	4,43	8,33
2018	-0,2614	3,40	3,10	4,36	8,11
2019	-0,3567	3,40	3,10	4,35	8,00
2020	-0,5621	3,35	3,15	4,39	8,26

Tabel Lampiran 5. Ringkasan uji heteroskedastisitas (Glejser) dari faktor suhu maksimum, suhu minimum, kelembaban udara dan curah hujan terhadap produktivitas tanaman lada sebelum terjadi perubahan iklim selama 7 Tahun (2007-2013)

Variabel	t	Signifikansi
Suhu Maksimum (x <sub>1</sub> )	3.124	0.089
Suhu Minimum (x <sub>2</sub> )	-2.581	0.123
Kelembaban Udara (x <sub>3</sub> )	9.673	0.011
Curah Hujan (x <sub>4</sub> )	-19.294	0.003

a. Dependent Variable: Abs\_RES

Tabel Lampiran 6. Ringkasan uji multikolinearitas faktor suhu maksimal, suhu minimal, kelembaban udara dan curah hujan terhadap produktivitas tanaman lada sebelum terjadi perubahan iklim selama 7 Tahun (2007-2013)

Coefficient Correlations <sup>a</sup>						
	Model	Suhu Maksimal (x <sub>1</sub> )	Suhu Minimal (x <sub>2</sub> )	Kelembaban (x <sub>3</sub> )	Curah Hujan (x <sub>4</sub> )	
1	Correlations	Suhu Maksimal (x <sub>1</sub> )	1.000	-0.066	0.736	-0.272
		Suhu Minimal (x <sub>2</sub> )	-0.066	1.000	-0.588	0.123
		Kelembaban (x <sub>3</sub> )	0.736	-0.588	1.000	0.736
		Curah Hujan (x <sub>4</sub> )	-0.272	0.123	0.736	1.000
1	Covariances	Suhu Maksimal (x <sub>1</sub> )	184.992	-79.622	158.240	-3.263
		Suhu Minimal (x <sub>2</sub> )	-79.622	36.741	-56.382	0.657
		Kelembaban (x <sub>3</sub> )	158.240	-56.382	250.041	-11.136
		Curah Hujan (x <sub>4</sub> )	-3.263	0.657	-11.136	0.780

a. Dependent Variable: Produktivitas (y)

Tabel Lampiran 7. Hasil uji autokorelasi nilai Durbin –Watson faktor suhu maksimal, suhu minimal, kelembaban udara dan curah hujan terhadap produktivitas tanaman lada sebelum terjadi perubahan iklim selama 7 Tahun (2007-2013)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.662 <sup>a</sup>	.438	-.686	.33738	2.551

a. Predictors: (Constant), Suhu Maksimal ( $x_1$ ), Suhu Minimal ( $x_2$ ), Kelembaban ( $x_3$ ), Curah Hujan ( $x_5$ )

b. Dependent Variable: Produktivitas ( $y$ )

Tabel Lampiran 8. Hasil analisis data regresi berganda faktor suhu maksimal, suhu minimal, kelembaban udara dan curah hujan terhadap produktivitas tanaman lada sebelum terjadi perubahan iklim selama 7 Tahun (2007-2013)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.662 <sup>a</sup>	.438	-.686	.33738

a. Predictors: (Constant), Suhu Maksimal ( $x_1$ ), Suhu Minimal ( $x_2$ ), Kelembaban ( $x_3$ ), Curah Hujan ( $x_5$ )

b. Dependent Variable: Produktivitas ( $y$ )

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.177	4	.044	.389	.808 <sup>a</sup>
1 Residual	.228	2	.114		
Total	.405	6			

a. Predictors: (Constant), Suhu Maksimal ( $x_1$ ), Suhu Minimal ( $x_2$ ), Kelembaban ( $x_3$ ), Curah Hujan ( $x_5$ )

b. Dependent Variable: Produktivitas ( $y$ )

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	78.376	89.762		0.873	0.475
1 Suhu Maksimal ( $x_1$ )	-16.116	13.601	-4.638	-1.185	0.358
Suhu Minimal ( $x_2$ )	7.241	6.061	3.542	1.195	0.355
Kelembaban ( $x_3$ )	-10.717	15.813	-1.595	-0.678	0.568
Curah Hujan ( $x_4$ )	0.148	0.883	0.240	0.167	0.883

a. Dependent Variable: Produktivitas ( $y$ )

Table Lampiran 9. Hasil uji Heteroskedastisitas data faktor suhu maksimum, suhu minimum, kelembaban udara dan curah hujan terhadap produktivitas tanaman lada setelah perubahan iklim selama 7 Tahun (2014-2020)

Coefficients <sup>a</sup>						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	-0.890	6.936		-0.128	0.910
	Suhu Maksimal (x <sub>1</sub> )	1.765	1.325	0.572	1.332	0.314
	Suhu Minimal (x <sub>2</sub> )	0.092	0.794	0.045	0.116	0.918
	Kelembaban (x <sub>3</sub> )	-1.477	0.542	-0.845	-2.726	0.112
	Curah Hujan (x <sub>4</sub> )	0.143	0.127	0.399	1.124	0.378

a. Dependent Variable: Abs\_RES

Table Lampiran 10. Hasil uji Multikolinearitas faktor suhu maksimum, suhu minimum, kelembaban udara dan curah hujan terhadap produktivitas tanaman lada setelah perubahan iklim selama 7 Tahun (2014-2020)

Coefficient Correlations <sup>a</sup>						
Model		Suhu	Suhu	Kelembaban	Curah	
		Maksimal (x <sub>1</sub> )	Minimal (x <sub>2</sub> )	(x <sub>3</sub> )	Hujan (x <sub>4</sub> )	
1	Correlations	Suhu Maks (x <sub>1</sub> )	1.000	0.667	-0.108	0.493
		Suhu Min (x <sub>2</sub> )	0.667	1.000	-0.118	0.266
		Kelembaban (x <sub>3</sub> )	-0.108	-0.118	1.000	-0.373
		Curah Hujan (x <sub>4</sub> )	0.493	0.266	-0.373	1.000
	Covariances	Suhu Maks (x <sub>1</sub> )	1.755	0.702	-0.078	0.083
		Suhu Min (x <sub>2</sub> )	0.702	0.631	-0.051	0.027
		Kelembaban (x <sub>3</sub> )	-0.078	-0.051	0.294	-0.026
		Curah Hujan (x <sub>4</sub> )	0.083	0.027	-0.026	0.016

a. Dependent Variable: Produksi (Y)

Tabel Lampiran 11. Hasil analisis data regresi berganda faktor suhu maksimum, suhu minimum, kelembaban udara dan curah hujan terhadap produktivitas tanaman lada setelah perubahan iklim selama 7 Tahun (2014-2020)

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.796 <sup>a</sup>	.633	-.100	.1547327

a. Predictors: (Constant), Suhu Maksimal (x<sub>1</sub>), Suhu Minimal (x<sub>2</sub>), Kelembaban (x<sub>3</sub>), Curah Hujan (x<sub>5</sub>)

b. Dependent Variable: Produktivitas

ANOVA<sup>b</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.083	4	.021	.864	.599 <sup>a</sup>
Residual	.048	2	.024		
Total	.131	6			

a. Predictors: (Constant), Suhu Maksimal ( $x_1$ ), Suhu Minimal ( $x_2$ ), Kelembaban ( $x_3$ ), Curah Hujan ( $x_5$ )

b. Dependent Variable: Produktivitas

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-24.538	26.777		-0.916	0.456
Suhu Maksimal ( $x_1$ )	4.609	5.115	0.582	0.901	0.463
Suhu Minimal ( $x_2$ )	-0.872	3.067	-0.165	-0.284	0.803
Kelembaban ( $x_3$ )	2.151	2.092	0.479	1.029	0.412
Curah Hujan ( $x_4$ )	0.223	0.490	0.244	0.456	0.693

a. Dependent Variable: Produktivitas

Tabel Lampiran 12. Biaya Usahatani, pendapatan dan Produktivitas tanaman petani lada di Desa Tole, Kecamatan Towuti Kabupaten Luwu Timur tahun 2018 sampai 2020

No	Nama Responden	Umur (Tahun)	Luas Lahan (Ha)	Tahun 2018										Pendapatan Usaha Tani, Rp (Pd)	Produktivitas (Kg/ha)
				Biaya (Rp)						Total Biaya (TC)	Penerimaan ( R )				
				Biaya Variabel (VC)			Biaya Tetap (FC)				Produksi (kg) (Yi)	Harga (Rp) (Pyi)	Total Penerimaan (TR)		
				Pupuk Organik	Pupuk An Organik	Pestisida/Herbisida	Upah Kerja	Biaya Penyusutan Alat	Pajak Perkebunan						
1	2	3	4	6	7	8	9	10	11	12	13	14	15	16	17
1	Suardi	48	2	4,940,000	560,000	1,884,000	5,540,000	140,000	34,000	13,098,000	1,700	39,000	66,300,000	53,202,000	850
2	Bapak Ibang	42	0.5	1,300,000	325,000	52,500	970,000	35,000	8,500	2,691,000	200	40,000	8,000,000	5,309,000	400
3	Nurdin	47	1	5,100,000	-	930,000	5,540,000	70,000	17,000	11,657,000	1,300	45,000	58,500,000	46,843,000	1,300
4	Muis	47	1	6,337,500	750,000	1,305,000	7,220,000	70,000	17,000	15,699,500	1,350	53,000	71,550,000	55,850,500	1,350
5	H. Tasman	62	1	5,600,000	-	1,800,000	7,340,000	70,000	17,000	14,827,000	1,500	45,000	67,500,000	52,673,000	1,500
6	Hasrun	43	0.5	5,100,000	-	1,750,000	4,260,000	35,000	8,500	11,153,500	520	45,000	23,400,000	12,246,500	1,040
7	Sarwono	17	1	4,550,000	-	1,750,000	6,040,000	70,000	17,000	12,427,000	1,400	45,000	63,000,000	50,573,000	1,400
8	Jon Kadang	54	0.5	1,300,000	-	640,000	3,560,000	35,000	8,500	5,543,500	500	42,000	21,000,000	15,456,500	1,000
9	Bahrin	52	1	3,900,000	-	940,000	5,340,000	70,000	17,000	10,267,000	1,500	40,000	60,000,000	49,733,000	1,500
10	Nawir	25	0.5	1,260,000	-	370,000	1,870,000	35,000	8,500	3,543,500	340	39,000	13,260,000	9,716,500	680
11	Haqbur	40	1	3,000,000	-	1,730,000	3,810,000	70,000	17,000	8,627,000	1,100	40,000	44,000,000	35,373,000	1,100
12	Rian	50	1	1,360,000	-	954,000	2,300,000	70,000	17,000	4,701,000	600	40,000	24,000,000	19,299,000	600
13	Agus	48	0.5	750,000	-	385,000	960,000	35,000	8,500	2,138,500	150	40,000	6,000,000	3,861,500	300
14	Sahrul	55	1.5	5,400,000	-	2,161,000	6,300,000	105,000	25,500	13,991,500	1,100	40,000	44,000,000	30,008,500	733
15	Nami	48	1	2,200,000	-	1,270,000	4,280,000	70,000	17,000	7,837,000	1,450	40,000	58,000,000	50,163,000	1,450
16	Amir	43	1	5,000,000	-	840,000	2,960,000	70,000	17,000	8,887,000	1,050	40,000	42,000,000	33,113,000	1,050
17	Muslimin	42	1	5,600,000	-	1,589,000	2,900,000	70,000	17,000	10,176,000	800	40,000	32,000,000	21,824,000	800
18	Udin	53	1	7,600,000	-	3,670,000	9,550,000	70,000	17,000	20,907,000	2,100	40,000	84,000,000	63,093,000	2,100
19	Latif	39	1	4,000,000	-	1,260,000	2,240,000	70,000	17,000	7,587,000	1,000	40,000	40,000,000	32,413,000	1,000
20	Muis	47	1	6,000,000	-	1,800,000	5,720,000	70,000	17,000	13,607,000	1,500	45,000	67,500,000	53,893,000	1,500
21	Uda Akip	57	1	6,000,000	-	1,650,000	8,440,000	70,000	17,000	16,177,000	1,800	40,000	72,000,000	55,823,000	1,800
22	Lodi	55	1	4,600,000	-	3,650,000	5,330,000	70,000	17,000	13,667,000	1,250	40,000	50,000,000	36,333,000	1,250
23	Sale Rombe	43	1	6,400,000	-	1,005,000	3,620,000	70,000	17,000	11,112,000	1,680	40,000	67,200,000	56,088,000	1,680
24	Suparman	45	1	4,000,000	-	794,000	2,120,000	70,000	17,000	7,001,000	900	40,000	36,000,000	28,999,000	900
25	Marwan	47	1	5,000,000	-	1,455,000	6,160,000	70,000	17,000	12,702,000	1,480	40,000	59,200,000	46,498,000	1,480

Berlanjut.....

Lanjutan Tabel Lampiran 12

Tahun 2019													
No	Nama Responden	Biaya (Rp)						Total Biaya (TC)	Penerimaan ( R )			Pendapatan Usaha Tani, Rp (Pd)	Produktivitas (Kg/ha)
		Biaya Variabel (VC)			Biaya Tetap (FC)				Produksi (kg) (Yi)	Harga (Rp) (Pyi)	Total Penerimaan (TR)		
		Pupuk Organik	Pupuk An Organik	Pestisida/Herbisida	Upah Kerja	Biaya Penyusutan Alat	Pajak Perkebunan						
1	2	18	19	20	21	22	23	24	25	26	27	28	29
1	Suardi	8,000,000	-	2,150,000	6,540,000	175,000	34,000	16,899,000	1,600	45,000	72,000,000	55,101,000	800
2	Bapak Ibang	1,300,000	-	405,000	1,700,000	42,750	8,500	3,456,250	117	42,000	4,914,000	1,457,750	234
3	Nurdin	6,300,000	-	1,320,000	5,440,000	85,500	17,000	13,162,500	960	40,000	38,400,000	25,237,500	960
4	Muis	6,000,000	-	1,120,000	8,560,000	85,500	17,000	15,782,500	1,000	45,000	45,000,000	29,217,500	1,000
5	H. Tasman	8,000,000	-	1,800,000	8,720,000	85,500	17,000	18,622,500	1,200	45,000	54,000,000	35,377,500	1,200
6	Hasrun	4,000,000	-	1,660,000	4,980,000	42,750	8,500	10,691,250	400	40,000	16,000,000	5,308,750	800
7	Sarwono	6,000,000	-	1,750,000	7,820,000	85,500	17,000	15,672,500	1,100	40,000	44,000,000	28,327,500	1,100
8	Jon Kadang	1,500,000	-	470,000	4,880,000	42,750	8,500	6,901,250	450	45,000	20,250,000	13,348,750	900
9	Bahrin	6,000,000	-	920,000	6,260,000	85,500	17,000	13,282,500	850	45,000	38,250,000	24,967,500	850
10	Nawir	1,350,000	-	634,000	2,260,000	42,750	8,500	4,295,250	280	44,000	12,320,000	8,024,750	560
11	Haqbur	3,250,000	-	1,795,000	5,150,000	85,500	17,000	10,297,500	900	40,000	36,000,000	25,702,500	900
12	Rian	1,800,000	250,000	980,000	2,330,000	85,500	17,000	5,462,500	530	41,000	21,730,000	16,267,500	530
13	Agus	975,000	-	470,000	1,160,000	42,750	8,500	2,656,250	100	45,000	4,500,000	1,843,750	200
14	Sahrul	5,600,000	750,000	2,161,000	6,300,000	128,250	25,500	14,964,750	1,058	45,000	47,610,000	32,645,250	705
15	Nami	2,400,000	250,000	1,270,000	4,640,000	85,500	17,000	8,662,500	1,200	45,000	54,000,000	45,337,500	1,200
16	Amir	6,400,000	-	990,000	4,920,000	85,500	17,000	12,412,500	950	42,000	39,900,000	27,487,500	950
17	Muslimin	5,600,000	-	2,249,000	3,600,000	85,500	17,000	11,551,500	730	42,000	30,660,000	19,108,500	730
18	Udin	8,000,000	375,000	4,690,000	9,550,000	85,500	17,000	22,717,500	1,800	42,000	75,600,000	52,882,500	1,800
19	Latif	5,000,000	-	1,060,000	2,800,000	85,500	17,000	8,962,500	850	43,000	36,550,000	27,587,500	850
20	Muis	7,000,000	-	1,800,000	6,440,000	85,500	17,000	15,342,500	1,200	40,000	48,000,000	32,657,500	1,200
21	Uda Akip	6,000,000	625,000	1,780,000	8,440,000	85,500	17,000	16,947,500	1,650	45,000	74,250,000	57,302,500	1,650
22	Lodi	4,600,000	500,000	3,650,000	6,080,000	85,500	17,000	14,932,500	1,110	45,000	49,950,000	35,017,500	1,110
23	Sale Rombe	7,000,000	-	1,332,000	3,940,000	85,500	17,000	12,374,500	1,430	45,000	64,350,000	51,975,500	1,430
24	Suparman	4,400,000	-	794,000	2,120,000	85,500	17,000	7,416,500	830	45,000	37,350,000	29,933,500	830
25	Marwan	5,600,000	-	1,585,000	6,670,000	85,500	17,000	13,957,500	1,230	45,000	55,350,000	41,392,500	1,230

Berlanjut.....

Lanjutan Tabel Lampiran 12

Tahun 2020													
No	Nama Responden	Biaya (Rp)						Total Biaya (TC)	Penerimaan ( R )			Pendapatan Usaha Tani, Rp (Pd)	Produktivitas (Kg/ha)
		Biaya Variabel (VC)				Biaya Tetap (FC)			Produksi (kg) (Yi)	Harga (Rp) (Pyi)	Total Penerimaan (TR)		
		Pupuk Organik	Pupuk An Organik	Pestisida/Herbisida	Upah Kerja	Biaya Penyusutan Alat	Pajak Perkebunan						
1	2	30	31	32	33	34	35	36	37	38	39	40	41
1	Suardi	5,400,000	-	2,150,000	6,900,000	171,000	34,000	14,655,000	1,300	43,000	55,900,000	41,245,000	650
2	Bapak Ibang	1,500,000	-	405,000	2,400,000	43,750	8,500	4,357,250	112	45,000	5,040,000	682,750	224
3	Nurdin	8,000,000	-	4,555,000	5,530,000	87,500	17,000	18,189,500	765	53,000	40,545,000	22,355,500	765
4	Muis	7,000,000	-	1,120,000	9,560,000	87,500	17,000	17,784,500	840	47,000	39,480,000	21,695,500	840
5	H. Tasman	8,000,000	-	1,820,000	9,080,000	87,500	17,000	19,004,500	1,050	50,000	52,500,000	33,495,500	1,050
6	Hasrun	2,000,000	-	1,463,003	3,500,000	43,750	8,500	7,015,253	290	53,000	15,370,000	8,354,747	580
7	Sarwono	6,000,000	720,000	2,070,000	8,960,000	87,500	17,000	17,854,500	850	48,000	40,800,000	22,945,500	850
8	Jon Kadang	1,000,000	1,125,000	829,000	4,340,000	43,750	8,500	7,346,250	400	53,000	21,200,000	13,853,750	800
9	Bahrn	8,000,000	-	1,270,000	7,000,000	87,500	17,000	16,374,500	700	45,000	31,500,000	15,125,500	700
10	Nawir	2,000,000	-	1,920,000	2,940,000	43,750	8,500	6,912,250	280	53,000	14,840,000	7,927,750	560
11	Haqbur	3,900,000	-	3,000,000	6,320,000	87,500	17,000	13,324,500	700	50,000	35,000,000	21,675,500	700
12	Rian	2,400,000	375,000	1,600,000	4,980,000	87,500	17,000	9,459,500	340	53,000	18,020,000	8,560,500	340
13	Agus	1,125,000	-	470,000	2,400,000	43,750	8,500	4,047,250	175	53,000	9,275,000	5,227,750	350
14	Sahrul	6,000,000	750,000	2,201,000	8,010,000	131,250	25,500	17,117,750	1,020	53,000	54,060,000	36,942,250	680
15	Nami	3,000,000	250,000	1,315,000	4,640,000	87,500	17,000	9,309,500	1,000	53,000	53,000,000	43,690,500	1,000
16	Amir	7,000,000	-	1,980,000	7,000,000	87,500	17,000	16,084,500	750	45,000	33,750,000	17,665,500	750
17	Muslimin	6,000,000	250,000	2,249,000	3,600,000	87,500	17,000	12,203,500	713	53,000	37,789,000	25,585,500	713
18	Udin	9,000,000	375,000	4,690,000	10,600,000	87,500	17,000	24,769,500	1,500	53,000	79,500,000	54,730,500	1,500
19	Latif	5,000,000	-	550,000	2,600,000	87,500	17,000	8,254,500	700	46,000	32,200,000	23,945,500	700
20	Muis	7,000,000	-	1,800,000	7,720,000	87,500	17,000	16,624,500	1,000	45,000	45,000,000	28,375,500	1,000
21	Uda Akip	6,375,000	625,000	4,180,000	9,320,000	87,500	17,000	20,604,500	1,400	53,000	74,200,000	53,595,500	1,400
22	Lodi	5,000,000	500,000	3,650,000	6,430,000	87,500	17,000	15,684,500	1,000	53,000	53,000,000	37,315,500	1,000
23	Sale Rombe	8,000,000	500,000	2,010,000	3,920,000	87,500	17,000	14,534,500	1,115	53,000	59,095,000	44,560,500	1,115
24	Suparman	5,000,000	-	834,000	2,280,000	87,500	17,000	8,218,500	800	53,000	42,400,000	34,181,500	800
25	Marwan	6,000,000	-	1,650,000	7,180,000	87,500	17,000	14,934,500	1,000	53,000	53,000,000	38,065,500	1,000



Tabel Lampiran 13. Biaya Usahatani, pendapatan dan produktivitas tanaman petani lada di Desa Tokalimbo, Kecamatan Towuti Kabupaten Luwu Timur tahun 2018 sampai 2020

No	Nama Responden	Umur (Tahun)	Luas Lahan (Ha)	Tahun 2018										Pendapatan Usaha Tani, Rp (Pd)	Produktivitas (Kg/ha)
				Biaya (Rp)						Total Biaya (TC)	Penerimaan (R)				
				Biaya Variabel (VC)				Biaya Tetap (FC)			Produksi (kg) (Yi)	Harga (Rp) (Pyi)	Total Penerimaan (TR)		
				Pupuk Organik	Pupuk An Organik	Pestisida/Herbisida	Upah Kerja	Biaya Penyusutan Alat	Pajak Perkebunan						
1	2	3	4	6	7	8	9	10	11	12	13	14	15	16	17
26	Hafid	50	1	9,450,000	600,000	2,025,000	10,800,000	70,000	17,500	22,962,500	2,000	40,000	80,000,000	57,037,500	2,000
27	Hamka	52	1	15,400,000	-	3,675,000	12,825,000	70,000	17,500	31,987,500	1,350	40,000	48,000,000	16,012,500	1,350
28	Yusri	38	1	-	900,000	1,660,000	3,300,000	70,000	17,500	5,947,500	1,100	40,000	31,500,000	25,552,500	1,100
29	Safar	65	1	12,600,000	-	1,720,000	5,000,000	70,000	17,500	19,407,500	1,300	40,000	54,000,000	34,592,500	1,300
30	Mustamar	45	1	10,500,000	-	1,930,000	5,750,000	70,000	17,500	18,267,500	1,150	40,000	45,000,000	26,732,500	1,150
31	Rusdin	41	1	13,200,000	-	1,830,000	4,050,000	70,000	17,500	19,167,500	1,200	40,000	38,250,000	19,082,500	1,200
32	Akib	77	1	6,300,000	-	1,125,000	3,175,000	70,000	17,500	10,687,500	1,200	40,000	38,250,000	27,562,500	1,200
33	Jamal	45	1	8,800,000	600,000	1,770,000	4,000,000	70,000	17,500	15,257,500	1,400	40,000	58,500,000	43,242,500	1,400
34	Aksan	60	0.8	3,150,000	-	485,000	1,740,000	56,000	14,000	5,445,000	550	40,000	18,000,000	12,555,000	688
35	Haerun	44	1	6,300,000	-	2,095,000	4,600,000	70,000	17,500	13,082,500	1,100	40,000	45,000,000	31,917,500	1,100
36	Muchtar	67	1	9,450,000	600,000	860,000	5,550,000	70,000	17,500	16,547,500	1,300	40,000	45,000,000	28,452,500	1,300
37	Hamid	40	1	8,400,000	-	1,720,000	5,400,000	70,000	17,500	15,607,500	1,300	40,000	54,000,000	38,392,500	1,300
38	Ismail	55	1	6,300,000	-	2,110,000	4,200,000	70,000	17,500	12,697,500	1,100	40,000	38,250,000	25,552,500	1,100
39	Norman	42	2	14,300,000	1,200,000	1,675,000	45,200,000	140,000	35,000	62,550,000	4,050	40,000	157,500,000	94,950,000	2,025
40	Mansur	37	2	16,800,000	11,250,000	1,425,000	17,615,000	140,000	35,000	47,265,000	5,000	40,000	90,000,000	42,735,000	2,500
41	Sandi	43	1	15,750,000	2,520,000	1,875,000	25,800,000	70,000	17,500	46,032,500	3,600	40,000	135,000,000	88,967,500	3,600
42	Salim	56	1	6,300,000	600,000	1,650,000	8,875,000	70,000	17,500	17,512,500	950	40,000	31,500,000	13,987,500	950
43	Basruddin	40	2	7,700,000	900,000	2,520,000	11,475,000	140,000	35,000	22,770,000	1,750	40,000	67,500,000	44,730,000	875
44	Amri	45	1.5	4,400,000	300,000	1,345,000	4,850,000	105,000	26,250	11,026,250	1,600	40,000	54,000,000	42,973,750	1,067
45	Herman	41	0.5	-	600,000	485,000	2,650,000	35,000	8,750	3,778,750	700	40,000	24,750,000	20,971,250	1,400
46	Andika	65	1	12,600,000	-	1,020,000	8,800,000	70,000	17,500	22,507,500	1,500	40,000	45,000,000	22,492,500	1,500
47	Rustam	44	1	9,450,000	-	595,000	6,500,000	70,000	17,500	16,632,500	1,200	40,000	42,750,000	26,117,500	1,200
48	Dani	46	6	25,200,000	1,800,000	5,225,000	42,000,000	420,000	105,000	74,750,000	4,000	40,000	157,500,000	82,750,000	667
49	Nasir	35	4	16,800,000	-	3,550,000	12,375,000	280,000	70,000	33,075,000	2,400	40,000	67,500,000	34,425,000	600
50	Hafid	37	2	14,385,000	750,000	1,425,000	22,850,000	140,000	35,000	39,585,000	3,000	40,000	112,500,000	72,915,000	1,500

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Lanjutan Tabel Lampiran 13.

Tahun 2019													
No	Nama Responden	Biaya (Rp)						Total Biaya (TC)	Penerimaan ( R )			Pendapatan Usaha Tani, Rp (Pd)	Produktivitas (Kg/ha)
		Biaya Variabel (VC)				Biaya Tetap (FC)			Produksi (kg (Yi)	Harga (Rp (Pyi)	Total Penerimaan (TR)		
		Pupuk Organik	Pupuk An Organik	Pestisida/Herbisida	Upah Kerja	Biaya Penyusutan Alat	Pajak Perkebunan						
1	2	18	19	20	21	22	23	24	25	26	27	28	29
26	Hafid	9,450,000	1,500,000	2,800,000	10,800,000	85,500	17,500	24,653,000	1,500	45,000	67,500,000	42,847,000	1,500
27	Hamka	-	1,800,000	4,850,000	10,825,000	85,500	17,500	17,578,000	1,325	40,000	48,000,000	30,422,000	1,325
28	Yusri	8,800,000	-	1,745,000	4,200,000	85,500	17,500	14,848,000	850	45,000	31,500,000	16,652,000	850
29	Safar	13,200,000	-	2,095,000	5,400,000	85,500	17,500	20,798,000	1,300	45,000	54,000,000	33,202,000	1,300
30	Mustamar	11,000,000	-	1,930,000	5,750,000	85,500	17,500	18,783,000	1,100	45,000	45,000,000	26,217,000	1,100
31	Rusdin	13,200,000	600,000	2,320,000	4,800,000	85,500	17,500	21,023,000	1,000	45,000	38,250,000	17,227,000	1,000
32	Akib	7,700,000	450,000	970,000	4,200,000	85,500	17,500	13,423,000	1,000	45,000	38,250,000	24,827,000	1,000
33	Jamal	13,200,000	-	1,770,000	3,225,000	85,500	17,500	18,298,000	1,300	45,000	58,500,000	40,202,000	1,300
34	Aksan	4,400,000	300,000	565,000	1,280,000	68,400	14,000	6,627,400	450	45,000	18,000,000	11,372,600	563
35	Haerun	7,700,000	600,000	1,985,000	4,600,000	85,500	17,500	14,988,000	1,000	45,000	45,000,000	30,012,000	1,000
36	Muchtar	9,900,000	-	860,000	7,800,000	85,500	17,500	18,663,000	1,200	45,000	45,000,000	26,337,000	1,200
37	Hamid	9,900,000	600,000	1,720,000	5,750,000	85,500	17,500	18,073,000	1,275	45,000	54,000,000	35,927,000	1,275
38	Ismail	6,600,000	600,000	2,170,000	3,825,000	85,500	17,500	13,298,000	1,000	45,000	38,250,000	24,952,000	1,000
39	Norman	14,300,000	-	1,675,000	83,500,000	171,000	35,000	99,681,000	4,000	45,000	157,500,000	57,819,000	2,000
40	Mansur	-	12,000,000	5,030,000	13,050,000	171,000	35,000	30,286,000	2,900	45,000	90,000,000	59,714,000	1,450
41	Sandi	12,000,000	2,010,000	4,175,000	17,500,000	85,500	17,500	35,788,000	3,200	45,000	135,000,000	99,212,000	3,200
42	Salim	3,150,000	1,350,000	3,220,000	10,650,000	85,500	17,500	18,473,000	780	45,000	31,500,000	13,027,000	780
43	Basruddin	7,875,000	750,000	2,520,000	11,800,000	171,000	35,000	23,151,000	1,700	45,000	67,500,000	44,349,000	850
44	Amri	5,500,000	600,000	1,345,000	7,800,000	128,250	26,250	15,399,500	1,500	45,000	54,000,000	38,600,500	1,000
45	Herman	5,500,000	-	485,000	3,250,000	42,750	8,750	9,286,500	550	45,000	24,750,000	15,463,500	1,100
46	Andika	-	1,200,000	1,370,000	7,800,000	85,500	17,500	10,473,000	1,450	45,000	45,000,000	34,527,000	1,450
47	Rustam	9,900,000	-	970,000	6,800,000	85,500	17,500	17,773,000	1,100	45,000	42,750,000	24,977,000	1,100
48	Dani	26,400,000	-	5,225,000	45,000,000	513,000	105,000	77,243,000	3,900	45,000	157,500,000	80,257,000	650
49	Nasir	18,526,000	-	3,550,000	13,500,000	342,000	70,000	35,988,000	1,700	45,000	67,500,000	31,512,000	425
50	Hafid	14,700,000	1,050,000	1,425,000	23,650,000	171,000	35,000	41,031,000	2,850	45,000	112,500,000	71,469,000	1,425

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Lanjutan Tabel Lampiran 13.

Tahun 2020													
No	Nama Responden	Biaya (Rp)						Total Biaya (TC)	Penerimaan ( R )			Pendapatan Usaha Tani, Rp (Pd)	Produktivitas (Kg/ha)
		Biaya Variabel (VC)				Biaya Tetap (FC)			Produksi (kg) (Yi)	Harga (Rp) (Pyi)	Total Penerimaan (TR)		
		Pupuk Organik	Pupuk An Organik	Pestisida/Herbisida	Upah Kerja	Biaya Penyusutan Alat	Pajak Perkebunan						
1	2	30	31	32	33	34	35	36	37	38	39	40	41
26	Hafid	15,600,000	-	3,925,000	14,850,000	87,500	17,500	34,480,000	1,200	45,000	54,000,000	19,520,000	1,200
27	Hamka	14,400,000	-	3,675,000	9,850,000	87,500	17,500	28,030,000	1,200	45,000	48,000,000	19,970,000	1,200
28	Yusri	9,600,000	-	1,720,000	5,700,000	87,500	17,500	17,125,000	700	45,000	31,500,000	14,375,000	700
29	Safar	14,400,000	900,000	1,720,000	5,700,000	87,500	17,500	22,825,000	1,200	45,000	54,000,000	31,175,000	1,200
30	Mustamar	12,000,000	-	1,930,000	5,750,000	87,500	17,500	19,785,000	1,000	45,000	45,000,000	25,215,000	1,000
31	Rusdin	14,400,000	-	2,250,000	6,200,000	87,500	17,500	22,955,000	850	45,000	38,250,000	15,295,000	850
32	Akib	8,400,000	-	2,095,000	6,650,000	87,500	17,500	17,250,000	850	45,000	38,250,000	21,000,000	850
33	Jamal	14,400,000	-	1,770,000	5,000,000	87,500	17,500	21,275,000	1,300	45,000	58,500,000	37,225,000	1,300
34	Aksan	7,200,000	-	560,000	2,375,000	70,000	14,000	10,219,000	400	45,000	18,000,000	7,781,000	500
35	Haerun	8,400,000	-	1,035,000	4,600,000	87,500	17,500	14,140,000	1,000	45,000	45,000,000	30,860,000	1,000
36	Muchtar	10,800,000	600,000	1,610,000	7,800,000	87,500	17,500	20,915,000	1,000	45,000	45,000,000	24,085,000	1,000
37	Hamid	10,800,000	-	1,720,000	5,750,000	87,500	17,500	18,375,000	1,200	45,000	54,000,000	35,625,000	1,200
38	Ismail	8,400,000	600,000	1,820,000	5,000,000	87,500	17,500	15,925,000	850	45,000	38,250,000	22,325,000	850
39	Norman	14,400,000	600,000	2,425,000	44,900,000	175,000	35,000	62,535,000	3,500	45,000	157,500,000	94,965,000	1,750
40	Mansur	27,000,000	11,000,000	5,170,000	32,750,000	175,000	35,000	76,130,000	2,000	45,000	90,000,000	13,870,000	1,000
41	Sandi	16,800,000	2,850,000	2,985,000	25,750,000	87,500	17,500	48,490,000	3,000	45,000	135,000,000	86,510,000	3,000
42	Salim	8,400,000	-	2,845,000	16,950,000	87,500	17,500	28,300,000	700	45,000	31,500,000	3,200,000	700
43	Basruddin	9,600,000	-	2,050,000	9,550,000	175,000	35,000	21,410,000	1,500	45,000	67,500,000	46,090,000	750
44	Amri	8,400,000	-	1,940,000	8,400,000	131,250	26,250	18,897,500	1,200	45,000	54,000,000	35,102,500	800
45	Herman	7,200,000	-	485,000	4,000,000	43,750	8,750	11,737,500	550	45,000	24,750,000	13,012,500	1,100
46	Andika	11,000,000	-	970,000	7,600,000	87,500	17,500	19,675,000	1,000	45,000	45,000,000	25,325,000	1,000
47	Rustam	10,800,000	600,000	595,000	8,600,000	87,500	17,500	20,700,000	950	45,000	42,750,000	22,050,000	950
48	Dani	36,000,000	-	5,225,000	42,000,000	525,000	105,000	83,855,000	3,500	45,000	157,500,000	73,645,000	583
49	Nasir	24,000,000	1,800,000	3,925,000	22,800,000	350,000	70,000	52,945,000	1,500	45,000	67,500,000	14,555,000	375
50	Hafid	16,800,000	1,500,000	2,700,000	21,820,000	175,000	35,000	43,030,000	2,500	45,000	112,500,000	69,470,000	1,250

Tabel Lampiran 14. Biaya Usahatani, pendapatan dan produktivitas tanaman petani lada di Desa Bantilang, Kecamatan Towuti Kabupaten Luwu Timur tahun 2018 sampai 2020

No	Nama Responden	Umur	Luas Lahan (Ha)	Tahun 2018											Pendapatan Usaha Tani, Rp (Pd)	Produktivitas (Kg/ha)
				Biaya (Rp)						Total Biaya (TC)	Penerimaan ( R )					
				Biaya Variabel (VC)			Biaya Tetap (FC)				Produksi (kg) (Yi)	Harga (Rp) (Pyi)	Total Penerimaan (TR)			
				Pupuk Organik	Pupuk An Organik	Pestisida/Herbisida	Upah Kerja	Biaya Penyusutan Alat	Pajak Perkebunan							
1	2	3	4	6	7	8	9	10	11	12	13	14	15	16	17	
51	Anto	34	1	7,700,000	600,000	860,000	3,600,000	70,000	17,500	12,847,500	750	40,000	30,000,000	17,152,500	750	
52	Muhctar	52	1	8,800,000	600,000	485,000	3,200,000	70,000	17,500	13,172,500	750	40,000	30,000,000	16,827,500	750	
53	Ilham	26	1.5	6,600,000	1,180,000	910,000	6,400,000	105,000	26,250	15,221,250	1,100	40,000	44,000,000	28,778,750	733	
54	Hermawanto	25	1.5	11,000,000	600,000	860,000	8,400,000	105,000	26,250	20,991,250	800	40,000	32,000,000	11,008,750	533	
55	Lucki	36	2	8,800,000	900,000	1,260,000	5,800,000	140,000	35,000	16,935,000	800	40,000	32,000,000	15,065,000	400	
56	Sahir	40	1	6,600,000	450,000	485,000	3,600,000	70,000	17,500	11,222,500	550	40,000	22,000,000	10,777,500	550	
57	Rakib	44	1	6,600,000	750,000	750,000	5,100,000	70,000	17,500	13,287,500	550	40,000	22,000,000	8,712,500	550	
58	Jamaluddin	40	2	12,100,000	710,000	970,000	5,200,000	140,000	35,000	19,155,000	1,100	40,000	44,000,000	24,845,000	550	
59	Anca	42	3.5	18,700,000	900,000	1,345,000	11,200,000	245,000	61,250	32,451,250	1,500	40,000	60,000,000	27,548,750	429	
60	Ikbal	37	4	22,000,000	2,020,000	2,145,000	12,700,000	280,000	70,000	39,215,000	1,400	40,000	56,000,000	16,785,000	350	
61	Suleman	46	1.5	7,700,000	900,000	1,345,000	7,000,000	105,000	26,250	17,076,250	925	40,000	37,000,000	19,923,750	617	
62	Vheli	24	2	8,800,000	600,000	970,000	6,000,000	140,000	35,000	16,545,000	950	40,000	38,000,000	21,455,000	475	
63	Jasliadi	34	2	11,750,000	600,000	970,000	5,200,000	140,000	35,000	18,695,000	1,200	40,000	48,000,000	29,305,000	600	
64	Jasmin	37	1.5	9,900,000	560,000	595,000	4,500,000	105,000	26,250	15,686,250	900	40,000	36,000,000	20,313,750	600	
65	Jaddal	47	2	11,000,000	560,000	820,000	8,000,000	140,000	35,000	20,555,000	1,150	40,000	46,000,000	25,445,000	575	
66	Chalung	45	1	6,600,000	300,000	430,000	2,300,000	70,000	17,500	9,717,500	600	40,000	24,000,000	14,282,500	600	
67	Miswar	27	1.5	8,800,000	-	595,000	3,600,000	105,000	26,250	13,126,250	800	40,000	32,000,000	18,873,750	533	
68	Imran	46	2	15,400,000	-	1,750,000	9,800,000	140,000	35,000	27,125,000	3,700	40,000	148,000,000	120,875,000	1,850	
69	Ramang	41	1	6,600,000	900,000	970,000	7,800,000	70,000	17,500	16,357,500	1,200	40,000	48,000,000	31,642,500	1,200	
70	Masding	48	8	22,000,000	4,800,000	2,975,000	23,600,000	560,000	140,000	54,075,000	11,000	40,000	440,000,000	385,925,000	1,375	
71	Eko Purwanto	29	1	8,800,000	-	1,020,000	3,600,000	70,000	17,500	13,507,500	750	40,000	30,000,000	16,492,500	750	
72	Iwan	30	2	8,800,000	-	1,560,000	9,200,000	140,000	35,000	19,735,000	1,400	40,000	56,000,000	36,265,000	700	
73	Ishak	37	2	13,200,000	900,000	1,370,000	9,400,000	140,000	35,000	25,045,000	900	40,000	36,000,000	10,955,000	450	
74	Udda	40	3	13,200,000	750,000	1,925,000	8,700,000	210,000	52,500	24,837,500	1,500	40,000	60,000,000	35,162,500	500	
75	Fatli	32	2.5	15,400,000	900,000	1,345,000	9,200,000	175,000	43,750	27,063,750	1,250	40,000	50,000,000	22,936,250	500	

Berlanjut.....

Lanjutan Tabel Lampiran 14

Tahun 2019													
No	Nama Responden	Biaya (Rp)						Total Biaya (TC)	Penerimaan ( R )			Pendapatan Usaha Tani, Rp (Pd)	Produktivitas (Kg/ha)
		Biaya Variabel (VC)				Biaya Tetap (FC)			Produksi (kg) (Yi)	Harga (Rp) (Pyi)	Total Penerimaan (TR)		
		Pupuk Organik	Pupuk An Organik	Pestisida/Herbisida	Upah Kerja	Biaya Penyusutan Alat	Pajak Perkebunan						
1	2	18	19	20	21	22	23	24	25	26	27	28	29
51	Anto	8,800,000	-	485,000	910,000	85,500	17,500	10,298,000	700	45,000	31,500,000	21,202,000	700
52	Muhctar	8,800,000	-	485,000	3,200,000	85,500	17,500	12,588,000	700	45,000	31,500,000	18,912,000	700
53	Ilham	9,900,000	-	1,420,000	7,600,000	128,250	26,250	19,074,500	1,000	45,000	45,000,000	25,925,500	667
54	Hermawanto	11,000,000	-	1,650,000	8,400,000	128,250	26,250	21,204,500	750	45,000	33,750,000	12,545,500	500
55	Lucki	8,800,000	-	970,000	5,800,000	171,000	35,000	15,776,000	780	45,000	35,100,000	19,324,000	390
56	Sahir	6,600,000	-	485,000	3,600,000	85,500	17,500	10,788,000	500	45,000	22,500,000	11,712,000	500
57	Rakib	7,700,000	-	860,000	5,800,000	85,500	17,500	14,463,000	450	45,000	20,250,000	5,787,000	450
58	Jamaluddin	13,200,000	-	970,000	4,200,000	171,000	35,000	18,576,000	1,000	45,000	45,000,000	26,424,000	500
59	Anca	18,700,000	-	1,345,000	10,600,000	299,250	61,250	31,005,500	1,400	45,000	63,000,000	31,994,500	400
60	lkbai	22,000,000	-	2,145,000	12,700,000	342,000	70,000	37,257,000	1,200	45,000	54,000,000	16,743,000	300
61	Suleman	7,700,000	-	1,345,000	6,200,000	128,250	26,250	15,399,500	900	45,000	40,500,000	25,100,500	600
62	Vheli	8,800,000	-	970,000	5,800,000	171,000	35,000	15,776,000	900	45,000	40,500,000	24,724,000	450
63	Jasliadi	14,300,000	-	970,000	5,200,000	171,000	35,000	20,676,000	1,000	45,000	45,000,000	24,324,000	500
64	Jasmin	9,900,000	-	595,000	4,500,000	128,250	26,250	15,149,500	850	45,000	38,250,000	23,100,500	567
65	Jaddal	11,000,000	-	820,000	6,200,000	171,000	35,000	18,226,000	1,125	45,000	50,625,000	32,399,000	563
66	Chalung	6,600,000	-	430,000	2,300,000	85,500	17,500	9,433,000	550	45,000	24,750,000	15,317,000	550
67	Miswar	9,900,000	-	595,000	3,600,000	128,250	26,250	14,249,500	775	45,000	34,875,000	20,625,500	517
68	Imran	15,400,000	900,000	1,750,000	9,200,000	171,000	35,000	27,456,000	3,500	45,000	157,500,000	130,044,000	1,750
69	Ramang	8,800,000	-	970,000	6,800,000	85,500	17,500	16,673,000	1,100	45,000	49,500,000	32,827,000	1,100
70	Masding	22,000,000	4,800,000	2,975,000	25,800,000	684,000	140,000	56,399,000	10,200	45,000	459,000,000	402,601,000	1,275
71	Eko Purwanto	8,800,000	300,000	970,000	3,600,000	85,500	17,500	13,773,000	600	45,000	27,000,000	13,227,000	600
72	Iwan	-	1,500,000	1,345,000	8,900,000	171,000	35,000	11,951,000	1,200	45,000	54,000,000	42,049,000	600
73	Ishak	13,200,000	-	1,345,000	9,400,000	171,000	35,000	24,151,000	850	45,000	38,250,000	14,099,000	425
74	Udda	13,200,000	300,000	1,420,000	8,200,000	256,500	52,500	23,429,000	1,200	45,000	54,000,000	30,571,000	400
75	Fatli	16,500,000	600,000	1,345,000	12,500,000	213,750	43,750	31,202,500	1,200	45,000	54,000,000	22,797,500	480

Berlanjut.....

Lanjutan Tabel Lampiran 14

Tahun 2020													
No	Nama Responden	Biaya (Rp)						Total Biaya (TC)	Penerimaan ( R )			Pendapatan Usaha Tani, Rp (Pd)	Produktivitas (Kg/ha)
		Biaya Variabel (VC)				Biaya Tetap (FC)			Produksi (kg) (Yi)	Harga (Rp) (Pyi)	Total Penerimaan (TR)		
		Pupuk Organik	Pupuk An Organik	Pestisida/ Herbisida	Upah Kerja	Biaya Penyusutan Alat	Pajak Perkebunan						
1	2	30	31	32	33	34	35	36	37	38	39	40	41
51	Anto	9,600,000	-	485,000	4,400,000	87,500	17,500	14,590,000	550	45,000	24,750,000	10,160,000	550
52	Muhctar	10,800,000	-	485,000	3,600,000	87,500	17,500	14,990,000	600	45,000	27,000,000	12,010,000	600
53	Ilham	10,800,000	450,000	1,420,000	7,600,000	131,250	26,250	20,427,500	950	45,000	42,750,000	22,322,500	633
54	Hermawanto	13,200,000	600,000	860,000	8,400,000	131,250	26,250	23,217,500	700	45,000	31,500,000	8,282,500	467
55	Lucki	8,800,000	-	970,000	5,800,000	175,000	35,000	15,780,000	650	45,000	29,250,000	13,470,000	325
56	Sahir	8,400,000	300,000	485,000	4,200,000	87,500	17,500	13,490,000	400	45,000	18,000,000	4,510,000	400
57	Rakib	8,400,000	-	485,000	5,000,000	87,500	17,500	13,990,000	400	45,000	18,000,000	4,010,000	400
58	Jamaluddin	14,400,000	-	970,000	5,200,000	175,000	35,000	20,780,000	850	45,000	38,250,000	17,470,000	425
59	Anca	21,600,000	-	1,720,000	11,200,000	306,250	61,250	34,887,500	1,200	45,000	54,000,000	19,112,500	343
60	lkbal	28,800,000	-	1,345,000	14,200,000	350,000	70,000	44,765,000	1,000	45,000	45,000,000	235,000	250
61	Suleman	-	-	1,345,000	5,600,000	131,250	26,250	7,102,500	750	45,000	33,750,000	26,647,500	500
62	Vheli	10,800,000	-	970,000	6,200,000	175,000	35,000	18,180,000	750	45,000	33,750,000	15,570,000	375
63	Jasliadi	20,400,000	-	970,000	5,200,000	175,000	35,000	26,780,000	900	45,000	40,500,000	13,720,000	450
64	Jasmin	-	750,000	595,000	4,700,000	131,250	26,250	6,202,500	700	45,000	31,500,000	25,297,500	467
65	Jaddal	12,000,000	-	820,000	5,100,000	175,000	35,000	18,130,000	900	45,000	40,500,000	22,370,000	450
66	Chalung	8,400,000	-	430,000	2,300,000	87,500	17,500	11,235,000	450	45,000	20,250,000	9,015,000	450
67	Miswar	10,800,000	-	595,000	3,600,000	131,250	26,250	15,152,500	700	45,000	31,500,000	16,347,500	467
68	Imran	19,200,000	-	1,420,000	11,800,000	175,000	35,000	32,630,000	3,000	45,000	135,000,000	102,370,000	1,500
69	Ramang	8,400,000	900,000	970,000	6,000,000	87,500	17,500	16,375,000	900	45,000	40,500,000	24,125,000	900
70	Masding	24,000,000	4,200,000	2,975,000	27,600,000	700,000	140,000	59,615,000	9,000	45,000	405,000,000	345,385,000	1,125
71	Eko Purwanto	10,800,000	-	970,000	4,500,000	87,500	17,500	16,375,000	500	45,000	22,500,000	6,125,000	500
72	Iwan	14,400,000	-	970,000	10,800,000	175,000	35,000	26,380,000	800	45,000	36,000,000	9,620,000	400
73	Ishak	13,200,000	600,000	970,000	9,400,000	175,000	35,000	24,380,000	700	45,000	31,500,000	7,120,000	350
74	Udda	14,400,000	-	1,420,000	8,400,000	262,500	52,500	24,535,000	900	45,000	40,500,000	15,965,000	300
75	Fatli	18,000,000	-	1,345,000	10,000,000	218,750	43,750	29,607,500	1,000	45,000	45,000,000	15,392,500	400

Tabel Lampiran 15. Hasil analisis uji beda rata-rata produktivitas tanaman lada milik petani tahun 2018 sampai tahun 2020 di Kecamatan Towuti Kabupaten Luwu Timur melalui Program SPSS

<b>Group Statistics</b>										
	Tahun	N	Mean	Std. Deviation	Std. Error Mean					
Produktivitas	2020	75	789.36	424.893	49.062					
	2019	75	920.61	476.681	55.042					

  

<b>Independent Samples Test</b>										
		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Produktivitas	Equal variances assumed	.985	.323	-1.780	148	.077	-131.253	73.735	-276.962	14.455
	Equal variances not assumed			-1.780	146.085	.077	-131.253	73.735	-276.978	14.471

  

<b>Group Statistics</b>										
	Tahun	N	Mean	Std. Deviation	Std. Error Mean					
Produktivitas	2020	75	789.36	424.893	49.062					
	2018	75	1063.40	557.809	64.410					

  

<b>Independent Samples Test</b>										
		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Produktivitas	Equal variances assumed	4.598	.034	-3.385	148	.001	-274.040	80.968	-434.042	-114.038
	Equal variances not assumed			-3.385	138.244	.001	-274.040	80.968	-434.136	-113.944

  

<b>Group Statistics</b>										
	Tahun	N	Mean	Std. Deviation	Std. Error Mean					
Produktivitas	2019	75	920.61	476.681	55.042					
	2018	75	1063.40	557.809	64.410					

  

<b>Independent Samples Test</b>										
		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Produktivitas	Equal variances assumed	1.419	.235	-1.685	148	.094	-142.787	84.725	-310.214	24.641
	Equal variances not assumed			-1.685	144.489	.094	-142.787	84.725	-310.247	24.674

Tabel Lampiran 16. Hasil analisis uji beda rata-rata pendapatan petani tanaman lada tahun 2018 sampai tahun 2020 di Kecamatan Towuti Kabupaten Luwu Timur melalui Program SPSS

<b>Group Statistics</b>										
	Tahun	N	Mean	Std. Deviation	Std. Error Mean					
Produktivitas	2020	75	29742633.29	4.220E7	4872652.327					
	2019	75	35986788.00	4.763E7	5499646.546					

  

<b>Independent Samples Test</b>										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
Produktivitas	Equal variances assumed	.003	.956	-.850	148	.397	-6244154.707	7347710.721	-2.076E7	8275821.725
	Equal variances not assumed			-.850	145.883	.397	-6244154.707	7347710.721	-2.077E7	8277558.585

  

<b>Group Statistics</b>										
	Tahun	N	Mean	Std. Deviation	Std. Error Mean					
Produktivitas	2020	75	29742633.29	4.220E7	4872652.327					
	2018	75	38405850.00	4.605E7	5317011.703					

  

<b>Independent Samples Test</b>										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
Produktivitas	Equal variances assumed	.104	.748	-1.201	148	.232	-8663216.707	7212028.435	-2.292E7	5588634.909
	Equal variances not assumed			-1.201	146.887	.232	-8663216.707	7212028.435	-2.292E7	5589525.208

  

<b>Group Statistics</b>										
	Tahun	N	Mean	Std. Deviation	Std. Error Mean					
Produktivitas	2019	75	35986788.00	4.763E7	5499646.546					
	2018	75	38405850.00	4.605E7	5317011.703					

  

<b>Independent Samples Test</b>										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
Produktivitas	Equal variances assumed	.061	.806	-.316	148	.752	-2419062.000	7649622.578	-1.754E7	1.270E7
	Equal variances not assumed			-.316	147.832	.752	-2419062.000	7649622.578	-1.754E7	1.270E7





Gambar Lampiran 1. Kondisi tanaman lada pada tiga desa lokasi penelitian di Kecamatan Towuti Kabupaten Luwu Timur



Gambar Lampiran 2. Kunjungan lapangan dan observasi pada kebun lada di Kecamatan Towuti Kabupaten Luwu Timur



Gambar Lampiran 3. Wawancara dengan petani tanaman lada di Kecamatan Towuti Kabupaten Luwu Timur