



**Advantages, constraints and key success factors in  
establishing origin- and tradition-linked quality signs:  
the case of Kintamani Bali Arabica coffee  
geographical indication, Indonesia**

**Case study on quality products linked to geographical origin in Asia  
carried out for FAO**

**by**

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**25 May 2009**

The views expressed in this information product are those of the author and do not necessarily reflect the views of the Food and Agriculture Organization of the United Nations (FAO)

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## Acronyms and glossary

CGIP	Community of Geographical Indication Protection
CIRAD	International Cooperation Centre on Agrarian Research for Development (Centre de coopération internationale en recherche agronomique pour le développement, Montpellier)
GI	geographical indication
ICCRI	Indonesian Coffee and Cocoa Research Institute, Ministry of Agriculture
IDR	Indonesian Rupiah
INAO	French National Origin and Quality Institute (Institut National de l'Origine et de la Qualité)
NY "C"	New York contract "C" (referring to the coffee future market)
PT	<i>Perseroan Terbatan</i> (limited company)
TRIPs	Trade-Related Aspects of Intellectual Property Rights
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

*subak abian* a traditional Balinese farmers' group or association

US\$1 = IDR 10 500

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**Abstract :**

The Indonesian Government is interested in supporting GI development in order to improve product competitiveness on the basis of quality and legal protection. To this end, a pilot project was carried out with local stakeholders, focusing on Arabica coffee in Bali's Kintamani highlands, a product with a reputation and quality that have been recognized since the early nineteenth century.

Implementation of a GI system required the involvement of a wide range of stakeholders – local producers' organizations, research bodies (the Indonesian Coffee and Cocoa Research Institute and the French International Cooperation Centre on Agrarian Research for Development), local and central government offices, and the private sector (coffee exporters and local roasters). The coffee farmers wanted to obtain legal protection for the name of their product by using the GI system, and they therefore established a GI organization, the Community of Geographical Indication Protection, based on pre-existing traditional farmers' organizations, to represent the local coffee community and manage GI protection. Establishment of this organization was an important step towards the management of preparation, registration, monitoring and marketing activities, while also helping to avoid social conflict.

On 5 December 2008, the Community of Geographical Indication Protection obtained a certificate from the Directorate General for Intellectual Property Rights for the protection of "Kopi Arabika Kintamani Bali", the first product protected by the GI system in Indonesia. The government will use the successful and promising establishment of GI protection for Kintamani Bali Arabica coffee as a model in developing various GI products from other areas of Indonesia.

## Introduction

Product differentiation is an important tool in attracting consumers in the global market, which is marked by very stiff competition. Like trademarks, geographical indications (GIs) play an important role in providing consumers with an image and information that a product offers a certain value, either in quality or some other characteristics that increase its competitiveness (WIPO, 2003).

Indonesia is a very large country, consisting of thousands of islands, and the geographical, social and traditional conditions vary widely. As a consequence, the country produces many products with specific local characteristics and market reputations, such as Toraja coffee from southern Sulawesi, Muntok white pepper from Bangka Island, Java kapok from central and eastern Java, Moluccas tuna fish from the Molluca Islands, Deli tobacco from northern Sumatra, Bali vanilla from Bali, Banda nutmeg from Banda Island and Alabio salted duck egg from southern Kalimantan. These products have the potential to obtain protection from a GI system.

Shortly after ratifying the Trade-Related Aspects of Intellectual Property Rights (TRIPs) Agreement of the World Trade Organization (WTO), Indonesia established its Law 15 of 2001 regarding trademarks, in which GI protection is mentioned in Chapter 56. Since this is a new system in Indonesia, a pilot project was carried out focusing on Arabica coffee in the Kintamani highlands of Bali in order to study implementation aspects of GI protection. Bali coffee was selected for the pilot project because of its reputation for quality, which has been recognized since the early nineteenth century. The taste profile of coffee is considered to be similar to that of wine, inasmuch as its flavour and its quality are highly influenced by locality or *terroir*, consisting basically of natural factors (soil and climate) and traditional knowledge.

Coffee is an important commodity for Indonesia, not only as a source of income for millions of farming households but also as a source of foreign exchange. In 2006, the country produced Arabica and Robusta coffee totalling about 680 000 tonnes (Directorate General for Estate Crops, 2007). Most Arabica coffee from the country goes to the speciality sector, under such origin-linked names as Gayo coffee from Aceh (northern Sumatra), Mandheling coffee and Lintong coffee from northern Sumatra, Java Preanger coffee from western Java, Java Jampit coffee and Java Pancoer coffee from eastern Java, Kalosi coffee from southern Sulawesi, Kintamani Bali coffee from Bali, Flores Bajawa coffee from Flores Island (Sunda Lesser) and Java *kopi luwak*. These coffees usually obtain premium prices – even very high prices in the case of Java Arabica *kopi luwak* – which makes them vulnerable to counterfeiting.

The Indonesian Government is interested in developing a GI system in order to improve product competitiveness on the basis of quality and legal protection. The establishment of a GI system in Indonesia is also expected to avoid intellectual property conflict over the use of geographical names, such as the coffee trademark conflict in Japan over the use of the name “Toraja” (Key Coffee, 2002). Toraja is the name of a highland region in central Sulawesi Island and the ethnic group inhabiting the area. Another example of such conflict over the use of a geographical name as a trademark was the use of the name “Gayo”, as reported in the *Jakarta Post* of 11 February 2008 under the headline “Dutch Company Claims International Trade Rights over Gayo Coffee”. Gayo is the name of another highland region in Aceh (northern Sumatra) and the ethnic minority inhabiting the area.

A pilot project to implement a GI system in the Kintamani highlands was initiated by improving the quality and consistency of Bali coffee. The government launched a quality improvement programme in the area in collaboration with the private sector in 1997, but more concentrated activities have been carried out since 2002 in parallel with execution of the pilot GI project.

The pilot project has borne fruit in the shape of a certificate of GI protection for Kintamani Bali Arabica coffee issued by the Directorate General for Intellectual Property Rights of the Ministry of Law and Human Rights on 5 December 2008. “Kopi Arabika Kintamani Bali” is thus the first GI-protected product in Indonesia.

The establishment of a GI system in Indonesia was very time-consuming, requiring the involvement of a wide range of stakeholders – local producers’ organizations, research bodies (the Indonesian Coffee and Cocoa Research Institute [ICCRI] and the International Cooperation Centre on Agrarian Research for Development [CIRAD]), government (local and central), the private sector (coffee exporters and local roasters) and the French Embassy in Jakarta. The supply of information and training on quality and GI systems for the various stakeholders was a key success factor, especially at the small-farmer level. The participation of small producers is an essential element in developing a GI product from such an area.

The present study had the aim of identifying the advantages, constraints and key success factors in establishing origin- and tradition-linked signs of quality by using the Kintamani Bali GI case as a basis. The results of the study are expected to provide information regarding the establishment of GI as quality sign, for other products from various localities in Indonesia and also in other countries, particularly in the Asia and Pacific region.

## 1. Institutional Context

Indonesia is one of the WTO members that has already ratified the TRIPs Agreement. Through its Law 7 of 1994 the country fully adopted the agreements established by the WTO and it therefore recognizes GIs as forms of intellectual property rights (Direktorat Jendral Hak Kekayaan Intelektual, 2007).

GI protection in Indonesia is regulated under Law 15 of 2001 regarding trademarks, Chapter VII of which provides for protection of GIs and sources of origin. GIs are defined as follows in Article 56 (1): “GIs shall be protected as signs indicating the place of origin of goods, which, due to geographical and environmental factors, including the factor of nature, people or a combination of the two, gives a specific characteristic and quality to the good produced there.” In order to implement the GI protection system, the law was followed up with Decree 51 of 2007, which gives details of the procedure to register a GI product from a particular area of the country, together with other aspects of GIs. Under Law 15 of 2001, a sign shall be the name of a place or region, or any mark that indicates the place of origin of the goods protected by the GI. The goods may be agricultural products, foodstuffs, handicrafts or any other goods complying with the provision.

Indonesia produces various types of goods with specific qualities based on origin and with a reputation either domestically or internationally, such as agricultural products (coffee, tobacco, tea, pepper, nutmeg) and handicrafts (sarongs, woven cloth, batik, carving). Application of the law on the protection of GI products is expected to have a number of benefits, some of which are listed by Kampf (2003):

- registered GIs can be used in marketing strategies in both domestic and international spheres;
- registration adds value to the potential GI product and improves producers' livelihoods;
- such products can become tools to develop rural areas on the basis of the good reputation of their quality;
- registration will improve the reputation of the GI product in global trade;
- registration will ensure equal treatment regarding GI protection and can be used as a tool for promotion abroad;
- GI protection will avoid unfair competition, misrepresentation or misleading, deceptive conduct.

A foreign GI product can also be registered in Indonesia when application is made by producers or operators holding a legitimate interest or by the representatives of the foreign country in Indonesia. To be admissible for registration, a foreign GI product must have been recognized or registered under the provisions of the country of origin.

Registration of GI products is carried out by the Directorate General for Intellectual Property Rights. This directorate is supported by a Geographical Indications Expert Team made up of seven members from the Ministry of Agriculture, the Ministry of Law and Human Rights, the Ministry of Industry and the Ministry of Marine Affairs and Fisheries.

In Indonesia, coffee is a regulated trade commodity, especially if it is for export. The country currently produces about 650 000 tonnes of green coffee annually, 10 percent Arabica and 90 percent Robusta (Directorate General for Estate Crops, 2007). Various types of Arabica coffee from the country have been traded under geographical names on the basis of their reputation for quality, such as Toraja coffee

from the Tana Toraja highlands of southern Sulawesi, Java Jampit coffee from the Ijen highlands of eastern Java, Gayo coffee from the Gayo highlands of Aceh and Lintong coffee from the Bukit Barisan highlands of northern Sumatra. Only Bali Kintamani Arabica coffee has so far been registered as a GI-protected product under Indonesian law, with a certificate issued on 5 December 2008 (see Figure 1).

*Figure 1. Certificate of geographical indication for Kopi Arabika Kintamani Bali issued by the Directorate General for Intellectual Property Rights on behalf of the Minister of Law and Human Rights*

 <b>REPUBLIK INDONESIA</b> <b>DEPARTEMEN HUKUM DAN HAK ASASI MANUSIA</b> <b>SERTIFIKAT INDIKASI-GEOGRAFIS</b>	
<p>Menteri Hukum dan Hak Asasi Manusia atas nama Negara Republik Indonesia berdasarkan Undang-Undang Nomor 15 Tahun 2001 tentang Merek dan Peraturan Pemerintah No.51 Tahun 2007 tentang Indikasi-Geografis, memberikan hak Indikasi-Geografis kepada :</p>	
Nama dan Alamat Pemilik Indikasi-Geografis	: Masyarakat Perlindungan Indikasi-Geografis (MPIG) Kopi Kintamani Bali Desa Blantih, Kec. Kintamani, Kab. Bangli, Provinsi Bali
Nama dan Alamat Kuasa/Konsultan HKI	: --
Tanggal Pendaftaran Indikasi-Geografis	: 05 Desember 2008
Tanggal Penerimaan Permohonan	: 18 September 2007
Nama Negara dan Tanggal Pendaftaran/ Diakui Indikasi-Geografis (Khusus Pendaftaran Indikasi-Geografis Luar Negeri)	: --
Nama Indikasi-Geografis	: Kopi Arabika Kintamani Bali
Nama Produk Indikasi-Geografis	: Kopi Arabika (ose dan bubuk)
Nomor Indikasi-Geografis	: IDIG000000001
<p>Perlindungan Indikasi-Geografis diberikan selama karakteristik khas dan kualitas yang menjadi dasar bagi diberikannya perlindungan atas Indikasi-Geografis tersebut masih ada (Pasal 4 PP No.51 Tahun 2007 tentang Indikasi-Geografis).</p>	
<p>Jakarta, 05 DEC 2008</p> <p>a.n. MENTERI HUKUM DAN HAK ASASI MANUSIA          REPUBLIK INDONESIA          DIREKTUR JENDERAL HAK KEKAYAAN INTELEKTUAL          u.b.          Direktur Merek</p>	
  Herdwiyatmi, S.H. NIP. 040034775	



## 2. Geographical zone and specific resources

### General context

Kintamani Bali Arabica coffee is produced in a narrow zone situated in Bali's northeastern highlands, which is inhabited by the *Bali agha* (original Bali) ethnic minority, most of whom are Hindus. This ethnic group holds fast to the *Tri Hita Karana* (three happiness causes) philosophy based on Hinduism and consisting of the three pillars of good relationships with the gods, other men and the environment (Pitana, 1994).

In the Kintamani zone, land use is categorized as residential, agricultural or forest. The agricultural area is the largest and consists of rainfed farms and rice fields. Land ownership data show that each farming household has an average of 1.43 hectares of land. A study carried out in 2001 found that 72.3 percent of farmers own plots of over 1.0 hectare, 23.7 percent own plots of 0.5 to 1.0 hectare, and 3.9 percent own plots of under 0.5 hectare.

Coffee is one of the main agricultural products of the zone and is usually grown under shade trees – mainly citrus, banana and perennial legume trees such as *Leucaena* spp., *Albizia* spp. and *Erythrina* spp. Citrus is another major cash crop for farmers, while a number of them also grow annual crops – chillies, yams, sweet potatoes and vegetables – between coffee bushes for home consumption. Most coffee growers raise cattle and other livestock to produce manure for their coffee crop and generate additional income. The leaves of legume shade trees are used as cattle feed.

Farmers have traditionally been organized into *subak abians* – typical Balinese farmers' organizations found in upland areas and based on the *Tri Hita Karana* philosophy. These organizations normally consist of 40 to 80 members, accounting for 40 to 160 hectares of farmland between them. Each village normally has more than one *subak abian*. Each of these organizations democratically establishes written internal regulations covering aspects of farming conduct, social relations, religious ceremonies etc., and holds a routine monthly meeting.

The traditional system mentioned above will be an advantage in developing GI in the zone, together with the reputation of Kintamani as a tourist destination in Bali, the suitability of the land for Arabica coffee and the infrastructure already found there. Competition with such other crops as tangerines, frequent cloudy weather during the coffee harvesting period and limited water availability for coffee processing will be the main constraints. Bali's reputation as a major world tourist destination and support from the local government are strong points in promoting GIs. However, the volatility of coffee

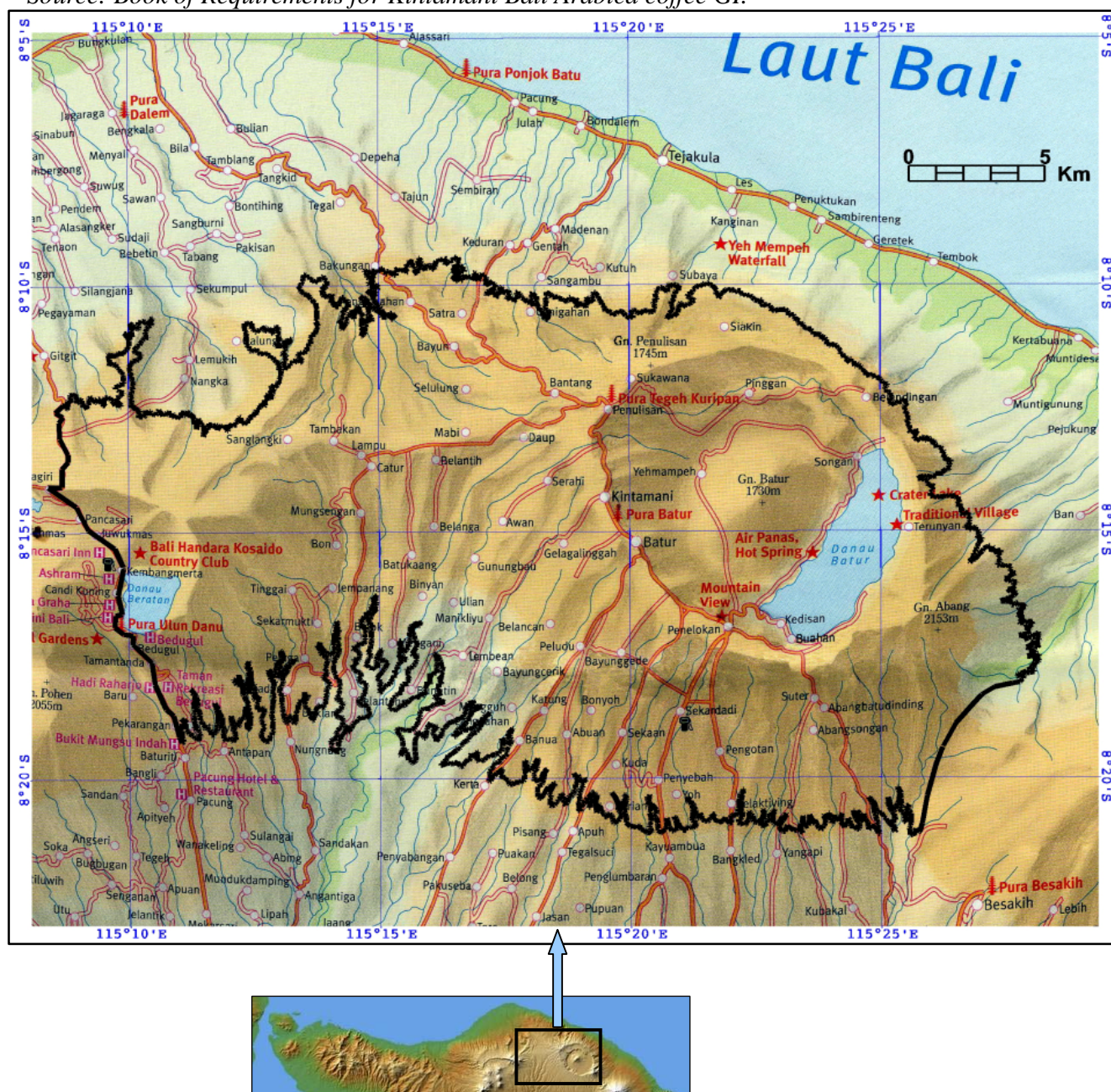
prices and limited market access are significant weaknesses.

### Delimitation of the production and processing zones

Area delimitation was a critical point in preparing GI protection for Bali Kintamani coffee and required several meetings organized by the Community of Geographical Indication Protection (CGIP) in order to avoid social conflict. It was agreed that the production area must be delimited on the basis of altitude (above 900 metres). The meetings to determine the area were also attended by local government officers, and a map showing the delimited area was drawn up with the assistance of experts from CIRAD and ICCRI (see Figure 2).

The zone is located in the northeast of Bali between longitudes 115°5' and 115°30' east and latitudes 8°10' and 8°20' south. It is a cool mountainous area, covering a plateau and some hilly slopes. The Kintamani highlands are suitable for Arabica coffee because of rainfall, altitude, temperature, humidity and soil type. Social, traditional and agricultural practices are very similar in the various villages in the zone.

Figure 2. Map of the production area of Kopi Arabika Kintamani Bali  
Source: Book of Requirements for Kintamani Bali Arabica coffee GI.



## Area delimited by CGIP

### Bali Island

#### Java

In administrative terms, the zone covers three districts – Bangli, Badung and Buleleng. Kintamani is the name of a subdistrict in Bangli District, and about 70 percent of Bali Kintamani coffee previously originated in this subdistrict. The numbers of districts, subdistricts and villages in the area delimited for the Kintamani Bali coffee GI are given in Table 1.

*Table 1. Districts, subdistricts and villages involved in the delimited area for Kintamani Bali coffee GI*

District	Number of subdistricts involved	Number of villages involved
Bangli	2	36
Badung	1	6
Buleleng	1	3

The infrastructure in the zone is in relatively good condition and the zone is very easily accessible from the main cities of Denpasar and Singaraja, facilitating transportation for marketing. Coffee from the zone used to be transported to Surabaya in eastern Java for export.

#### Local resources

- **Climate :**

The Kintamani Arabica coffee zone is a highland region with topographical conditions ranging from flat to hilly and even mountainous. Valleys lie in a north-to-south direction, while coffee plantations are found on slopes. The altitude ranges from 900 to 1 500 metres above sea level, but most of the Arabica coffee is grown between 1 100 and 1 400 metres. Temperatures range from 10 °C to 15 °C at night, 23 °C to 25 °C in the morning and 23 °C to 26 °C in the day.

Average annual rainfall in the Kintamani area is 2 990 millimetres, with 139 rainy days. There are four or five dry months in May/June to September/October. Coffee farms therefore suffer a water deficit from July to November when soil water availability is not sufficient to meet the needs of coffee. However, the farmers apply organic manure routinely in order to maintain the soil water content, also using sufficient shade trees to keep the temperature down during the dry season and reduce transpiration. Relative humidity at midday is fairly high (more than 80 percent).

- **Soil :**

In geological terms, the zone belongs to the Qbb formation (tuff with sediment from Mounts Buyan and Bratan and the Mount Batur volcano – quarter age). The types of soil are Entisols and Inceptisols, which generally have good physical and chemical fertility.

A soil study was carried out in 2004 by ICCRI (Mawardi *et al.*, 2004). Soil texture in the zone is loamy sand and sandy loam, although most of the main coffee-producing villages have a loamy sand texture. This area spreads from the centre to the east and southeast of the zone. Most soils tested had a pH of 7 (neutral), although a lower pH was observed in two villages (Ulian and Lembahan). On average, carbon content was high as a result of the farmers' use of organic fertilizers. However, nitrogen and calcium content were low, and magnesium, potassium and total phosphorus content were high. Micronutrient content tests showed low levels of copper, but moderate levels of iron and zinc.

- **Biodiversity :**

In terms of the zone's biodiversity, significant animal species are wild cattle, wild hens and domesticated Kintamani dogs. Bali pomelos and a particular variety of bamboo suitable for handicrafts grow well in the zone, especially at lower altitudes.

- **Coffee :**

It is not easy to obtain accurate information as to when coffee was introduced to Bali, but it can be assumed that Arabica coffee has been cultivated there since the end of the eighteenth century or early in the nineteenth. Laerne (1885) reported that in 1825 Java exported 10 377 picols (1 picol = 61.5210 kilograms) of Arabica coffee originating from Bali and Palembang (Sumatra).

Arabica coffee faced a serious problem when a destructive coffee leaf rust disease started to attack plantations in Java at the end of the nineteenth century and then quickly spread to Bali. There was an ongoing shortage of Arabica coffee production during the period of Japanese colonization, because farmers were forced to convert from coffee to food crops, mainly maize, in the early 1940s.

The eruptions of Mount Batur (in 1917, 1948 and 1977) and the major eruption of Mount Agung (in 1963) also drastically reduced Arabica coffee plantations. The production of Kintamani coffee decreased to such a degree that the reputation it had acquired on the international market almost disappeared.

In 1978/79, the Department of Agriculture's Directorate General for Estate Crops and local Offices for Estate Crop Development launched a rehabilitation campaign for Arabica coffee plantations through the Project of Rehabilitation and Rejuvenation of the Export Commodity Crops. In 1987/88, the rehabilitation of Kintamani coffee was supported by PT Perkebunan XXCVI (a state-owned company based in Java). As a result, the area of coffee plantations increased again to approximately 9 000 hectares.

Between the 1990s and the early 2000s, the price of coffee plunged, unlike the price of tangerines, which was very high. This situation forced farmers to reduce the area under coffee. Many farmers combined tangerines and coffee, but some of them converted totally to tangerines, so that the coffee area shrank drastically from 8 230 hectares in 2000 to 3 640 hectares in 2002.

- **Human resources:**

The Balinese tend to be diligent people and keen upholders of tradition, but they are also very dynamic and open-minded regarding other cultures. They follow the *Tri Hita Karana* philosophy in daily life, seeking to achieve harmonious relations with the gods, other men and the environment. They pay close attention to environmental conservation, for example making terraces on their farms and protecting wildlife, in addition to protecting the vegetation in certain zones in order to maintain water springs.

### 3. Product and market

#### Product qualification process

By the mid-1990s, the Office for Estate Crop Development of Bali Province had designed a programme to improve quality and thus increase the reputation of Bali coffee regarding both excellence of quality and continuity of supply. This programme was aimed primarily at ensuring the natural characteristics of good quality Arabica coffee from Bali and was launched in 1997. Farmers were requested to have the red cherries picked by a private company, PT Tirta Harapan Bali, which offered a price for this type of cherry that allowed a better income for farmers than in the case of dry processing. PT Tirta Harapan Bali had been able to rent a processing factory, which was not active at the time. PT Tirta Harapan Bali sought to purchase red cherries from the farmers through *subak abians* and process them in this factory before exporting them to Japan.

In 2001, the Office for Estate Crop Development of Bali Province and ICCRI ran a quality and marketing improvement programme by introducing a wet-processing method for red cherries at *subak abian* level. First, four *subak abians* were selected to start processing red cherries with equipment supplied by the Office for Estate Crop Development of Bali Province and technical assistance provided by ICCRI. The programme to improve marketing efficiency was carried out by establishing a direct business partnership between *subak abians* and coffee exporters in order to obtain guaranteed sales and better prices for high-quality coffee by using the “mediated partnership model” (Mawardi *et al.*, 2006). A good price is an essential element in motivating farmers to adopt new technologies and has significantly attracted the *subak abians* to become involved in producing high-quality coffee. So far, 52 *subak abians* (about 80 percent) are involved in the quality programme.

The GI-protection initiative was launched shortly after the government promulgated Law 15 of 2001. ICCRI and the Office for Estate Crop Development of Bali Province worked together with CIRAD to design a project concerning GI protection in Indonesia, and Kintamani Bali coffee was selected as a pilot case. Coffee is considered similar to wine, with taste profiles that are significantly influenced by the particular zone or *terroir* where the product originated.

The farmers have been involved in various training sessions and courses: (i) motivation and group dynamics, (ii) the technology of wet processing for Arabica coffee, (iii) green coffee quality grading and cup taste evaluation, (iv) business partnership application, (v) good manufacturing practices to obtain good quality and food safety, (vi) internal monitoring system, and (vii) GI protection. ICCRI also provided intensive support and supervision during the coffee harvesting season.

At the start of the quality improvement programme, the main difficulty was to find exporter(s) who



would be interested in establishing a business partnership with *subak abians*. The most significant obstacles encountered during the process were limited water availability, the extreme slowness of the sun-drying process due to heavy cloud in several cases, and competition with local collectors. Almost no stakeholders opposed the initiative.

As mentioned above, coffee farmers in Bali have traditionally been organized into *subak abians*. A GI managing group, CGIP, was established in 2007 to organize the production of Bali Kintamani GI coffee. The membership of CGIP is open only to *subak abians* or private firms, in other words organizations rather than individuals, and has been organized into a section for red cherry producers, composed of *subak abians*, a section for coffee processors, composed of *subak abians*, private processors or roasters, and an advisory board, composed of local government representatives (the Office for Estate Crop Development), support organizations (ICCRI) and the most important historical buyer (PT Indo CafCo).

The establishment of CGIP was facilitated not only by such national public institutions as the Office for Estate Crop Development, the Directorate General for Estate Crops and ICCRI, but also by such international partners as CIRAD. A number of meetings were held to elect a chairman and support staff. As a new social organization, CGIP also needed time and awareness-raising in order to become consolidated. The organization was initiated by the farmers' groups, but has been enlarged to involve other stakeholders in the coffee sector. In June 2007, it was composed of 58 *subak abians* (representing 3 218 farming families), 4 private coffee processors and 2 roasters in Denpasar, which sell Kintamani coffee. The *subak abians* are composed of farmers who are all red cherry producers. Several *subak abians* also have processing facilities and produce parchment coffee or green coffee, so that they can be represented in both the red-cherry-producer section and the coffee-processor section.

There has so far been no link with other certification systems for coffee in order to avoid confusion, since this is a pilot project focusing on GI protection in Indonesia.

### **Product specification and contents of the Book of Requirements (or code of practice)**

As called for by Government Decree 51 of 2007, the Book of Requirements contains:

- the name of the GI that is filed for registration;
- the type of goods covered by the GI;
- a description of the specific characteristics and quality that allow objective differentiation of the product from other similar products of the same category through characteristics conferred by its origin, with a description of the geographical environment and the inherent natural and human factors that have an effect on the quality or characteristics of the product (see subsection entitled "Specific quality and product differentiation" above);
- definition of the boundaries and/or a map of the area that is protected by the GI (see Figure 2 and subsection entitled "Delimitation of the production and processing zones" above);
- a description of the history and tradition behind the use of the GI to designate goods from the area, including a description of recognition of the GI by the relevant public;
- a description of the production process, explained in such a way as to allow any producer in the zone to produce the product on the basis of the information provided in the specifications (see Figure 3 above);
- a description of the method used to monitor the product, together with measures taken to ensure its traceability (see Figure 7 below);

- the specific labelling (logo) to be used relating to the GI (see Figure 3 below).

*Figure 3. Logo to be used for the Kintamani Bali Arabica Coffee GI*



In 2007, CGIP drew up a document entitled *Permohonan Pendaftaran Indikasi Geografis Kopi Kintamani* (or “Request for registration of Kintamani coffee GI” – hereafter referred to as the Book of Requirements), based on experience under the pilot project. CGIP needed several meetings over the period of a year in order to agree democratically on the contents of the Book of Requirements. Some of the elements in this document regarding specific quality and product differentiation are presented below.

The GI product is Arabica coffee originating in Bali’s Kintamani zone and known as Kopi Arabika Kintamani Bali. This name has been recognized as identifying Bali coffee for a long time and has indicated a specific quality of coffee since the beginning of the nineteenth century. GI protection will concern green coffee, roasted coffee and ground coffee obtained from fully washed Kintamani Arabica.



*Kopi Arabika Kintamani Bali red cherries*

Kintamani Bali coffee is produced from Arabica coffee bushes grown in the Kintamani highlands at an altitude above 900 metres. The Kintamani zone lies on the slopes of the volcanic Mount Batur, with fertile Entisol and Inceptisol soils. It has a cool, dry climate, with abundant rainfall during the six- to seven-month rainy season. The landforms of the zone are favourable for the growing of Arabica coffee.

Several selected planting materials are used to produce Kintamani Bali coffee. The bushes are grown under shade trees, combined with other crops, and are fertilized organically. The coffee cherries are hand-picked and carefully sorted, with a minimum of 95 percent of red cherries. They are then

processed by using the wet method, with a fermentation time of 12 to 36 hours, and clean parchment beans are fully sun-dried. The post-harvest processing techniques applied by Kintamani farmers reveal the quality potential of the area. These specific local characteristics, combined with agricultural and processing practices, allow the production of coffee beans with a high quality and a specific taste.



*Sorting and processing of red cherries, and sun drying*

Green beans of Kintamani Bali coffee are traded in Grade I form with a maximum of 11 physical defects according to the Indonesian national standard, a maximum moisture content of 12 percent and a greyish green colour. Kintamani coffee beans are generally larger in size than the Arabica coffee beans from other places in Indonesia. On average, 84 percent of the beans are retained by size 17 or 18 screens (and 87 percent of the beans have a medium or large diameter according to the Indonesian national standard classification). This means that it is easy for Kintamani Bali coffee to comply with the speciality coffee market requirement that beans have a size equal or superior to “screen 16”.

When medium roasted, Kintamani Bali coffee is relatively homogeneous, with a sweetish ground coffee flavour and a very light spicy tone. It has a significant cup taste profile, regular acidity, a strong aroma quality and intensity, with a tangerine or lemon scent and a medium body. Kintamani Arabica coffee is usually not too bitter or astringent. This is because Kintamani farmers take great care over selective picking (only red cherries) when harvesting. In more general terms, a Kintamani cup is clean and free of significant taste defects. One of the reasons is that the farmers already implement good manufacturing practices, following the standard of operational procedures provided by ICCRI and provincial government technical experts.

Lastly, the main taste profile of Kintamani Bali coffee is: (i) a medium to high acidity, (ii) a good to very good aroma quality and intensity, (iii) a fruity taste (often lemony), (iv) a medium body without too much bitterness, (v) a very light astringency and (vi) a clean cup, free of defects. It therefore has a good cup taste potential. The profile is very similar to Java coffee, which normally provides a spicy note. However, the Kintamani Bali coffee taste profile is different from Sumatra (Mandheling) coffee, which normally has a complex aroma and flavour and a strong body (almost syrupy), in addition to very low acidity.

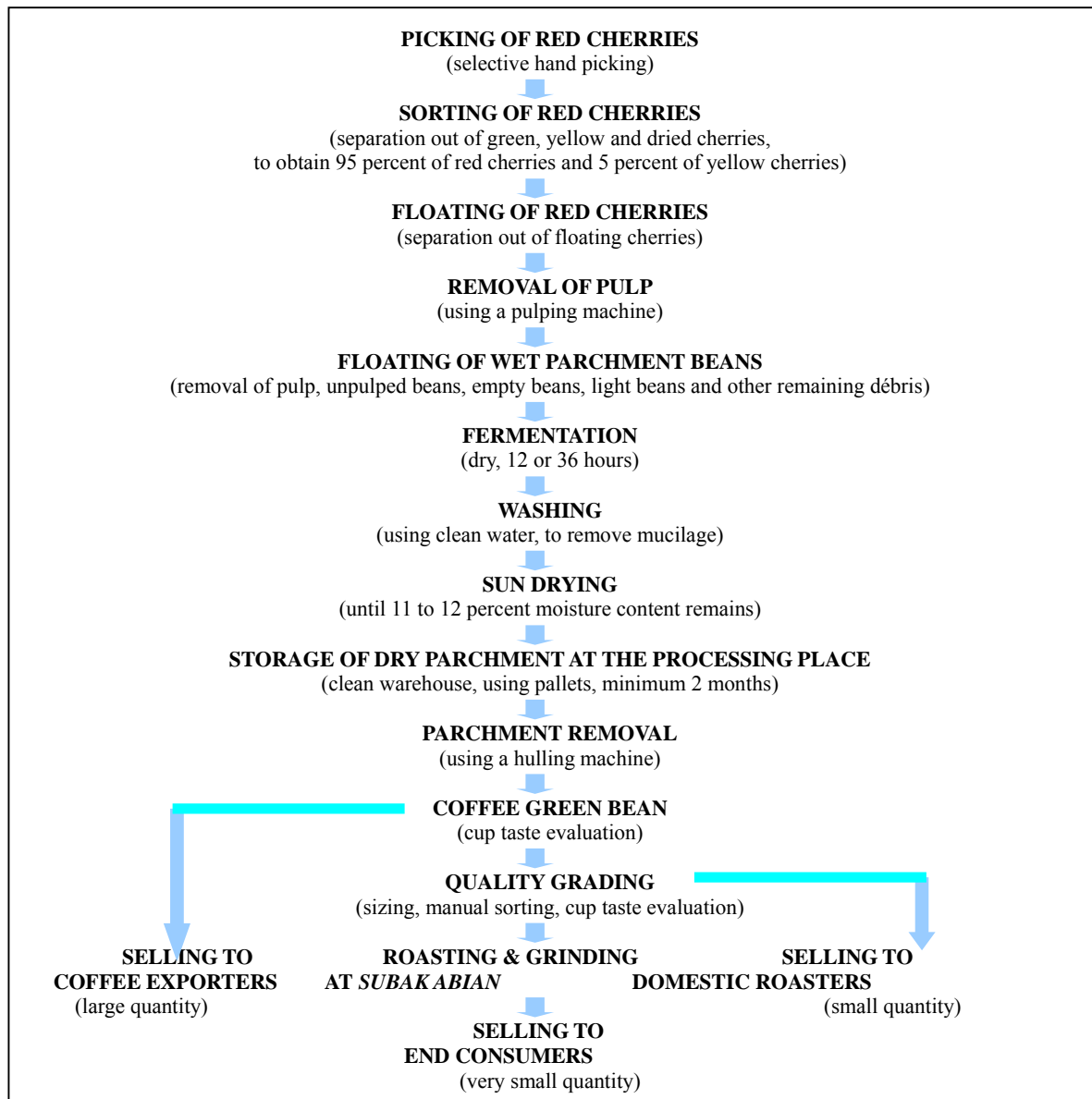
In order to maintain consistent good quality, CGIP has established a standard of operational procedures



that must be followed by *subak abians*. A summary of the procedures and critical monitoring points is presented as a flowchart in Figure 4.

*Figure 4. Summary of the required operational procedures for post-harvest processing of Kintamani Bali Arabica coffee*

*Source: Book of Requirements for Kintamani Bali Arabica coffee (simplified and modified by the author).*



### Type of recognition of specific quality or reputation

The reputation of Bali Arabica coffee has been recognized since the early nineteenth century. David (1996) also mentioned Bali coffee as one of the world's "geographic coffees".

After a quality improvement programme was stepped up in the 1990s, the market again started to recognize the reputation of Bali coffee. Good quality coffee resulted from the wet processing method used by a private company and was marketed under the “Bali Washed Arabica Shinzan” trademark, mainly for the Japanese market.

Kintamani Arabica coffee was previously recognized mainly for the domestic market, especially in Bali and Java, in order to distinguish it from Robusta coffee produced in other parts of Bali. When a GI protection project for Arabica coffee was set up in 2002, the farming community in Kintamani agreed to promote the geographical name “Kintamani Bali” for their coffee, and this name has so far been recognized in speciality markets in the United States, Europe and Australia.

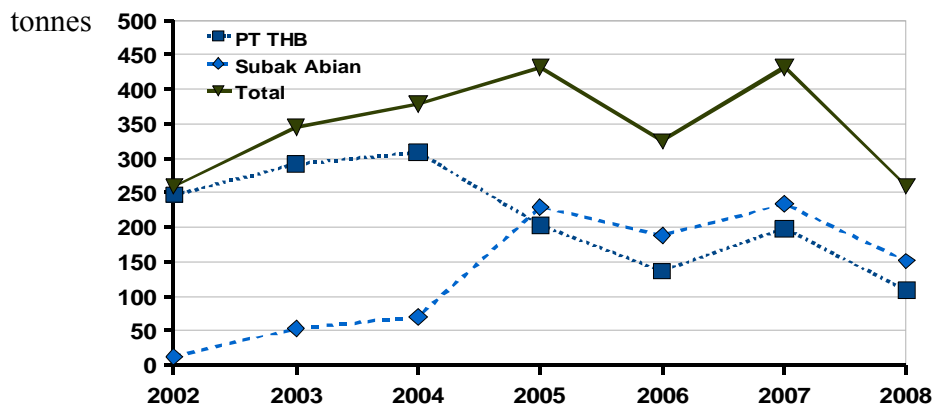
A number of domestic roasters, such as Caswell’s Coffee and PT Bhineka Jaya, have been purchasing Kintamani Bali Arabica coffee from *subak abians* and selling roasted beans or ground coffee under the “Kintamani Bali” brand. The roasters sell branded packets of “Kintamani Bali” mainly as souvenirs and for brewed coffee in special cafés.

Kintamani Bali coffee has recently become more expensive than similar coffees from other parts of Indonesia. For instance, the farmgate price of green coffee in 2008 rose to US\$3.3 per kilogram (when the NY “C” terminal equivalent was US\$2.6 per kilogram), making it too expensive for domestic consumers.

Although specific market studies for Kintamani Bali coffee have not yet been conducted, it seems that demand from overseas markets is gradually growing, inasmuch as exporters are requiring more coffee each year. Spot interviews indicate that foreign tourists purchase roasted and ground Kintamani Bali coffee because of its taste and also its uniqueness as souvenirs. The market growth of roasted and ground coffee is very slow, mainly because of its high price. Although local inhabitants would also like to consume more good-quality coffee, they sell their best coffee to obtain more cash for their households.

Changes in the production amounts of Kintamani Bali coffee are shown in Figure 4. During the past seven years, the average annual growth rate for the total production of wet-processed Arabica coffee has been 4.2 percent. *Subak abians* showed a particularly high average growth rate of 92.7 percent, while the large-scale processor PT Tirta Harapan Bali showed a negative rate of -7.2 percent.

Figure 5. Production (in tonnes) of wet-processed Arabica coffee in the Kintamani zone

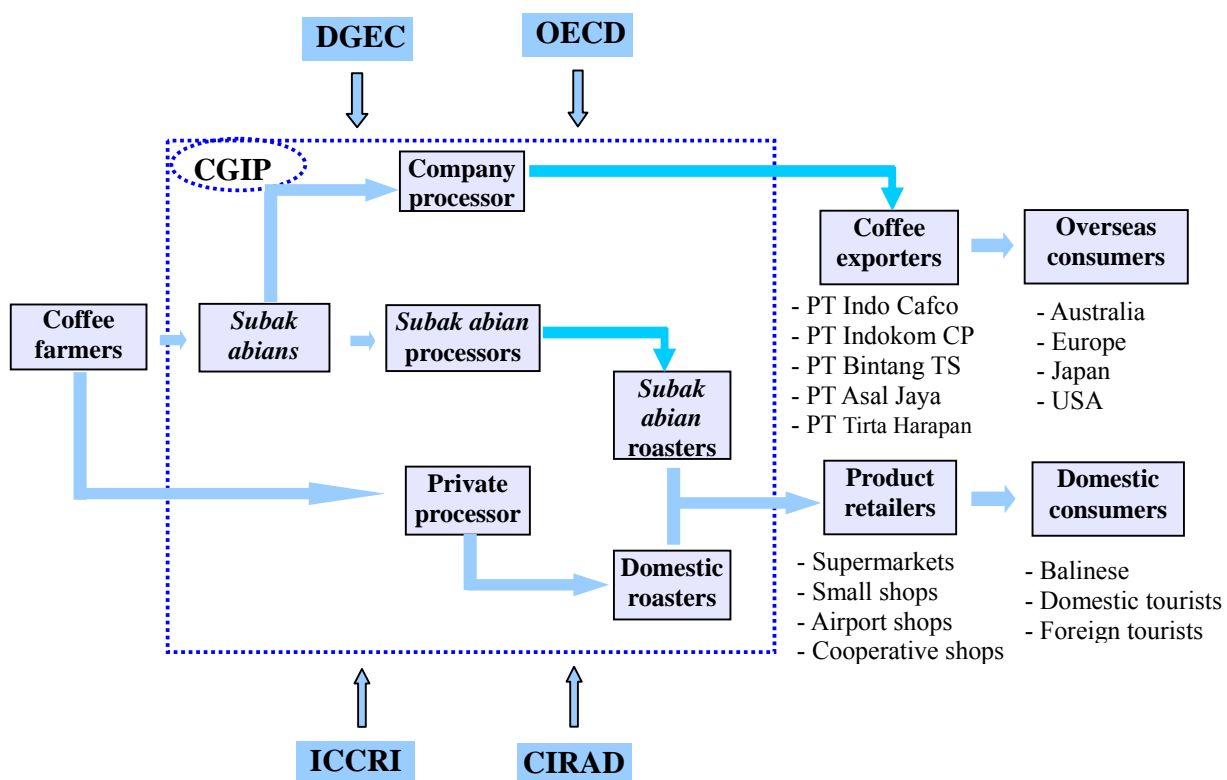


## Market

In the initial stage of the quality improvement project, only one exporter (PT Tirta Harapan Bali) was buying red cherries directly from *subak abians*, after which the cherries were wet-processed in a large factory with a capacity of 1 500 tonnes per year. The company is still working today, selling green coffee to Japan under the brand name “Bali Arabika Coffee Shinzan”, while in English it is called “Bali Arabica Coffee God Mountain”.

After quality improvement and GI application programmes had been implemented, a number of coffee exporters were interested in becoming involved. In 2008, six exporters thus purchased coffee directly from *subak abians*, namely PT Indo CafCo (Lampung, Sumatra), PT Indokom Citrapersada (Surabaya, eastern Java), PT Asal Jaya (Malang, eastern Java), PT Bitang Tunggal Sejati (Surabaya, eastern Java) and PT Kaliduren (Malang, eastern Java). Apart from these exporters, two roasters also purchased good-quality coffee from *subak abians*, namely PT Bhineka Jaya (Denpasar, Bali) and Caswell’s Coffee (Jakarta). The exporters seek to sell only to the speciality sector, where the demand is now increasing, as reported by the National Coffee Association of the United States (NCA, 2008).

Figure 6. Supply chain and stakeholders involved in establishing the GI protection system for Kintamani Bali Arabica coffee



Notes:

CGIP – Community of Geographical Indication Protection for Kintamani Bali coffee

CIRAD – International Cooperation Centre for Agrarian Research for Development

DGEC – Directorate General for Estate Crops, Ministry of Agriculture

ICCRI – Indonesian Coffee and Cocoa Research Institute

OECD – Office for Estate Crop Development, Province of Bali

## 4. Stakeholders and collective organization

### Types of stakeholder involved, according to roles and objectives

GI protection for Kintamani Bali coffee was a pilot project in Indonesia, starting with four *subak abians* as pilot farmers' groups in 2002. Arabica coffee growers in the Kintamani zone have an average of 1.0 to 1.5 hectares of land, most of which is traditionally owned. Farmers supply red cherries to *subak abians* for collective selling or collective processing to produce consistent good-quality coffee. Arabica coffee farmers in the Kintamani highlands generate additional income through mixed farming, with crop diversification and animal husbandry. They grow tree crops (citrus, tangerines, timber etc.), not only to provide shade for their coffee bushes but also to generate additional income. They often also grow elephant grass on the edges of their coffee fields to feed their cattle, which then produce organic manure for the coffee bushes. They also obtain additional income from the sale of livestock.

The collective processing method of the *subak abians* has created many jobs for villagers. For instance, in 2008 the Kerta Waringin *subak abian* was the source of 2 160 workdays to wet-process 165 420 kilograms of red cherries, or the equivalent of 76.5 kilograms per workday. In 2008, *subak abians* processed a total of 905 860 kilograms of red cherries, creating the equivalent of 11 841 workdays.

PT Tirta Harapan Bali, the only company, produces Kintamani Bali coffee by collecting red cherries from *subak abians* and wet-processing them in a large factory. The company was established under Indonesian law and exports coffee directly.

According to CGIP, the objectives in establishing GI protection were to obtain and maintain good prices and market access, protect the territorial name of their good-quality coffee, develop agricultural tourism and conserve natural resources. CGIP organized meetings with all stakeholders to draw up a programme of activities and discuss common problems. During the procedure to obtain a GI protection certificate from the government, there was no negative reaction from stakeholders, because a large number of meetings were held over several years to discuss various aspects of the development of a GI.

### Importance of external support

Acting through the Directorate General for Estate Crops and the Office for Estate Crop Development, the central government granted the *subak abians* equipment for the wet-processing of coffee. Local government (provincial and district) also provided equipment grants or soft loans for *subak abians*, while ICCRI and CIRAD provided technical assistance in the shape of scientific research on specific topics, training for CGIP and farmers, and support for coffee processing, quality control and the obtaining of market access.

In 2001, ICCRI and CIRAD launched a survey on the potential benefits of promoting Arabica coffee from the Kintamani highlands as a GI-protected product. This survey was followed in 2002 and 2003 by more detailed studies on farming systems, social aspects and product quality. In 2003, ICCRI and CIRAD experts then started awareness-raising activities concerning the GI system and its organization, aimed at Bali provincial government officers, extension service specialists and interested farmers. At the same time, an intensive *subak abian*-level campaign was launched to improve coffee quality by applying good manufacturing practices regarding the fully washed process, and in this regard ICCRI played a role not only in quality control, but also in providing training and technical support.

Intensive technical training courses on the application of the GI system was provided by the French National Origin and Quality Institute (INAO), CIRAD and ICCRI in 2004 and 2005 for extension specialists in the Kintamani area, *subak abian* representatives and coffee processors. During these two years, *subak abians* and other stakeholders were encouraged and supported in establishing a GI managing group to represent the community, and CGIP thus came into being with the agreement of Kintamani coffee stakeholders. ICCRI and CIRAD provided CGIP with technical and editorial information and assistance in drafting the Book of Requirements for the Bali Kintamani Arabica coffee GI. The provincial government also assisted CGIP in applying to the Directorate General for Intellectual Property Rights for legal protection.

The government has so far been very active in developing GI protection for Kintamani Bali coffee and has empowered *subak abians* by means of grants for such items as planting material and post-harvest processing equipment, training, assistance in setting up a zone-level organization, facilitation of market access and the provision of soft loans. The government has also provided premises for CGIP offices, so that the organization can carry out its coordination functions efficiently. However, in the near future the organization must gradually take over the various functions from the government. CGIP is expected to become an independent and self-supporting organization in the long run in order to sustain the production of GI-protected Kintamani Bali coffee. To help it develop and progress, CGIP will collect a contribution of IDR 100 for every kilogram of green coffee sold.

Some essential outside contributions still needed by the community are promotion of the product to improve marketing, access to financial support during the harvesting season and improvement of human resource skills.

### **Structure and coordination**

The traditional social structure of the *subak abians* is an effective tool in organizing farmers. It is a unique and very specifically Balinese social entity. However, since it lacks legal status, there are several obstacles to its acting as a private company or a cooperative, for example accessing banks to obtain financial support or negotiating business contracts. The establishment of a cooperative is considered a good alternative for *subak abian* members in order to develop their community-based business. A number of *subak abians* have already established cooperatives, and a secondary cooperative at zone level should be considered as a short-term tool to enable CGIP to operate on a larger scale.

The establishment of CGIP was a good way of coordinating *subak abians* and the private sector. CGIP

has started to take over the various tasks, but it still needs time before it can work really efficiently. Last year (2008), CGIP played a role in negotiating coffee prices with exporters. Although business contracts have not yet been made between several *subak abians* and their exporter partners, before harvesting there is a meeting between the two parties to negotiate volume, quality, price and time of delivery, and this meeting is normally facilitated by the local government.

Although the social structure in the Kintamani zone is a valuable asset in establishing an economic community-based body, limited expertise and insufficient access to microfinance are potential constraints.

### **Certification and control mechanisms**

In order to ensure the credibility of the Kintamani Bali coffee GI, a control and traceability plan has been established, with internal or external control. The mechanism is intended to monitor and ensure (i) the fulfilment of the Book of Requirements, (ii) the origin of the product (traceability) and (iii) the quality (absence of defects) and the specific nature of the product. The *subak abians* and CGIP have established an internal monitoring system.

Internal control by the community is carried out from the coffee-growing stage up to processing and has three elements: self-control by coffee farmers, control by the *subak abian* and by CGIP.

- In self-control, each producer has to check that his or her plantation meets the stipulations of the Book of Requirements concerning such matters as shade trees, varieties (only in the case of new plantations), density and maintenance (especially fertilizer and pesticide use).
- Control by *subak abians* is carried out annually, when *subak abian* leaders have to check the conformity of their members' coffee farms and report to CGIP. Each *subak abian* can select the means used to carry out this control: the *subak abian* board may carry it out itself or may designate a special person. Depending on circumstances, a simple meeting may be enough, but specific inspection of plantations may have to be carried out.
- Control by CGIP is also carried out each year. In April, it selects five *subak abians* at random and checks that their coffee farms are in conformity with the Book of Requirements, taking two days per *subak abian* (so that the whole process takes a total of ten days).

External control will be carried out by the national Geographical Indications Expert Team of the Directorate General for Intellectual Property Rights.

Traceability will cover three stages: village level through members' registration; during harvesting and processing, particularly monitoring of the origin of red cherries; and during the sale and purchase of GI coffee.

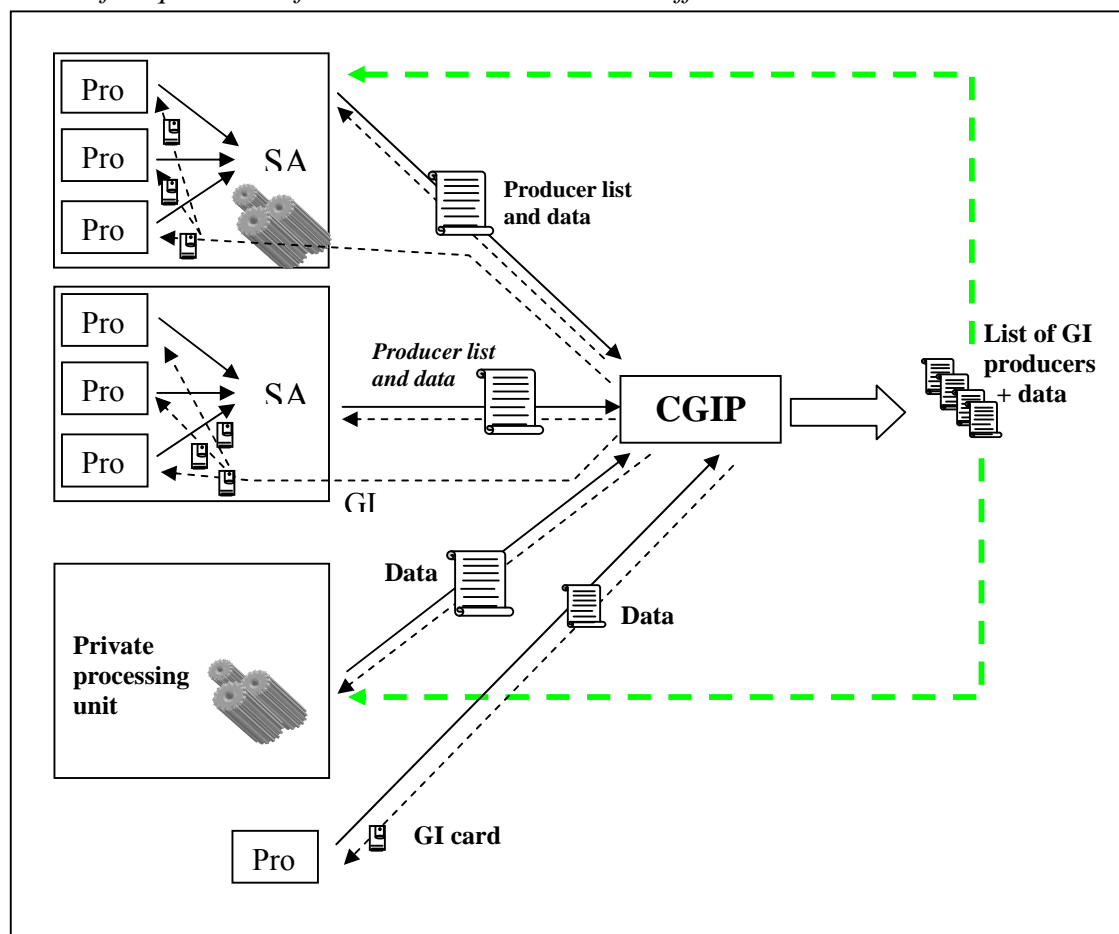
The *subak abians* belonging to CGIP have been asked to list all their coffee producer members. This list has been computerized and has allowed CGIP to give each producer a "GI card" with a membership number. Processing units should send CGIP a list of red cherry suppliers, and CGIP then checks whether the amounts of red cherries sold by each producer are in line with the size of farm and number of trees. After processing and storage, and obtaining the GI certificate (see the information below), the processing units can sell the GI coffee. Each transaction has to be registered, then CGIP checks the transactions and the correspondence between the amounts of green coffee or coffee in parchment sold

and the amounts of red cherries purchased from GI producers. The Balinese roasters registered as GI members also have to send the same kind of data (purchases of green coffee and sales of roasted and ground coffee) to CGIP in order to check the amount of coffee sold with a GI certificate. (See the diagram of traceability in Figure 7.)

The cost of certification for GI protection is paid by the provincial government (the Office for Estate Crop Development), but the cost of internal control must be paid by CGIP. The cost of external control is normally paid by the central government (the Directorate General for Intellectual Property Rights).

*Figure 7. Diagram of traceability for Kintamani Bali Arabica coffee GI*

*Source: Book of Requirements for Kintamani Bali Arabica coffee.*



Intensive internal control is a new system for small farmers in Kintamani, and a poor understanding of the system could be a major constraint. However, the traditional social structure and support from the government and the research institute, combined with the growing demand for good-quality coffee from Bali, will be strong factors forcing the community to carry out effective internal control.

## Collective action

Collective action by coffee-based *subak abians* started in the late 1970s when the government launched its coffee development project. This action was followed by the picking of red cherries and their sale to a large factory in the zone in the mid-1980s.

Collective action to process coffee using the wet method at *subak abian* level was initiated in 2001, when ICCRI, working in collaboration with the Office for Estate Crop Development of Bali Province, provided training on quality improvement, followed by action to obtain a GI protection certificate. CIRAD has also facilitated a farmers' study tour to France in order to learn about GI application in that country and promote the candidature of GI-protected Kintamani Bali coffee.

Collective action to obtain added value through quality improvement has improved such aspects of social life as religious ceremonies and individual relationships, since farmers obtain more money from coffee. It has also improved networking among *subak abians* in the zone. More attention is also focused on natural water conservation to ensure enough water during the coffee processing period.

## **5. Impact analysis**

### **Perception by stakeholders**

Different stakeholders have different perceptions. The *subak abians* are satisfied with the GI initiative because it directly benefits them, especially in terms of better prices and increased market access. The large-scale processor (PT Tirta Harapan Bali) seems less satisfied, because of shortages in the supply of red cherries from *subak abians* to its factory. Exporters and domestic roasters are so far satisfied with the quality sign programme. Various foreign traders and roasters seem satisfied too, inasmuch as they recognize that the coffee is being processed properly and in line with hygienic procedures. No negative effects of the programme have yet been identified.

### **Economic impacts**

The programme has had significant positive effects on rural economic development in the zone. In 2002, when the project was started, the farmgate price of dry-processed Arabica coffee was very low (about US\$0.8 per kilogram) – even lower than that of Arabica coffee from other places in Indonesia. The price increased gradually, so that by 2008 the farmgate price was about US\$3.3 per kilogram, which meant that the price of red cherries in the zone also went up. At the same time, the price of conventional coffee was US\$1.9 per kilogram. Even though the increase in price was also affected by the increase in world coffee prices, the quality sign programme provided a significant contribution. In 2008, total farmgate sales of Kintamani Bali coffee were estimated at about US\$825 000.

Of course, the quality sign programme has increased the reputation of Kintamani Bali coffee in both domestic and foreign markets. There is a steady increase in demand at present, mainly from the speciality sector in Australia and the United States.



### **Impact on rural development: economic and social aspects**

The estimated annual increase in income resulting from the quality sign programme was about US\$800 per hectare under coffee. Farmers who took part in coffee processing as workers received about US\$250 per year (working on a part-time basis during the coffee harvest). Each *subak abian* employed between 5 and 25 people during the coffee harvest, depending on the volume of coffee cherries to be processed, and this slowed rural depopulation. A number of young people even came home from the towns to work on coffee farms and in processing. A number of women also became involved in post-harvest coffee processing, rather than performing only on-farm activities. The rules for those working collectively to process coffee at the *subak abian* were agreed during a meeting of members.

The programme has increased cooperation between *subak abians* and coffee roasters and exporters.

Such infrastructure as village roads, processing units and electricity have been provided by the provincial government in order to promote coffee villages as tourist destinations in Bali. A number of tourists are already being attracted by “coffee ecotourism”, but internal capacity-building and increased promotion are still needed.

### **Culture and traditions**

The Balinese conduct a number of Hindu ceremonies each year to express their gratitude to the gods. The increased income resulting from coffee quality improvement has improved social life, especially in the case of religious ceremonies. The people are also proud of the quality of their product. Farmers’ representatives often receive marks of esteem from the government or private sector, in the form of participation in training courses, attendance at workshops and the receipt of prizes in farmers’ contests.

### **Environmental impact**

The Balinese believe that a good relationship with the environment is one of several key factors in reaching happiness in their lives, which is why good agricultural practices have been a tradition in the region in order to preserve the environment. Farmers built terraces on sloping land and maintain them well. They grow permanent shade trees to provide a favourable microclimate for their coffee and a “green” source of feed for their cattle. They have traditionally preserved local biodiversity, such as wild cattle and hens. An indirect impact of the quality sign programme on local environmental preservation has been observed, inasmuch as increasing coffee prices lead farmers to grow more coffee rather than annual crops, and this will improve soil and water conservation in the long run.

### **Costs**

The costs of GI certification of Kintamani Bali coffee are made up as follows: (i) preparation (research, training, meeting and equipment), (ii) registration (application and inspection) and (iii) control (internal and external). The estimated cost of establishing GI protection up to the end of 2008 was about US\$0.34 per kilogram of green coffee (farmgate price) and was for the most part granted by the Government of Indonesia and the French Embassy. The main expenditure was for preparation – chiefly

grants for equipment, research and the training of rural producers. The cost of maintaining GI protection in 2009 should decrease significantly to about US\$0.045 per kilogram of green coffee, mainly to build up the capacities of CGIP and for quality control. In the long term, CGIP is expected to raise funds by placing a levy on the sale of GI coffee in order to become self-supporting.

### **Internal strengths and weaknesses**

The Kintamani highland zone has a very high potential to produce a unique quality of Arabica coffee. Human capacities have been improved with a view to obtaining and maintaining a good quality. The reputation of Bali coffee is being revived by GI certification, and market demand is gradually growing. Bali's fame as a major tourist destination will also be of help in promoting specific products from the island.

As a new organization, CGIP is not yet strong enough to conduct its business effectively, but needs further capacity-building. Water availability will also be a serious constraint for post-harvest processing in several villages. Moreover, farmers' lack of access to financial support institutions will slow down the growth rate in the production of good-quality coffee.

### **Context-linked opportunities and dangers**

A significant market growth rate of speciality coffee in consumer countries is a major external opportunity for the development of GI-protected coffee. The demand for sustainable coffee is also growing, linked to increased awareness of environmental issues. The Government of Indonesia is keen to apply the GI protection system to products from a variety of origins.

World coffee price volatility is one of the main external threats to maintaining the quality of Kintamani Bali coffee. An improved reputation and the increased price of Kintamani Bali coffee will stimulate internal competition, with other parties seeking to cash in by producing similar products within the zone. Product counterfeiting should also be seen as a potential threat.

### **Success and failure factors**

The establishment of GI protection for Kintamani Bali Arabica coffee was a pilot project for application of the GI system in Indonesia, driven mainly by research institutes with government support. Success factors were (i) innovation and support from research and development institutions (ICCRI and CIRAD), (ii) government (central and provincial) support, (iii) the farmers' traditions and philosophy, (iv) traditional farmers' organizations, (v) the commitment of stakeholders to speciality quality, (vi) the partnership between farmers' organizations and coffee exporters for the marketing of quality coffee, and (vii) significant price differences between conventional and speciality qualities, which provided an incentive to coffee growers.

Constraints or potential failure factors were (i) price volatility, (ii) internal competition among collectors over the collection of coffee cherries, (iii) a lack of experience in managing a traceability and control system, and (iv) CGIP's need for further capacity-building.

## **Support and capacity-building required by stakeholders**

With a view to sustaining their business, CGIP and coffee farmers need capacity-building in a number of spheres, such as access to financial support (mainly soft loans), improvement in the traceability and monitoring system, and training in the maintenance of consistent quality and increased production. CGIP also needs capacity-building both to develop downstream industries, such as packagers of origin-roasted beans and ground coffee, and to improve marketing.

Exporters need greater access to buyers of origin-linked coffee through promotion in consumer countries. Ongoing sales by exporters will have a positive effect on sustainable partnerships with CGIP in coming years.

Domestic roasters need better access to domestic and international markets. Improved access to the tourist sector is also considered a potential aid in developing roasted and ground coffee markets.

## **6. Lessons learned**

Good quality is a key factor in developing Arabica coffee markets. The reputation of Bali Arabica coffee has been recognized since the early nineteenth century. However, when quality fell, prices also fell steeply, even reaching lower levels than those of Robusta coffee from a neighbouring region of Bali. Efforts to improve the quality of Arabica coffee in the Kintamani area had been made since 1997 in order to revive its reputation, but more concerted efforts really started in 2002. When consistent good quality was achieved, the price rose, and Kintamani Bali is now one of the most expensive Arabica coffees in Indonesia.

Most Balinese coffee farmers have now understood that growing Arabica coffee basically means focusing on quality of taste. After receiving various types of training, they now have a better understanding of quality and they know that the excellent taste of Arabica coffee can be achieved only by applying good agricultural practices and good manufacturing practices. Various stakeholders from the coffee sector have focused their joint attention on improving the quality of Arabica coffee in Bali, achieving significant positive results. The next essential step in retaining market trust and ensuring ongoing sales is to maintain consistent excellence of quality.

The involvement of research and development institutions is very important in building the capacities of the rural community, particularly in improving knowledge, technological expertise and market access. The main role of the government has been to build up physical infrastructure, for example through the granting of equipment and facilitation of access to financial support.

Demand for high-quality Kintamani Bali coffee for the speciality market sector is increasing every year because of its reputation. The farmers wanted to obtain legal protection for their product by using the GI system and therefore established an organization (CGIP) to represent the local coffee community and manage the protection. Establishment of this organization was an important step towards

management of preparation, registration, monitoring and marketing, while also helping to avoid social conflict.

GI protection is new in Indonesia. It took seven years to develop the system after promulgation of Law 15 of 2001. A pilot project to establish GI protection of Arabica coffee from the Kintamani highlands of Bali was an essential activity in obtaining practical experience in order to establish government regulations regarding GI. Government Decree 51 of 2007 regarding GIs was published, with a view to following up and enlarging on Law 15 of 2001, thus facilitating its implementation.

On 5 December 2008, CGIP obtained a certificate from the Directorate General for Intellectual Property Rights for the GI protection of Kopi Arabika Kintamani Bali, the first product protected by the GI system in Indonesia.

After obtaining GI protection, the stakeholders expect Arabica coffee grown in the Kintamani highlands to provide greater benefits in coming years. CGIP expects protection to be a tool in assuring the sustainable premium quality of Kintamani Bali Arabica coffee and improving the livelihood of coffee farmers, in addition to developing agrotourism. Higher coffee prices have encouraged farmers to grow more coffee, and the local government expects this to have positive effects on the environment, particularly in improving hydrological conditions, minimizing soil erosion, improving carbon storage and conserving biodiversity.

Coffee traders expect Bali Kintamani Arabica coffee to provide a wider choice of protected-origin coffees for end consumers in the speciality sector. Kintamani Bali coffee has a good market in Australia, where the speciality coffee sector is starting to develop, and also in the United States, which is the main speciality coffee consumer. Recent improvements in the quality and consistency of Kintamani Bali coffee has attracted a number of coffee exporters to become involved in the supply chain.

The government will use the establishment of GI protection for Kintamani Bali Arabica coffee as a model in developing GI coffee from other origins and various products from other places in Indonesia. The Bali provincial government is preparing to register other products (for example Bali vanilla, Kubu Bali cashew nuts and Amed Bali salt) for such protection. The central government will use the success in establishing GI protection for Kintamani Bali coffee as a model for other origin-linked products. In the case of coffee, the communities of Gayo (Aceh) and Bajawa (Flores Island) have taken lessons from Kintamani and are preparing to apply for GI protection for Gayo Arabica coffee and Flores Bajawa Arabica coffee.

The establishment of GI protection for Kintamani Bali coffee was demanding in terms of action, time and energy, but the involvement of a number of stakeholders allowed success to be achieved. The sharing of knowledge, experience and resources from a range of competent stakeholders was the key factor in obtaining benefits from internal strengths and external opportunities, overcoming internal weaknesses and anticipating external threats.

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## **Methodology for Data Collection and Analysis**

### **1. Literature and Document Study**

This study was initiated by collecting information at the library of ICCRI at Jember, East Java. Information collected was related to aspects of coffee growing in Kintamani area of Bali as well as legal issues. Document study was also done at the Office for Estate Crops Development, Bali Province, in Denpasar (Bali).

### **2. Collecting Data and Information**

#### **2.1. Interview on policy issues**

In order to get more information on policy issues several interviews have been done with the Provincial and District Government Officers.

- i. Head of the Dinas Perkebunan (Office of Estate Crops Development - OECD).*  
Interview was done in Denpasar mainly on government policy issues dealing with the establishment of GI protection system in Indonesia, as well as the Bali Provincial Government policy in implementing GI protection for other products rather than coffee.
- ii. Officers of OECD at provincial and district levels.*  
Several officers of OECD have been interviewed in order to get information on issues of (1) OECD's program in supporting Kintamani Bali coffee producers to maintain their GI products and developing other GI products in Bali, (2) the role of the government in formulating strategy and supporting producers to market the GI product in the next run, and (3) support from the government in application of good agricultural practices (GAP) and good manufacturing practices (GMP) as well as product quality control.
- iii. Field extension service officers at Kintamani area.*  
Interview was emphasized on their experiences and expectations on establishing GI for arabica coffee at Kintamani area, mainly dealing with field challenges and constraints.

#### **2.2. Interviewing the Management of Community of Geographical Indication Protection (CGIP)**

Interview was carried out with the chief, secretary and treasure of CGIP on various issues of the GI establishment for Kintamani Bali coffee. The issues mainly consisted of social, discussion on conformity of the 'Book of Requirement', internal control system, quality issue and marketing as well as farmer's livelihood. Interview was done at the meeting room of *Subak Abian* Kerta Waringin.

#### **2.3. Visit to Farmer Groups or *Subak Abian* (SA)**

During the study three SA have visited in order to make interview with the chief and members of the organization.

- i. SA Sari Boga*  
SA Sari Boga is located at Banjar (*sub village*) Kiadan, Desa (*village*) Plaga, Kecamatan (*sub district*) Petang, Kabupaten (*District*) Badung. Interview was carried out with the chief of SA

and four members at the coffee processing plant.

ii. *SA Kerta Waringin*

SA Kerta Waringin is located at Banjar Mabi, Desa Belantih, Kecamatan Kintamani, Kabupaten Bangli. Interview was carried out with the chief of SA and five members at the coffee farms and processing plant.

iii. *SA Ulian Murni*

SA Ulian Murni is located at Banjar Ulian, Desa Ulian, Kecamatan Ulian, Kabupaten Bangli. Interview was done with the chief of SA and three members at the coffee processing plant.

#### **2.4. Interview with coffee exporters**

i. *PT Indo CafCo (Lampung based)*

PT Indo CafCo is the first exporter partner of CGIP in developing GI of Kintamani Bali arabica coffee, the company belongs to Ecom Trading Group. Interviewing was done by phone with the former Manager of Bali Branch of the company. Subject of interview was experience on marketing of Kintamani Bali coffee.

ii. *PT Bintang Tunggal Sejati (Surabaya based)*

PT Bintang Tunggal Sejati is new exporter partner for CGIP based in Surabaya. Interviewing was done by phone and direct talk with the Director of the company. Interview was mainly emphasized on the expectation of the company on marketing of Kintamani Bali coffee.

#### **2.5. Interviewing coffee importer**

Interview with an importer was carried out at the location of SA Kerta Waringin at Banjar Mabi, Belantih village, Kintamani. It was good opportunity, when the study was done Mr. Andrew Ford of MTC Group, East Brisbane – Queensland – Australia visited Kintamani for his business. Interviewing was emphasized on his perception and expectation on Kintamani Bali coffee and their marketing strategy.

#### **2.6. Interview with domestic coffee roaster**

An interview with Manager of Caswell's cafe, domestic specialty coffee roaster, was conducted at Jakarta on 29 April 2009. The company was Casswel's cafe, a company based in Jakarta. The company had been roasting and marketing Kintamani Bali coffee for specialty segment as gift and its outlets for three years.

#### **2.7. Collecting photographs**

During the mission a number of photographs were taken in order to make documentation and to provide more information on the result of the study. Photographs also collected from the consultant collections during his activities in the region.

### **3. Data Analysis and Synthesizing Information**

Quantitative data recorded were analyzed to be expressed in table and graph as well as chart. Any information dealing with policy, social, market and other quantitative issues were recorded, then the information synthesized on logical framework.