

Income Analysis of Corn Farming

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ABSTRACT

This study was conducted with the aim of determining the income generated by corn farming. Respondents were selected randomly, with a total of 52 people. The analysis method used was quantitative descriptive. The results of the study show that the average corn farm production in one planting season was 134,900 kg/MT and the average total revenue obtained was IDR 8,349,423/MT, while the average total production cost incurred was IDR 4,011,954/MT and the average total profit (income) obtained was IDR 4,337,470/MT

INTRODUCTION

Indonesia is an agricultural country with vast agricultural land. The Central Statistics Agency (BPS) recorded Indonesia's agricultural land area in 2019 as 7.1 million hectares (ha). Indonesia is also known as an agricultural country because most of its population works in agriculture or farming. BPS published Indonesia's Employment Data for August 2018. Based on the National Labor Force Survey (Sakernas) in August 2018, around 28.79 percent of Indonesia's population worked in the agricultural sector as their main occupation. In addition, in 2018 the agricultural sector contributed to Indonesia's economic growth, namely the Gross Domestic Product, by 13.53 percent. The agricultural sector makes an important contribution to the country's economy (www.kompas.com).

Corn is an important food crop because it is the second largest source of carbohydrates after rice. Corn can also be used as a raw material for industries such as animal feed and ethanol production (Purwono and Hartono 2005). Corn is the second largest contributor to the Gross Domestic Product (GDP) after rice (Zubachtiroddin et al, 2007). In addition, corn is also a magnet for the growth of the upstream industry and a driver of agribusiness and commercial downstream industry growth (Ditjentan, 2010).

As one of the largest corn-producing regions in Indonesia, South Sulawesi Province has considerable agricultural natural resource potential. Of the 399,173 ha of agricultural land available for development, approximately 266,045 ha (66.06%) is intended for annual crops, 69,725 hectares (17.5%) for seasonal crops, and the remaining 63,403 hectares (15.9%) for paddy rice (Agricultural Research and Development Agency, 2019). The data on available land area shows that there are great opportunities for increasing the productivity of agricultural commodities such as corn, which is a type of seasonal crop, because the more land there is, the more food crops can be planted.

The Jeneponto District Agricultural Office (2022) recorded corn production data for 2021 showing that Jeneponto District produced 485,087.11 tons of corn from a harvested area of 65,120.50 hectares, contributing to the total corn production of 7.45 tons and making it one of the largest corn-producing areas in South Sulawesi. Manjangloe Village is one of 11 subdistricts in Jeneponto Regency that supplies corn to South Sulawesi Province. This can be seen from the fact that the majority of the community are farmers who grow corn as their main economic activity. Of the total 749 farmers in Manjangloe Village, 520 or 65.82% are corn farmers. Corn cultivation in this village covers an area of 64.18 hectares and is the second priority commodity after rice cultivated by farmers in Manjangloe Village. Therefore, corn farming, especially yellow corn, carried out by local farmers plays a role in supporting community welfare in terms of providing employment opportunities and increasing community income. (Manjangloe Subdistrict Office, 2022).

Income is one indicator used to measure the welfare of an individual or community, so that community income reflects the economic progress of a community (Sukirno 2012:26). In farming, income is closely related to the level of production achieved; if production levels increase, income will also tend to

increase. Farming activities aim to achieve agricultural production, which in turn is expected to increase income. Efforts to increase income from farming depend heavily on the amount of production costs incurred, particularly for land, seeds, fertilizers, and labor, which affect the amount of revenue and income obtained by farmers/respondents from their farming activities (Irwan et al., 2019).

LITERATURE REVIEW

1. Corn Farming

Agricultural enterprises are a collection of natural resources found in a particular location that are necessary for agricultural production, such as soil and water, improvements made to the land, sunlight, buildings constructed on the land, and so on. Agricultural enterprises can take the form of crop cultivation or livestock farming. In agricultural economics, a distinction is made between productivity and economic productivity in farming. In economic terms, the location or distance of a farm from the market is very important. If two farms have the same productivity, the farm closer to the market has a higher value because its economic productivity is greater (Wahyuni, 2021).

Agricultural economics is the study of how individuals allocate available resources effectively and efficiently to obtain high profits at a given time. It is considered effective if farmers can allocate their resources optimally, and it is considered efficient if the utilization of these resources produces an output that exceeds the input (Soekartawi in Darwis, 2017).

Agriculture can be defined as the science that studies how a person manages and coordinates production factors such as land and the surrounding environment as capital so as to provide the best possible benefits. It can also be defined as the science that studies the ways in which farmers determine, organize, and coordinate production factors as effectively and efficiently as possible so that their efforts provide maximum income (Suratyah in Wahyuni and Masita, 2021).

Farming is an activity in which a person works with the natural environment to obtain food and raw materials that can then be made into something else. In this type of activity, there are various levels, starting from the simplest, where humans only harvest without planting, so that the role of human labor is very small, only for harvesting. At a higher level, simple tools are used to cultivate the land and human labor is paid. Farming is also an activity in which a person coordinates production factors such as land, labor, and capital so as to provide the most effective and efficient benefits possible in order to generate the maximum possible income for themselves. Broadly speaking, there are two forms of farming, namely family farming and agricultural companies (plantations, estates, enterprises). Generally, what is meant by farming is a family business, while the other is an agricultural company (Suratyah in Wahyuni and Masita, 2021).

2. Corn Crop

Corn, as one of the main agricultural commodities producing carbohydrates, is familiar to people around the world. This commodity is a staple food. In very poor rural areas, corn is commonly used as a daily food source (food) as a substitute for rice. In fact, in some areas in Indonesia, corn is used as a staple food. Therefore, as a major source of carbohydrates, it plays an important role as a food reserve when rice production declines and is insufficient to meet the needs of the community (Bambang, 2007).

Corn is a grain crop (cereal) and is classified as an annual plant (short-lived). Corn plants produce only once, after which they die. Corn plants grow upright to a height of 1–3 m, depending on the variety. They do not branch. This plant originates from America. (Bambang, 2007).

Corn is a very important commodity because it is used in the food, animal feed, and energy industries. Therefore, corn farming has considerable income potential, especially if it is well managed and adopts the right agricultural technology.

3. Production

Production is the activity of utilizing the resources available in a company to produce goods or services that have value. Through process technology, the inputs or resources owned by the company will be used to produce goods/services. Efforts to optimize agricultural management require a good understanding and implementation of the key elements of agriculture. These key elements are called production factors (inputs). The agricultural production process is the process of combining agricultural production factors to produce output (agricultural production). This is in accordance with the definition of farming in Permentan R.I. No.18 of 2018, which states that farming is an activity in the agricultural sector ranging from cultivation, post-harvest handling, processing of production facilities, marketing of products, and supporting services (Purba et al., 2020).

Muin (2020) explains that optimal agricultural production is production that can generate products/output that provide profits. The factors of production within it support each other so that the results obtained are of high quality. The amount of production obtained in a production process is determined based on the use of production factors.

4. Cost

In farming, cost procurement is one of the most essential factors of production. Production costs are all funds and other expenses used as farming capital to obtain a product (Rochman 2019). The amount of costs incurred in a production activity depends on the number of products to be produced. If the number of goods produced remains constant, the costs incurred will also remain constant. Conversely, if the number of goods produced changes, the costs incurred will also change. Costs in farming can be divided into two categories:

1. Fixed costs are expenses incurred regardless of the volume of production, such as taxes and other similar expenses.
2. Variable costs are expenses incurred whose amount is influenced by production volume, such as production costs, namely labor, seeds, fertilizers, and pesticides/herbicides.

The total costs incurred in production activities are referred to as total costs. Suratiyah in Ashari (2020) explains that total costs are obtained by adding fixed costs and variable costs. Mathematically, total production costs can be calculated using the following formula:

$$TC = TFC + TVC$$

Information:

TC (Total Cost)	= Total Cost
TFC (Total Fixed Cost)	= Fixed Fees
TVC (Total Variable Cost)	= Variable Fees

5. Acceptance

Revenue is the product of production volume and product selling price. To maximize profits in producing a good, there are two main things that an entrepreneur must focus on, namely cost and revenue. The definition of agricultural revenue is the product of production volume and product selling price. Revenue consists of two types, namely net revenue and gross revenue in a farming business (Ratu et al., 2021). The value of income from farming carried out by farmers is greatly influenced by the farmers' own decisions; the more they produce, the higher their income will be.

The amount of income earned by farmers from their farming activities can be calculated using the mathematical formula according to Soekartawi in Rahmad (2021) as follows:

$$TR = P \times Q$$

Where:

TR (Total Revenue)	= Total receipts
P (Price)	= Selling Price
Q (Quantity)	= Production Quantity

6. Income

Income is compensation for all inputs used in a production process. Mathematically, gross income (revenue) from farming is obtained by multiplying the amount of production by the selling price of the product. Meanwhile, net income (revenue) is the difference between gross income (revenue) and total expenses in a production process, which consists of fixed costs and variable costs (Ali 2019).

Irawati (2016) states that the purpose of farming activities is to obtain profits or income for farmers. Fidaus in Damayanti (2019) explains that profit is the difference between revenue and total expenses. Profit, which is income from farming activities, can be calculated using the following mathematical formula:

$$I = TR - TC$$

Where:

I (Income)	= Income
TR (Total Revenue)	= Total Acceptance
TC (Total Cost)	= Total Cost

The income farmers earn from their farming activities depends on the combination of production factors used to maximize production yields. The size of these production yields depends on farmers' decisions in allocating their farming resources based on existing regulations regarding land use, the amount of seeds, fertilizers, pesticides, and labor in running their farms (Harianto et al., 2019).

METHODOLOGY

1. Time and Location

This research was conducted in Manjangle Village, Tamalatea District, Jeneponto Regency, 2024.

2. Sample Determination Technique

According to Arikanto (2006), the population is the entire subject of the study. The population is the total number of subjects that is the result of measurement or calculation. Meanwhile, a sample is a part of the number and characteristics possessed by the population (Sugiyanto, 2008). The population in this study consisted of 520 corn farmers, so a sample of 10% of the population was determined, resulting in 52 people. Sampling was conducted using simple random sampling.

3. Data Types and Sources

In this study, the author used quantitative descriptive research because the data obtained were in the form of numbers that would be analyzed further. The data sources used in this study were primary data and secondary data, as follows:

- a) Primary data refers to data obtained through observation activities conducted directly in the field or from interviews with respondent farmers, namely corn farmers.

- b) Secondary data refers to data obtained and collected from various sources or from specific parties and agencies deemed to have data relevant to this study.

4. Data Collection Techniques

The data collection techniques used in this study are:

1. Observation is conducting direct observation of phenomena found in the field that are related to the focus of the research.
2. Interviews, which is a data collection technique that involves direct questioning of relevant parties and face-to-face interaction with respondent farmers and informants using questionnaires.
3. Documentation, in this study, is used to assist in data collection from the research area by exploring data that has already been documented.

5. Data Analysis Techniques

The analysis method used in processing the research data is the income analysis model. Soekartawi (2006) states that farm income is the revenue earned by farmers after deducting all costs, where farm revenue is the product of production and selling price, while costs are the total expenses incurred in farming. This analysis model is used to answer the first question posed in this study. The formula is as follows:

Analysis of the Cost of Corn Farming

$$TC = TFC + TVC$$

Where:

TC (Total Cost)	= Total Cost
TFC (Total Fixed Cost)	= Fixed Costs
TVC (Total Variable Cost)	= Variable Costs

Analysis of Corn Farming Revenue

$$TR = Q \times P$$

Where:

TR (Total Revenue)	= Production Quantity
Q (Total Production)	= Acceptance
P (Price)	= Selling Price

Corn Farming Income Analysis

$$I = TR - TC$$

Where:

I (Income)	= Income
TR (Total Revenue)	= Total Receipts
TC (Total Cost)	= Total Cost

RESEARCH RESULT

Table 1. Profits of Farmers Responding to Corn Farming in Manjangloe Village, Tamalatea District, Jeneponto Regency, 2024 (Rp/Ha/MT)

No	Description Average	Value	
1.	Acceptance		
-	Production (Kg)	134.900	2.594
-	Price (Rp)		3.227
Total Revenue (TR) (Rp)		434.170.000	8.349.423
2.	Cost		
	A. Variable Costs		
-	Seed (Rp)	39.900.000	767.308
-	Fertilizer (Rp)	60.315.000	1.159.904
-	Herbisida (Rp)	32.200.000	619.231
-	Land Preparation Workforce (Rp)	13.850.000	266.346
-	Cultivation Workforce (Rp)	11.150.000	214.423
-	Fertilization Workforce (Rp)	7.350.000	141.346
-	OPT Handling Workforce (Rp)	3.250.000	62.500
-	Harvesting Workforce (Rp)	34.240.000	658.462
Total Variabel Cost (TVC) (Rp)			3.889.519
	B. Fixed Fees		
-	Land Tax	1.984.500	38.163
-	Shrinkage of Sprayer Tools (Rp)	3.676.500	70.702
-	Shrinkage of the machete tool (Rp)	320.750	6.168
-	Shrinkage of the Sickle Tool (Rp)	384.833	7.401
Total Fixed Costs (TFC) (Rp)		6.366.583	122.434
Total Production Cost (TC=TVC+TFC) (Rp)		208.621.583	4.011.954
3.	Income (TR-TC)	225.548.417	4.337.470

Source: Primary Data After Processing, 2024

1. Large Production of Usaha Tani Corn

Corn Farming Production is the physical amount of crop yield obtained by a farmer, expressed in (Rp/planting season). In producing corn crops, farmers always strive to obtain the maximum amount of production. The amount of production for each farmer generally varies. This can be influenced by the use of seeds, fertilizers, pesticides, and the varying sizes of land managed by farmers. Table 8 shows that the total corn production obtained by corn farmers in Manjangle Village was 134,900 kg, with an average production of 2,594 kg/planting season.

2. Corn Farming Income Analysis

Income analysis is conducted to determine the income of farmers on dry land obtained from corn farming. Income analysis explains the cost structure and income from corn farming. Corn farming income analysis is generally calculated as the difference between production revenue and expenses incurred.

Production revenue is the product of the amount of agricultural production and the unit selling price. To obtain the value of revenue and farmer profits, it is necessary to analyze the costs incurred, commonly referred to as farmer capital in agriculture. This cost analysis includes variable cost analysis and fixed cost analysis. The following data presents the analysis of corn farming revenue for farmers in Manjangle Village:

Acceptance

Revenue is the amount of money farmers earn from selling corn or other agricultural products (Rp/season). Based on Table 1, from a total of 134,900 kg of corn produced in Manjangle Village, the total revenue was Rp 434, 170,000, with an average income per season of IDR 8,349,423, obtained from the selling price of corn produced by 30 farmers in Manjangle Village, which ranged from IDR 3,100 to IDR 3,500. The selling price varies depending on the condition of the corn produced; the lower the moisture content of the corn, the higher the selling price. In addition to moisture content, corn prices also vary based on the fluctuating market value of corn. Corn produced by farmers in Manjangle Village is sold to collectors, who visit the farmers' locations. Based on the total number of farmer respondents, the average selling price of corn is IDR 3,227, which farmers consider to be quite high compared to previous corn selling prices.

Variable Costs

Variable costs are costs incurred by corn farmers, the value of which can fluctuate because they are influenced by the amount of production in a single production period. Table 1 shows that the variable costs used for corn farming consist of: seed costs, fertilizer costs, pesticide costs, planting labor costs, harvesting labor costs, and transportation costs, with total expenditure of IDR 202,255,000 and average variable cost usage of IDR 3,889,519 per planting season. The largest variable cost was fertilizer costs, amounting to IDR 60,315,000, while the smallest cost was labor costs for pest control, amounting to IDR 3,250,000 for corn farming in Manjangle Village.

Fixed Fees

Fixed costs are costs incurred by corn farmers that are not affected by the amount of production. Fixed costs in corn farming managed by farmers in Manjangloe Village consist of land tax, depreciation of hand sprayers, depreciation of machetes, and depreciation of sickles. Table 1 shows that the total fixed costs for corn farming in Manjangloe Village amounted to IDR 6,366,583, with an average cost of IDR 122,434 per planting season. The largest fixed cost is the depreciation cost of hand sprayers, which is IDR 3,676,500, while the smallest cost is the depreciation cost of machetes, which is IDR 320,750.

Total Cost

Total costs are the sum of variable costs and fixed costs incurred for a farming activity. Table 1 shows that the total costs incurred for corn farming in Manjangloe Village in one planting season amounted to Rp 208,621,583, with an average total cost of Rp 4,011,954 per planting season.

Income

Profit is the amount of value received by corn farmers as income from the farms they manage. To determine the amount of income received by corn farmers, a profit (income) analysis must be conducted. Profit (income) analysis is calculated based on the value of income minus the total costs incurred by farmers in managing their farms.

Based on Table 1, it is known that the total revenue from corn farming in Manjangloe Village was IDR 434,170,000 and the total expenses incurred were IDR 208,621,583, resulting in a profit of IDR 225,548,417 with an average profit of IDR 4,337,477. (income) of corn farming in Manjangloe Village is Rp 225,548,417 with an average profit of Rp 4,337,470/planting season.

DISCUSSION

Based on research conducted on corn farmers in Manjangloe Village, Tamalatea Subdistrict, Jeneponto Regency, South Sulawesi Province, regarding the analysis of corn farming income, namely the amount of income for corn farming in Manjangloe Village, Tamalatea Subdistrict, Jeneponto Regency, South Sulawesi Province, amounted to IDR 225,548,417 per planting season, with an average income (profit) of IDR 4,337,470 per planting season, obtained from an average land area of 0.5 hectares.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of research conducted on corn farmers in Manjangloe Village, Tamalatea District, Jeneponto Regency, South Sulawesi Province, it can be concluded that corn farming has a fairly good production level and corn farming income provides significant profits even though the land managed is relatively small.

Based on the analysis of corn farming income, several recommendations can be made to improve the sustainability and profitability of corn farming in Manjangloe Village, as follows:

Increased Productivity:

Although corn production in this area is relatively good, efforts to increase productivity per hectare are very important. Therefore, farmers can be provided with training and guidance on modern agricultural techniques, efficient fertilization, and better management of pests and plant diseases.

Sustainable Natural Resource Management:

In order for corn farming to be sustainable in the long term, it is important to pay attention to the sustainable use of land and natural resources. Environmentally friendly agricultural practices, such as crop rotation or agroforestry, can be good options for maintaining soil fertility and reducing losses due to natural disasters or pest attacks.

Product Diversification:

Given the abundant corn yield, farmers may consider diversifying their products, such as processing corn into processed products to increase their selling value and open up new market opportunities.

Market Access and Partnerships:

In order to increase farmers' income, it is necessary to open up wider and more secure market access. Establishing partnerships with corn processing companies or local corn producers can help farmers obtain better and more stable prices.

Improvement of Infrastructure and Production Facilities:

To support corn farming activities, the development of infrastructure such as better farm roads and the provision of more efficient production facilities (high-quality seeds, fertilizers, agricultural tools) are essential. Support from local governments in this regard will greatly help farmers increase their productivity and income.

ADVANCED RESEARCH

Recommendations for Further Research: Further research could deepen the analysis by:

- Comparing the income of corn farmers in Manjangloe Village with other areas that have similar corn farming conditions.
- Conducting a more in-depth study of the impact of climate change on corn production and farmer income.
- Researching the long-term sustainability of corn farming by considering environmental and economic factors.

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REFERENCES

- Ali, N., Saleh, Y., & Murtisari, A. (2019). Pemanfaatan Waktu Luang Petani Jagung Di Kecamatan Randangan Kabupaten Pohuwato. *Agronesia: Jurnal Ilmiah Agribisnis*, 3(2).
- Arikanto 2006. *Prosedur Penelitian Suatu Pendekatan Praktek..* PT. Rineka Cipta: Jakarta.
- Ashari, U. (2020, November). Analisis Pendapatan dan Kelayakan Usahatani Jagung Di Kecamatan Patilanggio Kabupaten Pohuwato Provinsi Gorontalo. In *Prosiding Seminar Nasional Pembangunan dan Pendidikan Vokasi Pertanian* 1(1).
- Badan Litbang Pertanian. 2019. *Ketersediaan Lahan Untuk Pengembangan Pertanian Indonesia*.
- Bambang. 2007. *Mengenai Lebih Dekat Varietas-Varietas Unggul Jagung*. Penerbit Sinar Baru Algensindo. Bandung.
- Damayanti, A. (2019). Analisis Usahatani Jagung Hibrida Pada Lahan Tadah Hujan Di Kecamatan Muara Badak Kabupaten Kutai Kartanegara. *Jurnal Magrobis*, 19(2).
- Dinas Pertanian Kabupaten Jeneponto (2021). *Kabupaten Jeneponto Dalam Angka 2022*, 251.
- Fajri, F., Zulkifli, Z., & Sadat, M. A. (2019). Prospek Pengembangan Tanaman Jagung Hibrida Pada Lahan Tadah Hujan Di Kecamatan Bontotiro Kabupaten Bulukumba. *Jurnal Agribis*, 9(1).
- Gischa, S. Indonesia Sebagai Negara Agraris. Desember 12, 2019. <https://kompas.com>.
- Hariato, F., Pata, A. A., & Sadat, M. A. (2019). Pendapatan Usaha Tani Jagung Hibrida Di Kecamatan Bontonompo Selatan, Kabupaten Gowa. *Jurnal Agribis*, 9(1).
- Irawati, M. R. (2016). *Kinerja Kelompok Tani Dalam Menunjang Pendapatan Usahatani Padi Sawah Di Desa Sidera Kecamatan Sigi Biromaru Kabupaten Sigi (Doctoral Dissertation, Tadulako University)*.
- Irwan, I., Dua, P., & Marliyah, M. (2019). Analisis Produksi dan Pendapatan Usahatani Jagung Hibrida Di Desa Kaliburu Kecamatan Sindue Tombusabora Kabupaten Donggala. *Jurnal Kolaboratif Sains*, 2(1)

- Mandang, M., Sondakh, M. F. L., & Laoh, O. E. H. (2020). Karakteristik Petani Berlahan Sempit Di Desa Tolok Kecamatan Tompas. *Agri- Sosioekonomi*, 16(1),
- Mardani, M., Nur, T. M., & Satriawan, H. (2017). Analisis Usaha Tani Tanaman Pangan Jagung Di Kecamatan Juli Kabupaten Bireuen. *Jurnal Sains Pertanian*, 1(3).
- Muin, M. (2020). Pengaruh Faktor Produksi Terhadap Hasil Produksi Merica Di Desa Era Baru Kecamatan Tellulimpoe Kabupaten Sinjai. *Economix*, 5(1).
- Purba, D. W., Thohiron, M., Surjaningsih, D. R., Sagala, D., Ramdhini, R. N., Gandasari, D., ... & Manullang, S. O. (2020). Pengantar Ilmu Pertanian. Yayasan Kita Menulis.
- Purwono dan Hartono. 2005. Bertanam Jagung unggul. Penebar Swadaya. Jakarta.
- Rochman, A. (2019). Analisis Usahatani Jagung Varietas Nk 22 (Studi Kasus Di Desa Junjung Kecamatan Sumbergempol Kabupatentulungagung). *Jurnal Agribis*, 5(1)
- Ratu, R. R., Pangemanan, P. A., & Katiandagho, T. M. (2021). Analisis Pendapatan dan Kelayakan Usaha Tani Jagung Di Desa Poopo Kecamatan Passi Timur Kabupaten Bolaang Mongondow. *Agri-Sosioekonomi*, 17(2).
- Rahmad, A. (2021). Analisis Usahatani Jagung Hibrida (*Zea Mays L*) Di Nagari Kinali Kecamatan Kinali Kabupaten Pasaman Barat. *Jurnal Research Ilmu Pertanian*, 1(2).
- Sugiono, 2017. Kajian Kepustakaan Kerangka Pemikiran, dan Hipotesis. <http://repository.um-palembang.ac.id>. Diakses Agustus 2022.
- Sugiyanto, 2008. Pasa Mosal. Cetakan Kedua, Alfabeta, Bandung.
- Sukirno, S. 2012. Makroekonomi Teori Pengantar Edisi Ketiga. Jakarta: Rajawali Pers.
- Tukan, M. L., Levis, L. R., & Wiendiyati, W. (2019). Perilaku Petani Terhadap Agribisnis Jagung Lamuru Di Desa Uiasa Kecamatan Semau Kabupaten Kupang. *Buletin Ilmiah Impas*, 20(3).
- Wahyuni, Tina Masita Henny. 2021. Analisis Usahatani Tanaman Hias (Krisan). *Vegetasi*, 17(2).

Zubachtiroddin, Pabbage MS, dan Subandi. (2007). Wilayah Produksi dan Potensi Pengembangan Jagung. Dalam Jagung Teknik Produksi dan Pengembangan. Badan Litbang Pertanian, Puslitbangtan, Hal 462–473.