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Author(s): Chelang A . Arslan, Enas Kayis

Keywords: Forecasting, ANN, PBNN, ANFIS., Precipitation.

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The Revenue Sharing of Agricultural Sector of Rice Through

Author(s): Nelly ., Rahmi ., Nurhayati ., Mahdani Ibrahim

Keywords: Mawah, landowner, Revenue sharing., Yield paddy, Economic resilience Peasants

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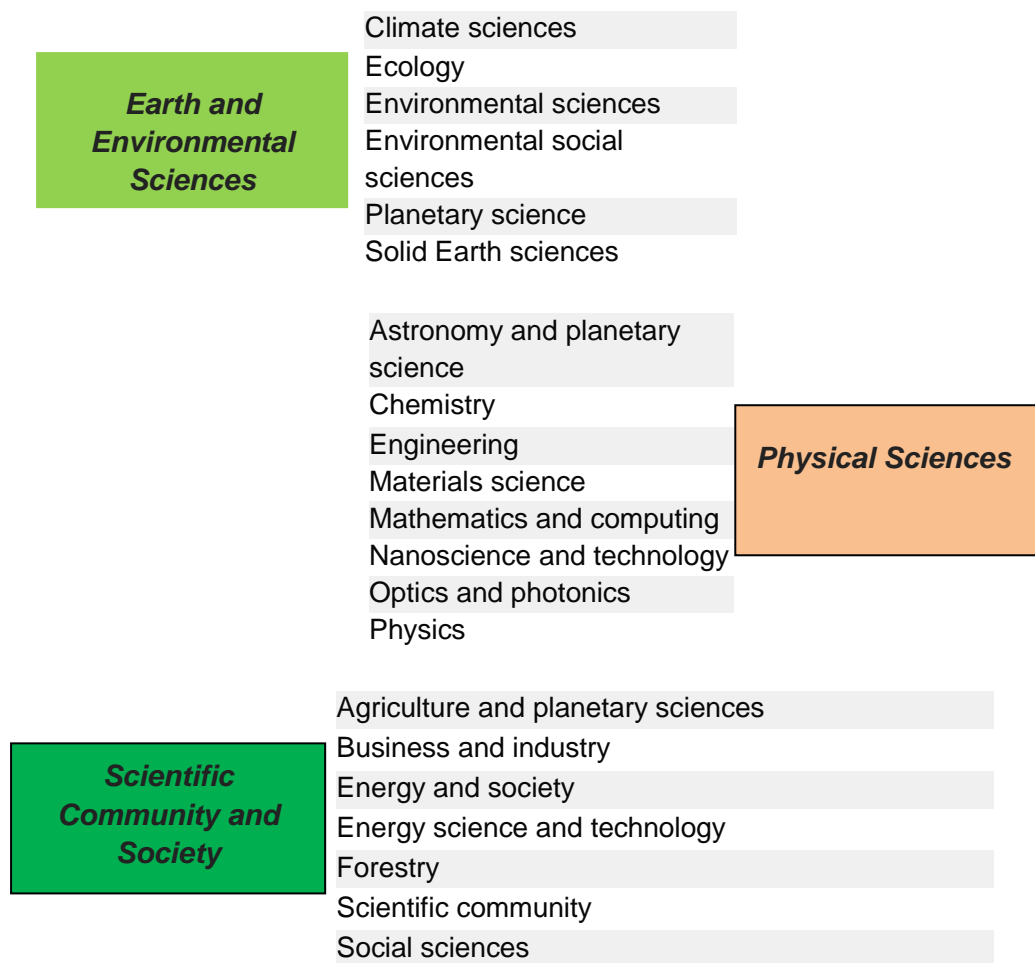
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THE REVENUE SHARING OF AGRICULTURAL SECTOR OF RICE THROUGH "MAWAH" SYSTEM (*RESEARCH IN KOTA BARO - ACEH BESAR*)



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ABSTRACT

Article History

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The practice of "mawah" has been going on in Aceh since the 16th century, this practice continues to roll to this day. "Mawah" is a customary practice in agricultural activities, especially in the sharing of rice cultivation. "Mawah" practice has helped the lives of the poor in Aceh. This study aims to examine the success of the practice of profit sharing system (Mawah) in the life of farmers in the countryside. In addition it also examines the level of economic resilience of people with the system "mawah". The sample consisted of 5 peasants and 3 paddy field owners. Methods of data collection by conducting interviews. Data analysis was done by qualitative method. Information obtained from interviews combined with the results that have been practiced, then taken conclusions. The results of the research found the practice of sharing of the system "Mawah" which has occurred in hereditary in Kota Baro, Regency of Aceh Besar. Besides, it also found the existence of economic resilience for people who practice "Mawah". In conclusion the practice of "Mawah" can protect them from the economic crisis.

Contribution/ Originality: This study is one of the studies that have been done before. The revenue-sharing system (mawah) that lasted until now in Kota Baro Aceh Besar is system by utilizing local wisdom. In the community, the "mawah" system can benefit both parties and be more dignified than others.

1. INTRODUCTION

Indonesia is known as an agrarian country where more than half of the population depends its livelihood on the agricultural sector, as the agricultural sector has been able to contribute to the livelihood of the Indonesian people and it is important in economic growth. In addition, the agricultural sector has also become a factor triggering the national economic growth, therefore, the agricultural sector until now still plays a role in the development of national economy Pane [1].

Farm land especially rice field is one of the planting place for the majority of Indonesian population who live in rural areas. Commodity of paddy is one of the commodities of cultivation. Rice is closely related to the needs of the people and can be used as a mean for survival. The increasing number of people causes the need for rice is

increasing Nurhayati [2]. However, rice production tends to stagnate and even decline and the welfare conditions of farmers themselves also decline [2].

In rural farming arrangements, in general the land tenure system can be classified into ownership, rent, profit (profit share), and mortgage status. Status of property rights is land that is owned and owned by individuals or groups or institutions / organizations. Iko [3] argued that the status of lease, profitability (profit sharing), and pledge are forms of land tenure where there is transfer of rights from landowners to others. This institutional form has become part of the rural community order in which its existence is dynamic between space and time. So it is seen that land is the main production factor in agricultural business. In other words, the existence of the land can be cultivated as a foundation in the production of farming that can bring opportunity in employment and earnings (income).

The "Mawah" system is one of the common revenue sharing strategies adopted by communities in rural Aceh. This revenue sharing system through "mawah" is a mutually beneficial way and considered more dignified than the "Pawn" or "Rent" way. The author is interested to examine the system of "Mawah" which has been practiced for generations, especially in Kota Baro sub-district. The "Mawah" system can be said as one of the local wisdom practiced in reducing poverty in Aceh. Is there a "Mawah" system in agricultural business activities in Kota Baro-sub-district can benefit farmers and also landowners. The results of this study will be able to contribute knowledge to all of us.

2. LITERATURE REVIEW

2.1. The Concept of Revenue Sharing According to the Law

The principle of justice and prosperity is a basic principle in land scarification in Indonesia. The principle has been regulated in Law Number 5 Year 1960 [4] Basic Regulation of Agrarian Principles. Article 16 states that land rights consist of: a. property rights, b. right of business, c. rights of use (of place), d. use rights, e. lease rights, f. land clearing rights, g. right to collect forest products, h. other rights not included in the above rights to be determined by law and temporary rights as mentioned in article 53 which read: temporary rights as referred to in article 16 paragraph (1) letter h, are liens, revenue sharing rights, riding rights and lease rights of agricultural lands are regulated to limit their properties that are contrary to this Law and the rights shall be abolished within a short period of time Purnami [5].

In Law Number. 2 of 1960 concerning Production Sharing Agreement (agricultural land) there is a regulation which regulates various matters concerning the agreement on the share of agricultural land. In Article 1 Paragraph (3) of Law Number 2 of 1960 concerning Production Sharing Agreement (agricultural land), that "revenue -sharing agreement is an agreement with any name held between the owner on one side and a person or legal entity on the other side" [6].

2.2. The Concept of Revenue Sharing in Islam

The principle of cooperation (agreement) which is widely known in Islamic Economy is the principle of revenue sharing. Agriculture as a field engaged in the real sector, also did not escape from the principle of revenue sharing cooperation. On the one hand, there are some people who own the land, but are unable to cultivate it. On the other hand, there are people who can afford to farm and garden, but have no farmland or plantation. So with the cooperation with the principle of revenue sharing, the two sides can make a system of mutually beneficial cooperation by empowering the farmland and the plantation. Islamic economic terms used for revenue-sharing cooperation in agriculture, including *Muzara'ah* (Harvest-Yield Profit Sharing) and *Musaqah* (Plantation Management Fee Based on Certain Portion of Yield) Abdullah [7]

2.3. The Concept of Revenue Sharing in Some Countries

Until now, the concept of revenue-sharing cooperation in agriculture is still practiced in various parts of the world and proven to increase work productivity. Not only by Muslim countries, cooperation with the revenue-sharing principle is also applied in non-Muslim majority countries. The UK Government (UK) proposes two forms of revenue-sharing system as an alternative to the remuneration system, which is cash dividend (based on output) and revenue sharing in share ownership [Poole and Jenkins \[8\]](#). In California, the revenue-sharing system is applied by agricultural companies to the management of farm workers with fair compensation [Strochlic and Hamerschlag \[9\]](#). In Korea, implementation of the revenue-sharing system can increase the productivity of workers by 10%, better than the implementation of team incentives or stock ownership [Koirala, et al. \[10\]](#) and [Dressler \[11\]](#).

2.4. The Revenue Sharing Concept of Agricultural Product Based on Local Wisdom in Indonesia

Farm-based farming management is also known in Indonesian culture with various titles such as *maro* (1: 1) and *mertelu* (1: 2) in Central Java, *Nengah* (1: 1) and *Jejuron* (1: 2) in Priangan, other names. In general, the agricultural production sharing agreement in Indonesia is regulated in Law no. 2 Year 1960 [\[3\]](#). This Agreement was issued under the provisions of customary law in Indonesia and was motivated by the inability or absence of opportunity for the landowners to cultivate their own land, and the absence or lack of land owned by the tiller farmers and the willingness of farmers to obtain additional cultivation [\[7\]](#).

According to [Abdullah \[7\]](#) management of farming with the pattern of revenue-sharing need to be preserved because it is in line with the principles of sharia (*muzara'ah*, *mukhabarah*, and *musaqah*). In addition, various studies mention this system has been able to increase productivity and income farmers in justice. However, there are several things that need to be improved from the management of the farming system, especially regarding the assertion of rights and obligations of landowners and smallholders who need to be explained in agreement in writing, reporting to local government (Head of Sub-district), and announcement by the Village Head. It is also contained in Law no. 2 of 1960 as the objective of the issuance of the Revenue Sharing Law to provide legal certainty to the tiller farmers and to assert the rights and obligations for the farmers and the landowners [\[6\]](#).

3. RESEARCH METHODS

3.1. Technique of Data Collection

This study uses two types of data namely primary data and secondary data. Primary data was obtained by conducting direct interviews with 4 farmland owners, 5 farmers, 3 community leaders, namely village head, *tuhapeut* (village supervisor), and sub-district head as the head of government of Kota Baro, Aceh Besar. It also uses questionnaires to obtain data in quantitative form. Secondary data is obtained through the documentation available at the village and sub-district government office, such as the size of the area, the number of farmers, the area of agricultural land and so on, which is related to the research object.

3.2. Data Analysis

The method of data analysis used in this study is qualitative techniques that emphasize more on the analysis of inductive inference process and on the analysis of the dynamics of relationships between observed phenomena by holding scientific logic, and the emphasis is on an effort to answer research questions through formal ways of thinking and argumentative. The data collected through interviews, observations and seminars will be processed with qualitative descriptive approaches, aiming to describe the categories relevant to the objectives to be achieved in the study, thus giving birth to the perfect research output as the research aimed to achieve.

To analyse the data qualitatively, the researcher pursues several techniques which are: (1) to observe the social phenomenon in the research location, (2) to identify problems by checking the interview data and answer the

questionnaire, (3) to categorize the information obtained, 4). To trace and explain categorization, (5) to describe categorization relationships, (6) to draw general conclusions.

4. RESULTS AND DISCUSSION

4.1. Geographical Situation of Research Sites

Kuta Baro is one of the sub-districts located in Aceh Besar district of Aceh province, Indonesia. The area of Aceh Besar is located on the line 5,050 - 5,750 North Latitude and 94.990 - 95.930 East Longitude.

Table-1. Area of sub-district according to villages and type of land use in Kota Baro Sub-district, 2016.

No	Name of the Villages	Type of Use			Village Area
		Farmland	Non-Farmland	Non-Agricultural Land	
1	2	3	4	5	6
1	Gue	28	0	14	42
2	BabahJurong	43	0	43	86
3	Lambro Deyah	14	0	13	27
4	Lam Baed	34	0	42	76
5	KruengAnoi	13	0	34	47
6	Cot Masam	22	7	8	37
7	Cot Mancang	81	15	45	141
8	BuengBakjok	69	27	64	160
9	Cot Beut	158	78	162	398
10	UjongBlang	129	73	240	442
11	Seupeu	16	0	33	49
12	Lam Neuheun	34	0	35	69
13	Lam Puuk	7	0	16	23
14	LambroeBileu	10	0	16	26
15	LampohKeude	0	0	44	44
16	Cot Peutano	20	0	25	45
17	Cot Cut	111	0	57	168
18	Lam Glumpang	7	0	14	21
19	MeunasahBakTrieng	22	0	12	34
20	Lam Asan	5	0	9	14
21	Lamceu	36	0	47	83
22	Cot Preh	105	38	250	393
23	Puuk	180	3	576	759
24	Lam Seunong	98	7	9	114
25	Lam Trieng	71	5	12	88
26	Beurangong	17	0	22	39
27	Rabue	148	0	27	175
28	Deyah	90	0	28	118
29	Cucum	27	0	24	51
30	Cot Yang	22	0	15	37
31	Cot Raya	21	0	23	44
32	LampohTarom	5	0	9	14
33	Aron	33	3	2	38
34	Lam Roh	16	1	3	20
35	BakBuloh	3	0	11	14
36	Lam Raya	69	0	447	516
37	TumpokLampoh	7	0	11	18
38	LambunotTanoh	44	7	318	369
39	LambunotPaya	84	0	325	409
40	Lamteube Mon Ara	22	2	6	30
41	LamteubeGeupula	5	0	8	13
42	Lam Alu Cut	23	1	31	55
43	Lam Sabang	21	0	9	30
44	Lam Alue Raya	22	0	9	31
45	LeupungUleeAlue	15	0	8	23
46	LeupungMesjid	94	4	9	107
47	Cot Lamme	98	29	443	570
Total		2.199 Ha	300 Ha	3.608 Ha	6.107 Ha

Source: Master File of Kota Baro Sub-district Office, 2017.

The area of Aceh Besar is 2,903.50 km², most of which is on land, and a small part of the archipelago. Approximately 10% of villages in Aceh Besar District are coastal villages, Aceh Besar District consists of 23 Sub-districts, 68 Residences and 604 villages. Kota Baro sub-district consists of 5 Residences with 61,07 km² (6,107 Ha) sub-districts consisting of 47 villages, namely Bung Cala with 10 villages, Leupung with 9 villages, Lamblang with 9 villages, Ateuk with villages 10, and Lamrabo there are 10 villages. and a small part of the archipelago. About 10% of villages in Aceh Besar District are coastal villages.

The area of Kuta Baro sub-district has a very wide land, and one of the land that is often used by the community is rice field. The yield of rice obtained by the community in the sub-district of Kuta Baro is very good, so it can be a source of community income. In general, the area of planting in Kuta Baro sub-district is 2,709 / Ha, with harvest area reaches 2,601 / ha and the total production reaches 17,427 / ton.

Table-2. Name of residences, Area and Number of Village in Kota Baro

Sub-district (as research sample)

No	Name of Residences	Area (Km ²)	Number of Village
1	Bung Cala	9,66	10
2	leupung	8,72	9
3	Lamblang	22,57	9
4	Ateuk	5,41	9
5	Lamrabo	14,70	10

Source: Master File of Kota Baro Sub-district Office, 2017

4.2. Characteristics of Population

Characteristics of population of Kuta Baro sub-district shows that the number of male is 13,096, while female is 13,143 people. In this case it illustrates that the female population is more than male (see Table 3).

Table-3. Number of population according to the villages and gender in Kota Baro,

sub-district 2016.

No	Name of Villages	Gender			
		Male	Female	Total	Sex Ratio
1	Gue	248	221	469	112
2	BabahJurong	687	677	1.364	101
3	Lambro Deyah	250	243	493	103
4	Lam Baed	444	467	911	95
5	KruengAnoi	568	549	1.117	103
6	Cot Masam	197	188	385	105
7	Cot Mancang	263	280	543	94
8	BuengBakjok	354	377	731	94
9	Cot Beut	260	267	527	97
10	UjongBlang	296	288	584	103
11	Seupeu	315	340	655	93
12	Lam Neuheun	191	204	395	94
13	Lam Puuk	147	165	312	89
14	LambroeBileu	979	702	1.681	139
15	LampohKeude	354	427	781	83
16	Cot Peutano	222	225	447	99
17	Cot Cut	416	410	826	101
18	Lam Glumpang	151	154	305	98
19	MeunasahBakTrieng	170	191	361	89
20	Lam Asan	306	287	593	107
21	Lamceu	545	535	1.080	102
22	Cot Preh	458	491	949	93
23	Puuk	236	248	484	95
24	Lam Seunong	273	270	543	101
25	Lam Trieng	171	187	358	91
26	Beurangong	201	191	392	105
27	Rabue	297	293	590	101
28	Devah	276	295	571	94

29	Cucum	374	393	767	95
30	Cot Yang	349	367	716	95
31	Cot Raya	288	311	599	93
32	LampohTarom	245	246	491	100
33	Aron	84	87	171	97
34	Lam Roh	54	52	106	104
35	BakBuloh	109	112	221	97
36	Lam Raya	260	270	530	96
37	TumpokLampoh	138	149	287	93
38	LambunotTanoh	72	72	144	100
39	LambunotPaya	175	206	381	85
40	Lamteube Mon Ara	106	107	213	99
41	LamteubeGeupula	168	167	335	101
42	Lam Alu Cut	304	346	650	88
43	Lam Sabang	363	354	717	103
44	Lam Alue Raya	227	242	469	94
45	LeupungUleeAlue	182	164	346	111
46	LeupungMesjid	134	138	272	97
47	Cot Lamme	189	188	377	101
	Total	13.096	13.143	26.239	100

Source: Master File of KotaBaro Sub-district Office, 2017

4.3. Agricultural Product Sharing Through "MAWAH" System

Distribution of rice cultivation between landowner and farmers (peasants) is generally carried out under the "Mawah" system. (the result of an interview with a farmer named Zubaidah). The name of Kuta Baro Sub-district Head is Sudirman who explained that the system of sharing with "Mawah" system has long been implemented in Kuta Baro Sub-district, it has become a system that is carried out for generations. The statement is reinforced by the results of Abdurrahman's research [12] which says that *Marwah* practice has been practiced in Aceh since the 16th century, this practice continues until now. *Marwah* practice is very popular in Aceh, so by implementing the *Marwah* system, it is very helpful for the lives of the poor people.

According to Abdurrahman [12] "Mawah" is a part of Aceh's customary law and is consistent with the existing concept in the system of sharing in Islam that is *Mudharabah*. The concept of *Marwah* is also very rational in its distribution system, where the concept of *Marwah* gives a large portion to the tiller farmers (peasants) whose distribution system has a provision that is 50:50, or according to the agreement made between the tiller and the owner of the field where the agreement should not violate and harm the farmer.

4.4. Practice of Revenue Profit Sharing System in Kota Baro Sub-District

The practice of sharing of *Marwah* System in Kota Baro sub-district is carried out between the owner of the paddy field and the farmer (peasants). In the early stages for farmers who do not have rice fields ask the landowners to be granted permission to work on rice fields, sometimes there are also landowners who appoint a farmer to work on his own rice fields and this is done in kinship and friendship (Result of Interview).

The next stage both parties made an oral revenue-sharing agreement in accordance with the usual division of the "Mawah" system done by people of KotaBaro Sub-district (Hera: respondent of Cot Prehville). In Kota Baro Sub-district there are at least two categories of "mawah" of harvest between the owners of paddy fields and farmers. The first category is that if the paddy field is located close to the irrigation, the revenue sharing (Mawah) is 1: 3. The second category is that if the location of paddy fields is far from irrigation or in other words less strategic, the profit sharing (Mawah) 1: 4.

In addition, the benefits of the farmers (peasants) also depend on the season, there are seasons experienced by the farmers, the "*rendengan*" (rainy season) and "*gadu*" (dry season) seasons. If planting activities in accordance with the rainy season, in general, the yield is more rather than in the dry season. Therefore, in the rainy season, farmers

are more profitable than in the dry season. Based on the results of interviews with the respondents, it is said that the revenue sharing of "mawah" system is done after the rice is harvested.

Physical form of sharing also depends on the agreement, there is in the form of rice calculated by (kg) there is also in the form of money in accordance with the price of rice after harvest. The practice of revenue sharing through "mawah" system among the population is considered a dignified way and contains pride value. Revenue sharing of "mawah" system is a local wisdom that needs to be maintained.

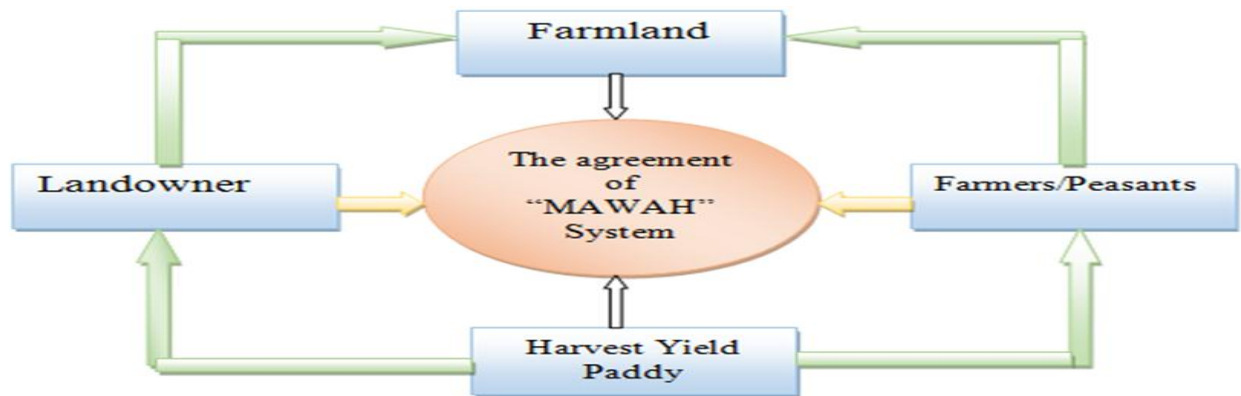


Figure-1. The Framework of Research Result

Source: Field interview results

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