



Sustainable Green Coffee Principles and Practices Table – Working Document

This paper is a working document in the form of a table, compiling the basic principles and practices of sustainable green coffee production, including post-harvest treatment, applicable to farms in all coffee-growing regions of the world. It was drafted in 2004 and tested through pilot projects. Based on these concrete experiences, it was revised and improved by a wide range of stakeholders (including producer representatives) during SAI Platform's Third Coffee Workshop, held in Uganda on Nov 28-Dec 1, 2007.

The document is meant to be further improved regularly, on the basis of practical experience. In addition, guidelines specific to local prevailing conditions (according to the region and its climates, ecological variables, farm sizes, organizational structure, cultures etc) and respecting national laws are to be further developed.

Chapter	Principle	Practice
1. Sustainable Farming System		
1.1. Site knowledge	<ul style="list-style-type: none"> The coffee producer shall be aware of the specific conditions (legal, topographic, ecological, social etc)that prevail on his farm as well as in the area where it is located in order to manage the farm accordingly. 	<ul style="list-style-type: none"> Grow coffee in areas where you have permission to do it. Be aware of your parcel/farm's characteristics (including topography, soil type) and based on these, chose the best location for coffee production. Look to know the surroundings of your farm (e.g. presence of a stream 25 meters away that one should protect as much as possible). Do not expand coffee plantations in protected areas nor in any part of intact natural forests. Do not use open fire in ecological areas like buffer zones and natural forests.
1.2 Planting material	<ul style="list-style-type: none"> The quality of genetic material is an essential parameter in order to contribute to the overall sustainability of green coffee production 	<ul style="list-style-type: none"> Be aware of the origin of the material that is planted – and give preference to one that has been tested, certified and released by an accredited institution. Robusta : Cuttings grown from elite clones should be preferred over plantlets grown from clonal seeds. Raising of plants from not-certified seeds should be avoided. Arabica: Planting material should be selected according to its potentials in yields and organoleptic profile. It should be grown from seeds obtained from known sources where certified seeds should be preferred.. Give preference to varieties that are adapted to local conditions and natural habitats, planted in homogenous parcels. In case genetically modified coffee trees would become available, public acceptance of green coffee produced from them would be prerequisites before any introduction. They could be cultivated if they present demonstrated advantages for consumers, the environment and farmers and are sustainable along the lines of this document. Genetically modified coffee trees should be used only in accordance with (inter)national laws and regulations,. Green coffee originated from these potentially genetically modified trees should be segregated and sold with proper label and information to the buyer. A strict control of genetic origin of coffee planting material should be used.
1.3 Diversification	<ul style="list-style-type: none"> Diversification of activities and income 	<ul style="list-style-type: none"> Look to diversify the sources of income by growing alternative commodities on the farm, either

	shall be sought.	for on-farm consumption or to be sold externally, as well as through the development of non-farming activities.
1.4 Support services	<ul style="list-style-type: none"> Coffee producers should have access to required know-how and essential support services such as extension, financing and market information. Coffee producers shall have access to new production methodologies and techniques as well as adequate farm inputs. Coffee producers shall strive to be able to operate in an encouraging environment providing and enforcing clear rules and regulations. 	<p>Individual farmers or farmers organised in groups, if this is easier, should:</p> <ul style="list-style-type: none"> Look to get access to short and long-term credit provided by reliable sources in adequate conditions. In view of price volatility look to make use of instruments and tools allowing an improved management of price risk (e.g. group marketing, warehousing). Participate in processes for further adopting production techniques. Look to get regular access to improved green coffee techniques. Strive for clear rules and regulations - on land tenure etc - and clearly define the roles and duties of sector participants enforced by the government.
1.5 Sustainability management system	<ul style="list-style-type: none"> The farm should have a functioning sustainability management system, geared towards continuous improvement of the production practices over time. Proper training should be provided to the farm's workers in order to continuously improve the sustainability management system. 	<ul style="list-style-type: none"> If applicable, clearly define responsibilities within the farm's management system. Make sure that people working on the farm are aware of the relevance of their co-operation and responsibility in the economic, social and environmental sustainability of the farm. If applicable, provide permanent employees with basic training on the following items: environmental protection; human health and hygiene; correct handling and use of substances or materials that are hazardous or harmful for human health; etc. Promote the orientation of seasonal workers on issues concerning health, hygiene and protection of the environment.
1.6 Sustainability record system	<ul style="list-style-type: none"> Coffee growers are expected to keep reliable documentation regarding their progress in meeting the sustainable green coffee practices. 	<ul style="list-style-type: none"> Maintain financial accounts. Maintain records on the application of agrochemical inputs providing details of date, product and amount used.
2. Economic Sustainability		
2.1 Harvest and post-harvest	<ul style="list-style-type: none"> Green coffee shall meet the aspects of food safety and quality assuring conditions and 	<ul style="list-style-type: none"> Harvest cherries at the peak of maturity; cherries picked from the ground shall not be mixed with properly harvested ripe cherries. Make sure that cherries are processed as soon as possible

<p>treatment; coffee quality</p>	<p>practices that preserve the quality of food avoiding any contamination and food-borne illnesses during production, processing, packaging, handling, storage or preparation. The level of mycotoxins such as Ochratoxin A is to be kept as low as possible.</p> <ul style="list-style-type: none"> • Quality of resources and facilities used for green coffee processing, handling, storing, packaging and preparation - if applicable - shall present no risk for product safety and quality and shall be appropriate to control risk of physical, chemical and biological contamination of the product. • Staff involved in these processes shall be aware of relevant aspects of food safety and product quality and duly respect these aspects in their operations. • Green coffee shall be of good quality meeting widely accepted standards and specifications, e.g. the minimum requirements defined in the ICO's coffee quality improvement program (ICO resolution 407). 	<p>after harvesting, at least at the same day.</p> <ul style="list-style-type: none"> • Dry coffee cherries timely and properly. When drying coffee in the sun it shall be put on concrete patios, drying tables, tarpaulins or mats. Alternatively it shall be dried artificially by use of proper equipment. • Avoid re-wetting of dried coffee cherries by rain, dew or other kind of humidity. • Store coffee separately from chemical products or other substances posing potential threat to human health or contamination risks. Avoid contact of coffee with smoke. • Make use of well-maintained facilities for green coffee processing and keep them clean. • Store coffee in a clean and ventilated environment. • When using bags make sure that these are dry, clean and sound. Clean old bags thoroughly before using them for storing green coffee. • Use containers for green coffee transport/export that are in adequate conditions. • Make sure that staff involved in harvesting and post harvest treatment of green coffee, if applicable, is properly trained in aspects relevant to food safety and coffee quality at their level of action. • Avoid uneven or high moisture contents of green coffee when drying. • Keep green coffee of different quality separate on the farm as well as during subsequent stages of coffee processing, storing and transport. • Remove defects and foreign matters as much as possible from green coffee.
<p>2.2 Economic Performance & Management</p>	<ul style="list-style-type: none"> • Coffee producers should strive to add value to their product while at the same time producing green coffee at the lowest possible cost. • Coffee producers should negotiate in open and honest terms attractive prices with their clients (optimum in quantity and quality). • Coffee producers should stay informed about the evolution and fluctuations of the green coffee market in order to be able to 	<ul style="list-style-type: none"> • Use inputs appropriately, keep levels of waste and defects as low as possible and try to make use of economies of scale (e.g. by working in farmer groups). • Try to further process the cherries/coffee so as to add value to the end product. • Try to build up financial reserves in order to avoid being obliged to sell production for urgent need of cash. • Apply sound financial management to assure liquidity during production, harvesting, treatment and trade of coffee. This relates in particular to larger farms and cooperatives. • If possible, optimise timing of coffee deliveries and select efficient trading channels in order to be able to sell when conditions are favourable.

	<p>sell green coffee when it is most favourable.</p> <ul style="list-style-type: none"> Coffee producers should be able to select efficient trading channels in order to be in the position of selling production to the buyer offering the best price 	<ul style="list-style-type: none"> Get organised in farmers' groups such as associations or cooperatives, if indicated, in order to accumulate volumes, get better access to support services and improve the position in bargaining prices. Try to develop long-term trading relationships with buyers.
3. Social Sustainability		
3.1 If applicable, Labour conditions	<ul style="list-style-type: none"> A safe working environment free of any type of discrimination shall be promoted. To every extent possible work performed must be on the basis of recognised employment relationship established through national law and practice. 	<ul style="list-style-type: none"> Strictly prevent discrimination on the basis of ethnic groups, national origin, religion, disability, gender, sexual orientation, worker organisations or political affiliation with regard to contracts, compensation, training, promotion, dismissal or retirement of its personnel. Concede the same rights and obligations to women and men. Do not demand from employees and workers to leave deposits or identity cards behind. Respect the right of employees and workers to practice their religion or to fulfil their needs relating to race, national origin, religion, disability, gender, sexual orientation, membership in worker organisations or political affiliation. Prevent behaviour, including gestures, language, and physical contact that is of a sexually abusive, coercive and threatening nature. Provide working conditions of decency and dignity to all workers regardless of their employment status. Encourage workers to know their status and, consequently, their respective rights and obligations under law. Look to establish regular employment relationships as far as possible. Establish working contracts or other appropriate working relationships that are in accordance with national law.
3.2 If applicable, Working hours	<ul style="list-style-type: none"> Working hours shall comply with national laws 	<ul style="list-style-type: none"> Make sure that daily working hours for registered employees do not exceed the maximum number of hours set by national regulations. Concede registered employees for every six working days at least one day of rest, covered by their salary. Demand overtime work only in exceptional circumstances over a short-term period due to the business cycle. Make sure that registered employees who have worked at the farm for more than one year have a period of paid leave.
3.3 If applicable, Wages	<ul style="list-style-type: none"> To every extent possible work performed 	<ul style="list-style-type: none"> Make sure that wages and benefits of permanent employees meet or exceed the minimum

	<p>must be remunerated on the basis of recognised wages and principles established through national laws and regulations.</p>	<p>required under local and national laws.</p> <ul style="list-style-type: none"> • Provide in particular temporary workers with clear information about the payment that they receive for each kg of coffee cherries picked. • Ensure that all the employees and workers receive remuneration in accordance with their tasks and abilities while having equal work opportunities. • Guarantee the right of the employee and worker to receive wages in legal tender/ currency. Compensation with merchandise, vouchers, tokens or any other symbolic means may be agreed upon with the employee or worker without creating any form of dependency. • Do not make deductions from wages for disciplinary purposes.
3.4 Child labour	<ul style="list-style-type: none"> • Child labour and in particular forced child labour shall neither be used nor supported. • Coffee producers should be committed to continuously improve the situation of all children on the farm. 	<ul style="list-style-type: none"> • Do not recruit as permanent workers or day labourers children under the work minimum age referred by national laws . • Permit for cultural and socio-economic reasons that children under the work minimum age referred by national laws accompany their parents during the coffee-harvesting period. It shall be ensured that they are not forced to work, do not work long hours and are not exposed to hazardous or heavy work. • Be aware of the problem of child labour and monitor carefully the individual situation of each child permanently living on the farm who is under work minimum age referred by national laws. • Consider the individual situation of the children involved in relation to all actions implemented in order to eliminate child labour. All measures taken shall be designed to actually improve the living conditions of the individual child. • Make sure that young workers under the age of 18 are not exposed to situations in the workplace that are hazardous, unsafe or unhealthy, even more so than any other workers.
3.5 Health and safety	<ul style="list-style-type: none"> • Accidents and diseases shall be prevented on the farm. • All farm workers and their families shall have access to at least basic health services. 	<ul style="list-style-type: none"> • Promote actions which help prevent accidents and injuries on the farm. • Provide for access to hygienic bathrooms and guarantee access to potable water for all employees and workers. • Make sure that registered employees and their families are members of the national health insurance, if it exists. • If possible, make sure that adequate basic health services can always be used either through assuring access to existing facilities or through providing equivalent facilities at the site. • As much as possible, promote activities for the prevention of diseases, like vaccination, orientation in aspects of personal hygiene and nutrition campaigns.
3.6 Education and Training	<ul style="list-style-type: none"> • Coffee producers shall be committed to assure children the access to adequate education as well as to support the education 	<ul style="list-style-type: none"> • Make sure that children under the work minimum age referred by national laws, living permanently or temporarily on the farm, participate in educational programmes comparable with the formal school system.

	and training of farm employees and workers.	<ul style="list-style-type: none"> • Where possible, promote the literacy of all individuals at the farm who are not able to read and write. • If applicable, make sure that all people working on the farm receive basic training in their area of work, especially if this involves handling of chemicals that can be hazardous to health, or if they work in the processing plant.
3.7 If applicable, Freedom of Association	<ul style="list-style-type: none"> • Freedom of association and the right to collective bargaining shall be respected. 	<ul style="list-style-type: none"> • Concede the right to employees and workers to form and join organisations or associations of their own choice without previous authorisation. • Concede the right to employees and workers to collective bargaining. • Allow labour organisation to conduct their activities if employees and workers wish so. • Do not discriminate workers representatives.
3.8 If applicable, Specific aspects for day labourers and seasonal workers	<ul style="list-style-type: none"> • Respectful relationships between management, permanent and temporary workers should be promoted. • If accessible to the farmer, suitable infrastructures and services should also be made accessible to workers. 	<ul style="list-style-type: none"> • Management of day labourers and seasonal workers should be as close as possible with those applied to permanent employees. • Provide seasonal workers and their families with suitable sanitary facilities and drinking water in sufficient amounts. • Make sure that seasonal workers and their families, living on the farm, have access to medical treatment, nutrition and accommodation. • If needed, provide dignified housing free of charge or in accordance to local conditions. • Provide suitable and hygienic facilities for the preparation, storage and consumption of food.
3.9 Strengthening local economy	<ul style="list-style-type: none"> • Green coffee production and commercialisation should contribute to improve the social and economic livelihoods of producers and provide economic benefits to local communities. 	<ul style="list-style-type: none"> • Give preference to local communities with regard to recruitment of permanent and temporary personnel, thus contributing to the build-up of sustainable livelihoods. • Look to collaborate with the local community on aspects of environmental protection, health and safety, as well as basic professional training. • Look to establish a continuous dialog with the local community, in order to share the experience gained with the implementation of the present recommendations.
4. Environmental Sustainability		
4.1 Biodiversity and ecosystem conservation	<ul style="list-style-type: none"> • Biodiversity and natural ecosystems shall be preserved in coffee areas and on coffee plantations. 	<ul style="list-style-type: none"> • Protect threatened or endangered species and habitats, e.g. through adequate measures that prevent hunting and collection of threatened flora and fauna. • Protect areas of high ecological value located on and around the farm, such as streams, wetlands and forests, via the minimisation of human intervention and the implementation of measures for the conservation. Such areas need connecting in order to create biological corridors that enable the migration and the exchange of species.

	<ul style="list-style-type: none"> Biodiversity and natural ecosystems shall be improved. Whenever feasible, preference should be given to shade-tree coffee cultivation. Its characteristics should help conserve as well as improve biodiversity and ecosystems. 	<ul style="list-style-type: none"> Promote the restoration of vegetation in degraded/abandoned areas that have been prone to loss of fertility or soil erosion, preferably by using native species. Contribute to the creation of a diverse landscape that serves as wildlife habitat and as a migration corridor for birds, other animals and insects. Strictly preserve primary forests. Make use of shade trees of different, preferably native species, that are compatible with coffee production. Alternatively establish or maintain significant forest areas as ecological compensation zones.
4.2 Soil conservation	<ul style="list-style-type: none"> Proper use of inputs and other cultivation practices shall contribute to conserve and improve soil fertility as well as prevent soil erosion, pollution, salinisation and losses of arable land. 	<ul style="list-style-type: none"> Return non-harmful organic material from the farm to the field, if not used for any specific activity, either directly or after processing (compost etc). Try to have a vegetative cover all year long (e.g. inter-cropping, nitrogen binding leguminous, mulching etc). Look to establish farming systems of mixed crop species. Prevent erosion as well as the deterioration of the soil by biological and mechanical control (e.g. use of terraces, erosion barriers, rain basins etc). If possible and economically viable, fertilisation should be done – according to leaf and soil analysis as well as yield expectations.
4.3 Water use, conservation and protection	<ul style="list-style-type: none"> Proper and limited use of water should be made. If applicable, inputs should be carefully and adequately used in order to conserve water. 	<ul style="list-style-type: none"> Where applicable, minimise the volume of water used to irrigate plantations through proper techniques. If applicable, reduce the volume of water used in wet processing of coffee via the application of efficient technologies and recycling of water. Prevent the pollution of waterways on or near the farm and minimise it, where unavoidable. Avoid the discharge of untreated farm activity effluents into natural superficial waters. Properly manage other existing or potential sources of pollution, such as sewage, to prevent the pollution of superficial and underground water. Plant, maintain or restore buffer zones adjacent to waterways, preferably with native species.
4.4 Energy use and conservation	<ul style="list-style-type: none"> Proper use of energy should be made 	<ul style="list-style-type: none"> Strive to reduce the use of non-renewable sources of energy and increase the use of renewable sources of energy. Use firewood only if it is unavoidable and comes from well-managed sources like shade trees, specific (fast growing) trees planted for this purpose or reforested areas, or from pruning residues only. Don't use firewood from natural forests.
4.5 Integrated crop management and appropriate use and	<ul style="list-style-type: none"> Integrated crop management should be applied in coffee production. 	<ul style="list-style-type: none"> Use agricultural inputs in a precise manner, based on the careful evaluation of all relevant factors, including if possible soil analysis.

<p>handling of agricultural inputs</p>	<ul style="list-style-type: none"> • Agricultural inputs should be carefully and safely handled and stored on the farm. 	<ul style="list-style-type: none"> • Realise crop protection through an Integrated Pest Management (IPM) approach that puts the emphasis on mechanical and biological means of control. • Create favourable conditions for natural enemies of frequent pests and diseases of coffee plants. • If the use of agrochemicals is necessary, use them in a manner that is the least toxic possible. • Don't use and store on the farm any agricultural inputs that are banned for agricultural use in the country of operation or by international agreement. • Store any toxic agricultural input separately on the farm. • Take effective measures to protect health and safety of people on the farm who handle or are exposed to agrochemicals.
<p>4.6 Integrated waste and crop by-product management</p>	<ul style="list-style-type: none"> • Waste and by-products should be handled according to the principles of reduction, reuse and recycling. 	<ul style="list-style-type: none"> • Continuously reduce, reuse and recycle the quantity of waste and by-products of the harvest and processing (e.g. coffee pulp, parchment skin) that are produced on the farm. • Assure availability and functioning of septic tanks or other alternatives and appropriate means for the treatment of human excrements. • Don't burn inorganic waste that is not recyclable, including chemical and toxic substances. Where applicable, hand them over to collection centres where they will be disposed off appropriately.