

Social Carbon Methodology
Indicators for Community Forestry Project
Versão 01, 2003

SOCIAL CARBON METHODOLOGY

INDICATORS FOR COMMUNITY FORESTRY PROJECT



REVISION HISTORY OF THIS DOCUMENT

Version	Description of the main modifications	Revision date
01	First revision of the indicators.	2003

1. Considerations for application of the Social Carbon Methodology in the sector

The Social Carbon Methodology was first developed to evaluate the communities involved in forestation projects. Through the years, due to the beginning of new scope of emission reductions projects, the Social Carbon Methodology was adapted also for enterprises, keeping its fundamental characteristics. The application of the Social Carbon Methodology (SCM) is a diagnostic of the social and environmental conditions of the project, basing in the indicators of SCM, and these are specific for activities of reforestation developed with the community participation.

The indicators presented here were developed during five years of experience in the implantation of the Ilha do Bananal Carbon Sequestration Project and its surroundings (PSCIB), phases 1 and 2. For more information about the MCS application in forest projects evolving communities, consult the book “*Social Carbon: adding value to sustainable development*”, available in www.socialcarbon.org.

2. Applying of Social Carbon Indicators

The application may be done through:

- a) **Group working:** Participatory meetings with representatives of the organization and/or community involved in the project. The meeting is conducted by a professional whose function is to guide the participants through a discussion of the elements contained in the indicators. The results of the discussion must be noted, compiled and scored according to the indicators.
- b) **Interviews:** Some key actors are interviewed in a semi-structured way, which aim to obtain information through indirect means about the six resources of Social Carbon Methodology. The results of the interviews must be noted, compiled and scored according to the indicators.
- c) **Questionnaires:** May be applied by professionals to the community involved, as well as to key informants in the organization, to collect information. The results of the research must be noted, compiled and scored according to the indicators.

The researcher responsible for drawing up the Social Carbon Point Zero report may choose a single method to apply indicators, or combine more than one method to obtain better results. Other

methods to apply the indicators are subjected to be approval by the Social Carbon Team.

Is recommended that the visits are made in the local where the projects are being developed, this will help to characterize the enterprise and to obtain evidences.

Scoring the indicators should attend the following guidelines:

- a) The responsible to apply should obtain the necessities information to characterize the enterprise or the community situation in relation with a particular indicator.
- b) After this, the researcher should compare the presented characteristics by the enterprise or the community with the six scenarios available for the indicator.
- c) The scenario that presented more similarity with the presented characteristic should be selected and the respective index should be attributed to the indicator.

Special cases:

- a) **The characteristics can't fit in any possible scenario:** The responsible should contact the Social Carbon team to verify the necessity to reformulate the indicator or to elaborate a new indicator.

- b) **The indicator can't be applied in the company or in the community:** The responsible should justify the reason for doesn't apply the indicator in the Social Carbon Report and identify it as "Not applied". No value should be conferring in this case.
- c) **The information necessities to evaluate the indicator don't exist or are not available:** In this case, when the absent of information is occurred by the absence of register, basis or evidences the index 1 should be applied. If the absence of information in justifies by confidentiality reason, the indicator should be consider as "Not applied" in the Social Carbon Report and no values should be conferring.
- d) **The characteristic presented similarity with more than one possible scenario:** The responsible should always select the scenario with the small index.

3. Indicators

Social Resource: are the social resources (network, social demands, social relationships, relationships of trust, association in social organizations) where people go in search of an alternative way of life.

Nº	Indicator	1	2	3	4	5	6
1.	Associations	Absence of formal community associations; individualism predominates, in other words, it's every one for him/herself	Community organizations exist but they lack structure and are riven by internal conflict	Community organizations exist and those in charge are keen to strengthen the group	Community organizations exist and are headed by people who are recognized as leaders by the community	Leaders of community organizations are motivated and relatively experienced	Organizations which internalize the sense of community exist and are headed by capable and experienced leaders
2.	Conflicts	Conflicts within the community are intractable		Few intractable internal conflicts	Internal conflicts are amenable to resolution	Few internal conflicts	No internal conflicts, or none which the group is unable to tolerate or resolve
3.	Interferences		The community is very vulnerable to external influences, especially from local politicians	Moderate vulnerability to external influences		Little vulnerability to external influences	Minimal vulnerability to external influences
4.	Collectivity	The relation is individualist, each one for your own			Interest for the collectivity	People have an interest in the collective and in teaming up with other community members	Existence of a sense of community
5.	Family Relations	Family networks are non-existent or highly fragmented			Existence of family networks	Existence of networks linking families and relatives	Existence of strong networks linking families and relatives

Monitoring Social Resource Indicators		
Indicator	Description	Valuing Method
Associations	Evaluate the existence of a formal association among the members of the community and the association structure grade.	Participatory, partly structured interviews
Conflicts	Evaluate the existence of internal conflicts among the association members or the organized groups.	Participatory, partly structured interviews
Interferences	Evaluate the existence of external interferences, as politics or other institutions influences for example.	Participatory, partly structured interviews
Collectivity	Evaluate the existence of one associative culture or the predominance of individual interests.	Participatory, partly structured interviews
Family Relations	Evaluate the integrity of the family relationship and your importance for the communities members	Participatory, partly structured interviews

Human resource: Its the skills, knowledge and capacity for work that people have, in addition to good health. Together, these items become essential to a strategy of different way of life.

9	Indicator	1	2	3	4	5	6
6.	Education - adults	High degree of illiteracy	Illiteracy amongst older inhabitants	Some illiteracy	Little illiteracy	Almost no illiteracy	No illiteracy
7.	Education - youths	Most people have had only 2-3 years' schooling	Young people have had 4 years in school	Young people have spent 6 years or more in school	Young people have more than 6 years' schooling and have access to school	Young people have access to school and, though many of them have completed their primary education (to age 16), they are not interested in continuing their studies	Young people have completed their primary education (to age 16), and some are going on to secondary school (pre-University level)
8.	Health	High incidence of disease, especially tropical diseases, and almost no access to hospitals or doctors.	Disease incidence mainly confined to children and the elderly, but there is little access to hospitals or doctors	Diseases occur and there is quite some difficulty in accessing hospitals and doctors	Few diseases but some difficulty in accessing doctors and hospitals	Low disease incidence and little difficulty accessing doctors and hospitals	Very low disease incidence and easy access to hospitals and doctors
9.	Technical assistance	No access to technical assistance	Little access to technical services, but awareness of their existence	Technical assistance only for devising agricultural projects to obtain credit	Access to technical assistance on a fairly regular basis	Regular access to technical assistance	Access to technical assistance is a routine part of production activities
10.	Incentive to work	People have no incentive to work	People have little incentive to work	People have some incentive to work	People want to work, but find it had to know what to do	People ready and willing to work	People are eager to work, and know what to do
11.	Professional capacity	Near absence of professional skills	Few people have professional skills	Some people have professional skills	People have professional skills but these need upgrading	Presence of skilled professionals	Presence of skilled professionals of various types
12.	Leisure	No leisure	Leisure activities consist of visiting other family members	Leisure activities consist of short journeys and sport	Leisure activities consist of excursions and sport	Leisure activities consist of excursions, religious festivals, d bathing in local rivers,	Leisure activities consist of sporting competitions, religious festivals, excursions and

						water-holes etc.	bathing in local rivers, waterholes etc.
--	--	--	--	--	--	------------------	--

Monitoring of Human Resources' Indicators

Indicator	Description	Valuing method
Education - adults	Evaluate the incidence of people without schooling among the adults	Interviews and constant visits, meetings and joint discussions, in a way integrated with the community
Education - youths	Evaluate the existence of scholar centers and spaces for education, the access facilities and schooling degree and studies opportunities among the youths	
Health	Evaluate the degree of difficulty of access to doctors and hospitals as well as the incidence of epidemic diseases, such as tropical diseases (dengue, malaria, etc.) or characteristics of the regions with conditions of poor nutrition and sanitation (cholera, malnutrition , etc.)	
Technical assistance	Evaluate the access degree for technical assistance for the production activities, commercialization, etc.	
Incentive to work	Evaluate the incentive of people to work and your orientation. If they know how to act in the professional area or if they find difficulties.	
Professional capacity	Consider the existence of trained professionals or with some ability to work as well as the need for further improvement. It also evaluate the upgrade and recycle of workers through the completion of courses and if these are accessible	
Leisure	Evaluate the existence of public places, realizations of events and manifestations propitious for the activities of culture, sports and leisure.	

Financial resource: it's the basic capital (money, credit / debit, savings and other economic assets), which is available to the people and that the supply of different options for means of living.

9	Indicator	1	2	3	4	5	6
13.	Credits	People are unaware of the existence of credit schemes	Some people have secured credit but are not keeping up with their repayments	Some people are aware of credit schemes, but have no access to them	Many people have secured credit and have begun to invest in their property	The majority have secured credit and repayments is proceeding more or less schedule	People have made use of credit schemes before and, having paid off almost all of their debt, are applying for new loans
14.	Rural Trade	Trade if agricultural produce nonexistent	Very little production from farming and cattle-raising activities and almost no commercialization of produce, as production is consumed by the household	Yields from livestock and agricultural activities are low and there is commercialization of produce	Production and trade of agricultural produce	Production and trade of agricultural produce with guaranteed food security	Trade of agricultural produce as a source of income generation
15.	Employment	No employment opportunities	Work as day laborer on neighboring farms	People work on their own land and also as day laborer on neighboring farms	People work almost exclusively on their own land	People work exclusively on their own land	Generating other jobs within the property
16.	Extractive community revenue	Trade of extraction products in an unsustainable way	Use of extraction products as only source of subsistence	Minimal use of products from extraction as source of subsistence	Appropriate use of products from extraction as source of subsistence	Appropriate use of products from extraction as source of subsistence and trade	Appropriate management of extraction products as a source of income generations
17.	Rural communities revenue	No cattle and very few other livestock	Some rearing of other livestock	Small herds of cattle are kept along with a larger number of other livestock	Production and sale of produce from agricultural and cattle-raising activities	Livestock and agricultural production is sufficient for the needs of the household and there	Animal raising as a source of income generation

						is a surplus for sale	
18.	Infrastructure	Isolated communities	Precious roads, without energy or water	Built roads, no electricity or water supplies	Built roads, energy supplies and artesian Wells being installed	Built roads, partial energy and water supply	Built roads, complete system of energy and water supply
19.	Residence	Homes made of straw, adobe and Wood, covered with straw	Homes made of bricks, adobe covered with tiles and straw	Homes made of bricks, adobe and covered with tiles. Outdoor toilets	Homes made of bricks and tiles with indoor toilets	House made of bricks, with water and electricity supplies	Houses are made of bricks, the walls are plastered and painted, and they have eletricity and water supplies
20.	Equipment	No machinery or agricultural equipment	Animal traction equipment	Agricultural equipment with constant maintenance problems		Agricultural equipments working, but without security that it will work until the harvest is finished	Agricultural equipment recently acquired and working

Monitoring of Financial Resources' Indicators

Indicator	Description	Valuing method
Credits	Evaluate the facilities of obtaining credits from financial institutions and the facilities of payment the funds or credits earned.	Interviews and visits to financial agencies
Rural Trade	Evaluate the development degree of the market in agricultural products.	Interviews and market
Employment	Evaluate the demand for jobs in the region, job opportunities and quality of jobs offered.	Participative meetings
Extractive community income	Evaluates the contribution to generate income from the exploitation and marketing of products and the existence of extractive techniques for sustainable management of resources.	Field survey and interviews
Rural communities income	Evaluates the contribution to generate income from production and marketing of agricultural products.	

Infrastructure	Evaluate the care of public service electrification, roads and water supply in the community, possible difficulties in the payment of accounts or problems in care.	
Residence	Evaluate the care for the basic conditions for a dignified residence and the existence of situations where people live on stilts, huts and other dwellings lack of minimum security and basic infrastructure.	
Equipment	Evaluates the access to equipment used in the production and the state of conservation and use of it.	

Natural resource: is the stock of natural resources (land, water, air, genetic resources) and environmental services (protection of land, maintenance of hydrological cycles, absorb pollution, pest control, pollination, among others), from which derives the resources to generate a sustainable way of life.

Nº	Indicator	1	2	3	4	5	6
21.	Native Ecosystem	Complete absence of native ecosystems.	Native ecosystems account for less than 1% of the regional area and are highly fragmented	Native ecosystems account for 1-5% of the regional area and are fragmented	Native ecosystems account for 5-20% of the regional area and have little interconnectivity	Native ecosystems account for 20-50% of the regional area and have good interconnectivity	Native ecosystems account of over 50% of the regional area and are thoroughly interconnected
22.	Protection	No specific legal protection for native ecosystems	Native ecosystems enjoy minimal legal protection	Native ecosystems enjoy little legal protection	Native ecosystems enjoy a reasonable level of legal protection	Native ecosystems are afforded the minimum level of protection provided for under the law	Native ecosystems are protected to a level beyond that required by legislation.
23.	Impacts - wild areas and / or water resources	Socioeconomic activities have a high level of impact on native ecosystems and water resources	Socioeconomic activities have a considerable impact on native ecosystems and water resources	Socioeconomic activities cause moderate impact on native ecosystems and water resources	Socioeconomic activities cause low level impact on native ecosystems and water resources	Socioeconomic activities result in minimal impact on native ecosystems and water resources	Socioeconomic activities are undertaken in a sustainable manner
24.	Water resources	Water resources are not available for use by local communities	Water resources are available for use by local communities at a high cost	Water resources are available for use by local communities at a moderate cost	Water resources are available at a low cost but are used in an unsustainable manner	Water resources are available at a low cost and are of good quality but their use requires a certain level of control or demand management	Water resource are readily available at low cost, are of good quality and are used in a sustainable way by local communities

Monitoring Natural Resource Indicators

Indicator	Description	Valuing method
Native Ecosystem	Evaluate the existence of native ecosystems preserved in the region and its degree of fragmentation or connectivity.	Analysis of satellite imagery

Protection	Evaluate the existence of protected areas and their representation for the region.	Survey conducted in conjunction with government agencies at federal, state and municipal levels
Impacts - wild areas and / or water resources	Evaluate the impact of socioeconomic activities developed on wild areas.	Survey of vegetation structure and species composition in affected areas
Water resources	Consider the availability of the water resources by local communities, both for economic activities (agriculture, livestock, fisheries, etc.) and for recreational activities.	Collection of physical and chemical data on water resources

Biodiversity resource: represents the number of species, ecosystems and genes that form the biological diversity existent in any region. The following aspects are relevant in this component: the integrity of the natural communities, the type of use and interaction of the human communities with the biodiversity, the state of conservation, the pressures and threats imposed to the native species and the existence of areas of priority for conservation (hot spots).

Nº	Indicator	1	2	3	4	5	6
25.	Natural Communities	Natural Communities are totally degraded with non-native species predominating	Natural communities are strongly degraded; common species of little conservation interest predominate	Natural communities are reasonably well preserved but exhibit visible signs of disturbance (absence of indicator species).	Natural communities are well preserved in legally mandated conservation areas	Natural communities have been subject to little disturbance and exhibit high levels of diversity in legally mandated conservation areas	Natural communities are undisturbed or almost intact in legally mandated conservation areas
26.	Use	Biodiversity is either not available or is not used by the local human population	/the local population make very little use of available biodiversity	Biodiversity is reasonably well used by the local population	Significant use is made of biodiversity, which provides a considerable proportion of the nutritional and medicinal needs of the local population	Biodiversity is widely used by the local population which is heavily dependent on native species	Biodiversity is heavily used by the local population which has an intrinsic dependence on native species
27.	Species	Complete absence of species of conservation interest	Species of conservation interest are rare, or their populations are declining rapidly	Species of conservation interest occur sporadically and their populations show moderate rates of decline	Occurrence of a small number of species of conservation interest, exhibiting slight population decline	Occurrence of a reasonable number of species of conservation interest, whose populations are stabilizing	Occurrence of several species of conservation interest, whose populations are stable, or increasing

Monitoring Biodiversity Resource' Indicators

Indicator	Description	Valuing method
Natural Communities	Evaluates the characterization of natural communities and species as to their conservation state.	Field surveys

Use	Evaluates the availability and the use of biodiversity by the population and the intensity of the activities' impacts.	Interviews with local inhabitants
Species	Evaluates the existence of species of interest for the conservation in the region and the tendency in the evolution of these populations.	Interviews with local inhabitants field surveys

Carbon Resource: refers to the type of carbon management developed, which can be through sequestration, substitution and conservation.

9	Indicator	1	2	3	4	5	6
28.	Transaction cost	High project transaction cost	High project transaction cost, but with counterparts from the communities.	Transaction costs paid up front by financial agents (to be recouped later)	Moderate level of transaction costs	Transaction costs are shared	Transaction costs are shared in a cooperative manner
29.	Type of Project	Projects geared towards carbon conservation, ineligible under the CDM.	Projects with very few activities eligible under the CDM	Projects with 30% of the activities eligible under the CDM	Projects with 50% of the activities eligible under the CDM	Projects with 70% of the activities eligible under the CDM	All projects activities are eligible under the CDM.
30.	Community involvement	No community involvement in the conception or development of the project	Little community involvement	Moderate level of community participation	Considerable community participation	Significant community input and participation	Project processes are thoroughly participatory
31.	Social return	The project provides negligible social and economic returns for the community	Low social returns	Social and economic returns are adequate, based on the level of community participation	Satisfactory social and economic returns	Social benefits are evident and measurable in social and economic terms	High social and economic returns

Monitoring Carbon Resource' Indicators

Indicator	Description	Valuing method
Transaction cost	Evaluates the transaction cost of the Project and the distribution of this cost among the stakeholders.	Analysis of the cost in each phase
Type of Project	Considers the eligibility of the project's activities in the CDM market.	Parameters of the Kyoto Protocol and CDM

Community involvement	Evaluates the intensity of the involvement of the community members with the project.	Participative process
Social return	Evaluates the benefits obtained by the community members with the development of the project.	Semi-structural and participative meetings and information about the income of the community