APPLICATION FOR THE REGISTRATION OF THE

PROTECTED GEOGRAPHICAL INDICATION

KOPI ARABIKA GAYO

Summary

I. INTRODUCTION

The Gayo Highland is located in one of the ridges of Bukit Barisan that lies across Sumatera Island. It is located in the northern most part of Sumatera Island and lies on the centre of Aceh Province. Administratively, the Gayo Highland covers the districts of Aceh Tengah, Bener Meriah, and Gayo Lues. The three main towns as the capital city of the three districts' are Takengon, Simpang Tige Redelong and Blangkejeren.

Figures 1a and 1b show the maps of Indonesia as well as a map of administrative and geographical territory of Sumatra Island and Aceh Province.

Figure 1 a. Map of Indonesia (Source Google)

Figure 1b. Map of Sumatera Island (Source Google)

Figure 1c. Map of Aceh Province

In the map, the Gayo Highland appears as part of the areas in orange color (higher than the surroundings). The Gayo Highland is located between 100 – 3,200 m above the sea level. Arabica coffee is cultivated only between 900 – 1,700 m above the sea level. The most of Gayo society livelihood is agriculture such as coffee, rice, vegetables, and tobacco. The main source of livelihood is Arabica coffee plantation.

The **Kopi Arabika Gayo** or, as called in English, *Gayo Arabica Coffee*, is one of Indonesian most prominent export commodities. The coffee plantations that have been developed since 1926 are blossoming until today. The Gayo Highland has the largest coffee plantations in Indonesia, which is more than 100,000 hectares.

Kopi Arabika Gayo is well-known in the domestic and international markets. It is known for its reputation as specialty coffee that has a distinct taste and aroma, as well as a complex flavour, bright acidity, and strong heavy body. It provides thickness and strong aroma when drank.

Such reputation is starting to be undermined by companies that try or succeed on registering trademarks using the word "Gayo" for commercializing coffee (robusta or mixed coffee), with consequent serious potential damages to the Kopi Arabika Gayo, which is already a registered GI in Indonesia[1].

In the case of *Kopi Arabika Gayo*, the protection role of Geographical Indications is very important, where the local producers' community needs a legal protection for the original name of the product, so that it is not used by other parties for fraudulent practices. Furthermore, Geographical Indications have an important role in attracting domestic and international customers. This is evidenced by the improvement of the consumers' demand on the origin of the coffee products that they are buying. Consumers do not only want to fulfil their needs and desires of coffee with good taste, but they also expect a guarantee that the coffee was produced in the indicated origin, through responsible processes and methods, as well as under a reliable traceability system.

Considering these reasons, the farmers' community of Kopi Arabika Gayo realized that Kopi Arabika Gayo should obtain Geographical Indications protection. In order to do so, the farmers' community of Kopi Arabika Gayo gathered under the organization called the **Gayo Arabica Coffee Protection Society / Masyarakat Perlindungan Kopi Gayo** (MPKG). The organization applied for the protection of the Geographical Indication ***"Kopi Arabika Gayo"*** to the Indonesian government, which was granted on 28 of April 2010.

At present, due to the increasing reputation of Kopi Arabika Gayo in the international markets, notably in Europe, the increasing demand of consumers as well as the risk of abuses from third

[1] See Annex n°1

parties, the Gayo Coffee Protection Society *(MKPG/Masyarakat Perlindungan Kopi Gayo)* has decided to file the present application for a Protected Geographical Indication of Kopi Arabika Gayo in the European Union.

The present application to protect the Geographical Indication *"Kopi Arabika Gayo"* (Gayo Arabica Coffee) in the EU aims at:

1) Obtaining an adapted legal protection,
2) Securing an acknowledgment for the products' quality and specialty, and
3) Preserving the traditional coffee production procedures (based on traditional uses) that exist in the Gayo Highland.

II. APPLICANT

Applicant : Yayasan Masyarakat Pelindung Kopi Gayo (MPKG)
Address : Jln. Yos Sudarso Komplek Kantor Bupati Aceh Tengah, Gedung A – Takengon
Phone/Fax : (+62) 82367555559
Email : YayasanMPKG@gmail.com
Contact Person : Hadiyan Wijaya IB
Email : hadiyan.tmi.itb@gmail.com

III. CONTEXT OF THE APPLICATION

History

In 2005, the Aceh Coffee Forum was established as an organization for the coffee community in Aceh. Since 2006, UNDP (United Nation Development Program) and Aceh Provincial Development Planning Agency (BAPPEDA) through the Aceh Partnership for Economic Development (APED) facilitated various activities, conducted by the Aceh Coffee Forum, in socializing the coffee community of the Gayo Highland on the Geographical Indications protection. In 2009, the Gayo Arabica Coffee Protection Society (MPKG) was established as an organization that supports legal protection for Kopi Arabika Gayo and maintains the quality and taste of Kopi Arabika Gayo. Its establishment was fully supported by relevant parties, especially by local governments of the Aceh Tengah, Bener Meriah, and Gayo Lues districts.

MKPG is a coffee community whose members share a vision and mission, which is to apply for Geographical Indication's protection for Kopi Arabika Gayo and to obtain as much benefit as possible for the people of the Gayo Highland, especially those whose livelihoods depend on coffee, for example in maintaining the quality and distinctiveness of "Kopi Arabika Gayo".

This Association has been legalized the 31th of July of 2015 under the number 58. (See copy of the legalization of the MPKG in Appendix no. 2).

Members:

The MPKG membership consists of individuals, farmers' groups, cooperatives, as well as private companies. Farmers who are not affiliated to any farmers group can be a member of MPKG. The

membership to the organization remains open to anyone, as long as they fulfilled the requirements as described in the production specification.
The MPKG is composed of the following members:

1. Red coffee berries producers, consisting of individual farmers and farmers' groups
2. Coffee processors, consisting of cooperatives, processors and roasters
3. Consultative board, consisting of the local governments' representatives, supporting organizations, and the consumers of Kopi Arabika Gayo.

Farmers' groups that produce red coffee berries have changed their legal status into cooperatives. Some of these cooperatives have the facilities for processing red coffee berries. Cooperatives that process coffee may become members ("red coffee berries producers" and "coffee processors"). Their rights to vote are divided equally (50%/50%) between the two groups (the consultative board does not have a right to vote). Between the "red coffee berries producers" and "coffee processors", the bigger stakeholders have two votes, while the smaller ones have only one vote.

The current membership of MPKG consists of[2]:

- 10,869 farmer families that manage approximately 12,996 hectares
- 4 cooperatives:
    - KBQ Babburrayyan, 5752 farmers, collectors 101 and 7029 Ha of farms,
    - KSU Gayo Mandiri, 1696 farmers and 1677 Ha of farms,
    - Ketiara, 1170 farmers, collectors 20, and 1731 Ha of farms,
    - Arisarina, 1440 farmers, and 1748 Ha of farms
- Private companies, i.e. PT. Indo Cafco, 811 farmers, Collectors 5, and 811 Ha of farms.
- 6 coffee roasters:
    - Lepo Gayo Coffee,
    - Aroma Gayo Coffee,
    - Duta kopi Indonesia (located in Aceh Tengah District),
    - Bergendal Coffee (located in Bener Meriah District),
    - Arigayo Coffee and
    - Rizki Coffee.

MKPG membership will continue to increase following the increase in the organization's dynamics. The current members of MKPG are 10,869 farmers, 4 cooperatives, 1 private company, and 6 roasters, who are basically the stakeholders of Kopi Arabika Gayo supply chain as the total members of MKPG at the moment of the application.

[2] Source: MPKG, 2015

IV. KOPI ARABIKA GAYO SPECIFICATION

A. The Name

Kopi Arabika Gayo

B. Type of product

Class 1.8.: other products of Annex I of the Treaty (spices, etc.)

C. Description of the product

Kopi Arabika Gayo Protected Geographical Indication covers a specific product: an Arabica coffee grown in Gayo Highland (Aceh Tengah', 'Bener Meriah' and 'Gayo Lues') which is processed by the typical "Sumatra semi-washed method" also know as "wet hulling" method which is covered semi-washed and full-washed process as described in the specifications and which complies with the Indonesian and export standards.

Coffee varieties:

Kopi Arabika Gayo (Gayo Arabica Coffee) refers to Arabica coffee variety.

There are approximately 20 varieties of coffee in Gayo Highland, traditionally used by producers. However, the list of the coffee plant varieties that are used to produce Kopi Arabika Gayo are the following:

- Timtim
- Ateng Jaluk
- Borbor
- P-88
- S795

These varieties can be used as single variety or mixed.

Products covered by the GI:

The Geographical Indication" Kopi Arabika Gayo" covers the following products: The coffee beans obtained from wet hulling method.

Characteristics of the beans:

Kopi Arabika Gayo beans traded in the international market are of quality grade 1 (National standard that refers to the physical defect value), which means with the physical defect value lower than 11 per 300g of green beans [3].

According to the Indonesian National Standards (*Standar Nasional Indonesia/SNI*) and the standards by the Specialty Coffee Association of America (SCAA), the Kopi Arabika Gayo beans have a white grayish colour

[3] "Quality No 1" refers to the grading of the coffee and corresponds to "Grade 1". According to the National standard, the Grade 1 means that the physical defect value is lower than 11 per 300 g of green beans (reference of the SNI Standard/Indonesian Standard).

before processing and the water content is 35-40%. After wet hulling, the colour of the bean is blue to bluish green and the water content is 12-12,5%. The final sorting after rustling produces coffee beans with minimum size of 6.5 mm or bigger.

Characteristics and profile of the Kopi Arabika Gayo:

The wet hulling method, the cultivation on the Gayo Highland in certain agro-climatic zones and the type of soil that is dominated by volcanic ashes, produce a unique coffee with uniform taste, bright acidity (no indicator-just sensorial/organoleptic effect during coffee tasting), less bitter, strong intensity of aroma.

Specific coffee growing area and products described in this specification must comply with the domestic market and export standards.

Specific characteristics of Kopi Arabika Gayo consist of:

- free from main defect tastes,
- uniform taste
- bright acidity (no indicator-just organoleptic effect during coffee tasting),
- less bitter,
- strong intensity of aroma.

In addition, Kopi Arabika Gayo presents characteristics of unique of complexity flavor and aroma such as nutty, chocolaty, caramelly, fruity, bright acidity, full body as well as long finish as the specific characteristics.

In this regard, it must be noted that coffee to be presented to consumers must consist of 100 % Gayo highland (3 districts covered by the geographical area) origin.

Labelling of Kopi Arabika Gayo

Coffee covered by the PGI “Kopi Arabika Gayo” will be presented to customers or final consumers in the market in packagings and containers which clearly bear the following mention: “Protected Geographical Indication” or PGI, the name "Kopi Arabika Gayo" only or together with its translation in any of the official EU languages if desired, the “Kopi Arabika Gayo” logo registered as European Union trade mark and the European PGI Logo, if desired.

D. The Geographical Area

‘’Kopi Arabika Gayo” is produced at an elevation of between 900 m – 1700 m above sea level within three administrative districts ‘Aceh Tengah’, ‘ Bener Meriah’ and ‘Gayo Lues’ located in Gayo Highland.

The steps that must take place in the geographical area of the PGI Kopi Arabika Gayo are production and processing procedures such as planting, harvesting until final beans processing. For coffee roasting, the process can be done in geographical area as well as outside geographical area as long as the source of bean must be originated and taken from the geographical area of Gayo Highland.

The geographical area covers the following activities:

- The production of coffee berries

- The processing procedures until final processing.

The steps of production that are covered in the geographical and outside geographical area for Kopi Arabika Gayo are shown in the table below:

Steps of coffee production and processing	Locations
- Plantation - Red berries production	Limited areas, In Gayo Highland area only with limitation of elevation between 900 m – 1700 m above sea level, which is covering three administrative districts of Aceh Tengah, Bener Meriah and Gayo Lues
Processing until wet-processed coffee - Depulping - Fermentations - Washing - Parchment Drying - Dehulling	Limited areas, In Gayo Highland area only with limitation of elevation between 900 m – 1700 mabove sea level, which is covering three administrative districts of Aceh Tengah, Bener Meriah and Gayo Lues
- Beans drying - Storage (2 months) - Cleaning - Sorting and Grading - Bagging	Limited areas, In Gayo Highland area only with limitation of elevation between 900 m – 1700 mabove sea level, which is covering three administrative districts of Aceh Tengah, Bener Meriah and Gayo Lues
- Roasting/grinding - Packaging	Anywhere

Source: MPKG

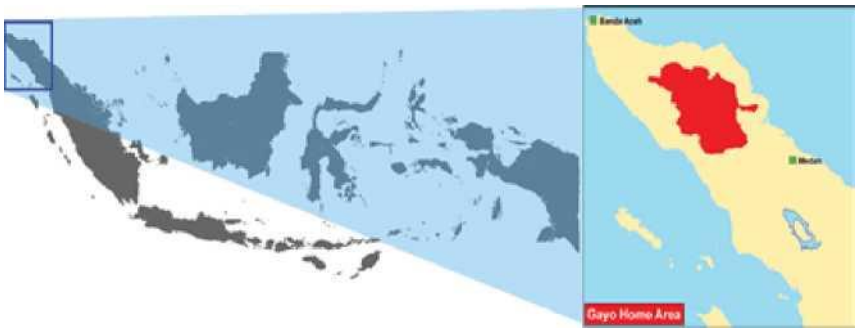
Administratively, the geographical area is part of Nanggroe Aceh Darussalam Povince and covers three districts, i.e. Aceh Tengah, Bener Meriah, and Gayo Lues. The list of villages within GI area is shown in Annexe n°3.

Districts covered by the PGI geographical area:

- District of Aceh Tengah
- District of Bener Meriah
- District of Gayo Lues

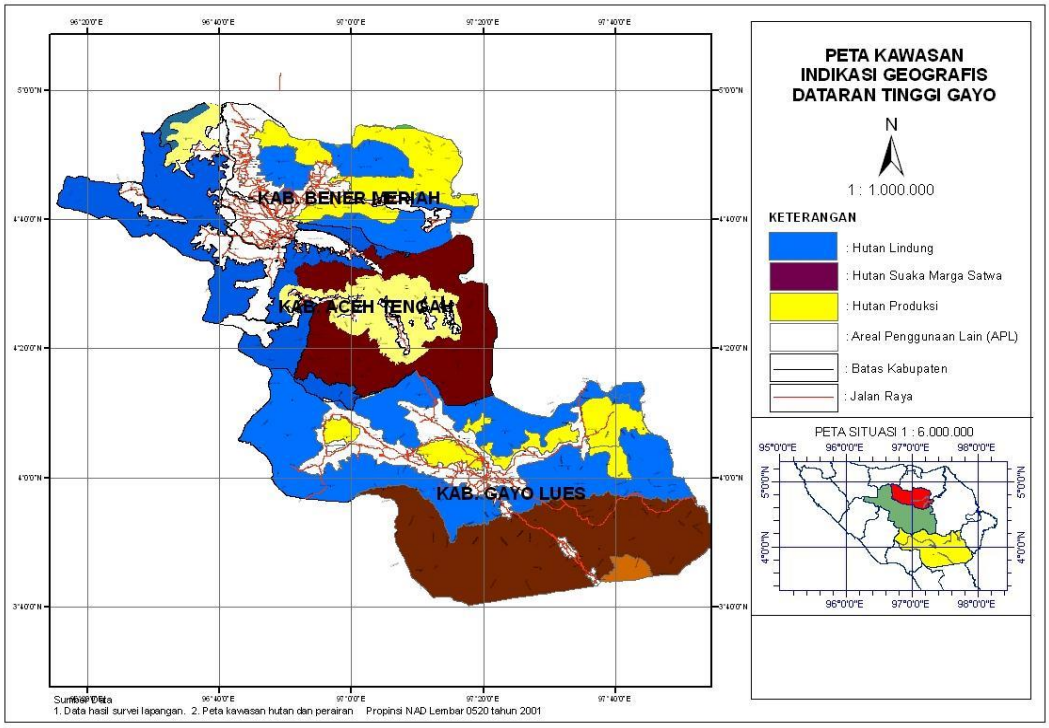
This specific area is located at the height of 900 - 1,700 m above sea level (most varieties of Arabica coffee are planted on the height between 1,000 and 1,400 m above sea level).

Location of Gayo Highland in Aceh Region:



Source: joshuaproject.net

Map of the geographical area of the GI Kopi Arabika Gayo



Source: Dinas perkebunan dan pertanian provinsi Nanggroe Aceh Darussalam

Translation of the Map:

- *Peta Kawasan Indikasi Geografis Dataran Tinggi Gayo : Map of the GI geographical area in Gayo Highland*
- *Hutan Lindung : Protected forest*
- *Hutan Suaka Marga Satwa: forest wildlife*
- *Hutan Produksi : logged forest/productive forest*
- *APL : Other forest areas*
- *Batas Kabupaten : Districts boundaries*
- *Jalan Raya: Main road*
- *Peta situasi : map of situation*

The map on the right side called "Peta situasi » presents the 3 districts covered by the GI in the Aceh Province.

- Red: Bener Meriah district
- Green: Aceh Tengah Distinct
- Yellow: Gayo Lues district

The 1st map on the left presents the 3 districts covered by the GI and the land use within these areas at the time of the GI registration in Indonesia.
On each district, the land is composed of 3 components:

- wild forest (blue)
- wild life and (brown)
- cultivated areas (yellow)
- Other purposed area (White)

The yellow and white colours represent the area where the coffee is produced.

E. Evidence that the product originates in the defined geographical area referred

In order to guarantee the credibility of GI coffee of the Gayo Highland, a control and traceability process is set up with the purpose of:

- Fulfilling the rules of the product specification
- Ensuring the origin of the product
- Ensuring the quality of the product.

Starting from the coffee harvest in the plantation until to the exporters, Kopi Arabika Gayo should be right tracked according to its origin, whether originally it been sold as cherry or green bean. This impact to the record system to clearly show the product distribution flow (Supply chain).

The control on the compliance of the rules in the PGI product specification must be completed in both, the control of the cultivation and also the control of the processing. Such control is carried out from the phase of cultivation to the result of processing.

1. Control of Cultivation

a. The auto-control

Each producer must check that he has fulfilled the rules on the plantation, based on the product specification. The requirements are the existence of the shelter woods, the variety, space of planting/density, maintenance (for giving the fertilizer and also the pest control), etc. Thus, each producer must be informed by the MPKG or the Farming Group on the rules that she/he should respect in the plantations.

b. Control by the farming group

Every group can choose the ways to carry out the controls. The board of staffs of the farming group can do the control by themselves or give the task to a qualified person to perform the controls. In this case, a meeting of common members can be held or there might be a control on the plantation areas regularly.

In the yearly control by the groups, the Head of the Group (or the staff of the farming group) has to report to the MPKG, that the group has the product specification and so do all the members of the group. The group should report to the Gayo Coffee Protection Society (MPKG) about this compliance.

c. Control by the MPKG

Every year, at the end of April, the MPKG will choose randomly 5 farming groups and they will check the compliance of the product specification in the plantation areas of the members of the farming group for 2 days per group (so it needs 10 days to perform this control). In the following year, controlling can be done in the other groups in rotation and regularly.

d. External control by the competent authority

Articles 14 to 19 of the Regulation of the republic of Indonesia, No. 51, year 2007 regarding Geographical Indications define the controls on GIs.

Within the Directorate General of Intellectual Property Rights, there is a Geographical Indication Experts Team (GIET) that must organize and monitor the control of use of Geographical Indication in the territory of the Republic of Indonesia.

GIET undertakes control on:

- The compliance of the rules set down in the BoR by the MPKG and producers
- The compliance of the product specification before placing the products on the market.

GIET is part of the DGIP which is the public authority competent for GI controls according to the law.

2. Controls on Processing

a. The Control by Group or Processing Unit

In every processing unit (farming group, cooperation or private processing unit), there is one person assigned to check the processing (checking the process based on the product specification).

The person in charge must check the process every day, for example:

- The raw red beans that will be processed came from registered producers,
- The percentage of the raw red beans is sufficient (>/85%)
- The skin pulping can be done in the same day with the picking day up to midnight
- The level of moisture (12-12,5%).

The fermentation is done for 12 hours or 24 hours. Drying is done on the top of plates, sheets, or cemented floors and they should not reach the soil directly. The moisture after the drying should be precisely in the level of 12-12,5 %, which is checked by using a control tool for the water amount that has a good setting. Besides, the cleanliness of the processing units (including the machine, fermentation tanks, etc.) must be taken into account by the group or the processing unit. After processing, the person in charge of controls in the processing unit will check the conditions, make sure that the length of fermentation of the beans respects a minimum of 2 months, the dry unhulled beans reach the moisture of 12-12,5% before the hulling and the coffee beans are correctly stored to reach 12-12,5 % before being exported or moved from the Gayo Highland.

b. The Control by MPKG

Every year, during the harvesting time and in the processing stages, the MPKG chooses randomly 3 farming groups or private processing units or cooperative, and checks the process based on the guidelines from the product specification for one day in the processing unit (so it needs 5 days for this controlling process).

The MPKG must also check the hulling process, the preparation to export the lots and the labelling of the coffee packaging. In order to make sure the control works easily, the places for operating this process must be communicated by the people doing the activity (processing unit or the buyers) to the MPKG.

If any requirement from the product specification is not fully followed, the MPKG will decide the steps they should done which can be in the form of recommendation to a temporary deactivation of

the unit. From all the cases, the action to re-evaluate will be performed to the processing groups or units after they do the evaluation and fulfil the requirements based on the product specification.

c. External control by the competent authority

Within the DGIPR, there is a Geographical Indication Experts Team (GIET) that must organize and monitor the control of use of Geographical Indication in the territory of the Republic of Indonesia.

GIET controls whether the quality , characteristics and code of practices can still be maintained in accordance with the product specification including report of the internal controls that have been done as well as the organization and its activities. GIET will also check the use of the GI logo and the traceability methods and practices. In carrying out its duties and functions, the Geographical Indication Experts Team (GIET) may be assisted by a team of Technicaly Supervision which consists of technical experts in the field of certain goods that provide recommendations. The team can be a competent institution implement good supervision regional and central level, and / or private institutions or non - departmental government agency that is recognized as an institution competent in carrying out inspection / surveillance.

GIET undertakes control on:

- The compliance of the rules set down in the BoR by the MPKG and producers
- The compliance of the product specification before placing the products on the market.

GIET is part of the DGIP which is the public authority competent for GI controls according to the law.

In addition, each stakeholder wishing to use word of “Kopi Arabika Gayo” as Geographical Indication may apply to MPKG. If the MPKG agrees, it will issue a letter of recommendation or confirmatory letter. On that basis the applicant must be registered to the Directorate General of Intellectual Property Rights as a Geographical Indication User, as required by the Indonesian Law (article 15 of the Regulation of the republic of Indonesia, n° 51, year 2007 regarding Geographical Indications).

3. Traceability elements

a. Membership Enrolment /GI membership

The farming group, as member of the MPKG, will be asked to make a list of the members of coffee producers. Being on this list, the coffee producers will get the GI member cards with a member number from the MPKG.

The update of the producers’ list will be issued every year. The MPKG will send the list of the producers to each farming group and they will ask the group members whether they have any changes in the membership list. For example, there might have a new producer (they will get a new member card) or in reverse a member who stops their coffee production will no longer have a member card.

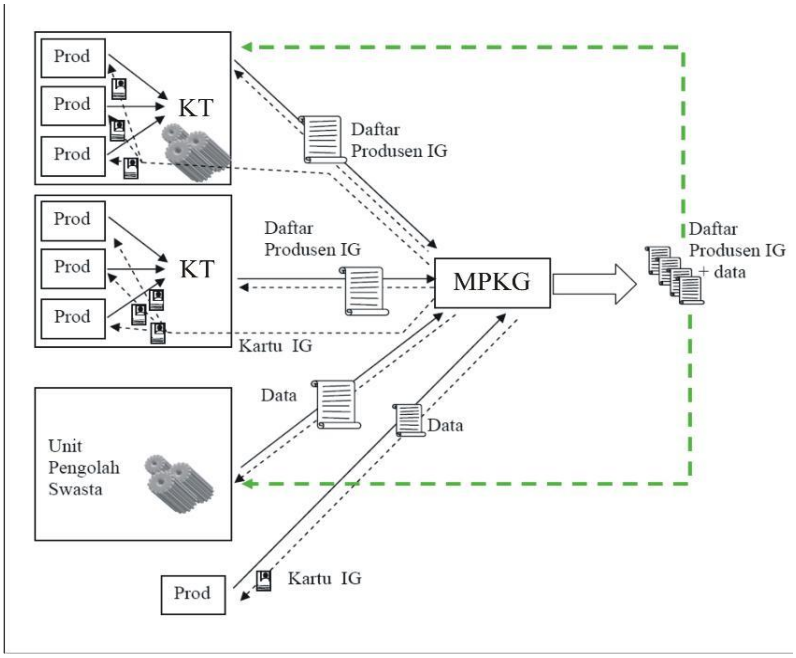


Figure. Tracing System of GI Arabica Red Unhulled Coffee Beans

Prod -> KT -> GI producers' list -> MPKG -> data -> GI member card-> Private Processing Unit
Explanation: KT = Farming group

b. <u>Supporting information at production stage</u>

Every farming group in the area of the GI Kopi Arabika Gayo must be registered to the MPKG so that they will have the membership number in the MPKG and automatically their regions will be listed in the GI Kopi Arabika Gayo.

The registration process is done every 3 months, 6 months, and yearly after some administration inspection process in each area and, after that, they will officially become members of the MPKG and will be listed in the GI Kopi Arabika Gayo. Each member of a farming group will be registered to the MPKG to make it easier the control of the products of each farming group.

Every farming group should list the name of its producers and the data of their plantation areas. The data will be sent to the MPKG.

Each independent producer should be registered directly by the MPKG.

Farmer list coding:

1. Farmer code
2. Farmer name
3. Address
4. Condition of plantation
5. Large of the plantation
6. Harvest estimation (in one session)

Example of Farmer list

KBQ BABURRAYYAN
CU 803507

List of Farmer / Daftar Petani : Aceh Tengah (D-07)

Village / Desa : **Gunung Sitolih**
Sub Village / Dusun : **Gunung Sitolih**
Unit Number : **F-A041**
Sub Distric : **Jagong**
Classification : **Organik**
Product : **Arabica Coffee**

No Urt	Farm ID	Owner Name	Gender (Sex)		Field Number	Acreage (Ha)	Control Union Classification	Team Inspection (Inspeksi Tim)					Education	Training	Agreement Penjualan		Estimated Produksi (Kg)	Altitude MDPL	Rem
								Prev Inspection	Inspection Date	Inspection Result (Hasil)									
	Identitas Petani	Nama Pemilik **Gunung Sitolih**	Jenis L	Jenis P	Nomor Lahan	Luas (Ha)	Tanggal Inspeksi	Inspeksi Sebelumnya	Inspeksi Terakhir	Shadow Kayuan	Compost Kompos	Label	Pendidikan	Pelatihan	Yes	No	Gelondong Merah		
1	2	3	4		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	F106551	Mutmoin			002	1.0	4/20/2008	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	4,900		
2	F106552	Salman			003	2.0	2/15/2011	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	9,500		
3	F106553	Sugeng			006	1.0	10/24/2007	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	4,700		
4	F106554	M. Saleh			008	1.0	2/24/2012	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	4,800		
5	F106555	Jamaki			011	1.0	2/19/2009	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	4,900		
6	F106559	Ismail			012	1.0	2/19/2009	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	4,800		
7	F106560	Ashil			013	1.0	2/19/2009	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	5,000		
8	F106561	Muchar			014	2.0	2/19/2009	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	9,000		
9	F106562	Muhrin			015	1.0	2/4/2007	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	4,900		
10	F106563	Idamo			016	1.0	2/4/2007	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	4,800		
11	F106564	Yani			017	2.0	1/29/2010	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	9,000		
12	F106565	Mahfin			018	2.0	1/29/2010	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	9,000		
13	F106566	Diman			019	1.0	2/19/2009	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	4,500		
14	F106567	Amin			020	2.0	4/20/2008	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	9,000		
15	F106568	Muberos			021	2.0	2/15/2011	12/4/2013	1/4/2013	Lambro	-		-	-	Yes	-	9,000		
16	Jumlah					21.0											91,800		

Takengon, 22 February 2014
Internal Control Sistem (ICS)

Koordinator ICS

Approved at : Takengon
Date : 22 February 2014
By : Control Union Certifications

Rudi Susanto
Kolektor : SALIMAN

ALPIAN, S.ST

CHAIRIL AZHAR, SP

Source: KBQ Baburrayyan

If a producer wants to make a change on their plant and they can no longer follow the rules in the product specification, their membership will be called off and they should give the card back to the association.

Each processing unit (either private or part of the farming group) shall be registered by the MPKG. The MPKG gives the GI member cards to each producer and send the data of each of them to the processing unit.

c. <u>Harvesting and processing stages</u>

During the harvesting season, the processing units must send the data about the unhulled beans that they received and the beans that they produced to the MPKG.

At the end of the season, the processing units must report the total amount of coffee that they have sold. Coffee beans presenting defects will not be sold as GI Kopi Arabika Gayo. In these circumstances, there is separated information whether the coffee is intended to be sold as a GI or not (conventional coffee or commercial coffee).

Each processing unit should be listed as GI processors. To make the controls in GI coffee processing units easier, every processing unit should mention the places where they performed their coffee processing and where the coffee will also be stored.

Harvesting and processing stages must certify the coffee comes from raw unhulled beans. Every time the producer sells the raw unhulled beans to the processing unit (farming group, private processing unit and cooperative), the processing units must check the member cards and note the name of the producers, the number of member of the producer, the amount of the coffee that they bought and the production date. If a problem appears, the processing unit can check the registration of the

producer. The MPKG will send the list of the farmers who are registered to all processing units every year before the harvesting time.

The processing unit must send the list of the raw red unhulled coffee beans supplier to the MPKG twice a year: in September in the beginning of harvesting season and in May or June, by the end of harvesting season.

The MPKG will check whether the amount of raw red unhulled beans sold by a producer matches the amount of trees they cultivated and the width of their land.

The minimum requirement of bill purchasing:

1. Farmer code (Kode Petani)
2. Name of Farmer (Nama Petani)
3. Amount of coffee (Jumlah Kopi)
4. Purchasing amount (Nilai Pembelian)

Example of purchasing bill (Contoh Kwitansi Pembelian Kopi)

KOPERASI BAITUL QIRADH BABURRAYAN

Jl. Takengon - Isaq, Wih Nareh Pegasing Takengon - Aceh Indonesia 24561

Kwitansi Pembelian Kopi di Wilayah
FA-078 Wih Terjun
Receipt Of Coffee Purchase Payment

No. KW : **034241**
Ref No. : _____
PO : _____
FLO ID KBQB : 5416
FLO ID Bayer : _____

Tanggal / Date : 22 Jun 2015

Beli / Purchased : 3,142 Bambu / 3,513 Kilo x Rp. 26,700.00 = Rp. 83,891,400.00 (Kas / Kredit) (Cash / Credit)

Terbilang / Written : ***DELAPAN PULUH TIGA JUTA DELAPAN RATUS SEMBILAN PULUH SATU RIBU EMPAT RATUS RUPIAH ***

Keterangan / Remarks : **Pembelian Fair Trade Arabica Organic Coffee**

Petugas Pembelian / Purchase Staff : Ahmad

Nama Kolektor/ Petani / Collector / Farmer's Name : IRHAMSYAH

Tanda Tanggan / Signature : .....

Tanda Tanggan / Signature : .....

Lembar Putih : Arsip Adm Keu / Adm File — Lembar Merah : Petani / Farmer — Lembar Kuning : Arsip / File

KOPERASI BAITUL QIRADH BABURRAYAN

Jl. Takengon - Isaq, Wih Nareh Pegasing Takengon - Aceh Indonesia 24561

LAPORAN HARIAN PEMBELIAN KOPI GABAH

No Bukti : 034241 Tanggal : 22 Jun 2015 Wilayah : FA-078 /Wih Terjun

Kg : 3,513 Bambu : 3,142 X Rp. 26,700.00 = Rp. 83,891,400.00 Simpanan : Rp. 78,550.00

No.	Nama Petani	No. Lahan	Jumlah Gabah		Harga / bambu	Nilai	Simpanan KBQB
			Bambu	Kg			
1	Abd Hamid	010	440	492	26,700	11,748,000.00	11,000.00
2	Bambang Prionot	020	498	557	26,700	13,296,600.00	12,450.00
3	Sukarna	036	420	470	26,700	11,214,000.00	10,500.00
4	Mariadi	049	432	483	26,700	11,534,400.00	10,800.00
5	Tujo	055	412	461	26,700	11,000,400.00	10,300.00
6	Seh Aman, AD	064	440	492	26,700	11,748,000.00	11,000.00
7	Riswandi	072	500	559	26,700	13,350,000.00	12,500.00
	0.00		3,142	3,514		83,891,400.00	78,550.00

Terbilang : ***DELAPAN PULUH TIGA JUTA DELAPAN RATUS SEMBILAN PULUH SATU RIBU EMPAT*

Diketahui; Ketua Koperasi — RIZWAN HUSIN

Diterima Oleh; Bendahara — SUGIATI

Disetor Oleh; — IRHAMSYAH

Source: KBQ Baburrayyan

The minimum requirement note in the processing plant (Dalam prosessing minimal mencatat)

1. Huller process (Proses Huller)
2. Drying (Pengeringan)
3. Sort and blending (Sortase dan Blanding)
4. Outstanding PO
5. Book stock (Buku Stock)

Example of the recapitulate of book stock (Contoh Buku Rekap Stock)

KOPERASI BAITUL QIRADH BABURRAYAN

Jl. Takengon - Isaq, Wih Nareh Pegasing Takengon - Aceh Indonesia 24561

Processing Unit : WIH NAREH ACEH TENGAH (D - 07)

PERIODE... : 01-01-2014 - 31-12-2014

(In Kg)

REKAP PROSES KOPI GABAH ke READY EXPORT

NO	KETERANGAN/ITEM	GABAH/PARCM...	LABU	ASALAN	GREEN EXPORT
A.	INITIAL SALDO	0.00	12,980.80	65,957.18	242,327.74
B.	RECEIVED				
1	From Village	6,251,879.50			
2	Process Result		4,323,787.80	2,407,442.55	1,988,044.91
	Total	6,251,879.50	4,336,768.60	2,473,399.73	2,230,372.65
C.	OUT				
1	Processed	6,251,879.50	4,326,725.80	2,340,746.93	
2	To Berastagi (D-08)				2,193,480.00
3	Export				
4	Local Sales				
5	Mutasi Conventional				
	Total	6,251,879.50	4,326,725.80	2,340,746.93	2,193,480.00
	SALDO	0.00	10,042.80	132,652.80	36,892.65

Wih Nareh, 31-12-2014

Source: KBQ Baburrayyan

d. Tracking the Coffee Lot order

Right after the processing, the UP must impart to every sack a lot code. The code includes: code of processing unit, year of production, lot number. Each processing unit there are lots of their annual production (the lots can be formed depending on the production time). The lot's codes are saved to the stage of coffee selling.

Illustration of tracking the coffee lot order:

GI Logos	
GI compliant Product	100% of Gayo Arabica Coffee (Kopi Arabika Gayo) - GI
Origin of Product	Product of Gayo Highland – Indonesia
Name of Seller / Company Producer	KBQ Baburrayyan
Number Certificate of Origin (ICO)	ICO: 015/1617/003
Register Number of MKPG Member as GI confirmatory	MPKG-RN 00001
Seller FLO ID Number	FLO ID 5416
Kind of certificate requirement (FT = fairtrade certificate)	Sumatera FT Organic
Name of Seller Product (Gayo Supreme)	Gayo Supreme
Grade of Product / quality of product and variety of coffee	Grade I Arabica
Type of Product	Green Beans
Orgnization of certification issued	Fairtrade
Name of Buyer	Volcafe special coffee / Starbucks Coffee
Buyer Number of Purchasing Order / Contract Number	PO 60008099-1-1-1
Number of Seller Fair Trade ID	FLO ID 2443
Quantity of product/bags	Net Weight 60 Kgs
Number and Total of Bags in a Container	1-320
Year of Harvesting and year of delivery	Crop 2015

4. Selling and buying GI Coffee

After the processing and storing, the processing unit can sell their coffee. Every transaction should be noted. Annually, the data should be sent to the MPKG. After that, the MPKG will check the transactions and if the sum of the raw unhulled coffee beans they sold matches the sum of the raw unhulled coffee beans they purchase from the GI producers.

The control and tracing of Kopi Arabika Gayo deals with the buying from each farming group such as form of MPKG farmer, recapitulation of Farming group/ Cooperative of the MPKG, covering letter of Kopi Arabika Gayo MPKG are placed in the attachment of the Document of origin.

Kopi Arabika Gayo is sold to exporters who have to possess those data above. The exporters must follow the rules that they are not allowed to mix Kopi Arabika Gayo with other coffees as stated in the specification. Kopi Arabika Gayo exporters must ask for the documents from each farming group/cooperative to make sure that the coffee they bought is Kopi Arabika Gayo.

Roasters originated from the geographical area are also registered within the MKPG.

Book stock for coffee beans to be sold (Buku Stock Ready):

KOPERASI BAITUL QIRADH BABURRAYAN
Jl. Takengon - Isaq, Wih Nareh Pegasing Takengon - Aceh Indonesia 24561

KARTU STOCK KOPI READY

PERIODE : 01-01-2014 - 31-12-2014

Processing Unit :

Tanggal	No Bukti	Keterangan	Masuk		Keluar		Stock	
			Kg	Nilai	Kg	Nilai	Kg	Nilai
28-12-2014	BHS032690	F115 Sortase	120.8	7,211,233			35,881.3	2,414,148,617
28-12-2014	BHS032691	F070 Sortase	861.7	59,115,275			36,743.0	2,473,263,892
28-12-2014	BHS032692	F030 Sortase	885.1	61,169,214			37,628.1	2,534,433,107
28-12-2014	BHS032693	F115 Sortase	696.5	44,064,281			38,324.6	2,578,497,388
28-12-2014	BHS032694	F090 Sortase	913.0	58,688,774			39,237.6	2,637,186,163
28-12-2014	BHS032695	F090 Sortase	142.2	10,741,089			39,379.8	2,647,927,252
28-12-2014	BHS032696	F091 Sortase	647.3	41,752,197			40,027.1	2,689,679,450
28-12-2014	BHS032697	F027 Sortase	872.3	58,413,793			40,899.4	2,748,093,244
28-12-2014	BHS032698	F115 Sortase	516.5	33,704,798			41,415.9	2,781,798,042
28-12-2014	BHS032699	F140 Sortase	263.8	19,478,747			41,679.7	2,801,276,789
28-12-2014	BHS032700	F125 Sortase	1,238.2	80,513,276			42,917.9	2,881,790,066
28-12-2014	BHS032701	F083 Sortase	1,239.8	80,619,902			44,157.7	2,962,409,968
28-12-2014	BHS032702	F127 Sortase	794.8	54,463,048			44,952.5	3,016,873,016
28-12-2014	BHS032703	F140 Sortase	526.6	34,125,687			45,479.1	3,050,998,703
28-12-2014	BHS032704	F138 Sortase	970.5	61,820,189			46,449.6	3,112,818,892
29-12-2014	00593	Ke D-08,grade 1...			9,600.0	643,343,090	36,849.6	2,469,475,802
29-12-2014	BHS032705	F137 Sortase	933.2	59,440,763			37,782.8	2,528,916,565
29-12-2014	BHS032706	F011 Sortase	578.7	38,385,084			38,361.5	2,567,301,650
29-12-2014	BHS032707	F040 Sortase	869.3	54,934,443			39,230.8	2,622,236,094
29-12-2014	BHS032708	F115 Sortase	167.1	12,668,761			39,397.9	2,634,904,856
29-12-2014	BHS032709	F093 Sortase	1,258.0	84,144,146			40,655.9	2,719,049,002
29-12-2014	BHS032710	F071 Sortase	1,117.5	75,558,009			41,773.4	2,794,607,011
29-12-2014	BHS032711	F106 Sortase	304.8	19,349,674			42,078.2	2,813,956,686
29-12-2014	BHS032712	F093 Sortase	1,350.7	86,927,626			43,428.9	2,900,884,312
29-12-2014	BHS032713	F016 Sortase	227.3	14,882,638			43,656.2	2,915,766,950
29-12-2014	BHS032714	F016 Sortase	161.8	10,836,491			43,818.0	2,926,603,442
29-12-2014	BHS032715	F123 Sortase	995.1	63,969,529			44,813.1	2,990,572,971
29-12-2014	BHS032716	F129 Sortase	676.0	45,158,593			45,489.1	3,035,731,564
29-12-2014	BHS032717	F003 Sortase	833.7	55,697,656			46,322.8	3,091,429,221
29-12-2014	BHS032718	F091 Sortase	1,144.9	73,509,682			47,467.7	3,164,938,903
29-12-2014	BHS032719	F124 Sortase	1,252.6	79,879,137			48,720.3	3,244,818,040
29-12-2014	BHS032720	F083 Sortase	1,252.3	79,862,301			49,972.6	3,324,680,342
		Jumlah	1,988,044.9	146,802,701,811	2,180,400.0	153,933,904,312	49,972.6	3,324,680,342

Source: MPKG

The Kopi Arabika Gayo roasters who are registered as members of the GI should send the same data (data of coffee purchasing) to the MPKG annually (in June). Therefore, the MPKG can also check the amount of coffee sold with the label of GI certificate.

To meet the traceability requirements, coffee exporters must have the following information:
1. List of Farmers, or farmer Encoding list
2. When the purchasing is conducted or payment purchase
3. When the coffee product is transferred to the transport service, the product must have a transport document
4. When about to be processed, processing plant must have a statement
5. There shall be a record sales (export), transhipment declaration, landing declaration.
6. Should make log book, inventory book.

5. Testing and panel tests

Some testing panels are organized by “Gayo Cupper Team” to verify the good quality of the product and its compliance with the characteristics of the GI Kopi Arabika Gayo.

During the cupping session, the quality of each lot will be checked by the MPKG.

The main criteria checked during the testing panels: the quality of aroma, acidity, bitterness, aftertaste, body, balance, uniformity, clean cup, sweetness and the presence of defect(s). After the score note of the elements above is made, the overall quality is evaluated and after that the decision is made to accept or decline that coffee.

The Organoleptic testing quality (Cup test) can be grouped into some quality levels such as
- 1. Excellent
- 2. Very Good
- 3. Good
- 4. Ordinary

If it is approved, the coffee will then get the GI certificate. (See an example in Annexe n°4). If it is declined, the processing unit still has the chance to present the coffee for a second time to get the testing from other team of panellists. If the later team declines this coffee, the coffee cannot receive GI certificate and thus the coffee cannot be sold by labelling it with GI name “Kopi Arabika Gayo”.

Testing panels Organization is called « Gayo Cupper Team ». It is an independent organization composed of professionals of tasting, certified by Q Grader. In carrying out its duties Gayo Cupper Team will issue an organoleptic flavour test document（see in Annexe 4). Gayo Cupper Team will perform organoleptic tests aimed to determine the coffee samples from defects taste and characteristic in accordance with established product specification.

Each member MPKG that will sell products under the name "Kopi Arabika Gayo" is required to submit a sample to be tested and will be subject of charges. Then she/he will receive a certificate of eligibility product as GI Product of Kopi Arabika Gayo stamp by MPKG

F. Description of the method of obtaining the product

1. Land and land preparation

i. There are two types of lands that can be used as coffee plantation area in the Gayo Highland.
- First, the land which was previously used as coffee plantation area (other plants) or even from bushes.
- Second, a newly opened land from the forest vegetation.
  If the land is from the forest clearing, the role of the local customs is dominant and it starts from the deforestation plan. In the Gayo Highland, especially in Aceh Tengah and Bener Meriah, they have a unique tradition 20-25 years old, which deals with the process of forest clearing i.e. the people do not burn the forest. After the process of felling and slashing the trees, the land will be neglected for one year in order to get the felled trees started to rot and some cutting are completely decomposed. After that, there will be the clearing for one more year and then the planting holes are made for the coffee seedlings. The planting can be performed with 3-6 months' seeds.

ii. Almost all of the lands in the Gayo Highland can potentially be used as Arabica Coffee plantation areas. For the slopping areas, the conservation function can adopt the terraced method. Mostly, for the slopes under 30% it can be made into mountain belt terraces, while for the slopes of more than 30% it can be made into individual terraces where on each terrace can have maximum one kind of plant.

iii. The space of planting made by the farmers varies and it depends on the land's morphology, fertility, and the variety of Arabica coffee.
The space of planting which is generally practiced by the farmers in the Gayo Highland are 2 m x 2 m (2.500 trunks per hectare), 2,50 m x 2,50 m (1.600 trunks per hectare); 2 m x 2,50 m (2.000 trunks per hectare), 3 m x 3 m (1.100 trunks per hectare), etc.
In almost all of these spaces, the farmers in the Gayo Highland used to use the *matalima* technique. The technique aims at putting the seedling inside a hole in the middle of 4 holes of the planting holes which have the shape of squares. So far, this technique is known and applied only by the farmers living in the Gayo Highland.

iv. The coffee plants should be planted in the planting holes which should be made in every 2 or 2,5m with 40 cm depth. When planting and covering the holes, the soil is mixed with organic fertilizer from the coffee beans' shell or manure. In the planting holes, the natural soil is mixed with the manure when the planting time of the young seedling comes.

v. In the people's coffee plantation in the Gayo Highland, the farmers used to planting shelterplants for the coffee plants. The shelter plants are mostly lamtorogung plant *(Leucaena leucocephala)* although many of them are from the variety of Gayo keprok orange and avocado. The shelter plants are planted among the coffee plants with the space of 6 m x 6 m or 8 m x 8 m, and it depends on the kind of shelter plans. Therefore, the density of the shelter plants is around 25% from the total population of the coffee plants.

2. Planting and seedlings' nursery material

i. There are approximately 20 varieties of coffee in Gayo Highland, traditionally used by producers. However, the list of the coffee plant varieties that are used to produce Kopi Arabika Gayo are the following:

- Timtim
- Ateng Jaluk
- Borbor
- P-88
- S795

These varieties can be used as single variety or mixed.

ii. The authorized varieties of coffee shall follow these rules:

- The seedlings' nursery can be directly done by the Farmer's Group (Kelompok Tani) or they can be bought from the certified nursery farms or given by the government (in this case is the local Farming Serviceor D*inas Pertanian*);
- The list of the varieties which have the authorization from Masyarakat Perlindungan Kopi Gayo or MPKG (Gayo Arabica Coffee Protection Society), Indikasi Geografis (Geographical Indications), supported by the "Indonesian Coffee and Cocoa Research Institute" *(Pusat Penelitian Kopi dan Kakao Indonesia/PPKKI)*, Farming Service, academia from Faculty of Farming Syiah Kuala University, etc and renewal can be issued if it is necessary.

Source : MKPG

3. Plant Maintenance

The maintenance of Kopi Arabika Gayo in the area of the GI is based in the natural, organic, without any artificial chemical substances in the form of artificial fertilizer or pesticide and herbicide.

i. Fertilization twice a year by using the organic fertilizer, especially those from coffee beans' shell and manure from the dung from the cows nurtured by the farmers themselves or bought by them. Thus, the fertility of the soil is in a stable condition because of the regular annually scheduled fertilizer addition. It is allowed to use the organic disposal such as vegetable compost, but the use of artificial fertilizer is banned for the GI Kopi Arabika Gayo.

ii. The coffee pruning is done by making the single trunk shape pruning with the height of 180 cm. besides the shape pruning; regularly there is post-harvest pruning, rough water sprout and soft water sprout.

iii. Important pest control: Important pests for the Kopi Arabika Gayo are nematode, coffee anger beetle and branch anger beetle. The pest and disease control is performed through the System of Integrated Pest and Disease Control (*PHT= Pengendalian Hama dan Penyakit secara Terpadu*) by using the natural enemies and bio-agencies. On the other hand, the use of artificial pesticide and herbicide is banned.

iv. Regulation of shelter woods: In the Gayo Highland, it is common to plant the coffee under a shelterwoods. The shelter woods mostly used are *lamtorogung* tree, orange and avocado. The *lamtorogung* tree can grow from tree's cutting, can easily be pruned and the pruning disposals are the local source of organic fertilizer. As a result of the good condition, Kopi Arabika Gayo can resist sunlight because of the low evapotranspiration, it makes the case of leaf fall rarely found in the Kopi Arabika Gayo coffee varieties in the Gayo Highland.

v. Plant Diversification: The land ownership of quite shallow land, for about 2 hectares. The farmers in the coffee plantation in the Gayo region use to do the horizontal diversification effort, with the other plants such as the fruit plants or the live stocks. Since there are benefits from such kind of diversification to the coffee plant, the diversification should be recommended. The effort of diversification like this can not only raise the income of the farmers in the broader society but it can also provide organic fertilizers. The fertilizers are from coffee beans' shell, the *lamtorogung* pruning disposal, manure and the garbage from the pruning disposal from the other plants in the garden for the coffee plant, and this can support the organic maintenance of the coffee plants in the Gayo Highland. The diversification is commonly used with vegetable plants in the 1-3 years after the coffee planting, after that, the diversification is done by using orange and avocado plants which are planted at the same time as the coffee plants. The orange and avocado plants will be the shelter woods for the coffee plants.

vi. In the fences of the coffee plants or along the way to the plantation, the farmers grow the grass. The grass has the function of natural source of food for the livestock kept by the farmers. Besides, the falling leaves from the shelter woods such as from the *lamtorogung* or disposal from other plants, including also the parasite plant disposal which were cleaned regularly, are the source of the local source ingredients for making the organic fertilizer.

4. Processing methods

Kopi Arabika Gayo coffee is processed with the wet hulling method through the following steps:

i. Harvest

The harvesting practice, which is generally done by the farmers, is the hand-picking system. The red beans are picked by sorting in the trees. The harvesting is done by the farmers or the farm workers. The harvest time begins from September until May or June.

Source : MKPG

The harvest should be done with care and using manual hand picking technique. The purpose of doing this is to get at least 85 % raw red beans, with maximum 15 % raw yellow beans without any green or black beans. The percentage will be checked at the gate of the processing unit (the sorting will be done after the harvest if it is necessary). Only the raw beans will be sorted in the right way to be processed

ii. Processing of red coffee beans into coffee beans and clean hulled coffee beans

- To make sure that there are only the best quality beans and to minimize the damaged raw red coffee beans, the harvested beans should be peeled of their red skins the same day they are picked and then also processed completely the same day. Then the process shall last no more than 24 hours.

- The red coffee beans are then sorted manually by using the water immersion. The raw beans that float will be sorted and processed separately and will not be considered and sold as GI Kopi Arabika Gayo.

ii.1. Red skin pulping

The process of peeling off the red skin is called “pulping”. The pulper machine can sort the red skin from the coffee beans which are called “unhulled coffee beans”. During this process of pulping, extra care should be taken in order not to damage the beans.

In the Gayo Highland, the pulping process is usually done directly by the farmers. The farmers do this process to get an extra income besides the income from the selling price and also from the skin of the raw beans that can be used in the coffee plantation as organic fertilizer.
The pulping is done by using the electric mechanical pulping machine and sometimes manually.

After getting the red raw beans pulped, the coffee will be immersed in water and then the floating beans are sorted.

Source : MPKG

ii.2. Mucilage Removing

The mucilage sticking in the surface of the unhulled coffee beans can obstruct the drying process. Therefore, the mucilage in the surface of the beans should be cleaned before the drying process. Mucilage can be separated from the surface of the unhulled coffee beans by curing the unhulled beans in the plastic bag as well as in the curing basin; this is often called “fermentation”.

The fermentation can be done for 12 hours or 36 hours. In the curing process, the coffee beans become hot, so that the mucilage sticking in the beans will automatically go. The fermentation is done when the unhulled beans become rough if they are squished. The fermentation is done in a natural and complete way, without the existence of the skin and raw unhulled beans in the fermenting tank. After that process, the clean coffee beans are washed with clean water.

Source : MPKG

ii.3. Drying

The wet unhulled coffee contains high amount of water, which makes them easily decay. Therefore, the water amount in the unhulled coffee beans should be decreased by drying them

using the direct sunlight or using a drying machine. Drying using the direct sunlight is better than using the drying machine. The sunlight contains ultraviolet which can form a better aromatic smell of the beans and make the storage time longer. If the amount of sunlight cannot be used in the drying process, the drying machine shall be used and the temperature shall be adjusted to the temperature of the sunlight in order to have a little difference with the direct sunlight drying process.

Source: MPKG

ii.4. Hulling process

- Peeling the hull

  The process of peeling the hull is called “hulling”. During the hulling a special attention should be taken in order not to produce damage or cracked coffee beans and throw the clean hulled beans with the skin disposal. Along with the advancement in technology, the hulling machine is now completed by the machine to clean the hull in the coffee beans called “polishing machine”. By using the machine, the hull attached in the coffee beans can be cleaned so that the coffee beans look cleaner. In the Gayo Highland, the process is done by the processors, some are called “coffee mill manufacturer” and they exist besides the coffee farmers.

- The method of processing by dry hulling in the Gayo Highland

  The drying process should be done to reach the water content level of 12-12,5 %. In the sun drying process, the coffee beans are stirred to avoid the beans to reabsorb the water. The process lasts for around 14 days.

  The unhulled beans/ dry unhulled coffee beans which are produced should be stored in new sacks for minimum 2 (two) months in the processing place (where the raw unhulled coffee beans processed before) by the private processing group or unit. The storage should be done in a dry and clean room (no direct contact to soil), and in the storage room which is free of chemical substances (the cause of smell contamination). After the storage, the unhulled beans can be sold directly or once the hulling is done. Hulling (using the huller) can be done

by the processing unit or by the unhulled coffee beans buyers in all of the area in the Gayo Highland.

Source: MPKG

Scheme of the Process of Dry Hulling of the Dried hulled Coffee beans

RAW UNHULLED RED BEANS
BEANS SORTING
(Sorting the green, yellow, dry beans, leaving 85 % red beans and 5% yellow beans)

↓

BEANS IMMERSION IN WATER
(Floating beans are sorted)

↓

PULPING PROCESS OF RED BEANS
(Using the pulper machine)

↓

WATER IMMERSION FOR WET UNHULLED BEANS
(Removing the hull, empty beans and other dirt)

↓

FERMENTATION
(For 12 hours or 36 hours)

↓

WASHING
(Using the running clean water)

↓

DRYING PARCHMENT
(Until the moisture is in the level of 35-40%)

↓

WET HULLING
(Using the huller machine)

↓

DRYING BEAN
(Until the moisture is in the level of 12-12,5%)

↓

STORING THE UNHULLED BEANS IN THE PROCESSING PLACE (min 2 months)

↓

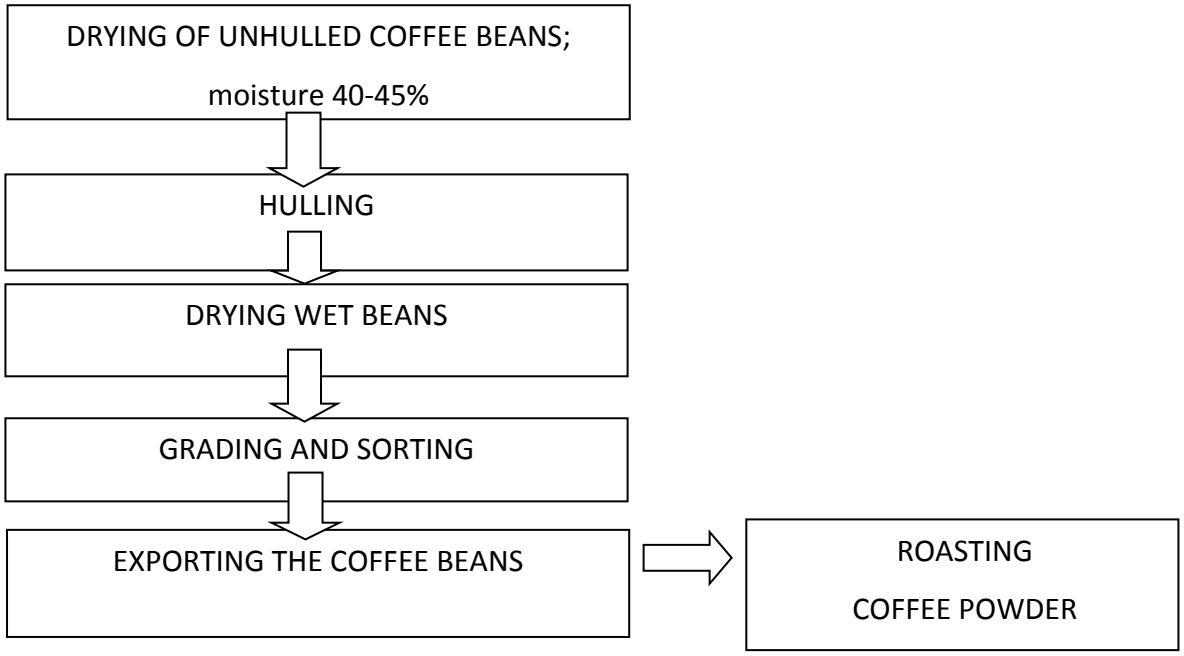
READY TO BE EXPORTED OR SOLD TO EXPORTERS OR ROASTERS

- The wet hulling process

The wet hulling process is done in the Gayo Highland. The unhulled beans are dried in the sunlight to get a moisture level of 40-45% and then the hulling process is done.

The result of the hulling is called the wet bean *(kopi labu)*. The wet beans still have a high moisture level and still need a further sun drying process to reach the level of 12-12,5 %. In the Gayo Highland, the process is generally done by the farmers themselves.

Scheme of wet hulling process



ii.5. Sorting (Grading)

The sorting process is performed using a machine called grading machine. For the light beans can be used the machine called blowing machine and for the defect beans such as the black beans, brown beans, cracked beans, or the beans damaged by the pest can be manually sorted. Despite using the manual way, the machine can also be used during the sorting phase. By using this machine, the bad beans can be sorted faster and efficiently compared to the manual way.

Source: MPKG

ii.6. Storage

The storage of the coffee beans should be clean and neat by arranging the air circulation in the storage warehouse. The air circulation is very important and should be taken into consideration so that the amount of water of the coffee beans remains stable.

The coffee beans should be stored in a specific place separated from other ingredients which have strong smell such as cloves, garlic, rubber, cinnamon, etc. This is because the coffee can absorb the smells around it.

The bags where the beans are stored have to be clean and free from other smells and it is necessary not to store the beans in bags which have been used by other ingredients before. The contamination may occur and affect the coffee beans.

The coffee beans from the Gayo Highland are usually stored by the sellers and exporters before exporting the beans.

5. Preparation of Lot before Exporting

After the hulling process, the coffee beans should be sorted to fulfil the standards of the specialty coffees.

The physical defect should be less than 5 per 350 gr. Based on the standards of Specialty Association of America (SCAA), the size of the coffee beans should be bigger or the same of 16.

After its preparation, the Kopi Arabika Gayo will be put in bags (gunny bags) with the information including the name and GI logo, lot number, harvesting time. The preparation of lot export has to be done in the Gayo Highland and the activities should be reported to the MPKG.


Source MPKG

6. Roasting Method and Retail Selling

There are generally three types of roasting: dark roast, medium roast, and light roast. The types of roasting have a close relationship with the consumers' taste as coffee drinkers. After the roasting, the coffee needs the grinding and then packaging and then it is ready to be sold. There are many producers that use the aluminium packaging for the food and drink. This kind of packaging is not only practical but also food-grade if it is compared to the tin packaging.

The process of roasting/powder should be done in a safety food practice condition and must maintain the good quality of the coffee beans. The types of roasting will depend on the roasters wishes (can be in the form of light roast, medium roast, or dark roast), it also depend on the demand of the market or the demand of the consumers. However, the general recommendation for Kopi Arabika Gayo is the medium roasting and done in the defined geographical area.

The name of Kopi Arabika Gayo (Gayo Arabica Coffee) can only be used in the pure coffee which means that the coffee sold under this name have to get the composition of 100% Kopi Arabika Gayo.

The mixed coffee cannot bear the Kopi Arabika Gayo (Gayo Arabica Coffee) name. When the Kopi Arabika Gayo is used in the mixed coffee, the percentage of composition of the Kopi Arabika Gayo composition should be attached in the composition information of the ingredients or the contents.

7. Labelling rules

Coffee covered by the PGI "Kopi Arabika Gayo" will be presented to customers or final consumers in the market in packagings and containers which clearly bear the following mention: "Protected Geographical Indication" or PGI, the name "Kopi Arabika Gayo" only or together with its translation in any of the official EU languages if desired, the "Kopi Arabika Gayo" logo (registered as a European Union trade mark – See Annexe 6) and the European PGI Logo, if desired.

MPKG will stick or print the labelling on the bagging and packaging or MPKG will give the authority to authorized operator (members for each company) to stick or to print the labelling on the bagging and packaging based on the quality control which is listed in BOR. The logo will be print in Bahasa or English or Bahasa and English.

The logo must be put together with the company register number of MPKG membership. The logo size can be arranged and adjusted based on the bagging and packaging. The logo should be put in the bottom left side for the final product (roasted bean/powder), while for bagging, the logos can be put together in the centre of the top of the bagging as illustrated in previous section.

G. Elements that justify the link with the geographical area

1. <u>Specificity of the geographical area:</u>

a. <u>Natural Factors</u>

The Gayo Highland is located in the North-Eastern part of the Aceh Province, in the tropical area, at 96°E-98°E and 4°N-5°N. The region is a cool volcanic mountain with flat slopes, hills, curves, and ranges from steep to very steep. The vegetation in the region includes pines and horticulture plants.

The Gayo Highland is formed by the mountain of several mounts: Mt. Geureudong (2,855 m above

sea level/ above sea level), Mt. Tangga (2,500 m above sea level), Mt. Geumpang (1,002 m above sea level), Singah Mata Hill, Mt. Mueajan (3,079 m above sea level), Mt. Leuser (3,140 m above sea level), Mt. Kapal (2,763 m above sea level), Mt. Pepanji (2,275 m above sea level), Mt. Krueng Pase (1,462 m above sea level), Mt. Batok (1,500 m above sea level), and Mt. Burni Telong (2,812 m above sea level). Four of the mounts are volcanic.

At the centre of the Highland, there is a freshwater tectonic lake located at 96° 55' 25 E and 4° 36' 43" N, near Takengon, the capital of Aceh Tengah District. This Highland is a buffer zone of Leuser ecosystem that is conserved by the Government. Its volcanic soil (Andosol) helps the plants to grow.

Basically, the region is an agricultural region that practices intensive and eco-friendly plant cultivation using diversification planting technique. The main geographical elements of the Gayo Highland are shown in Table 1.

Table 1. Physical elements of the Gayo Highland

Relief	Height	900 - 1,700 m above sea level
	Slope	0-40%
Weather	Rainfall	1,834 mm per annum
	Temperature	16-24°C
	Relative humidity	80%
Soil	Geological formations	Andesit and pyroclastic
	Soil types	Hapludand, Durudand, Dystropept, and HapludultTypics
	Texture	Dusty clay, sandy clay, clay, liat clay
	Solum	75 - >100 cm
	C-organic	Medium to high
	Cation-switch capacity	Low to medium
	Period of dry spell	February-May

Source: Karim (1993, 1999)

i. Topography

The region of Kopi Arabika Gayo cultivation is mountainous with varied topography, ranging from flat, curvy, to mountainous. The villages are at various heights; some farmlands in the villages have contrasting difference in heights. Most of the farmers' plantations are located at 900 - 1,700 m above the sea level.

Kopi Arabica Gayo' grows mostly at 900 m to 1.700 m above sea level under legume shade trees of Leucane sp. (local name called pete). Coffee growing in conditions of high altitude and lower light intensity, about 60 % of full sunlight, will result in slower maturity process. This process will entail formation of chemical compounds that will constitute coffee flavour.

ii. Rainfall

Among other aspects of the climate, the rainfall is the most dominant one. It is used as a criterion to determine the climate of a region in relation to the requirements of plant cultivation.

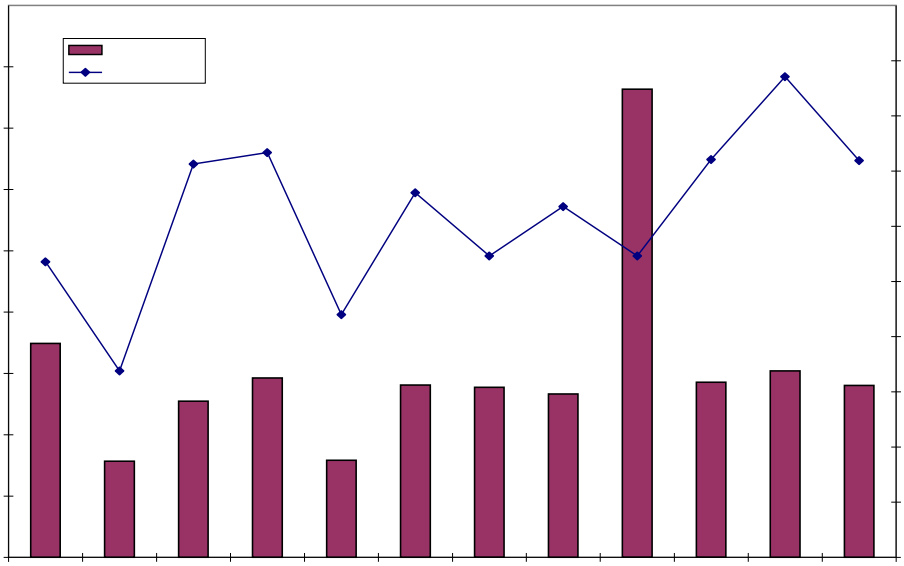


Figure 4. Rainfall in the Gayo Highland in 2008 (of 3 districts). Dinas Perkebunan Pertanian Provinsi NAD

The rainfall is in average of 1,834 mm per annum, for 149 days, with monthly average rainfalls at 60-347 mm. The lowest rainfall occurs in May and the highest in September. According to its Q value (climate type), the rainfall type falls to B and C.

Table 2. The average of wet, humid, and dry months in the Gayo Highland region

	Total
Wet months	10
Dry months	2

In Gayo Highland rain falls almost during the whole year. This influences flower bud formation and blossoming, which takes place during the whole year as well. Consequently, Kopi Arabika Gayo' bushes bear cherries during the whole year, with two peaks of harvesting season, namely in March - April and October - November. Distribution of cherries bearing over the year will avoid overbearing, as a physiological disorder symptom. Under overbearing conditions, normally bean growth and aroma precursors will be imperfect.

The climate characteristics of the Gayo Highland show that there are 1-2 dry months. This period usually last between February and May. Soil moisture during dry months is not sufficient to support the coffee plants' need of water, but because it does not occur back to back, their need of water is fulfilled in the following months.

On the other hand, Kopi Arabika Gayo farmers have learned to deal with this phenomenon. Soil management practices by adding organic materials are one of the effective methods in keeping soil moisture. Moreover, the shade of trees such as white leadtree (*lamtorogung*), avocado, and

Mandarin orange (*jeruk keprok*) is effective in controlling the temperature and water around the coffee plants during dry seasons, so that soil moisture reduction can be kept minimal.

Nevertheless, the dry months also have positive impacts on coffee production in the Gayo Highland, because they accelerate the maturity of good coffee berries as well as drying under the sun after manufacturing.

iii. Temperature and humidity

Based on the observation in Redelong Airport, Bener Meriah District, the relative humidity is currently high (>80%), the daily temperature ranges from 16°C during the day to 18°C at 10 PM and to 21-24°C at midnight.

iv. Soil

The geological formation of most of the Gayo region is typically Andesit and pyroclastic with Hapludand, Durudand, Dystropept, and Hapludult Typics.

The variety of soil structures also has various characteristics. In general, the soil texture is medium and it has good drainage. The fertility of soil is low to medium, as evidenced by the soil reaction, which ranges from acid to more acid (pH 5.0-6.3). The C organic is medium to high, while the total N is low. The nutrients reserve (P and K potentials) is high to very high, while K reserve is medium but P reserve is very low, resulting in general low soil fertility (Source: Yusuf, et al., 1998; Karim et al., 1996; Karim et al., 1999).

The soil's ability to exchange cation and the alkalinity is high to very high. Shallow soil at the subgroup level (<50 cm) is classified as Hapludands Lithic, while medium-deep to deep soil (>75 m) is HappludandsTypic, EutricHapludands, and AlficHapludands (Karim et al., 1998). These types of soil have high potentials for agriculture, especially annual plants such as coffee (See Annexe n°5).

- Land Use
  Based on the District Land Use Plan (*RencanaTataruang Wilayah Kabupaten/RTRWK)* of each district, land use in the Gayo Highland is divided into three, i.e. for other purposes (roads, settlements, agriculture, etc.), production forest, and wildlife reserve.

  The agricultural area is used for unirrigated lands as well as irrigated rice fields. Unirrigated lands in the form of dry fields are dominated by Arabica coffee plants, while rice fields are located in the valleys along the river, which receive enough water supply.

  Based on the field observation of land ownership in the Gayo Highland, the average of land managed by each farmer is 2 ha, while fewer than 5% of farmers have over 2 ha land.

- Characteristics of the soil
  Some analysis using the samples taken from some sample locations orvillages in the Gayo Highland has been carried out by KPKG researchers since 1990 and by Karim since 1992. These analyses enabled to characterize the soil of the Gayo Highland and gave evidences that Gayo Highland was suitable for coffee production.

Textures of soil in the Gayo Highland are mostly silty loam, sandy loam, loam, and clay loam. The villages that produce most of the coffee are usually of loamy sand, spreading from the centre to the east and southeast. The villages at the south usually have sandy loam to sand types of soil. The

villages at the centre-south to the west are of sandy loam to loam textures. Overall, the lands in villages in the Gayo Highland have the suitable soil acidity (pH) for coffee planting.

The C-organic value in the farmers' plantations is medium to high. This is in line with the farmers' habit of fertilizing coffee plants with only organic fertilizers, especially which are made of a combination of coffee shells and various local materials, such as cuts of white leadtree (lamtorogung) and manure (Karim, et al., 2000). Most farmers need to use more organic fertilizers, because many lands have low P-nutrients. Only a few farmers have processed manure well, and the relative C/N in the Gayo Highland is generally still low. P-total level in villages in the Gayo Highland is generally high (save for one village that is located near the forest).

The characteristics of soil cation in the Gayo Highland are explained as follows:

- The soil in the Gayo Highland villages generally has low level of K, Mg, Ca, and cation exchange capacity (KTK).
- The soil alkaline saturation *(kejenuhan basa/KB)* is generally high
- Average contents of micro elements: soil nutrients of Cu micro are generally low, and only a few villages have them at medium level, but soil nutrients of Fe and Zn are at medium level.
- Other soil factors contributing to the quality of flavour and acidity are total number of cation and alkaline saturation *(Mawardi, Wibawa, and Sulistyowati, 2004).* The analysis shows interesting values for those factors, showing that the Gayo Highland is suitable for Arabica coffee cultivation. These natural characteristics define the distinct taste of Kopi Arabika Gayo.

Gayo Highland belongs to a humid tropical area. It is composed of fertile volcanic soils. In terms of physical properties, the soil texture in the area mostly consists of a balance between sand, silt and clay. This situation facilitates coffee roots to grow well. Most soils in Gayo Highland have also good chemical properties such as high to very high level of organic matter/material (C-organic), medium to very high nitrogen content (N-total) and low to medium C/N ratio as well as optimum pH requirement for coffee growing (5.5 to 7.0).

Thanks to the mentioned physical and chemical soil properties, 'Kopi Arabika Gayo' has vigorous growth. A healthy plant normally holds enough healthy leaves to support coffee bean growth until complete maturity. In this regard, the bean will be able to reach maximum growth as well as to form the best appropriate flavour precursors.

Of course, soil is not the only factor determining final flavour characteristic. It also influenced by other factors such as altitude, light intensity and rainfall.

By considering geographical factors of soil type and characteristics such as altitude, rainfall type and legume shade trees, most of coffee beans from Gayo Highland provide bean growth and flavour precursors perfectly.

b. Human Factors

i. The people in the Gayo Highland

The population of Gayo Highland is composed of various ethnicities. The majority is Gayo ethnicity, followed by Javanese, Acehnese, Mingkabau, Tapanuli, Sundanese, Bataknese, Chinese, etc. Gayo is the native ethnicity of the people in the Gayo Highland. In general, the people in the Gayo Highland

speak in Bahasa-Indonesa and Gayo languages in daily communications. Similar to the people of Coastal Aceh *(Aceh Pesisir),* special autonomy was also given to the Gayo Highland by the Indonesian government, i.e. the application of Islamic syaria law since 2003.

ii. Involvement of the local population in the coffee production

All raw materials for Arabica coffee red berries in the Gayo Highland are produced by local farmers. They are generally affiliated do some farmers' groups. Those groups are essentially the organizations of farmers who share farming orientation. With the groups' development, the farmers are able to sell red coffee berries to develop wet-processed coffee. The production of high quality red coffee berries may significantly improve the farmers' income.

In order to manage the farmers' groups, the members appoint a managing committee *through democracy.* These groups discuss the to pointed an ideal planting period as well as the best methods of planting, cutting, fertilizing, pest and disease controlling, and harvesting. Moreover, the groups keep the members from using chemical pesticides and impose a fine to members who do not follow the deliberation results or mutual decisions.

The groups also have an important role in Gayo in manufacturing red berries production as well as in social and religious aspects of the people's lives.

The know-how of Gayo people that impacts on coffee quality is mainly based on coffee farming practices, cherry picking and post-harvest handling through semi-washed process.

In terms of farming practices, Gayo people implement the growing of coffee under shading trees such as white leadtree (lamtorogung), avocado, and Mandarin orange (jeruk keprok), good maintenance on soil fertility as well as conducting regular pruning.

Furthermore, producers traditionally use unirrigated lands for coffee plantations. In addition, the farmers' habit of fertilizing coffee plants with only organic fertilizers, especially which are made of a combination of coffee shells and various local materials, such as cuts of white leadtree (lamtorogung) and manure (Karim, et al., 2000). Most farmers need to use more organic fertilizers, because many lands have low P-nutrients.

Gayo coffee farmers always do the selection of red cherries beans, because they understand well the impact of picking of post-harvest processing and coffee quality (aspect, flavor and aroma) as well.

In terms of post-harvest handling, the coffee community in Gayo Highland uses the "wet hulling process" also known as"Sumatra semi-washed process". In this regard, the process of removing parchment or "dehulled" is conducted when parchment coffee beans still moist (with moisture content between 25 - 30 %). In contrast, most Arabica green beans in the rest of the world are produced using the "full-washed process" (mainly in Central America). Coffee beans processed by the "wet hulling method" will perform more body and more flavour complexity than those processed by " full-washed" one.

iii. Coffee production and its relationship with the local traditions

Gayo people believe that coffee cultivation and production have to go through religious ceremonies. Ceremonies in relation to the Arabica coffee production take place before and after the harvest. Special ceremony are organized when the plants are attacked by pests or diseases. This shows the

deep relation between production and tradition, as well as the people's faith.

In developing coffee plantations in Gayo, traditional ceremonies are performed, starting from land opening, planting, harvesting, and post-harvesting.

Kopi Arabika Gayo is produced by the local organizations/social-religious institutions. There is a relation between coffee and the local culture of Gayo. Kopi Arabika Gayo is a traditional product. Coffee is used as gifts or donation during certain events. In several ceremonies such as weddings and funerals, neighbours and relatives are expected to donate something, such as coffee to consume during the ceremonies.

Coffee is also used for medicine, for example for headaches and wounds. When a woman is having difficulty in baby delivery, the family often offer sweet coffee drink to help with the delivery. Coffee has become a traditional drink consumed in certain events in the daily lives of Gayo people, such as when a guest visits, during farmers' group meetings, as well as during family meetings.

Therefore, coffee is an important part of the local culture, possibly even more than tea. Tea is part of the cultures of other Asian countries, but it is not consumed in the same way all over Indonesia, especially in Gayo. After developing for more than one century and becoming well-known in and out of the Gayo Highland, the local production of Gayo coffee shows a strong and sustainable relation with its area of origin.

c. History and reputation of the Kopi Arabika Gayo

Arabica coffee is originated in the African continent, from the plains around Lake Tana at the Northwest of Ethiopia to the North of Sudan. The first variety that entered Indonesia was Arabica (*Coffea arabika, L*) in 1696. Because all the coffee plants died from flood, in 1699 more seedlings were brought in and spread around Jakarta and West Java, then also to many islands in Indonesia.

Since 1696, a lot of folktales say that the Dutch mercenary soldiers (VOC) introduced coffee on Java Island for business. At the time, coffee was already a popular drink in the world. Until 1885, Indonesia had been one of the largest producers of coffee in the world.

Bireun-Takengon highway was first rebuilt in 1913. The winding roads surrounded the edges of plantations in the Gayo Highland. This resulted in the opening of agricultural lands in forests in Paya Tumpi, Bergendal, and Belang Gele. This opening was done by the Dutch Colonials in order to fulfil the demands of the European market. In 1930, small farmers in the area had been planting coffee for their livelihood.

Starting from the partnership between the Indonesian government and the Dutch Empire through IDAP Project in 1980, the development of Kopi Arabika Gayo began more intensely. The people of the Gayo Highland greatly depended on coffee produce, but the manufacturing system was very simple, producing only 500 kg per ha per year. Aside from low production, the quality was low because the farmers had not learned of innovations in technology, in both cultivation and harvest processing. Therefore, in 1984, the government built a unit of wet processing factory with the capacity of 15 tons of red coffee berries per day. It was aimed at improving the quality of coffee as well as the farmers' income.

In 1979, the Department of Agriculture through PRPTE Project developed horticulture plants in areas throughout Indonesia, including in the Aceh Province. In the Gayo Highland, according to its agroecological zone, the PRPTE Project developed the Arabica coffee. In the same year, the

Indonesian Coffee Exporters Association (Asosiasi Eksportir Kopi Indonesia/AEKI) was established at the national level. AEKI was aimed at promoting Indonesia Arabica coffee to the international market.

Since 1984, various facilitation activities for coffee farmers were carried out in the Gayo Highland by several projects to improve the cultivation and processing practices as well as the quality of the coffee.
The earthquake and tsunami of 26 December 2004 in Aceh affected the economy in the Gayo Highland. Most of the people lost families or relatives in Banda Aceh and its surrounding areas. On 15 August 2005 the peace treaty between GAM and the Republic of Indonesia was signed. It brought great impacts on the livelihood improvement of the Gayo Highland people.

In 2006, the buyers of Kopi Arabika Gayo, such as Indocafco and Baburayan Cooperative, built factories to process unhulled coffee into coffee kernels right in the Gayo Highland. Until today, there have been a lot of domestic and foreign investors who are interested in building storages or factories in the Gayo Highland.

The history of Kopi Arabika Gayo shows that for more than one century, coffee has become part of Gayo people's primordial activity. Even if there is a great fluctuation of the land, coffee remains one of the most important commodities in the region that boosts the regional development.

Since the Dutch Colonials started developing Arabica coffee in the Gayo Highland, coffee started to gain reputation among Gayo people and among Indonesians as well as foreign coffee lovers.

Currently, in line with the tourism development in Gayo, more and more foreigners come to the Gayo Highland. It improves the region visibility and its' products' reputation, especially its coffee. Tourists who come to Gayo usually buy coffee directly in the region or in other surrounding regions, because some roasters supply coffee in stores and supermarkets.

Aside from the domestic and foreign tourists, Gayo consumers also include coffee lovers who regard it as an origin coffee. They are willing to spend money on it. These consumers can be found in the Gayo Highland and all around Indonesia, as well as in Japan, Australia, and several European countries where it has been exported for more than 20 years. Kopi Arabika Gayo is in need of Geographical Indications (GI) protection, which will guarantee all consumers of the origin and quality of Gayo coffee that they buy.

The figures are one of the examples of Kopi Arabika Gayo packaging that are sold in the market, illustrating that this coffee is protected by Geographical Indications (GI) owned by Gayo people, and that Gayo is the name of Geographical Indications (GI). The logo of GI provided by MPKG can be illustrated in the bottom left side as show in the figure below.

Examples of Coffee named "Kopi Arabika Gayo" (products present in the Indonesian market)

Source: MPKG

Existing packaging with GI logos

Source: MPKG

In addition, some publications confirm the reputation of the Kopi Arabika Gayo:

- Evaluation Criteria of Land Suitability to Arabica Gayo coffee in the Gayo Highlands/ Evaluasi Kriteria Kesesuaian Lahan Kopi Arabika Gayo di Dataran Tinggi Gayo - R Salima, A Karim, S Sugianto - Jurnal Manajemen , 2012 - jurnal.unsyiah.ac.id
  This research was conducted to evaluate the criteria of the land suitability for Arabica Gayo coffee, and to define the land characteristic based on climate and soil that can affect the physical quality of Arabica Gayo coffee bean

- Guide to raise and process **Gayo** Arabica **Coffee** /Panduan Budidaya dan Pengolahan Kop**i** Arabika Gayo - S Mawardi, R Hulupi, A Wibawa, S Wiryaputra – 2008

- Application of ISM and ME-MCDM techniques for the identification of stakeholders position and activity alternatives to improve the quality of **Kopi Gayo** - Rachman Jaya1), Machfud 2), Muhammad Ismail 1) 1) Balai Pengkajian Teknologi Pertanian Nangroe Aceh Darussalam Jl. Panglima Nyak Makam No. 27, Lampineung, Banda Aceh Email: abah_pipah@yahoo.co.id 2)Departemen Teknologi Industri Pertanian, Fakultas Teknologi Pertanian, Institut Pertanian Bogor

  Application of artificial intelligence such as fuzzy logic is one of the ways to handle in the realworld with uncertainty situation like in coffee bean industry in Highland Gayo of Aceh Province. The aims of this study were to apply Fuzzy Multi Expert Multi Criteria Decision Making (MEMCDM) and Interpretatif Stuctural Modelling (ISM) methods in increasing of institutional system and coffee quality. The results of the study show that for the coffee quality improvement, the importance alternatives were: improvement of agricultural technique, pre-harvest and post harvest technologies, whereas for the institutional system, the key elements were local government, farmers, and middle-man.

- Registration of geographical indications of goods in agriculture – Plantations in Aceh Region – Puji Tri Nuzzuli

  Aceh has various natural resources with abundant agricultural products such as Kopi Gayo, nutmegs, patchouli, pepper, clover, Kopi Ulee Kareng, and Pisang Siem. Agricultural products in each area also have their specific or special characteristics which become its superior quality such as their aroma, taste, color, size, and texture so that they can compete with other products of the same types. Existence of goods have potential to be protected by the geographical indication in Aceh. Government during the time has given an assistance which is positive in registering geographical indications. Local government, after the GI registration evaluates once a year the local society existence and plantation, monitors the plantation in Aceh province to see how far growth, sale and labialization from the Coffee Gayo.

2. Specificity of the product

Kopi Arabika Gayo Protected Geographical Indication covers a specific product: an Arabica coffee grown in Gayo Highland (Aceh Tengah', 'Bener Meriah' and 'Gayo Lues') which is processed by the typical "Sumatra semi-washed method" also know as "wet hulling" method which is covered semi-whased and full-washed process as described in the specifications and which complies with the Indonesian and export standards.

Coffee varieties:

Kopi Arabika Gayo (Gayo Arabica Coffee) refers to Arabica coffee variety.

There are approximately 20 varieties of coffee in Gayo Highland, traditionally used by producers. However, the list of the coffee plant varieties that are used to produce Kopi Arabika Gayo are the following:

- Timtim
- Ateng Jaluk
- Borbor
- P-88
- S795

These varieties can be used as single variety or mixed.

Products covered by the GI:

The Geographical Indication" Kopi Arabika Gayo" covers the following products: The coffee beans obtained from wet hulling method.

Characteristics of the beans:

Kopi Arabika Gayo beans traded in the international market are of quality grade 1 (National standard that refers to the physical defect value), which means with physical defect value lower than 11 per 300g of green beans [4].

According to the Indonesian National Standards (*Standar Nasional Indonesia/SNI*) and the standards by the Specialty Coffee Association of America (SCAA), the Kopi Arabika Gayo beans have a white grayish colour before processing and (the water content is 35-40%. After wet hulling, the colour of the bean is blue to bluish green and the water content if 12-12,5%. The final sorting after rustling produces coffee beans with minimum size of 6.5 mm or bigger.

Characteristics and profile of the Kopi Arabika Gayo:

The wet hulling method, the cultivation on the Gayo Highland in certain agro-climatic zones and the type of soil that is dominated by volcanic ashes, produce a unique coffee with uniform taste, birght acidity (no indicator-just sensorial/organoleptic effect during coffee tasting), less bitter, strong intensity of aroma.

Specific coffee growing area and products described in this specification must comply with the domestic market and export standards.

Specific characteristics of Kopi Arabika Gayo consist of:

- free from main defect tastes,
- uniform taste
- bright acidity (no indicator-just organoleptic effect during coffee tasting),
- less bitter, and
- strong intensity of aroma.

In addition, Kopi Arabika Gayo presents characteristics of unique of complexity flavor and aroma such as nutty, chocolaty, caramelly, fruity, bright acidity, full body as well as long finish as the specific characteristics.

In this regard, it must be noted that coffee to be presented to consumers must consist of 100 % Gayo highland (3 districts covered by the geographical area) origin.

[4] "Quality No 1" refers to the grading of the coffee and corresponds to "Grade 1". According to the National standard, the Grade 1 means that the physical defect value is lower than 11 per 300 g of green beans (reference of the SNI Standard/Indonesian Standard).

3. <u>Causal link between the product and its geographical origin</u>

The history of 'Kopi Arabika Gayo' shows that for more than one century, coffee has become part of Gayo people's primordial activity. Coffee remains one of the most important commodities in the region that boosts the regional development. Since 1984, various facilitation activities for coffee farmers were carried out in the Gayo Highland by several projects to improve the cultivation and processing practices as well as the quality of the coffee.

"Kopi Arabika Gayo" presents characteristics of unique complexity flavour and aroma because of natural and human factors present in the geographical area. These qualities make up the reputation of Kopi Arabika Gayo in the market.

There is a close link between the quality and the specificities of the Kopi Arabika Gayo and its geographical area for the following reasons:

- The influence of the natural factors, in particular production in the geographical area of Gayo Highlands, which consist in rich volcanic soils and high altitude;
- The traditional know-how of local people with the semi-wash process/hulling process;
- Both elements confer a specific quality to this coffee: free from main defect tastes, bright acidity, less bitter, strong intensity of aroma. 'Kopi Arabika Gayo' presents characteristics of unique complexity flavor and aroma, such as nutty, chocolate, caramel, fruity, bright acidity, full body and long finish.
- The reputation of the Arabica Coffee of this area because of it quality.

a. <u>Influence of natural factors</u>:

'Kopi Arabika Gayo' originates from a specific area at the height of 900 - 1,700 m above the sea level. The location of the Gayo Highland makes use of natural borders such as valleys or roads for the Western and Eastern parts. 'Kopi Arabika Gayo' grows under legume shade trees of *Leucane* sp. (local name called *pete).* Coffee growing in conditions of high altitude and lower bright intensity, about 60 % of full sunlight, will result in slower maturity process. This process will entail formation of chemical compounds that will constitute coffee flavour as nutty, caramelly, chocolaty, fruity, bright acidity, full body and long finish.

This area has cold and dry air, with an annual rainfall of 1,834 mm with 149 days of rain, averaging 60 – 347 mm per month. Its temperature ranges between 16 and 24°C all year round, while the relative humidity is over 80%. There is an extreme temperature difference of around 5°C in Gayo Highland in the day and at night. Consequently, 'Kopi Arabika Gayo' bushes bear cherries during the whole year, with two peaks of harvesting season, namely in March - April and October - November. Distribution of cherries bearing over the year will avoid overbearing, and impacts on the specific aroma of the coffee (nutty, caramelly, chocolaty, fruity, bright acidity, full body and long finish).

Gayo Highland belongs to a humid tropical area. It is composed of fertile volcanic soils (Andosol, Inseptisol, Ultisol, and Oxisol). In terms of physical properties, the soil texture in the area mostly consists of a balance between sand, silt and clay. This situation facilitates coffee roots to grow well. Most soils in Gayo Highland have also good chemical properties such as high to very high level of organic matter/material (C-organic), medium to very high nitrogen content (N-total) and low to medium C/N ratio as well as optimum pH requirement for coffee growing (5.5 to 7.0).

Thanks to the mentioned physical and chemical soil properties, 'Kopi Arabika Gayo' has vigorous growth. A healthy plant normally holds enough healthy leaves to support coffee bean growth until

complete maturity. In this regard, the bean will be able to reach maximum growth as well as to form the best appropriate flavour precursors.

Hence, the specific flavour of coffee is not determined by a single factor. It will be influenced by an interaction of several factors mainly consisting of land (mainly soil fertility and altitude), plant growth (vigour and healthiness), and production methods such as the use of the shade trees, pest and disease attack (including physiological disorders), cherry picking (maturity level and freshness), and post-harvest handling (through semi-washed wet-hulling process).

b. Description of human factors:

Besides the above factors, 'Kopi Arabika Gayo' is also prominent in terms of human factors. 'Kopi Arabika Gayo' is a product that has a high reputation because it is grown by the people who care about its quality.

The know-how of Gayo people that impacts on coffee quality is mainly based on coffee farming practices, cherry picking and post-harvest handling through semi-washed process.

In terms of farming practices, Gayo people implement the growing of coffee under shading trees such as white leadtree (lamtorogung), avocado, and Mandarin orange (jeruk keprok), good maintenance on soil fertility as well as conducting regular pruning.

Furthermore, producers traditionally use unirrigated lands for coffee plantations. In addition, the farmers' habit of fertilizing coffee plants with only organic fertilizers, especially which are made of a combination of coffee shells and various local materials, such as cuts of white leadtree (lamtorogung) and manure (Karim, et al., 2000). Most farmers need to use more organic fertilizers, because many lands have low P-nutrients.

Gayo coffee farmers always do the selection of red cherries beans, because they understand well the impact of picking of post-harvest processing and coffee quality (aspect, flavor and aroma) as well.

In terms of post-harvest handling, the coffee community in Gayo Highland use the "wet hulling method" also known as as "semi-washed process". In this regard, the process of removing parchment or "dehulled" is conducted when parchment coffee beans still moist (with moisture content between –35-40 %). Coffee beans processed by " wet hulling method" will perform more body and more flavour complexity as nutty, caramelly, chocolaty, bright acidity, fruty, full body and long finish. Moisture content will be of 12-12,5% and such characteristics are controlled for trade purpose.

c. Reputation of the Kopi Arabika Gayo:

The name of "Gayo" is related to coffee production and coffee production is known as a traditional production of this area (several guide books or articles refer to this) and it is ntegrated in the cultural practices of local people.

History of the coffee in the Gayo Region: 'Kopi Arabika Gayo' has a long history. It started from an Experimental Garden in Berendal, a village in the Aceh Tengah District, during the Dutch colonial era and developed throughout all areas on the Gayo Highland. Because of the local cultivation tradition, the region produces quality coffee. Therefore, 'Kopi Arabika Gayo' has a good reputation and is known as one of the origin coffees and specialty coffees in Indonesia.

Some publications confirm the reputation of the Kopi Arabika Gayo:

- Evaluation Criteria of Land Suitability to Arabica Gayo coffee in the Gayo Highlands/ Evaluasi Kriteria Kesesuaian Lahan Kopi Arabika Gayo di Dataran Tinggi Gayo - R Salima, A Karim, S Sugianto - Jurnal Manajemen ..., 2012 - jurnal.unsyiah.ac.id

  This research was conducted to evaluate the criteria of the land suitability for Arabica Gayo coffee, and to define the land characteristic based on climate and soil that can affect the physical quality of Arabica Gayo coffee bean

- Guide to raise and process Gayo Arabica Coffee /Panduan Budidaya dan Pengolahan Kopi Arabika Gayo - S Mawardi, R Hulupi, A Wibawa, S Wiryaputra – 2008.

Those factors are homogenous within the limited areas. Their effects on the quality of coffee have been explained earlier. Sensory analysis has been performed in the areas and proves that there is high quality coffee in all of the areas.

Because of geographical and human factors “Kopi Arabika Gayo” has a quality: free from main defect tastes, bright acidity, less bitter, strong intensity of aroma. ‘Kopi Arabika Gayo’ presents characteristics of unique complexity flavor and aroma, such as nutty, caramelly, chocolaty, bright acidity, fruty, full body and long finish. This quality makes the reputation of Kopi Arabika Gayo in the market.

H. Reference to the responsible authority that verifies the compliance of the specification

The DGIP is the responsible authority that verifies the good compliance of the GI specification.

The article 16 of the Regulation of the republic of Indonesia, no 51, year 2007 regarding Geographical Indications defines the competent authority to controls the GIs:
“The competent authority to control” shall mean the government as well as non-government institution which has the competency in conducting an evaluation and control regarding the quality of a good”.

The DGIP, through a GI experts’ team (GIET), undertakes controls on:
- The compliance of the rules set down in the specifications by the MPKG and the stakeholders
- The compliance of the production specification before placing the products on the market.

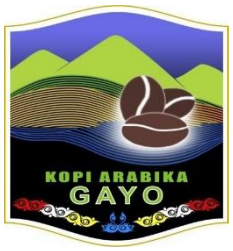
The GIET is part of the DGIP which is the public authority, competent for GIs controls/compliance according to the Indonesian legislation.

I. Any specific labelling rule for the product in question

All coffee in packs of either the form of sacks for packing green bean or ground coffee sold under the GI certificate should bear:

- The name of “Kopi Arabika Gayo” only or together with its together with its translation in any of the official EU languages, if desired.

- The logo of the “Kopi Arabika Gayo”, registered as a European Union trade mark (see Annexe n°6)



- The European GI logo, if desired.
- The mention “Protected Geographical Indication” or “PGI”.
- The Lot code

The name of “Kopi Arabika Gayo” can only be used in the pure coffee which means that the coffee sold under this name have to get the composition of 100% Kopi Arabika Gayo.

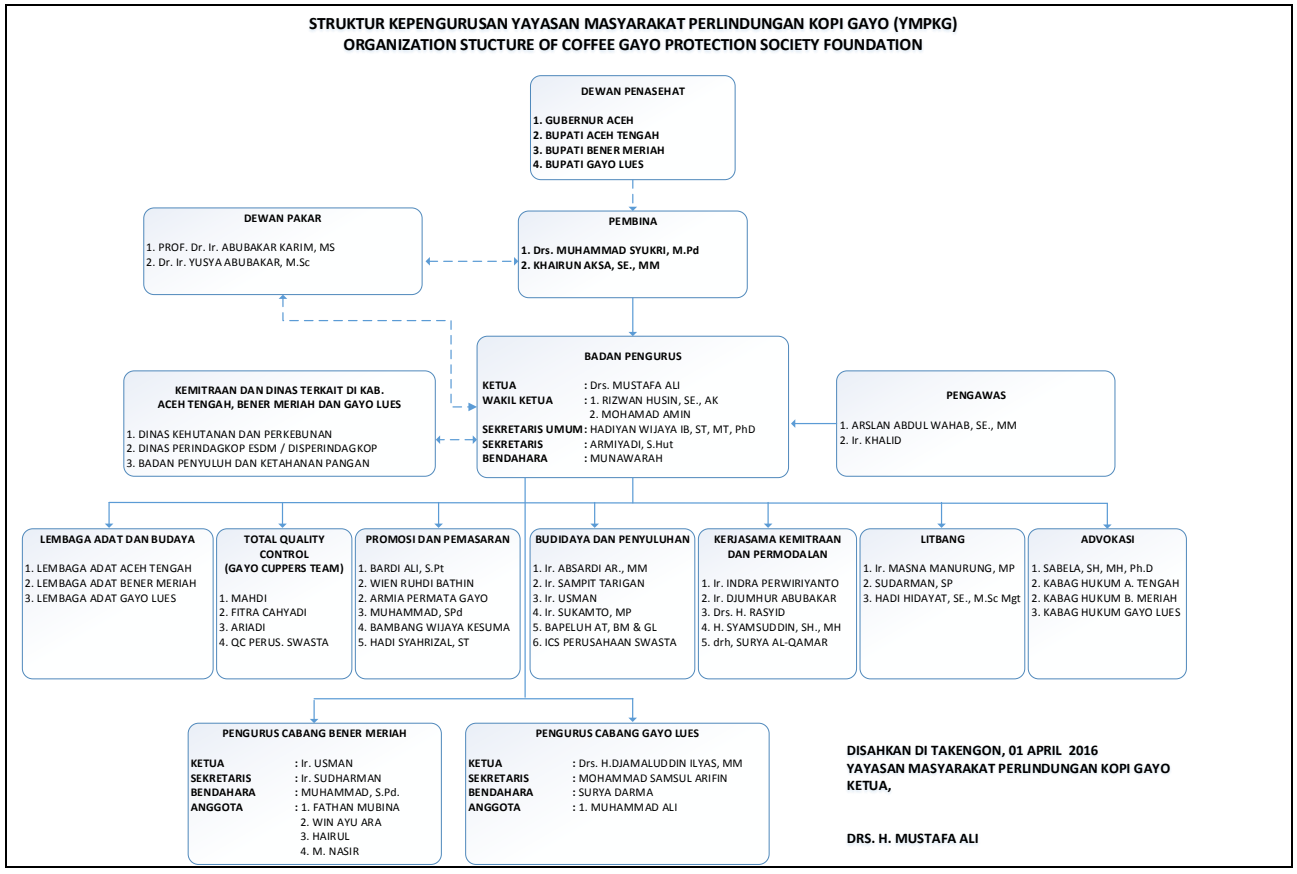
The mixed coffee cannot bear the Kopi Arabika Gayo name. When the Kopi Arabika Gayo is used in the mixed coffee, the percentage of composition of the Kopi Arabika Gayo composition should be attached in the composition information of the ingredients or the contents.

V. Annexes

Annexe 1. Copy of GI Kopi Arabika Gayo Registration in Indonesia

Annexe 2. Copy of the MKPG Legalization and organisation of the MPKG

Follow the Organization structure of Gayo Coffee Protection Society Foundation (MPKG)



Annexe 3 – List of the villages/cities/towns covered by the GI geographical area

THE LIST OF VILLAGES/CITIES/TOWN IN ACEH TENGAH DISTRICT BASED ON THE VILLAGE IN THE SUBDISTRICT

Negara : Negara Kesatuan Republik Indonesia (NKRI)
Provinsi : Nanggroe Aceh Darussalam (NAD)
Kota/Kabupaten : Aceh Tengah

1. Kecamatan Atu Lintang
Daftar nama Desa/Kelurahan di Kecamatan Atu Lintang di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Atu Lintang (Kodepos : 24563)
- Kelurahan/Desa Bintang Kekelip (Kodepos : 24563)
- Kelurahan/Desa Gayo Murni (Kodepos : 24563)
- Kelurahan/Desa Kepala Akal (Kodepos : 24563)
- Kelurahan/Desa Merah Jernang (Kodepos : 24563)
- Kelurahan/Desa Merah Mege (Kodepos : 24563)
- Kelurahan/Desa Merah Muyang/Mayang (Kodepos : 24563)
- Kelurahan/Desa Merah Pupuk (Kodepos : 24563)
- Kelurahan/Desa Tanoh Abu (Kodepos : 24563)

2. Kecamatan Bebesen
Daftar nama Desa/Kelurahan di Kecamatan Bebesen di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Atu Gajah Reje Guru (Kodepos : 24552)
- Kelurahan/Desa Atu Tulu (Kodepos : 24552)
- Kelurahan/Desa Bahgie (Kodepos : 24552)
- Kelurahan/Desa Bebesen (Kodepos : 24552)
- Kelurahan/Desa Blang Gele (Kodepos : 24552)
- Kelurahan/Desa Blang Kolak I (Kodepos : 24552)
- Kelurahan/Desa Blang Kolak II (Kodepos : 24552)
- Kelurahan/Desa Bur Biah (Kodepos : 24552)
- Kelurahan/Desa Calo Blang Gele (Kodepos : 24552)
- Kelurahan/Desa Daling (Kodepos : 24552)
- Kelurahan/Desa Empus Talu (Kodepos : 24552)
- Kelurahan/Desa Gele Lah (Kodepos : 24552)
- Kelurahan/Desa Kebet (Kodepos : 24552)
- Kelurahan/Desa Kemili (Kodepos : 24552)
- Kelurahan/Desa Keramat Mupakat (Kodepos : 24552)
- Kelurahan/Desa Lelabu (Kodepos : 24552)
- Kelurahan/Desa Lemah Burbana (Kodepos : 24552)
- Kelurahan/Desa Mah Bengi (Kodepos : 24552)
- Kelurahan/Desa Mongal (Kodepos : 24552)
- Kelurahan/Desa Nunang Antara (Kodepos : 24552)
- Kelurahan/Desa Pendere Saril (Kodepos : 24552)
- Kelurahan/Desa Sadong Juru Mudi (Kodepos : 24552)
- Kelurahan/Desa Simpang Empat (Kodepos : 24552)
- Kelurahan/Desa Tan Saril (Kodepos : 24552)
- Kelurahan/Desa Tensaren (Kodepos : 24552)
- Kelurahan/Desa Ulu Nuwih/Nuih (Kodepos : 24552)
- Kelurahan/Desa Umang (Kodepos : 24552)

3. Kecamatan Bies

Daftar nama Desa/Kelurahan di Kecamatan Bies di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Arul Latong (Kodepos : 24561)
- Kelurahan/Desa Atang Jungket (Kodepos : 24561)
- Kelurahan/Desa Bies Baru (Kodepos : 24561)
- Kelurahan/Desa Bies Mulie (Kodepos : 24561)
- Kelurahan/Desa Bies Penentanan (Kodepos : 24561)
- Kelurahan/Desa Lenga (Kodepos : 24561)
- Kelurahan/Desa Pucuk Deku (Kodepos : 24561)
- Kelurahan/Desa Simpang Lukub Badak (Kodepos : 24561)
- Kelurahan/Desa Simpang Uning Niken (Kodepos : 24561)
- Kelurahan/Desa Tebes Lues (Kodepos : 24561)
- Kelurahan/Desa Uning Pegantungen (Kodepos : 24561)

4. Kecamatan Bintang

Daftar nama Desa/Kelurahan di Kecamatan Bintang di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Atu Payung (Kodepos : 24571)
- Kelurahan/Desa Bale Nosar (Kodepos : 24571)
- Kelurahan/Desa Bamil Nosar (Kodepos : 24571)
- Kelurahan/Desa Bewang (Kodepos : 24571)
- Kelurahan/Desa Dedamar (Kodepos : 24571)
- Kelurahan/Desa Gegarang (Kodepos : 24571)
- Kelurahan/Desa Genuren (Kodepos : 24571)
- Kelurahan/Desa Jamur Konyel (Kodepos : 24571)
- Kelurahan/Desa Kala Bintang (Kodepos : 24571)
- Kelurahan/Desa Kala Segi Bintang (Kodepos : 24571)
- Kelurahan/Desa Kejurun Syiah Utama (Kodepos : 24571)
- Kelurahan/Desa Kelitu Sintep (Kodepos : 24571)
- Kelurahan/Desa Kuala I Bintang (Kodepos : 24571)
- Kelurahan/Desa Kuala II (Kodepos : 24571)
- Kelurahan/Desa Linung Bulen I (Kodepos : 24571)
- Kelurahan/Desa Linung Bulen II (Kodepos : 24571)
- Kelurahan/Desa Mengaya (Kodepos : 24571)
- Kelurahan/Desa Merodot (Kodepos : 24571)
- Kelurahan/Desa Mude Nosar (Kodepos : 24571)
- Kelurahan/Desa Serule (Kodepos : 24571)
- Kelurahan/Desa Sintep (Kodepos : 24571)
- Kelurahan/Desa Wakil Jalil (Kodepos : 24571)
- Kelurahan/Desa Wihlah Setie (Kodepos : 24571)

5. Kecamatan Celala

Daftar nama Desa/Kelurahan di Kecamatan Celala di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Arul Gading (Kodepos : 24562)
- Kelurahan/Desa Berawang Gading (Kodepos : 24562)
- Kelurahan/Desa Blang Delem (Kodepos : 24562)
- Kelurahan/Desa Blang Kekumur (Kodepos : 24562)
- Kelurahan/Desa Celala (Kodepos : 24562)
- Kelurahan/Desa Cibro (Kodepos : 24562)
- Kelurahan/Desa Kuyun (Kodepos : 24562)
- Kelurahan/Desa Kuyun Toa (Kodepos : 24562)
- Kelurahan/Desa Kuyun Uken (Kodepos : 24562)
- Kelurahan/Desa Makmur (Kodepos : 24562)
- Kelurahan/Desa Melala (Kodepos : 24562)

- Kelurahan/Desa Paya Kolak (Kodepos : 24562)
- Kelurahan/Desa Ramung Ara (Kodepos : 24562)
- Kelurahan/Desa Sepakat (Kodepos : 24562)
- Kelurahan/Desa Tanoh Depet (Kodepos : 24562)
- Kelurahan/Desa Uning Berawang Ramung (Kodepos : 24562)

6. Kecamatan Jagong Jeget

Daftar nama Desa/Kelurahan di Kecamatan Jagong Jeget di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Berawang Dewal (Kodepos : 24563)
- Kelurahan/Desa Gegarang (Kodepos : 24563)
- Kelurahan/Desa Jagong Jeget (Kodepos : 24563)
- Kelurahan/Desa Jeget Ayu (Kodepos : 24563)
- Kelurahan/Desa Merah Said (Kodepos : 24563)
- Kelurahan/Desa Paya Tungel/Tunggal (Kodepos : 24563)
- Kelurahan/Desa Telege Sari (Kodepos : 24563)

7. Kecamatan Kebayakan

Daftar nama Desa/Kelurahan di Kecamatan Kebayakan di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Lot Kala (Kodepos : 24517)
- Kelurahan/Desa Jongok Meluem (Kodepos : 24518)
- Kelurahan/Desa Bukit (Kodepos : 24519)
- Kelurahan/Desa Bukit Iwih Tami Delem (Kodepos : 24519)
- Kelurahan/Desa Bukit Sama (Kodepos : 24519)
- Kelurahan/Desa Gunung Bahgie (Kodepos : 24519)
- Kelurahan/Desa Gunung Balohen (Kodepos : 24519)
- Kelurahan/Desa Gunung Bukit (Kodepos : 24519)
- Kelurahan/Desa Jongok Bathin (Kodepos : 24519)
- Kelurahan/Desa Kala Lengkio (Kodepos : 24519)
- Kelurahan/Desa Kelupak Mata (Kodepos : 24519)
- Kelurahan/Desa Kutelot (Kodepos : 24519)
- Kelurahan/Desa Mendale (Kodepos : 24519)
- Kelurahan/Desa Paya Reje Tamidelem (Kodepos : 24519)
- Kelurahan/Desa Paya Tumpi (Kodepos : 24519)
- Kelurahan/Desa Paya Tumpi Baru (Kodepos : 24519)
- Kelurahan/Desa Paya Tumpi I (Kodepos : 24519)
- Kelurahan/Desa Pinangan (Kodepos : 24519)
- Kelurahan/Desa Timangan Gading (Kodepos : 24519)

8. Kecamatan Ketol

Daftar nama Desa/Kelurahan di Kecamatan Ketol di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Bah (Kodepos : 24562)
- Kelurahan/Desa Bergang (Kodepos : 24562)
- Kelurahan/Desa Bintang Pepara (Kodepos : 24562)
- Kelurahan/Desa Blang Mancung (Kodepos : 24562)
- Kelurahan/Desa Blang Mancung Bawah (Kodepos : 24562)
- Kelurahan/Desa Buge Ara (Kodepos : 24562)
- Kelurahan/Desa Burlah (Kodepos : 24562)
- Kelurahan/Desa Buter (Kodepos : 24562)
- Kelurahan/Desa Cang Duri (Kodepos : 24562)
- Kelurahan/Desa Gelumpang/Glumpang Payung (Kodepos : 24562)
- Kelurahan/Desa Genting Bulen (Kodepos : 24562)
- Kelurahan/Desa Jalan Tengah (Kodepos : 24562)
- Kelurahan/Desa Jaluk (Kodepos : 24562)

- Kelurahan/Desa Jerata (Kodepos : 24562)
- Kelurahan/Desa Kala Ketol (Kodepos : 24562)
- Kelurahan/Desa Karang Ampar (Kodepos : 24562)
- Kelurahan/Desa Kekuyang (Kodepos : 24562)
- Kelurahan/Desa Kute Gelime (Kodepos : 24562)
- Kelurahan/Desa Pantan Penyo (Kodepos : 24562)
- Kelurahan/Desa Pantan Reduk (Kodepos : 24562)
- Kelurahan/Desa Pondok Balik (Kodepos : 24562)
- Kelurahan/Desa Rejewali (Kodepos : 24562)
- Kelurahan/Desa Selon (Kodepos : 24562)
- Kelurahan/Desa Serempah (Kodepos : 24562)
- Kelurahan/Desa Simpang Juli (Kodepos : 24562)

9. Kecamatan Kute Panang

Daftar nama Desa/Kelurahan di Kecamatan Kute Panang di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Atu Gogop (Kodepos : 24568)
- Kelurahan/Desa Balik (Kodepos : 24568)
- Kelurahan/Desa Bukit Rata (Kodepos : 24568)
- Kelurahan/Desa Buter Balik (Kodepos : 24568)
- Kelurahan/Desa Dedingin (Kodepos : 24568)
- Kelurahan/Desa Kute Panang (Kodepos : 24568)
- Kelurahan/Desa Lukub Sabun (Kodepos : 24568)
- Kelurahan/Desa Lukub Sabun Barat (Kodepos : 24568)
- Kelurahan/Desa Lukub Sabun Tengah (Kodepos : 24568)
- Kelurahan/Desa Lukub Sabun Timur (Kodepos : 24568)
- Kelurahan/Desa Pantan Sile (Kodepos : 24568)
- Kelurahan/Desa Ratawali (Kodepos : 24568)
- Kelurahan/Desa Segene Balik (Kodepos : 24568)
- Kelurahan/Desa Tapak Moge (Kodepos : 24568)
- Kelurahan/Desa Tawar Miko (Kodepos : 24568)
- Kelurahan/Desa Tawardi (Kodepos : 24568)
- Kelurahan/Desa Timang Rasa (Kodepos : 24568)
- Kelurahan/Desa Wih Nongkal (Kodepos : 24568)

10. Kecamatan Linge

Daftar nama Desa/Kelurahan di Kecamatan Linge di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Arul Item (Kodepos : 24563)
- Kelurahan/Desa Delung Sekinel (Kodepos : 24563)
- Kelurahan/Desa Dispot Linge (Kodepos : 24563)
- Kelurahan/Desa Gelampang Gading (Kodepos : 24563)
- Kelurahan/Desa Gemboyah (Kodepos : 24563)
- Kelurahan/Desa Gewat (Kodepos : 24563)
- Kelurahan/Desa Ise Ise (Kodepos : 24563)
- Kelurahan/Desa Jamat (Kodepos : 24563)
- Kelurahan/Desa Kemerleng (Air Asin Kemerleng) (Kodepos : 24563)
- Kelurahan/Desa Kute Baru (Kodepos : 24563)
- Kelurahan/Desa Kute Keramil (Kodepos : 24563)
- Kelurahan/Desa Kute Rayang (Kodepos : 24563)
- Kelurahan/Desa Kute Reje (Kodepos : 24563)
- Kelurahan/Desa Kute Riyem (Meriem) (Kodepos : 24563)
- Kelurahan/Desa Kute Robel (Kodepos : 24563)
- Kelurahan/Desa Linge (Kodepos : 24563)
- Kelurahan/Desa Lumut (Kodepos : 24563)
- Kelurahan/Desa Mungkur (Kodepos : 24563)

- Kelurahan/Desa Owaq (Kodepos : 24563)
- Kelurahan/Desa Pantan Nangka (Kodepos : 24563)
- Kelurahan/Desa Penarun (Kodepos : 24563)
- Kelurahan/Desa Reje Payung (Kodepos : 24563)
- Kelurahan/Desa Simpang III Uning (Kodepos : 24563)
- Kelurahan/Desa Umang (Kodepos : 24563)

11. Kecamatan Lut Tawar

Daftar nama Desa/Kelurahan di Kecamatan Lut Tawar di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Takengon Timur (Kodepos : 24511)
- Kelurahan/Desa Asir-Asir Asia (Kodepos : 24512)
- Kelurahan/Desa Bale Atu (Kodepos : 24512)
- Kelurahan/Desa Bujang (Kodepos : 24512)
- Kelurahan/Desa Gunung Suku (Kodepos : 24512)
- Kelurahan/Desa Kute Nireje (Kuteni Raja) (Kodepos : 24512)
- Kelurahan/Desa Asir-Asir (Kodepos : 24513)
- Kelurahan/Desa Hakim Bale Bujang (Kodepos : 24513)
- Kelurahan/Desa Takengon Barat (Kodepos : 24514)
- Kelurahan/Desa Kenawat (Kodepos : 24515)
- Kelurahan/Desa Pedemun One-One (Kodepos : 24515)
- Kelurahan/Desa Rawe (Kodepos : 24516)
- Kelurahan/Desa Toweren Antara (Kodepos : 24516)
- Kelurahan/Desa Toweren Toa (Kodepos : 24516)
- Kelurahan/Desa Toweren Uken (Kodepos : 24516)

12. Kecamatan Pegasing

Daftar nama Desa/Kelurahan di Kecamatan Pegasing di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Arul Badak (Kodepos : 24561)
- Kelurahan/Desa Berawang Baro (Kodepos : 24561)
- Kelurahan/Desa Blang Bebangka (Kodepos : 24561)
- Kelurahan/Desa Gele Lungi (Kodepos : 24561)
- Kelurahan/Desa Ie Relop (Kodepos : 24561)
- Kelurahan/Desa Jejem (Kodepos : 24561)
- Kelurahan/Desa Jurusen (Kodepos : 24561)
- Kelurahan/Desa Kala Pegasing (Kodepos : 24561)
- Kelurahan/Desa Kayu Kul (Kodepos : 24561)
- Kelurahan/Desa Kedelah (Kodepos : 24561)
- Kelurahan/Desa Kung (Kodepos : 24561)
- Kelurahan/Desa Kute Lintang (Kodepos : 24561)
- Kelurahan/Desa Lelumu (Kodepos : 24561)
- Kelurahan/Desa Linung Ayu (Kodepos : 24561)
- Kelurahan/Desa Panangan Mata (Kodepos : 24561)
- Kelurahan/Desa Pantan Musara (Kodepos : 24561)
- Kelurahan/Desa Paya Jeget (Kodepos : 24561)
- Kelurahan/Desa Pedekok (Kodepos : 24561)
- Kelurahan/Desa Pegasing (Kodepos : 24561)
- Kelurahan/Desa Pepalang (Kodepos : 24561)
- Kelurahan/Desa Simpang Kelaping (Kodepos : 24561)
- Kelurahan/Desa Tebuk (Kodepos : 24561)
- Kelurahan/Desa Terang Ulen (Kodepos : 24561)
- Kelurahan/Desa Ujung Gele (Kodepos : 24561)
- Kelurahan/Desa Uning (Kodepos : 24561)
- Kelurahan/Desa Uring (Kodepos : 24561)
- Kelurahan/Desa Wih Ilang (Kodepos : 24561)

- Kelurahan/Desa Wih Lah (Kodepos : 24561)
- Kelurahan/Desa Wih Nareh (Kodepos : 24561)
- Kelurahan/Desa Wih Terjun (Kodepos : 24561)

13. Kecamatan Rusip Antara

Daftar nama Desa/Kelurahan di Kecamatan Rusip Antara di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Arul Pertik (Kodepos : 24562)
- Kelurahan/Desa Atu Singkih (Kodepos : 24562)
- Kelurahan/Desa Kerawang (Kodepos : 24562)
- Kelurahan/Desa Kuala Rawa (Kodepos : 24562)
- Kelurahan/Desa Mekar Maju (Kodepos : 24562)
- Kelurahan/Desa Meurandeh/Merandeh Paya (Kodepos : 24562)
- Kelurahan/Desa Pantan Bener (Kodepos : 24562)
- Kelurahan/Desa Pantan Tengah (Kodepos : 24562)
- Kelurahan/Desa Paya Tampu/Tumpu (Kodepos : 24562)
- Kelurahan/Desa Pilar (Kodepos : 24562)
- Kelurahan/Desa Pilar Jaya (Kodepos : 24562)
- Kelurahan/Desa Rusip (Kodepos : 24562)
- Kelurahan/Desa Tanjung (Kodepos : 24562)
- Kelurahan/Desa Tirmi Ara (Kodepos : 24562)

14. Kecamatan Silih Nara

Daftar nama Desa/Kelurahan di Kecamatan Silih Nara di Kota/Kabupaten Aceh Tengah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Arul Gele (Kodepos : 24562)
- Kelurahan/Desa Arul Kumer (Kodepos : 24562)
- Kelurahan/Desa Arul Kumer Barat (Kodepos : 24562)
- Kelurahan/Desa Arul Kumer Selatan (Kodepos : 24562)
- Kelurahan/Desa Arul Kumer Timur (Kodepos : 24562)
- Kelurahan/Desa Arul Putih (Kodepos : 24562)
- Kelurahan/Desa Arul Relem (Kodepos : 24562)
- Kelurahan/Desa Bius Utama (Kodepos : 24562)
- Kelurahan/Desa Burni Bius (Kodepos : 24562)
- Kelurahan/Desa Burni Bius Baru (Kodepos : 24562)
- Kelurahan/Desa Genting Gerbang (Kodepos : 24562)
- Kelurahan/Desa Gunung Singit (Kodepos : 24562)
- Kelurahan/Desa Jerata (Kodepos : 24562)
- Kelurahan/Desa Mekar Indah (Kodepos : 24562)
- Kelurahan/Desa Mulie Jadi (Kodepos : 24562)
- Kelurahan/Desa Paya Beke (Kodepos : 24562)
- Kelurahan/Desa Paya Pelu (Kodepos : 24562)
- Kelurahan/Desa Pepayungen Angkup (Kodepos : 24562)
- Kelurahan/Desa Rebe Gedung (Kodepos : 24562)
- Kelurahan/Desa Remesen (Kodepos : 24562)
- Kelurahan/Desa Reremal (Kodepos : 24562)
- Kelurahan/Desa Rutih (Kodepos : 24562)
- Kelurahan/Desa Sanehen (Kodepos : 24562)
- Kelurahan/Desa Semelit Mutiara (Kodepos : 24562)
- Kelurahan/Desa Simpang Kemili (Kodepos : 24562)
- Kelurahan/Desa Tenebuk Kampung Baru (Kodepos : 24562)
- Kelurahan/Desa Terang Engon (Kodepos : 24562)
- Kelurahan/Desa Wih Bersih (Kodepos : 24562)
- Kelurahan/Desa Wih Pesam (Kodepos : 24562)
- Kelurahan/Desa Wih Porak (Kodepos : 24562)
- Kelurahan/Desa Wih Sagi Indah (Kodepos : 24562)

- Kelurahan/Desa Wihni Bakong (Kodepos : 24562)
- Kelurahan/Desa Wihni Durin (Kodepos : 24562)

THE LIST OF VILLAGES/CITIES/TOWNS IN BENER MERIAH DISTRICT BASED ON THE VILLAGE IN THE SUBDISTRICT

Negara : Negara Kesatuan Republik Indonesia (NKRI)
Provinsi : Nanggroe Aceh Darussalam (NAD)
Kota/Kabupaten : Bener Meriah

1. Kecamatan Bandar
Daftar nama Desa/Kelurahan di Kecamatan Bandar di Kota/Kabupaten Bener Meriah, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Bahgie Bentona (Kodepos : 24582)
- Kelurahan/Desa Bandar Jaya (Kodepos : 24582)
- Kelurahan/Desa Batin Baru (Kodepos : 24582)
- Kelurahan/Desa Bener Kelipah Selatan (Kodepos : 24582)
- Kelurahan/Desa Bener Kelipah Utara (Kodepos : 24582)
- Kelurahan/Desa Bener Lukup II (Kodepos : 24582)
- Kelurahan/Desa Beranun Teleden (Kodepos : 24582)
- Kelurahan/Desa Bintang Musara (Kodepos : 24582)
- Kelurahan/Desa Blang Pulo (Kodepos : 24582)
- Kelurahan/Desa Bukit Wih Ilang (Kodepos : 24582)
- Kelurahan/Desa Gele Semayang (Kodepos : 24582)
- Kelurahan/Desa Gunung Antara (Kodepos : 24582)
- Kelurahan/Desa Gunung Musara (Kodepos : 24582)
- Kelurahan/Desa Hakim Wih Ilang (Kodepos : 24582)
- Kelurahan/Desa Jadi Sepakat (Kodepos : 24582)
- Kelurahan/Desa Janarata (Kodepos : 24582)
- Kelurahan/Desa Jongok Meluem (Kodepos : 24582)
- Kelurahan/Desa Kala Nempan (Kodepos : 24582)
- Kelurahan/Desa Kala Tenang (Kodepos : 24582)
- Kelurahan/Desa Keramat Jaya (Kodepos : 24582)
- Kelurahan/Desa Lewajadi (Kodepos : 24582)
- Kelurahan/Desa Lot Bener Kelipah (Kodepos : 24582)
- Kelurahan/Desa Makmur Sentosa (Kodepos : 24582)
- Kelurahan/Desa Mutiara (Kodepos : 24582)
- Kelurahan/Desa Muyang Kute Mangku (Kodepos : 24582)
- Kelurahan/Desa Nosar Baru (Kodepos : 24582)
- Kelurahan/Desa Nosar Tawar Jaya (Kodepos : 24582)
- Kelurahan/Desa Pakat Jeroh (Kodepos : 24582)
- Kelurahan/Desa Paya Baning (Kodepos : 24582)
- Kelurahan/Desa Paya Ringkel (Kodepos : 24582)
- Kelurahan/Desa Petukel/Petukal Blang Jurong (Kodepos : 24582)
- Kelurahan/Desa Pondok Baru (Kodepos : 24582)
- Kelurahan/Desa Pondok Gajah (Kodepos : 24582)
- Kelurahan/Desa Pondok Ulung (Kodepos : 24582)
- Kelurahan/Desa Puja Mulia (Kodepos : 24582)
- Kelurahan/Desa Purwosari (Kodepos : 24582)
- Kelurahan/Desa Remang Ketike Jaya (Kodepos : 24582)
- Kelurahan/Desa Selamat Rejo (Kodepos : 24582)
- Kelurahan/Desa Selisih Mara (Kodepos : 24582)
- Kelurahan/Desa Sidodadi (Kodepos : 24582)
- Kelurahan/Desa Simpang Utama (Kodepos : 24582)
- Kelurahan/Desa Suku Bener (Kodepos : 24582)
- Kelurahan/Desa Suku Wih Ilang (Kodepos : 24582)
- Kelurahan/Desa Tanjung Pura (Kodepos : 24582)
- Kelurahan/Desa Tansaran Bidin (Kodepos : 24582)

- Kelurahan/Desa Tawar Sedenge (Kodepos : 24582)
- Kelurahan/Desa Wonosari (Kodepos : 24582)

2. Kecamatan Bukit
Daftar nama Desa/Kelurahan di Kecamatan Bukit di Kota/Kabupaten Bener Meriah, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Babussalam (Kodepos : 24581)
- Kelurahan/Desa Bale Atu (Kodepos : 24581)
- Kelurahan/Desa Bale Redelong (Kodepos : 24581)
- Kelurahan/Desa Bathin Wih Pongas (Kodepos : 24581)
- Kelurahan/Desa Blang Ara (Kodepos : 24581)
- Kelurahan/Desa Blang Panas (Kodepos : 24581)
- Kelurahan/Desa Blang Sentang (Kodepos : 24581)
- Kelurahan/Desa Blang Tampu (Kodepos : 24581)
- Kelurahan/Desa Bujang (Kodepos : 24581)
- Kelurahan/Desa Bukit Bersatu (Kodepos : 24581)
- Kelurahan/Desa Burni Telong (Kodepos : 24581)
- Kelurahan/Desa Delung Asli (Kodepos : 24581)
- Kelurahan/Desa Delung Tue (Kodepos : 24581)
- Kelurahan/Desa Godang (Kodepos : 24581)
- Kelurahan/Desa Hakim Tungul Naru (Kodepos : 24581)
- Kelurahan/Desa Isaq Busur (Kodepos : 24581)
- Kelurahan/Desa Karang Rejo (Kodepos : 24581)
- Kelurahan/Desa Kenawat Redelong (Kodepos : 24581)
- Kelurahan/Desa Kute Kering (Kodepos : 24581)
- Kelurahan/Desa Kute Lintang (Kodepos : 24581)
- Kelurahan/Desa Kute Tanjung (Kodepos : 24581)
- Kelurahan/Desa Meluem (Kodepos : 24581)
- Kelurahan/Desa Mupakat Jadi (Kodepos : 24581)
- Kelurahan/Desa Mutiara Baru (Kodepos : 24581)
- Kelurahan/Desa Panji Mulia I (Kodepos : 24581)
- Kelurahan/Desa Panji Mulia II (Kodepos : 24581)
- Kelurahan/Desa Pasar Simpang Tiga (Kodepos : 24581)
- Kelurahan/Desa Paya Gajah (Kodepos : 24581)
- Kelurahan/Desa Pilar Jaya (Kodepos : 24581)
- Kelurahan/Desa Rejeguru (Kodepos : 24581)
- Kelurahan/Desa Rembele (Kodepos : 24581)
- Kelurahan/Desa Sedie Jadi (Kodepos : 24581)
- Kelurahan/Desa Serule Kayu (Kodepos : 24581)
- Kelurahan/Desa Tingkem Asli (Kodepos : 24581)
- Kelurahan/Desa Tingkem Benyer (Kodepos : 24581)
- Kelurahan/Desa Tingkem Bersatu (Kodepos : 24581)
- Kelurahan/Desa Ujung Gele (Kodepos : 24581)
- Kelurahan/Desa Uning Bersah (Kodepos : 24581)
- Kelurahan/Desa Uning Teritit (Kodepos : 24581)
- Kelurahan/Desa Uring (Kodepos : 24581)
- Kelurahan/Desa Waq Pondok Sayur (Kodepos : 24581)

3. Kecamatan Permata
Daftar nama Desa/Kelurahan di Kecamatan Permata di Kota/Kabupaten Bener Meriah, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Ayu Ara (Kodepos : 24582)
- Kelurahan/Desa Bale Musara (Kodepos : 24582)
- Kelurahan/Desa Bale Purnama (Kodepos : 24582)
- Kelurahan/Desa Bener Pepanyi (Kodepos : 24582)
- Kelurahan/Desa Bintang Bener (Kodepos : 24582)
- Kelurahan/Desa Bintang Permata (Kodepos : 24582)
- Kelurahan/Desa Buntul Fitri (Peteri) (Kodepos : 24582)
- Kelurahan/Desa Burni Pase (Kodepos : 24582)
- Kelurahan/Desa Ceding Ayu (Kodepos : 24582)

- Kelurahan/Desa Darul Aman Ramu (Kodepos : 24582)
- Kelurahan/Desa Gelampang Wih Tenang Uken (Kodepos : 24582)
- Kelurahan/Desa Jelobok (Kodepos : 24582)
- Kelurahan/Desa Jungke (Kodepos : 24582)
- Kelurahan/Desa Kepies (Kodepos : 24582)
- Kelurahan/Desa Pantan Tengah Jaya (Kodepos : 24582)
- Kelurahan/Desa Penosan Jaya (Kodepos : 24582)
- Kelurahan/Desa Ramung Jaya (Kodepos : 24582)
- Kelurahan/Desa Rikit Musara (Kodepos : 24582)
- Kelurahan/Desa Seni Antara (Kodepos : 24582)
- Kelurahan/Desa Suku Sara Tangke (Kodepos : 24582)
- Kelurahan/Desa Tawar Bengi (Kodepos : 24582)
- Kelurahan/Desa Temas Mumanang (Kodepos : 24582)
- Kelurahan/Desa Timur Jaya (Kodepos : 24582)
- Kelurahan/Desa Uning Sejuk (Kodepos : 24582)
- Kelurahan/Desa Wih Tenang Toa (Kodepos : 24582)
- Kelurahan/Desa Wih Tenang Uken (Kodepos : 24582)

4. Kecamatan Pintu Rime Gayo

Daftar nama Desa/Kelurahan di Kecamatan Pintu Rime Gayo di Kota/Kabupaten Bener Meriah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Arul Cincin (Kodepos : 24553)
- Kelurahan/Desa Arul Gading (Kodepos : 24553)
- Kelurahan/Desa Bener Meriah (Kodepos : 24553)
- Kelurahan/Desa Bintang Berangun (Kodepos : 24553)
- Kelurahan/Desa Blang Ara (Kodepos : 24553)
- Kelurahan/Desa Blang Rakal (Kodepos : 24553)
- Kelurahan/Desa Gemasih (Kodepos : 24553)
- Kelurahan/Desa Musaba (Kodepos : 24553)
- Kelurahan/Desa Musara Pakat (Kodepos : 24553)
- Kelurahan/Desa Negeri Antara (Kodepos : 24553)
- Kelurahan/Desa Pancar Jelobok (Kodepos : 24553)
- Kelurahan/Desa Pantan Lah (Kodepos : 24553)
- Kelurahan/Desa Pantan Sinaku (Kodepos : 24553)
- Kelurahan/Desa Perdamaian (Kodepos : 24553)
- Kelurahan/Desa Pulo Intan (Kodepos : 24553)
- Kelurahan/Desa Rata Ara (Kodepos : 24553)
- Kelurahan/Desa Rimba Raya (Kodepos : 24553)
- Kelurahan/Desa Simpang Lancang (Kodepos : 24553)
- Kelurahan/Desa Singah Mulo (Kodepos : 24553)
- Kelurahan/Desa Taman Firdaus (Kodepos : 24553)
- Kelurahan/Desa Ulu Naron (Kodepos : 24553)
- Kelurahan/Desa Uning Mas (Kodepos : 24553)
- Kelurahan/Desa Wih Porak (Kodepos : 24553)

5. Kecamatan Syiah Utama

Daftar nama Desa/Kelurahan di Kecamatan Syiah Utama di Kota/Kabupaten Bener Meriah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Amor (Kodepos : 24582)
- Kelurahan/Desa Blang Panu (Kodepos : 24582)
- Kelurahan/Desa Buntul Gayo (Kodepos : 24582)
- Kelurahan/Desa Cemparan Jaya (Kodepos : 24582)
- Kelurahan/Desa Cemparan Lama (Kodepos : 24582)
- Kelurahan/Desa Cemparan Pakat Jeroh (Kodepos : 24582)
- Kelurahan/Desa Gerpa (Kodepos : 24582)
- Kelurahan/Desa Geruti Jaya (Kodepos : 24582)
- Kelurahan/Desa Goneng (Kodepos : 24582)
- Kelurahan/Desa Gunug Sayang (Kodepos : 24582)
- Kelurahan/Desa Hakim Peteri Pintu (Kodepos : 24582)
- Kelurahan/Desa Jamur Atu Jaya (Kodepos : 24582)

- Kelurahan/Desa Kerlah (Kodepos : 24582)
- Kelurahan/Desa Kutelah Lane (Kodepos : 24582)
- Kelurahan/Desa Pantan Kuli (Kodepos : 24582)
- Kelurahan/Desa Pasir Putih (Kodepos : 24582)
- Kelurahan/Desa Payung (Kodepos : 24582)
- Kelurahan/Desa Perumpaken Benjadi (Kodepos : 24582)
- Kelurahan/Desa Rata Mulie (Kodepos : 24582)
- Kelurahan/Desa Rusip (Kodepos : 24582)
- Kelurahan/Desa Simpang Renggali (Kodepos : 24582)
- Kelurahan/Desa Simpur (Kodepos : 24582)
- Kelurahan/Desa Sosial (Kodepos : 24582)
- Kelurahan/Desa Tembolon (Kodepos : 24582)
- Kelurahan/Desa Tempen Baru (Kodepos : 24582)
- Kelurahan/Desa Uning (Kodepos : 24582)
- Kelurahan/Desa Wer Tingkem (Kodepos : 24582)
- Kelurahan/Desa Wih Resap (Pintu Wih Resap) (Kodepos : 24582)
- Kelurahan/Desa Wihni Durin (Kodepos : 24582)

6. Kecamatan Timang Gajah

Daftar nama Desa/Kelurahan di Kecamatan Timang Gajah di Kota/Kabupaten Bener Meriah, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Alam Jaya (Kodepos : 24553)
- Kelurahan/Desa Bandar Lampahan (Kodepos : 24553)
- Kelurahan/Desa Blang Rongka (Kodepos : 24553)
- Kelurahan/Desa Bukit Mulie (Kodepos : 24553)
- Kelurahan/Desa Bukit Tunyang (Kodepos : 24553)
- Kelurahan/Desa Bumi ayu (Kodepos : 24553)
- Kelurahan/Desa Cekal Baru (Kodepos : 24553)
- Kelurahan/Desa Damaran Baru (Kodepos : 24553)
- Kelurahan/Desa Datu Beru Tunyang (Kodepos : 24553)
- Kelurahan/Desa Fajar Harapan (Kodepos : 24553)
- Kelurahan/Desa Gajah Putih (Kodepos : 24553)
- Kelurahan/Desa Gayo Setie (Kodepos : 24553)
- Kelurahan/Desa Gegur Sepakat (Kodepos : 24553)
- Kelurahan/Desa Gunung Tunyang (Kodepos : 24553)
- Kelurahan/Desa Kampung Baru (Kodepos : 24553)
- Kelurahan/Desa Karang Jadi (Kodepos : 24553)
- Kelurahan/Desa Kenine (Kodepos : 24553)
- Kelurahan/Desa Kolam Para Kanis (Kodepos : 24553)
- Kelurahan/Desa Lampahan (Kodepos : 24553)
- Kelurahan/Desa Lampahan Barat (Kodepos : 24553)
- Kelurahan/Desa Lampahan Timur (Kodepos : 24553)
- Kelurahan/Desa Linung Bale (Kodepos : 24553)
- Kelurahan/Desa Mekar Ayu (Kodepos : 24553)
- Kelurahan/Desa Meriah Jaya (Kodepos : 24553)
- Kelurahan/Desa Mude Benara (Kodepos : 24553)
- Kelurahan/Desa Pantan Kemuning (Kodepos : 24553)
- Kelurahan/Desa Pantan Lues (Kodepos : 24553)
- Kelurahan/Desa Pantan Pediangen (Kodepos : 24553)
- Kelurahan/Desa Pante Karya (Kodepos : 24553)
- Kelurahan/Desa Rembune (Kodepos : 24553)
- Kelurahan/Desa Rerongga (Reronga) (Kodepos : 24553)
- Kelurahan/Desa Setie (Kodepos : 24553)
- Kelurahan/Desa Simpang Layang (Kodepos : 24553)
- Kelurahan/Desa Simpang Rahmat (Kodepos : 24553)
- Kelurahan/Desa Suka Damai (Kodepos : 24553)
- Kelurahan/Desa Sumber Jaya (Kodepos : 24553)
- Kelurahan/Desa Timang Gajah (Kodepos : 24553)
- Kelurahan/Desa Timang Rasa (Kodepos : 24553)
- Kelurahan/Desa Tunyang (Kodepos : 24553)

- Kelurahan/Desa Umah Besi (Kodepos : 24553)

7. Kecamatan Wih Pesam
Daftar nama Desa/Kelurahan di Kecamatan Wih Pesam di Kota/Kabupaten Bener Meriah, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Bener Ayu (Kodepos : 24581)
- Kelurahan/Desa Bener Mulie (Kodepos : 24581)
- Kelurahan/Desa Blang Benara (Kodepos : 24581)
- Kelurahan/Desa Blang Kucak (Kodepos : 24581)
- Kelurahan/Desa Blang Paku (Kodepos : 24581)
- Kelurahan/Desa Bukit Pepanyi (Kodepos : 24581)
- Kelurahan/Desa Burni Telong (Kodepos : 24581)
- Kelurahan/Desa Cinta Damai (Kodepos : 24581)
- Kelurahan/Desa Gegerung (Kodepos : 24581)
- Kelurahan/Desa Jamur Ujung (Kodepos : 24581)
- Kelurahan/Desa Jamur Uluh (Kodepos : 24581)
- Kelurahan/Desa Kebun Baru (Kodepos : 24581)
- Kelurahan/Desa Lut Kucak (Kodepos : 24581)
- Kelurahan/Desa Merie Satu (Kodepos : 24581)
- Kelurahan/Desa Pante Raya (Kodepos : 24581)
- Kelurahan/Desa Simpang Antara (Kodepos : 24581)
- Kelurahan/Desa Simpang Balik (Kodepos : 24581)
- Kelurahan/Desa Simpang Teritit (Kodepos : 24581)
- Kelurahan/Desa Suka Jadi (Kodepos : 24581)
- Kelurahan/Desa Suka Makmur (Kodepos : 24581)
- Kelurahan/Desa Suka Makmur Timur (Kodepos : 24581)
- Kelurahan/Desa Suka Ramai/Rame Atas (Kodepos : 24581)
- Kelurahan/Desa Suka Ramai/Rame Bawah (Kodepos : 24581)
- Kelurahan/Desa Syurajadi (Kodepos : 24581)
- Kelurahan/Desa Wih Pesam (Kodepos : 24581)
- Kelurahan/Desa Wonosobo (Kodepos : 24581)

THE LIST OF VILLAGE/CITIES/TOWNS IN THE GAYO LUES DISTRICT BASED ON THE VILLAGE IN THE SUBDISTRICT

Negara : Negara Kesatuan Republik Indonesia (NKRI)
Provinsi : Nanggroe Aceh Darussalam (NAD)
Kota/Kabupaten : Gayo Lues

1. Kecamatan Blang Jerango
Daftar nama Desa/Kelurahan di Kecamatan Blang Jerango di Kota/Kabupaten Gayo Lues, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Akul (Kodepos : 24655)
- Kelurahan/Desa Gegarang (Kodepos : 24655)
- Kelurahan/Desa Ketukah (Kodepos : 24655)
- Kelurahan/Desa Penosan (Kodepos : 24655)
- Kelurahan/Desa Penosan Sepakat (Kodepos : 24655)
- Kelurahan/Desa Peparik Gaib (Kodepos : 24655)
- Kelurahan/Desa Sekuelen (Kodepos : 24655)
- Kelurahan/Desa Tingkem (Kodepos : 24655)

2. Kecamatan Blang Kejeren
Daftar nama Desa/Kelurahan di Kecamatan Blang Kejeren di Kota/Kabupaten Gayo Lues, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Agusen (Kodepos : 24655)
- Kelurahan/Desa Bacang (Kodepos : 24655)
- Kelurahan/Desa Bukit (Kodepos : 24655)

- Kelurahan/Desa Bustanussalam (Kodepos : 24655)
- Kelurahan/Desa Cempa (Kodepos : 24655)
- Kelurahan/Desa Durin (Kodepos : 24655)
- Kelurahan/Desa Gele (Kodepos : 24655)
- Kelurahan/Desa Kampung Jawa (Kodepos : 24655)
- Kelurahan/Desa Kota Blang Kejeren (Kodepos : 24655)
- Kelurahan/Desa Kuta Lintang (Kodepos : 24655)
- Kelurahan/Desa Kute Sere (Kodepos : 24655)
- Kelurahan/Desa Leme (Kodepos : 24655)
- Kelurahan/Desa Lempuh (Kodepos : 24655)
- Kelurahan/Desa Palok (Kodepos : 24655)
- Kelurahan/Desa Penampaan Toa (Kodepos : 24655)
- Kelurahan/Desa Penampaan Uken (Kodepos : 24655)
- Kelurahan/Desa Penggalangan (Kodepos : 24655)
- Kelurahan/Desa Porang (Kodepos : 24655)
- Kelurahan/Desa Raklunung (Kodepos : 24655)
- Kelurahan/Desa Sepang (Kodepos : 24655)

3. Kecamatan Blang Pegayon
Daftar nama Desa/Kelurahan di Kecamatan Blang Pegayon di Kota/Kabupaten Gayo Lues, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Bener Baru (Kodepos : 24653)
- Kelurahan/Desa Blangbengkik (Kodepos : 24653)
- Kelurahan/Desa Gantung Geluni (Kodepos : 24653)
- Kelurahan/Desa Kong (Kodepos : 24653)
- Kelurahan/Desa Kute/Kuta Bukit (Kodepos : 24653)

4. Kecamatan Dabun Gelang / Debun Gelang
Daftar nama Desa/Kelurahan di Kecamatan Dabun Gelang / Debun Gelang di Kota/Kabupaten Gayo Lues, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Badak (Kodepos : 24653)
- Kelurahan/Desa Blangtemung (Kodepos : 24653)
- Kelurahan/Desa Kendawi (Kodepos : 24653)
- Kelurahan/Desa Panglima/Panglime Linting (Kodepos : 24653)
- Kelurahan/Desa Pangur (Kodepos : 24653)
- Kelurahan/Desa Rerebe (Kodepos : 24653)
- Kelurahan/Desa Sangir (Kodepos : 24653)
- Kelurahan/Desa Uning Gelung (Kodepos : 24653)
- Kelurahan/Desa Uning Sepakat (Kodepos : 24653)

5. Kecamatan Kuta Panjang
Daftar nama Desa/Kelurahan di Kecamatan Kuta Panjang di Kota/Kabupaten Gayo Lues, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Bener (Kodepos : 24655)
- Kelurahan/Desa Beranang (Kodepos : 24655)
- Kelurahan/Desa Cike (Kodepos : 24655)
- Kelurahan/Desa Kerukunan Kota (Kuta Panjang) (Kodepos : 24655)
- Kelurahan/Desa Kong Paluh (Kodepos : 24655)
- Kelurahan/Desa Kuta Ujung (Kodepos : 24655)
- Kelurahan/Desa Rema (Kodepos : 24655)
- Kelurahan/Desa Rema Baru (Kodepos : 24655)
- Kelurahan/Desa Rikit Dekat (Kodepos : 24655)
- Kelurahan/Desa Tampeng (Kodepos : 24655)
- Kelurahan/Desa Tampeng Musara (Kodepos : 24655)
- Kelurahan/Desa Ulon Tanoh (Kodepos : 24655)

6. Kecamatan Pantan Cuaca
Daftar nama Desa/Kelurahan di Kecamatan Pantan Cuaca di Kota/Kabupaten Gayo Lues, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Aih Selah (Kodepos : 24654)

- Kelurahan/Desa Atu Kapur (Kodepos : 24654)
- Kelurahan/Desa Cane Baru (Kodepos : 24654)
- Kelurahan/Desa Kenyaran (Kodepos : 24654)
- Kelurahan/Desa Kuning Kurnia (Kodepos : 24654)
- Kelurahan/Desa Remukut (Kodepos : 24654)
- Kelurahan/Desa Seneren (Kodepos : 24654)
- Kelurahan/Desa Suri Musara (Kodepos : 24654)
- Kelurahan/Desa Tetinggi (Kodepos : 24654)

7. Kecamatan Pining / Pinding
Daftar nama Desa/Kelurahan di Kecamatan Pining / Pinding di Kota/Kabupaten Gayo Lues, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Ekan (Kodepos : 24655)
- Kelurahan/Desa Gajah (Kodepos : 24655)
- Kelurahan/Desa Lesten (Kodepos : 24655)
- Kelurahan/Desa Pasir Putih (Kodepos : 24655)
- Kelurahan/Desa Pepelah (Kodepos : 24655)
- Kelurahan/Desa Pertik (Kodepos : 24655)
- Kelurahan/Desa Pining (Pinding) (Kodepos : 24655)
- Kelurahan/Desa Pintu Rime (Kodepos : 24655)
- Kelurahan/Desa Uring (Kodepos : 24655)

8. Kecamatan Putri Betung
Daftar nama Desa/Kelurahan di Kecamatan Putri Betung di Kota/Kabupaten Gayo Lues, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Gumpang (Kodepos : 24655)
- Kelurahan/Desa Marpunge (Kodepos : 24655)
- Kelurahan/Desa Meloak Sepakat (Kodepos : 24655)
- Kelurahan/Desa Ramung Musara (Kodepos : 24655)

9. Kecamatan Rikit Gaib
Daftar nama Desa/Kelurahan di Kecamatan Rikit Gaib di Kota/Kabupaten Gayo Lues, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Ampa Kolak (Kodepos : 24654)
- Kelurahan/Desa Cane Toa (Kodepos : 24654)
- Kelurahan/Desa Cane Uken (Kodepos : 24654)
- Kelurahan/Desa Kota Rikit Gaib (Kodepos : 24654)
- Kelurahan/Desa Kuning (Kodepos : 24654)
- Kelurahan/Desa Kupur (Kodepos : 24654)
- Kelurahan/Desa Lukup Baru (Kodepos : 24654)
- Kelurahan/Desa Mangang (Kodepos : 24654)
- Kelurahan/Desa Padang Pasir (Kodepos : 24654)
- Kelurahan/Desa Penomon Jaya (Kodepos : 24654)
- Kelurahan/Desa Pinang/Pingang Rugup (Kodepos : 24654)
- Kelurahan/Desa Rempelam (Kodepos : 24654)
- Kelurahan/Desa Rikit Gaib (Kodepos : 24654)
- Kelurahan/Desa Tungel (Kodepos : 24654)
- Kelurahan/Desa Tungel Baru (Kodepos : 24654)

10. Kecamatan Terangun / Terangon
Daftar nama Desa/Kelurahan di Kecamatan Terangun / Terangon di Kota/Kabupaten Gayo Lues, Provinsi Nanggroe Aceh Darussalam (NAD) :
- Kelurahan/Desa Berhut (Kodepos : 24656)
- Kelurahan/Desa Blang Kala (Kodepos : 24656)
- Kelurahan/Desa Blang Kuncir (Kodepos : 24656)
- Kelurahan/Desa Bukut (Kodepos : 24656)
- Kelurahan/Desa Garut (Kodepos : 24656)
- Kelurahan/Desa Gawar Belangi (Kodepos : 24656)
- Kelurahan/Desa Gewat (Kodepos : 24656)
- Kelurahan/Desa Jabo (Kodepos : 24656)

- Kelurahan/Desa Kuta Sange (Kodepos : 24656)
- Kelurahan/Desa Kutereje (Kodepos : 24656)
- Kelurahan/Desa Makmur Jaya (Kodepos : 24656)
- Kelurahan/Desa Padang (Kodepos : 24656)
- Kelurahan/Desa Pantan Lues (Kodepos : 24656)
- Kelurahan/Desa Persada Tongra (Kodepos : 24656)
- Kelurahan/Desa Pkmt Sosial Berhut (Kodepos : 24656)
- Kelurahan/Desa Reje Pudung (Kodepos : 24656)
- Kelurahan/Desa Rempelam Pinang (Kodepos : 24656)
- Kelurahan/Desa Rumpi (Kodepos : 24656)
- Kelurahan/Desa Soyo (Kodepos : 24656)
- Kelurahan/Desa Telege Jernih (Kodepos : 24656)
- Kelurahan/Desa Terangon (Kodepos : 24656)
- Kelurahan/Desa Terlis (Kodepos : 24656)

11. Kecamatan Teripe Jaya / Tripe Jaya

Daftar nama Desa/Kelurahan di Kecamatan Teripe Jaya / Tripe Jaya di Kota/Kabupaten Gayo Lues, Provinsi Nanggroe Aceh Darussalam (NAD) :

- Kelurahan/Desa Pantan Kela (Kodepos : 24656)
- Kelurahan/Desa Pasir (Kodepos : 24656)
- Kelurahan/Desa Paya Kumer (Kodepos : 24656)
- Kelurahan/Desa Perlak (Kodepos : 24656)
- Kelurahan/Desa Rerebe (Kodepos : 24656)
- Kelurahan/Desa Setul (Kodepos : 24656)

Annexe 4. Copy of the panel tests

Follow the panel test cup, Q grader of Gayo Cupper Team as the Q grader of MPKG Foundation
The Leader : Mahdi
Members : Fitra Cahyadi
Armiyadi, S.Hut

LICENSED Q GRADER CERTIFICATE

Mahdi

This document certifies that Mr./Ms.

The Coffee Quality Institute confers the honor and professional distinction of Licensed Q Grader to the holder of this certificate for having successfully passed all of Licensed Q Grader exams. The Coffee Quality Institute hereby for 36 months extends all the privileges as described in the Q Grader Rules and Regulations, and the holder of this certificate agrees to uphold the Q Grader Code of Ethics established by the Q Coffee System.

Presented this 19th day of **November, 2011**
Instructor | Rocky Rhodes
Location | Bali, Indonesia

Colman Cuff
Board of Trustees Chairperson

Coffee Quality Institute
www.coffeeinstitute.org

Ted Lingle
Executive Director
Coffee Quality Institute

Improving Coffee. Changing Lives. ™

CERTIFICATE OF COMPLETION

In recognition of completing the curriculum of cupping training designed to teach the basic sensory skills and expertise required in the evaluation of coffee through standardized methods of cupping and grading established by the Technical Standards Committee of the Specialty Coffee Association of America, this certificate has been duly earned by:

Mahdi

Presented this 12th day of November, 2011
Denpasar, Bali

Rocky Rhodes
Principle Instructor

ICC International Coffee Consulting

Coffee Quality Institute

Ted Lingle
Executive Director

LICENSED Q GRADER CERTIFICATE

This document certifies that Mr./Ms. **Mahdi**

The Coffee Quality Institute and the Specialty Coffee Association of America confer the honor and professional distinction of CQI/SCAA/SCE Licensed Q Grader to the holder of this certificate for having successfully passed all of the Licensed Q Grader exams. CQI and SCAA hereby for 36 months extend all the privileges as described in the Q Grader Rules and Regulations, and the holder of this certificate agrees to uphold the Q Grader Code of Ethics established by the Q Coffee System.

Presented this 11th day of November, 2011

Instructor | Rocky Rhodes

Location | Kopi Bali House

Ric Rhinehart
Executive Director
Specialty Coffee Association of America

Coffee Quality Institute

Ted Lingle
Executive Director
Coffee Quality Institute

LICENSED Q GRADER CERTIFICATE

CERTIFICADO DE CATADOR Q AUTORIZADO

Este documento certifica que el Sr./Sra. **Mahdi**

The Coffee Quality Institute confers the honor and professional distinction of Licensed Q Grader to the holder of this certificate for having successfully passed all of Licensed Q Grader exams. The Coffee Quality Institute hereby for 36 months extends all the privileges as described in the Q Grader Rules and Regulations, and the holder of this certificate agrees to uphold the Q Grader Code of Ethics established by the Q Coffee System.

Presented this 11th day of November, 2011

Instructor | Rocky Rhodes

Location | Kopi Bali House

Colman Cuff
Board of Trustees Chairperson

Coffee Quality Institute
www.coffeeinstitute.org

Ted Lingle
Executive Director
Coffee Quality Institute

Improving Coffee. Changing Lives. ™

LICENSED Q GRADER CERTIFICATE

This document certifies that Mr. / Ms.: *Fitra Cahyadi*

The Coffee Quality Institute confers the honor and professional distinction of Licensed Q Grader to the holder of this certificate for having successfully passed all of Licensed Q Grader exams during the **1st Q Grader course in Indonesia**. The Coffee Quality Institute hereby extends all the privileges as described in the Q Grader Rules and Regulations and will uphold the Code of Ethics to which the holder of this certificate has agreed.

Coffee Quality Institute™

Ellen Jordan Reidy Board of Trustees Chairman

www.coffeeinstitute.org

Ted R. Lingle Executive Director Coffee Quality Institute™

Improving Coffee. Changing Lives. ™

LICENSED Q GRADER CERTIFICATE

This document certifies that Mr. / Ms.: *Armiyadi S. Hut*

The Coffee Quality Institute confers the honor and professional distinction of Licensed Q Grader to the holder of this certificate for having successfully passed all of Licensed Q Grader exams during the **1st Q Grader course in Indonesia**. The Coffee Quality Institute hereby extends all the privileges as described in the Q Grader Rules and Regulations and will uphold the Code of Ethics to which the holder of this certificate has agreed.

Coffee Quality Institute™

Ellen Jordan Reidy Board of Trustees Chairman

www.coffeeinstitute.org

Ted R. Lingle Executive Director Coffee Quality Institute™

Annexe 5. Type of soils in the geographical area (extract from the Indonesian specification of the Kopi Arabika Gayo)

Average results of analysis on texture, pH, and other macro elements of soil on the Gayo Highland.

No.	Village	Layer (cm)	Soil Texture	pH (H_2O)	C-org. (gram)	N-total (gram)	C/N Ratio	P_2O_5 (ppm)
ACEH TENGAH								
1	Jaluk I	0-22	Lp	6,2	3.92	0.35	10.89	2.92
		22-40	Pl	5.8	0.71	0.09	7.89	1.84
2	Kuyun	0-20	lip	5,8	4,55	0,40	11,38	18,75
		20-42	li	6,1	1,15	0,08	14,38	12,98
3	BumiBius	0-24	pl	6,7	3,90	0,34	11,47	16,00
		24-45	pl	8,3	0,20	0,02	10,00	14,00
4	Tebes Lues	0-21	l	5,6	9,16	0,81	11,31	0,90
		21-38	l	6,0	4,98	0,46	10,83	5,86
5	PucukDeku	0-18	ld	5,6	6,50	0,45	14,44	9,80
		18-45	lli	6,1	2,10	0,18	11,67	4,50
6	BiesPenantanan	0-20	ld	5,8	5,80	0,45	12,89	8,80
		20-42	lp	6,0	1,45	0,09	16,11	5,75
7	Uning	0-20	lp	6,0	3,00	0,28	10,71	6,10
		20-45	lid	6,5	1,80	0,17	10,59	5,89
8	BlangGele	0-20	ld	6,2	9,60	0,78	12,31	7,80
		20-40	lp	6,3	7,90	0,60	13,17	7,10
9	Tansaran	0-20	ld	5,8	7,80	0,58	13,45	14,60
		20-40	lli	6,0	4,10	0,32	12,81	8,90
10	Simp. Keleping	0-10	lp	5,4	9,20	0,56	16,43	6,60
		10-40	pl	6,4	5,80	0,32	18,13	5,85
11	KutePanang	0-18	lp	5,4	4,92	0,52	9,46	4,57
		18-40	lp	5,9	1,72	0,19	8,95	1,89
12	LukupSabun	0-10	l	5,4	4,60	0,35	13,14	10,55
		10-45	lp	6,2	2,00	0,18	11,11	6,45
13	Ratawali	0-15	ld	5,4	10,30	0,86	11,98	10,22
		15-30	ld	5,5	6,70	0,54	12,41	8,56
14	Raya Tupi	0-20	ld	6,4	8,20	0,68	12,06	12,50
		20-45	lli	6,6	4,20	0,29	14,48	8,90
15	Dedemar	0-20	lip	5,4	2,10	0,18	11,67	25,60
		20-35	li	5,6	0,75	0,05	15,00	18,20
16	WihLlang	0-21	ld	5,4	5,70	0,52	10,96	11,20
		21-44	lli	5,8	3,20	0,30	10,67	6,70
17	TanohAbu	0-20	ld	6,8	8,25	0,68	12,13	8,22
		20-42	lli	7,0	6,50	O,55	11,81	6,50
18	AtuLintang	0-18	lid	4,6	9,30	0,89	10,45	6,55
		18-43	lid	4,8	6,69	0,63	10,62	5,96
19	Gegarang	0-22	l	5,7	7,40	0,58	12,76	2,43
		22-41	l	5,9	5,79	0,43	13,47	2,92
20	JagongJeget	0-23	lli	6,6	2,66	0,29	9,17	4,46
		23-46	lli	6,6	1,62	0,19	8,53	12,62
21	ArulItem	0-20	ld	5,0	7,80	6,50	1,20	12,50
		20-40	lli	5,0	4,50	2,30	1,96	9,80

BENER MERIAH								
22	UwerLah	0-20	lli	6,0	8,75	0,65	13,46	18,20
		20-40	lp	6,2	1,80	0,15	12,00	12,76
23	AlurGading	0-17	lp	7,4	4,20	0,42	10,00	23,00
		17-31	pl	7,5	3,90	0,37	10,54	27,00
24	RimbaRaya	0-20	lp	6,0	5,20	0,44	11,82	15,22
		20-38	lp	6,6	0,56	0,04	14,00	9,80
25	Lampahan	0-20	ld	6,4	4,20	0,36	11,67	12,56
		20-44	lp	6,6	1,80	0,13	13,85	6,12
26	Simp.Baliq	0-25	ld	5,0	7,50	0,65	11,54	12,06
		25-45	ld	5,6	5,20	0,36	14,44	4,88
27	JamurUjung	0-18	pl	5,0	2,88	0,25	11,52	9,24
		18-38	lp	5,6	0,96	0,07	13,71	4,58
28	BlangPanas	0-20	lp	5,7	2,50	0,32	7,81	5,39
		20-39	l	5,7	0,50	0,06	8,33	8,99
29	DelungTea	0-20	l	6,0	3,75	0,28	13,39	8,50
		20-50	ld	6,2	2,98	0,24	12,42	7,60
30	HakimWihIlang	0-27	l	5,6	2,17	0,53	4,09	7,22
		27-45	l	5,7	1,78	0,22	8,09	2,41
31	Petukel	0-10	lli	4,2	7,40	0,60	12,33	8,86
		10-28	lli	4,4	3,70	0,28	13,21	7,92
32	PondokGajah	0-20	ld	5,7	3,00	0,24	12,50	17,20
		20-45	lp	6,1	1,18	0,08	14,75	14,80
33	BatinBatu	0-22	l	5,7	3,38	0,39	8,67	5,83
		22-41	l	5,9	6,16	0,22	28,00	2,87
34	LotKucak	0-15	ld	4.6	7,20	0,52	13,85	12,20
		15-35	l	4.0	3,80	0,28	13,57	6,80
35	PondokBaru-1	0-20	l	5,0	5,10	0,40	12,75	8,70
		20-30	l	5,6	1,40	0,09	15,56	2,60
36	KeramatJaya	0-20	ld	5,6	3,19	0,30	10,63	8,90
		20-42	llid	6,0	1,65	0,14	11,79	7,95
37	PondokBaru-2	0-19	lp	6,3	4,80	0,47	10,21	9,00
		19-33	pl	6,3	4,20	0,45	9,33	17,00
38	BintangPermata	0-28	l	6,5	7,47	0,55	13,58	4,03
		28-47	l	6,0	1,80	0,19	9,47	1,39
39	WihTenangUken	0-20	ld	5,4	6,20	0,48	12,92	8,60
		20-45	ld	5,4	4.20	0,24	17,50	4,50
40	JamurAtu	0-20	lp	5,1	6,40	0,43	14,88	18,00
		20-44	lid	5,9	1,20	0,11	10,91	18,00
GAYO LUES								
41	AihSelah	0-20	llid	5,8	6,30	0,41	15,37	0,97
		20-45	llip	6,1	1,23	0,06	20,50	0,61
42	CaneBaru-1	0-20	llid	6,7	3.15	0,18	17,50	0,55
		20-40	llid	6,8	1,28	0,07	18,29	0,16
43	CaneBaru-2	0-21	llid	5,9	3.55	0,26	13,65	1,74
		21-45	llip	5,9	2,11	0,12	17,58	0,56
44	SuriMusara	0-22	llip	6,2	4,24	0,31	13,68	1,51
		22-45	llip	6,3	1,18	0,08	14,75	0,86
45	Kenyaran	0-20	llid	6,7	5,14	0,26	19,77	0,54

		20-38	lli	6,8	2,31	0,11	21,00	0,24
46	KalaKenyaan	0-12	llid	5,9	5,24	0,28	18,71	0,90
		12-34	lli	5,8	2.30	0,12	19,17	0,51
47	PantanCuaca-1	0-18	llid	6,3	5,76	0,30	19,20	0,86
		18-41	lip	6,4	2,48	0,13	19,08	0,46
48	PantanCuaca-2	0-21	llip	6,2	5,44	0,31	17,55	0,98
		21-28	lli	6,4	2,31	0,12	19,25	0,47
49	Reko	0-20	llip	5,8	3,65	0,28	13,04	0,98
		20-42	lli	5,8	1,28	0,08	16,00	0,34
50	PisangAbu/Sangir	0-20	llid	5.7	4,40	0,30	14,67	0,78
		20-45	lli	5,9	1,22	0,08	15,25	0,22

Annexe 6. Copy of the registration/application of European Union Trade mark Gayo Arabika Coffee