

**Prospects and challenges of forest coffee certification in Ethiopia:  
the need to effectively link economic benefits and biodiversity  
conservation.**

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## **Abstract**

The montane rainforests of historical Kaffa in South-western Ethiopia are the worldwide origin of the *Coffea arabica* gene-pool, and until the present time, comprise naturally regenerating coffee populations with a high genetic diversity. The local population dwelling in or adjacent to the forests traditionally utilise this unique natural heritage by gathering coffee cherries for home consumption and as a source of income. Most forest coffee is home-dried and then sold - basically regardless of the coffee quality - with low prices to local merchants, who resell it blended with coffee from other production systems (semi-forest or garden).

Concomitantly the Ethiopian coffee forests witness high rates of depletion and deforestation, which not only brings about increasing scarcity of valuable forest products, land degradation, and erosion, each one enhancing poverty, but irreversible loss of biodiversity and the forest coffee gene-pool.

This paper concerns the question whether and how certification of forest coffee can lead to more economic benefit for the producers while at the same time providing incentives for sustainable use and conservation of the unique forest eco-system. Based on data gathered in fieldwork conducted in the framework of an interdisciplinary German-Ethiopian research project, chances and limitations of current activities to certify forest coffee in the cooperative-unions systems according to internationally applied standards are illustrated and analysed.

It is argued that current activities to certify forest coffee in Ethiopia face practical performance problems and structural dilemmas. Modus operandi and certification standards which have been basically developed for intensive agricultural production systems like coffee plantations in the Americas, can not simply be imposed on the specific ecological and socio-economic circumstances found in the Ethiopian coffee forests. Instead, the development of a consistent and distinctive standard for forest coffee from Ethiopia is recommended, e.g. in the framework of international forest certification standards already existing. Nevertheless, certification can only be one tool in this regard. Beyond, functional and product upgrading through institutional restructuring and quality enhancement are required.

## **1. Forest coffee from South-western Ethiopia**

Ethiopia is not just another coffee growing country. The relationship between the Ethiopians and coffee is deep-rooted and multifaceted, and coffee production and consumption are closely intertwined with Ethiopian history, culture and economy. Coffee has been cultivated, picked, processed, traded, and consumed over centuries, and still plays a significant role in the daily life of most Ethiopians and - on the macro level - for the state of Ethiopia as a whole.

The highland forests of Abyssinia (present-day Ethiopia) are the cradle of *Coffea arabica*, which is today's most popular coffee species in the world. The accurate 'birthplace', hence the exact area from which the *Coffea arabica* gene pool started its expansion, and the way people begun to utilise and disseminate coffee has not yet been scientifically proven. Nevertheless, legends exist in Ethiopia that explain the 'discovery' of coffee and set the place of its origin. The most complete and appealing Ethiopian coffee legend is 'Kaldi and the dancing goats'. It locates the place of coffee origin in historical Kaffa region, an area now mostly under Kaffa Zone and Bench Maji Zone in South-western Ethiopia. According to the legend, the etymological origin of coffee and its miscellaneous variants in different tongues - Kaffee (German), Koffie (Dutch), café (French, Portuguese), caffè (Italian), Καφές (Greek), Кофеий

(Russian), コーヒー (Japanese), etc. - can be traced back to 'Kaffa', its place of origin (Stellmacher 2007a).<sup>1</sup>

Until today, the montane rainforests in historical Kaffa comprise naturally regenerating coffee populations as an understory shrub under the coverage of the forest canopy. The local population living in or adjacent to the forests traditionally utilise the coffee for own consumption and for selling (see Stellmacher 2007a). Most peasants transplant coffee seedlings within in the forest and slash competitor plants. In general, though, forest management intensities are minimal with low labour and almost no cash input. Forest coffee grows entirely organic, simply because peasants can not afford pesticides, herbicides or other chemical inputs. The yields fluctuate tremendously over time and space. Research results from nine cooperatives in Kaffa and Bench-Maji Zone show an average forest coffee yield of 187 kg of dried coffee per ha/year (n=61). Yields tend to fluctuate tremendously from year to year with even no yield in some seasons due to unfortunate weather conditions. These figures are extremely low in comparison to more intensively managed garden production or plantation systems. In total, it is estimated that only 6-10 % of the total Ethiopian coffee production is gained from forest production systems (Abebaw & Virchow 2003).

However, parallel to the trend in other African countries, the montane rainforests of Ethiopia including the last wild populations of *Coffea arabica* are threatened by rapid deforestation. Forest are gradually depleted and destroyed due to increased extraction of timber and non-timber forest products, and converted into agricultural land and new settlements.

The processes of forest degradation and loss are complex and difficult to assess as there are few reliable primary data. Environmental scientists began their long-term assessments at a point when the ecosystem had already experienced massive human-devised change. Hence, we do not actually know much about the natural 'original' state of the Ethiopian coffee forests. However, data provides evidence that 60 percent of the closed high forests in south-western Ethiopia were lost between 1975 and 1997 (Reusing 1998). This development is not only alarming because of the direct environmental and socio-economic consequences such as land degradation and scarcity of timber and non-timber forest products but of the irreversible loss of the world-wide unique wild coffee gene pool, leading to high consequential costs also for international coffee breeding and production (Gatzweiler 2007).

## **2. Research objective and data collection**

The purpose of the paper is to provide insights into how certification of Ethiopian forest coffee is implemented in local level practice at the birthplace of *Coffea arabica* and to discuss the question whether certification of forest coffee can combine economic benefit for the producers and conservation of the unique coffee forest ecosystem and biodiversity.

The paper bases on empirical field research conducted in Ethiopia between 2003 and 2007 in the framework of the interdisciplinary research project "Conservation and use of wild populations of coffee arabica in the montane rainforest of Ethiopia".<sup>2</sup> Primary information on forest coffee certification and marketing activities was collected on place, both in the field and in the offices. In total, nine coffee forest sites

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<sup>1</sup> Paradoxically, though, most languages of Ethiopia use the idiom *bunna* to express coffee; merely in the Sidama language is coffee named *tukke* (Anbassa Enterprises n.d.).

<sup>2</sup> For more information see the projects' webpage under [www.coffee.uni-bonn.de](http://www.coffee.uni-bonn.de)

in Kaffa Zone and Bench-Maji Zone, South-western Ethiopia, were visited. Semi-structured interviews were carried out with 61 local forest coffee farmers in certified and non-certified coffee cooperatives, with cooperative board members, representatives of Forest Coffee Cooperative Unions and certifying agencies. The ecological conditions of the respective coffee forests were assessed. In Addis Ababa, interviews were held with representatives of about 20 concerned agencies from civil society, state and business.

### **3. Certification as a marketing tool**

Upgrading of food products by means of certification is a marketing tool that addresses a growing worldwide demand for healthier and more socially and environmentally-friendly products. It is based on the idea that consumers are motivated to pay price premia for products that meet certain precisely defined and assured standards. Additional motivations for certification and justification for price premiums can be given through the assurance of authenticity, such as a designated origin or a specific genetic trait. Being able to label a product as 'organic', 'FairTrade' or 'Ethiopian Wild Coffee' and to protect the label from fraud is considered a valuable marketing advantage in today's consumer market in general and the coffee market in particular. On the production side, the payment of a price premia can be seen as an incentive to maintain the production basis, in the case of forest coffee to use the coffee forest ecosystem in a more sustainable manner.

Over the last decades, a great many of concepts for product certification have been developed and implemented. In principle, forest coffee from Ethiopia can be certified according to three groups of certification concepts, namely: general certification of agricultural commodities (as 'organic' or 'FairTrade'), specific coffee certification (e.g. 'Utz Certified' formerly known as 'Utz Kapeh'), and certification of forest management (as 'Forest Stewardship Council' or 'Rainforest Alliance'). However, each certification scheme was developed by different stakeholders under different agendas and backgrounds with different geographical foci in response to different ecological and socio-economic concerns.

Each certification concept sets up standards and principles, defined with a set of criteria and indicators (classified in major must/minor must or minimum/progress requirements) that serve as parameter for verification. The FairTrade concept, for example, essentially sets up a set of social standards following several internationally recognized conventions - particularly those of the International Labour Organisation (ILO) - but also involve some basic environmental concerns. FairTrade certification can only be granted to smallholder coffee producers when they organise themselves in peasant organisations (cooperatives/associations) "which are able to contribute to the social and economic development of their members and their communities and are democratically controlled by their members" (Fairtrade Labelling Organizations International 2003).

Utz Certified is a package of farm-level, brand-level and financial tools to bring social and environmental performance to the mainstream coffee market. It bases on a Code of Conduct developed in 1999 ago by a consortium of Guatemalan grower-exporters together with the Dutch Ahold Coffee Company. Its social component implies, inter alia, chapters and criteria from ILO conventions and the Universal Declaration of Human Rights. The environmental criteria of the Utz Certified Code of Conduct are based on the Eurepgap code, an initiative of the Euro-Retailer Produce Working Group (Eurep) that agreed on standards and procedures for good agricultural practices (GAP). While FairTrade concentrates all its efforts on smallholder farmers,

the Utz Certified code of conduct is more directed towards medium and large-scale coffee plantations. Both, FairTrade and Utz Certified certificates are only issued for one year. After that period the certified body has to be visited and inspected again (Slob & Oldenziel 2003).

In Ethiopia, certification of agricultural commodities in general and non-timber forest products (NTFPs) in particular is a relatively new phenomenon. First certification of forest coffee started in 2002. Activities and structures have continuously evolved ever since, but are still at their infancy stage. In the first years, only one certifier in the whole country was accredited/registered simultaneously by EEC (Europe), NOP (USA), and JAS (Japan) to issue concerning certificates. This monopoly fell in 2006 with other certifiers opening branches in Ethiopia. Some of them started to certify forest coffee for the German market. Simultaneously, Ethiopia increasingly attracted attention of international standard holders, and 'Rainforest Alliance', 'Utz Certified' and 'Forest Stewardship Council' opened own branch offices in Addis Ababa.

#### **4. Prospects and challenges of current forest coffee certification undertakings**

In the following section, I will discuss the prospects and challenges of forest coffee certification in Ethiopia exemplified on current certification activities undertaken within the coop-union system in Kaffa Zone and Bench Maji Zone, South-western Ethiopia. Currently, the bulk of Ethiopian forest coffee harvest is sold and traded via conventional coffee market structures in Ethiopia and abroad. Thereby, peasants collect the coffee from the nearby forest tracts, dry it in their homesteads and sell it to local merchants, the *sebsabies*. They resell the dried coffee to the wholesalers, the *akrabies*, who facilitate the processing (de-hulling) and take the beans to Addis Ababa where they are inspected by the state-run 'Coffee and Tea Quality Control and Liquoring Unit' at the national processing and liquoring centre. Coffee suitable for export is sent to the national coffee auction, where exporters with a corresponding license can bid on it. The exporters sell the coffee to international importers, who then sell it on to the roasters in the destination countries (GTZ 2006, Petit 2007).

The conventional coffee value chain in Ethiopia involves a large number of intermediaries and is largely state-controlled. Exporters must be Ethiopian nationals and are not allowed to cup taste the coffee before buying it at the auction. Licenses are required for every function in the market chain. They are, however, difficult to obtain and can be arbitrarily withdrawn or not renewed. The auction put emphasis on keeping consignments from different coffee growing regions separate (Limu, Sidamo, Yirgacheffe etc.). However, a separation of forest coffee against other coffees is not foreseen in this market chain. Forest coffee from South-western Ethiopia is rather blended with semi-forest and garden coffee, and sold at the national auction for the most part under the classification Jimma 5<sup>3</sup> (Petit 2007).

In the last years, however, an alternative coffee value chain - the so-called 'coop-union system' - developed parallel to the conventional market chain. It is essentially based upon local Agricultural Service Cooperatives (ASC) established in the 1970s by the then military *Derg*<sup>4</sup> government in the framework of the enactment of the "Proclamation to Provide for the Nationalization of Rural Land No. 71/1975". By the End of the 1990s, as many as 4,000 ASCs with no less than 4.5 million members

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<sup>3</sup> Jimma is the biggest town in South-western Ethiopia. The number 5 stands for unwashed coffee.

<sup>4</sup> *Derg* (or *Dergue*) (Amharic) stands for committee or council used as a short form for "Armed Forces Coordinating Committee".

were established in Ethiopia. However, the cooperatives widely served as a vehicle for the government's mass collectivisation policy and were to a large extent characterised by corruption and mismanagement. In 1990, with the *Derg's* reign drawing to a close, all ASCs were formally dismantled and numerous cooperative offices and shops looted and destroyed. Particularly in remote rural areas, though, the change was not sudden and definite like that. The organisational and infrastructural 'skeleton' of many cooperatives continued to exist, however, often in a status of bankruptcy (McCarthy 2001, Stellmacher 2007a, Stellmacher 2007b).

Since the End of the 1990s the new Ethiopian EPRDF<sup>5</sup> government facilitated the restructuring of the cooperative system and the formation of cooperative umbrella associations, the coffee cooperative unions. Unions buy the coffee from their member cooperatives and take over the processing and transport to Addis Ababa. Since 2001 the unions are legally allowed to by-pass the coffee auction and directly negotiate with and sell to international exporters, although their coffee must also be inspected at the national processing and liquoring centre (GTZ 2006, Petit 2007). Currently, six Coffee Unions are operative in Ethiopia. Out of them, two are specialized on forest coffee. The Forest Coffee Unions have been established only recently and are the countries' smallest Coffee Unions in terms of total production. Both are geographically located in former Kaffa region in the "Southern Nations and Nationalities Peoples' Regional State", Ethiopia's most ethnically heterogeneous province.

In the last years, concerned stakeholders highlighted the coop-union system as a chance to create an alternative 'shorter' coffee value chain in order to promote efficiency, transparency, traceability, and ecological and social responsibility as well as to facilitate product upgrading by certification and quality improvement in the Ethiopian coffee sector. A lot of money was invested by NGOs and international donors in physical and institutional infrastructure and training. This is particularly remarkable as cooperatives until recently had a bad reputation with donors due to their political use during the *Derg* regime (Dempsey 2006).

In this context, the two Ethiopian Forest Coffee Unions started to engage in certification. The unit of certification were the local cooperatives. They were visited by accredited certification inspectors from Addis Ababa who checked the fulfilment of the respective standards. The resulting information was filled in certification forms and then sent for evaluation to the certifiers' headquarters in Europe. The headquarters issued the Master Certificates for the union. In May 2007, 12 forest coffee-producing cooperatives were certified in both unions, according to organic, FairTrade and Utz Certified standards respectively. However, certification has considerable built-in costs - directly (e.g. certification fees, costs for annual re-evaluation) and indirectly (e.g. investment in training, infrastructure and marketing) - that can not be afforded by cooperatives nor by the unions (Shanley et al 2005). Hence, the whole process was facilitated and subsidised from 'outside' i.e. by international donors, NGOs, certifiers, and concerned coffee industry and trade. However, with particular focus on the connection between economic benefits and conservation of the forest ecosystem and biodiversity, scepticism seems justified.

The first concern relates to the compatibility of economy and ecology. The actors involved into certification of Ethiopian forest coffee cooperatives do this on the basis of different goals and interests. The leading objective of the Forest Coffee Unions as main local actors, for example, is an economic one, namely to "to increase

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<sup>5</sup> "Ethiopian People's Revolutionary Democratic Front" is the ruling party in Ethiopia since the breakdown of the *Derg* in 1991.

farmer/member income through the selling and exporting of their products.” (KFCFCU 2008). Accordingly, they foremost try to produce larger quantities of forest coffee and to obtain higher prices. This is, however, likely to have negative impacts on the forest. Forest coffee is a part of the natural ecosystem and its yields can not be expanded beyond limited thresholds without degrading its natural habitat. Higher prices provide an incentive to produce more forest coffee by increased forest management at the expense of the forest ecosystem and biodiversity. Forest management not only disturbs the forest structure, but also modifies the original plant species composition of the forest (Gole 2003, Schmitt 2006). The objectives of other stakeholder, donors and NGOs in particular, are more related to the concept of environmental sustainability and the conservation of the forest ecosystem and biodiversity. However, in practice, the question needs clarification whether the general undertaking is more concerned on forest coffee or the coffee forest. The certification standards have to be chosen accordingly.

The second problem concerns the structural and organisational capacity of the coop-unions system. In contrast to the cooperative system in the Latin Americas, the Ethiopian cooperatives are not ‘grown’ bottom-up but have been state-enforced by a communistic-inspired authoritarian regime within a rigid command economy. Despite considerable steps towards market liberalisation since the 1990s, this is a path dependent burden. Until the present time, the coffee cooperatives and unions are de facto para-statal entities. Positions are assigned by intransparent considerations and/or on the basis of political or ethnical affiliation, rather than by pure qualification. However, the system is fed by international money. To be sarcastic, one may say that the coop-union system is more dependent on and part of the political and development arena in Ethiopia than of the market and its needs and constraints. This might not only imply negative impacts on efficiency and transparency but also creates a situation that may be untenable in the long term (see also Shanley et al 2005).

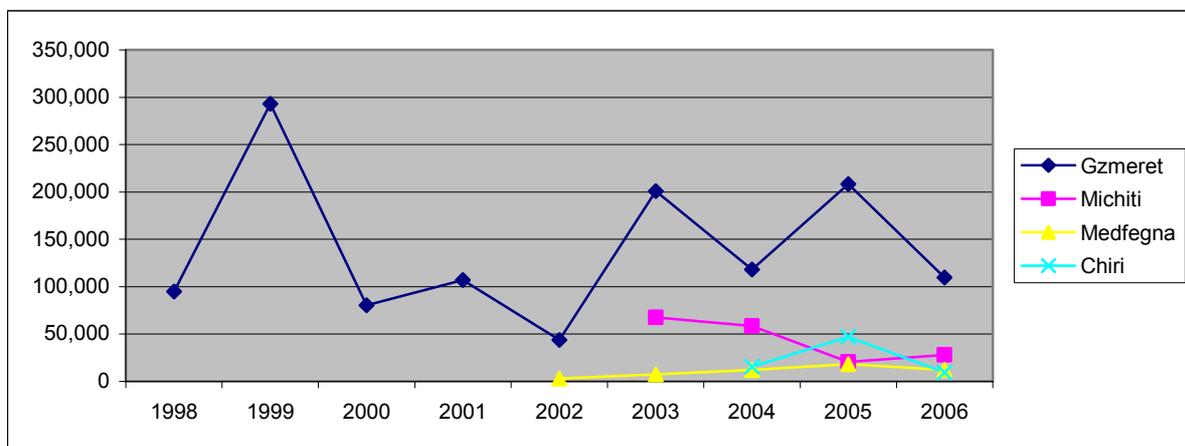
In addition, the coop-union system in South-western Ethiopia tends to be weakened by a strong ethnical heterogeneity in this area, exaggerated by decades-long state-enforced immigration. The 61 interviewed cooperative members, for instance, were affiliated to 10 ethnically diverse groups, with different linguistic, religious and cultural background. The cooperatives’ internal structure consists of ‘core’ decision makers and less integrated ‘peripheral’ members. Lower respected ethnicities such as the Mandjah people are proportionately underrepresented in the cooperatives. This setting brings about local level tensions and low levels of trust.

The third concern is lack of know-how and expertise on modern business-management in general and certification in particular. Relevant knowledge is extremely unequally spread along the value chain, being highest among the actors in Addis Ababa and lowest among those in the remote rural areas. Understanding of goals and concepts of certification and its standards ends latest at cooperative committee board’s level. The overall majority of coffee-producing coop members does actually not know whether their cooperative is certified and what the respective standards are. When being asked what certification of a cooperative means, none of the interviewed 61 cooperative members could give a somewhat reasonable answer. 25 answered frankly with “I don’t know”. The others associated certification with ideas such as “certification permits the cooperative to buy and sell coffee” (#28) or “certification means that the coop gets loan from government to give it to its members” (#10). The visit of the certification inspector and his/her examinations was rather associated with the cooperatives’ concern to increase coffee quality than with the monitoring of ecological or social standards. These findings reveal basic deficiencies in knowledge management and participation. However, one has to be

aware that schooling is a relatively new phenomenon in rural Ethiopia. The educational level of the rural population in rural Ethiopia is still considerably low and broad levels of the adult population - also among the so-called 'decision makers' - are illiterate. 45% of the interviewed cooperative members did never go to school; 53% obtained only few years of primary education (n=56).

The fourth problem concerns the economy of scale. As mentioned beforehand, the forest coffee production system implies considerable low yields and high fluctuations from year to year and from one forest plot to another. The coffee cooperatives in South-western Ethiopia consist of around 100 to 300 - in one case of more than 500 - members. The average production per individual member was assessed with 596 kg of dry forest coffee per year. Graph 1 exemplifies the total production of selected certified cooperatives in Bench-Maji Zone (Gzmeret) and Kaffa Zone (Michiti, Medfegna, and Chiri) and the level of fluctuation in production in the last years.

Graph 1: Forest coffee production in certified cooperatives in Bench-Maji and Kaffa Zone (in kg of unprocessed dry coffee)



Source: data obtained from the cooperative chairmen in 2007

After processing and the quality check in Addis Ababa, the final 'end product', hence the amount of coffee that can be actually exported is much lower. In the last years, each of the two Forest Coffee Unions from South-western Ethiopia sent overseas an annual maximum of 3 or 4 container of certified coffee with high annual fluctuations. Given these relative low amounts, the costs with certification, investment and advertisement per kg of coffee are disproportionately high. Accordingly, both Forest Coffee Unions face problems to reach the economy of scale and to provide clients with guaranteed amounts of certified forest coffee over a period of several years.

## 5. Conclusions

'Wild' forest coffee from Ethiopia is a fashionable product with a number of particularly positive features. It is worldwide unique with a specific flavour and an authentic and positive image. Since 2002, a growing number of stakeholders engage in upgrading of forest coffee by means of certification within the cooperative-unions system. Para-statal coffee cooperatives and unions, certifiers, coffee industry and trade, as well as environmentally and socially-concerned donors and NGOs 'discovered' forest coffee certification as a sphere of activity - though, under diverging - and party conflicting - agendas and interests, and sometimes stiff competition.

This paper, however, illustrates that current modes and activities to certify forest coffee in Ethiopia face practical performance problems and structural dilemmas. FairTrade and Utz Certified certification standards have been developed for and most widely applied in intensive agricultural production systems like coffee plantations in the Americas. These standards can not simply be 'transferred' to the Ethiopian coffee forests, describing an entirely different ecological, institutional and socio-economic situation with different contextual needs.

Certification needs for capable organisational and institutional arrangements, market structures and expertise. First of all, Ethiopia's coffee market in general and the coop-unions system in particular is highly state controlled and regulated. Secondly, on the local level in the remote forest areas, the certification process is not actively promoted and understood by those who are to be certified, and difficult to assess and control by certification inspectors. Forest coffee is produced in badly accessible large forest tracts by smallholders. Certification of centrally organised coffee plantations is indeed much easier and cheaper. Thirdly, the overall institutional framework lacks independent control devices. Ethiopia has no national certification agency. The country has no or very limited experience with a free press/media as a 'watchdog' against personal or organisational abuse of certification. In this context, the booming worldwide speciality coffee market together with a specific market advantages of the Ethiopian forest coffee (the image of 'wild', 'natural', 'unique', 'exotic' or 'good for the poor'), may provide incentives for some actors to (mis-)use certification for their own benefit disregarding the (negative) impact on the coffee forest ecosystem and biodiversity.

The marketing of forest coffee does not contribute per se to forest conservation in the strict sense. A fundamental structural dilemma concerns the fact that certification price premia paid to forest coffee producers provide an incentive to degrade the forest ecosystem. In view of long term better prices, producers tend to increase production quantities by means of intensified management of the forest coffee including the surrounding forest. Slashing of competing undergrowth several times a year, cutting of unnecessary trees and stand thinning and/or transplanting of coffee trees are the most prevailing activities. All contribute to the degradation and loss of the natural forest ecosystem and biodiversity.

One recommendation to overcome the illustrated bottlenecks addresses the market chain. After several years of experience with the coop-union system, stakeholders may consider alternative chains for the marketing and certification of forest coffee. An innovative and promising approach may be the organisation of forest coffee producers in Public Limited Companies (PLCs) in the context of Participatory Forest Management projects and their direct linkage to small exporters. Another recommendation concerns the certification standards. To better balance the contradiction between economic benefits and biodiversity conservation, the development of a consistent and distinctive standard for forest coffee from Ethiopia is recommended, perhaps in the framework of international forest certification standards already existing. The implementation of a new certification and marketing concept is, of course, not an easy task. To be effective and efficient, public-private partnerships in cooperation with local stakeholders are of fundamental importance. Nevertheless, certification can only be one tool in this regard. Beyond, functional and product upgrading through institutional restructuring and coffee quality enhancement are required.

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