

## Basel Criteria for Responsible Soy Production

<b>Country/ Organization</b>	Prepared by ProForest for Coop Switzerland in cooperation with WWF Switzerland	<b>Year and status</b>	2004
<b>Initiative</b>	Basel Criteria for Responsible Soy Production		
<b>Membership</b>	-		
<b>Governing bodies</b>	-		
<b>Type and implementation approach</b>	Voluntary tool for retailers and producers	<b>Geographical coverage</b>	Global
<b>Feedstock(s) covered</b>	Soy	<b>Supply chain coverage</b>	Production
<b>Type(s) of biofuels covered</b>	Soy can be used to produce biodiesel		
<b>Link</b>	<a href="http://assets.panda.org/downloads/05_02_16_basel_criteria_engl.pdf">http://assets.panda.org/downloads/05_02_16_basel_criteria_engl.pdf</a>		

### Overview<sup>1</sup>.

The Basel Criteria for Responsible Soy Production were prepared in 2004 by ProForest in cooperation with WWF Switzerland, with the aim to “provide a working definition of acceptable soy production that can be used by individual retailers or producers”. More precisely, as stated in the final report by ProForest, the Basel Criteria for Responsible Soy Production aim to:

- provide a working definition for environmentally, socially and economically responsible soy production;
- enable businesses to source soy for their animal and food products from farms that are managed in a responsible way; and
- provide input into the development of internationally applicable and accepted criteria for sustainable soy production through a multi-stakeholder process provided by an international round table on sustainable soy.

The Basel Criteria for Responsible Soy Production were developed by drawing on widely accepted existing criteria and standards such as Eurepgap standards and ILO conventions<sup>2</sup>.

They were designed to be applicable to all soy production at all scales throughout the world. As stated in the final report, the criteria can be used for two purposes:

<sup>1</sup> The information included in this section was excerpted and adapted directly from the Basel Criteria for Responsible Soy Production document: [http://assets.panda.org/downloads/05\\_02\\_16\\_basel\\_criteria\\_engl.pdf](http://assets.panda.org/downloads/05_02_16_basel_criteria_engl.pdf)

<sup>2</sup> This was done in order to ensure that the criteria were compatible with the requirements of other users and schemes.

- as an internal management tool for soy producers who wish to assess their current management against the criteria as a means of confirming or improving their economic, environmental and social performance; and
- as a mechanism for confirming to purchasers that soy products are originating from a responsibly managed source.

In order to be used by operators, the Basel criteria (and the associated general guidance) shall be complemented with local indicators and means of verification. “It is these local interpretations of the Basel Criteria that set minimum performance thresholds, where needed, and guide users in what, precisely, must be achieved”. As stated in the final report, this process should be the responsibility of the audit team, which should seek inputs from key economic, environmental and social stakeholder groups in both producing and purchasing countries.

The criteria allow for a phased approach where, provided that there is a commitment, underpinned by a plan, to reach full compliance within clearly defined and tight timeframe, suppliers can be accepted immediately. However, the fulfilment of Criterion 2.3.1 (that prohibits the use of genetically modified soy) and Criterion 3.1.1 (that prohibits clearance of High Conservation Value Areas) is a prerequisite to acceptance of an action plan.

For citation:

Ismail, M., & Rossi, A. 2010. *A Compilation of Bioenergy Sustainability Initiatives*. Rome: Food and Agriculture Organization of the UN (FAO).

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ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
<b>1. ENVIRONMENTAL</b>			
1.1 Land-use change (direct and/or indirect)	3. Environmental Management	3.1 Conversion of natural ecosystems  3.1.1 Primary vegetation and High Conservation Value Areas should not be converted to agricultural land.	See <a href="#">general guidance 3.1.1</a> on conversion of primary vegetation to agricultural land at aspect/issue 1.2 Biodiversity and ecosystem services.
		3.1 Conversion of natural ecosystems  3.1.2 The farm should not be planted on land that has been deforested after 1994 unless commensurate conservation offset measures have been undertaken by the grower.	3.1.2 In addition to compliance with criterion 3.1.1, where conversion of forest is permitted by law, and all or part of the farm is on land cleared of natural vegetation since 1994, the grower must demonstrate that they have actively and sufficiently compensated for the loss of natural ecosystems through such measures as: <ul style="list-style-type: none"> <li>• Restoration activities on the farm to enhance biodiversity</li> <li>• Procuring and protecting areas of natural vegetation locally,</li> <li>• Financing conservation initiatives that directly result in the protection of natural ecosystems locally (e.g. helping to establish one or more protected areas; assisting funding for protected area management).</li> </ul> <p>[Also relevant to aspect(s)/issue(s): <a href="#">1.2 Biodiversity and ecosystem services.</a>]</p>
1.2 Biodiversity and ecosystem services  <a href="#">Back to table of contents</a>	3. Environmental Management	3.1 Conversion of natural ecosystems  3.1.1 Primary vegetation and High Conservation Value Areas should not be converted to agricultural land.	3.1.1 Clearance of primary vegetation and High Conservation Value Areas to create agricultural land after 31 July 2004 is prohibited. This applies irrespective of any changes in land ownership or farm management that have taken place after this date. Farm development should actively seek to utilise degraded and abandoned agricultural land.  Local interpretation should refer to existing national definitions of

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<p>1.2 Biodiversity and ecosystem services (continued)</p> <p><a href="#">Back to table of contents</a></p>	<p>3. Environmental Management (continued)</p>	<p>3.1 Conversion of natural ecosystems</p> <p>3.1.1 Primary vegetation and High Conservation Value Areas should not be converted to agricultural land. (continued)</p>	<p>HCVA or equivalent land-use conservation plans or consider how growers and the audit team can identify High Conservation Value Areas.</p> <p>This applies irrespective of any changes in land ownership or farm management that have taken place after this date.</p> <p>The large-scale use of land for soy farms should not lead to increased pressure to clear native vegetation to provide land for other uses (e.g., where expansion of industrial soybean farming results in smallholders having to move into more marginal areas which are then cleared for subsistence farming activities or cattle ranching).</p> <p>Local interpretation should specify whether there are any reasons why planting on deforested land should be permitted locally as well as on appropriate methods of confirming land-use prior to planting with soy (e.g., the types of documents or other evidence that can be used as proof of land-use history). Guidance on appropriate conservation compensation activities should be developed. For example, these might include:</p> <ul style="list-style-type: none"> <li>• The acceptable equivalent area of natural vegetation that should be protected (which might be, for example, an area of 20-30% the size of the deforested area);</li> <li>• the proportion of farm that should be restored;</li> <li>• the proportion of turnover that should be donated to biodiversity protection (and for how long);</li> <li>• the types of conservation activities that are acceptable.</li> </ul> <p>[Also relevant to aspect(s)/issue(s):  <a href="#">1.1</a> Land-use change (direct and/or indirect).]</p>

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ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
1.2 Biodiversity and ecosystem services (continued)  <a href="#">Back to table of contents</a>	3. Environmental Management (continued)	3.1 Conversion of natural ecosystems  3.1.2 The farm should not be planted on land that has been deforested after 1994 unless commensurate conservation offset measures have been undertaken by the grower.	See <a href="#">general guidance 3.1.2</a> on ecosystem conservation at aspect/issue 1.1 Land-use change (direct and/or indirect).
		3.3 On-farm conservation  3.3.1 An understanding of the plant and animal species and habitats that exist inside and around the farm should be established.	3.3.1 Information for large farms should include: <ul style="list-style-type: none"> <li>• Presence of protected areas in the locality of the farm;</li> <li>• Details of any legally protected, red-list, rare, endangered or endemic species in and around the farm including population and habitat requirements;</li> <li>• Identification of the range of habitats and ecosystems within the farm;</li> <li>• An understanding of important local conservation issues.</li> </ul> For individual smallholders, a basic understanding of any important local conservation issues, species or habitats will be sufficient. For local interpretation, reference should be made to any relevant existing information such as general species lists, studies from the farm area and local or national 'red lists' of rare species.

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ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
<p>1.2 Biodiversity and ecosystem services (continued)</p> <p><a href="#">Back to table of contents</a></p>	<p>3. Environmental Management (continued)</p>	<p>3.3 On-farm conservation</p> <p>3.3.2 A plan to maintain and increase biodiversity in and around the farm should be developed and implemented.</p>	<p>3.3.2 For large farms and groups there must be a documented plan whereas for individual smallholders, a more informal verbally-communicated plan may be adequate. The plan should:</p> <ul style="list-style-type: none"> <li>• Ensure that any legal requirements relating to the protection of part of the property under natural vegetation or the protection of and management of species listed in national or local regulations are met.</li> <li>• Ensure action to avoid damage to and deterioration of habitats, including protection of riparian areas, steep slopes, fragments of natural vegetation, conservation set-aside/reserve areas and areas of high conservation value.</li> <li>• Include measures to enhance habitats, particularly riparian strips, corridors to link areas of natural vegetation, enlargement of existing areas of natural vegetation or areas that were originally planted but which are now recognised as unsuitable (e.g., steep slopes).</li> <li>• Consider the conversion of unproductive sites (e.g. low lying wet areas, headland strips or areas of impoverished soil) to conservation areas for the encouragement of natural flora and fauna.</li> <li>• Consider the need to control any illegal or inappropriate hunting, fishing or collecting activities.</li> </ul> <p>Local interpretation should identify any relevant indicators and performance thresholds. Issues to consider include:</p> <ul style="list-style-type: none"> <li>• Whether there should be a minimum proportion of a farm which should be managed for biodiversity.</li> <li>• Whether the focus should be on restoring degraded areas to natural vegetation, or on protecting remaining fragments that have not yet</li> </ul>

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ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
1.2 Biodiversity and ecosystem services (continued)	3. Environmental Management (continued)	3.3 On-farm conservation  3.3.2 A plan to maintain and increase biodiversity in and around the farm should be developed and implemented. (continued)	<p>been degraded.</p> <ul style="list-style-type: none"> <li>Whether there should be a maximum contiguous area planted with soy (e.g. 200 ha) with natural vegetation maintained (or restored) as a network around such plots.</li> </ul> <p>Whether there should be a maximum proportion of the farm planted with soy (e.g. 66%).</p> <p>[Also relevant to aspect(s)/issue(s): <a href="#">3.1 Compliance.</a>]</p>
1.3 Productive capacity of land  <a href="#">Back to table of contents</a>	2. Technical Management	2.1 Maintaining soil and water quality  2.1.1 Soil suitability for soy cultivation should be established to ensure the long-term suitability of land for soy cultivation and the results should be used to plan field operations.	<p>2.1.1 Soil suitability maps or soil surveys should be appropriate to the scale of operation and should include information on soil types, topography, rooting depth, moisture availability, stoniness and fertility. This information should be used to plan rotations, planting programmes, etc.</p> <p>Assessing soil suitability is also important for small-scale producers, particularly where there are significant numbers operating in a particular location. Information may be collected and provided by a farmer group or the company that buys soybeans from individual smallholders.</p> <p>Local interpretation should specify the local or national code of practice or other guidelines that should be followed; or set out what 'good practice' constitutes within the local and national context.</p> <p>[Also relevant to aspect(s)/issue(s): <a href="#">2.7 Good management practices and continuous improvement.</a>]</p>



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ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
1.3 Productive capacity of land (continued)  <a href="#">Back to table of contents</a>	2. Technical Management (continued)	2.1 Maintaining soil and water quality  2.1.2 Long-term soil fertility should be maintained through appropriate cultural practice.	2.1.2 Long-term fertility depends on maintaining the structure, organic matter content, nutrient status and microbiological health of the soil. Fertiliser application, using either mineral or organic fertilisers, should be sufficient to maintain soil fertility whilst not exceeding the needs of the crop. The quantity of fertiliser applied and timing of fertiliser application should be carefully considered so as to maximise benefits and minimise losses of fertiliser. Records should be kept of all applications of fertilizer. Crop rotations (including pasture) should be used as appropriate to maintain soil condition, reduce reliance on agrochemicals and to maximise plant health. Where rotations are not employed, adequate justification must be provided. Smallholders should be able to demonstrate that they have an understanding of the techniques required to maintain soil fertility and that they are being implemented.  Local interpretation should identify the range of appropriate techniques.
		2.1 Maintaining soil and water quality  2.1.3 Soil erosion and damage to soil structure should be minimized.	2.1.3 Field cultivation techniques that minimise soil erosion should be adopted. Mechanical cultivation should be used only where proven to improve or maintain soil structure, and to avoid soil compaction. Smallholders should be able to demonstrate that they have an understanding of the techniques required to minimise soil erosion and that they are being implemented. Local interpretation should identify the range of appropriate

BASEL CRITERIA FOR RESPONSIBLE SOY PRODUCTION			
ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
1.3 Productive capacity of land (continued)	2. Technical Management (continued)	2.1 Maintaining soil and water quality  2.1.3 Soil erosion and damage to soil structure should be minimized. (continued)	techniques and any appropriate performance thresholds. Local interpretation should refer to national guidelines or best practice and where appropriate include performance thresholds for requirements such as the size and location of riparian strips or acceptable maximum runoff levels.
		2.2 Chemical use and crop protection  2.2.2 All chemical use should be properly managed and records of pesticide use maintained.	See <a href="#">general guidance 2.2.2</a> on precautions to be taken for aerial application of agrochemical at aspect/issue 1.4 Crop management and agrochemical use.
	3. Environmental Management	3.4 Waste and pollution management  3.4.1 Waste and pollution should be minimised and properly managed.	See <a href="#">general guidance 3.4.1</a> on composting activities and soil conditioning at aspect/issue 1.8 Waste management.
1.4 Crop management and agrochemical use  <a href="#">Back to table of contents</a>	2. Technical Management	2.1 Maintaining soil and water quality  2.1.5 Water use for irrigation, where used, should be efficient and sustainable.	See <a href="#">general guidance 2.1.5</a> on use of sewage water for irrigation at aspect/issue 1.5 Water availability and quality.

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1.4 Crop management and agrochemical use (continued)  <a href="#">Back to table of contents</a>	2. Technical Management (continued)	2.2 Chemical use and crop protection  2.2.1 Integrated Crop Protection (ICP) methods should be used wherever possible and chemical use minimised.	2.2.1 Growers should apply recognised ICP/IPM techniques on a preventive basis. Non-chemical pest treatments are preferred over chemical treatments. All use of chemicals should be justified. Protection of crops against pests, diseases and weeds should be achieved with the appropriate minimum pesticide input. There should be a plan to reduce pesticide use wherever possible. Selective products that are specific to the target pest, weed or disease and which have minimal effect on other organisms, workers and consumers should be used where available.  Local interpretation should provide further guidance on what practices are most appropriate for a particular country, and where needed, on practices which are appropriate to small-scale production.  [Also relevant to aspect(s)/issue(s): <a href="#">2.5 Human health and safety.</a> ]
		2.2 Chemical use and crop protection  2.2.2 All chemical use should be properly managed and records of pesticide use maintained.	2.2.2 Growers should only use chemicals that are officially registered in the country of use and are registered for use on the crop that is to be protected where such official registration scheme exists, or, in its absence, complies with the specific legislation of the country of destination. A list of all products that are approved for use on soy should be kept and regularly updated. The use of chemicals which are banned in the countries purchasing the soy products should also be avoided. Records of chemical use should be maintained and periodically assessed to ensure that use is stable or decreasing. Agrochemicals should only be applied by qualified persons who have received the necessary training and should always be applied in accordance with the product label.

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ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
1.4 Crop management and agrochemical use (continued)  <a href="#">Back to table of contents</a>	2. Technical Management (continued)	2.2 Chemical use and crop protection  2.2.2 All chemical use should be properly managed and records of pesticide use maintained. (continued)	<p>Particular precautions should be taken when pesticides are applied aerially to avoid drift into water bodies (springs, streams etc), natural vegetation, human settlements and other land uses. Growers (other than individual smallholders) and/or suppliers should be able to provide evidence of residue testing.</p> <p>Local interpretation should consider: statutory requirements concerning pesticide use, lists of legally prohibited agrochemicals, agrochemical residues that should be tested for and the appropriate levels of residues, and best management practices for pesticide use or sources of information on these. A link should be made to criterion 4.3.2 covering health and safety.</p> <p>[Also relevant to aspect(s)/issue(s):  <a href="#">1.3</a> Productive capacity of land;  <a href="#">1.5</a> Water availability and quality; and  <a href="#">2.5</a> Human health and safety.]</p>
		2.3 Planting material  2.3.1 Genetically modified material must not be used.	<p>2.3.1 <b>Seed material must be from non-GMO strains.</b> The grower should provide certificates of origin and affidavits covering all seed purchased. Where smallholders save seed from one harvest to sow the following year, documentation should cover the original seed purchase.</p> <p>Where machinery (including planters, harvesters, transporters, etc) is shared with other producers who may be using GMO strains, all machinery should be thoroughly cleaned before use.</p> <p>The soybean harvest should not contain GMO residues greater than the limits set by the purchaser and should always be within EU limits. Individual smallholders would not be expected to be responsible for conducting DNA tests on their harvest; however, those storing, transporting or trading the soybeans should be able to do so. If</p>

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ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
	2. Technical Management (continued)		requested by a purchaser, the grower or supplier should be able to demonstrate the results of appropriate DNA tests that establish that the soybeans are within these limits.
		2.3 Planting material 2.3.2 Planting material should be of a high quality and from a known source.	2.3.2 Whenever the grower purchases seed, they should seek to do so from reputable sources and should maintain records/certificates of the seed quality, variety purity, variety name, batch number and seed vendor.
1.5 Water availability and quality <a href="#">Back to table of contents</a>	2. Technical Management	2.1 Maintaining soil and water quality 2.1.4 The quality and quantity of natural water sources should be maintained.	2.1.4 Water courses, wetlands and swamps should be protected, including maintaining appropriate riparian buffer zones along all bodies of water. Contamination of surface and ground water through run-off of soil (see also <a href="#">criterion 2.1.3</a> ), nutrients or chemicals, or as a result of inadequate disposal of waste, should be avoided (see also <a href="#">criterion 2.2.1</a> ).  Local interpretation should refer to national guidelines or best practice and where appropriate include performance thresholds for requirements such as the size and location of riparian strips or acceptable maximum runoff levels.
		2.1 Maintaining soil and water quality 2.1.5 Water use for irrigation, where used, should be efficient and sustainable.	2.1.5 Untreated sewage water should never be used for irrigation. The water supply for field irrigation should be sustainable and efficient. Plans for water management, appropriate to the scale of use, should be developed to optimise water usage and reduce waste and ensure that the effects of water use on local water resources (groundwater and surface water) are sustainable.  [Also relevant to aspect(s)/issue(s): <a href="#">1.4</a> Crop management and agrochemical use; <a href="#">2.3</a> Access to water and other natural resources.]

BASEL CRITERIA FOR RESPONSIBLE SOY PRODUCTION			
ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
	2. Technical Management (continued)	2.2 Chemical use and crop protection 2.2.2 All chemical use should be properly managed and records of pesticide use maintained.	See <a href="#">general guidance 2.2.2</a> on precautions in pesticides application to avoid drift to water bodies at aspect/issue 1.4 Crop management and agrochemical use.
1.7 Air quality	3. Environmental Management	3.4 Waste and pollution management 3.4.1 Waste and pollution should be minimised and properly managed.	See <a href="#">general guidance 3.4.1</a> on avoiding burning in operation in aspect/issue 1.8 Waste management.
1.8 Waste management <a href="#">Back to table of contents</a>	3. Environmental Management	3.4 Waste and pollution management 3.4.1 Waste and pollution should be minimised and properly managed.	3.4.1 All medium and large operations should have a strategy for minimising waste and pollution, while for smallholders the approach can be more informal provided that the outcome is acceptable.  A strategy for minimising waste should include: <ul style="list-style-type: none"> <li>• Sources of waste and pollution are identified. All the possible waste products (e.g. paper, cardboard, plastic, crop debris, oil, rock wool and other substrates) and pollutants (e.g. chemicals, oil, fuel, noise, light, debris, pack-house effluent, etc.) should be identified in all areas of the farm business.</li> <li>• A plan should be developed and implemented, to avoid or reduce wastage and pollution, and whenever possible, avoid the use of land-fill or burning, by recycling the waste. Organic crop debris can be composted on the farm and, where there is no risk of disease carry-over, reused for soil conditioning.</li> <li>• Hazardous chemicals are stored and disposed of in an appropriate way. Fertilisers, pesticides and oil must be stored covered in a clean, dry location able to contain spillage where there is no risk of</li> </ul>

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ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
1.8 Waste management (continued)	3. Environmental Management (continued)	3.4 Waste and pollution management  3.4.1 Waste and pollution should be minimised and properly managed. (continued)	contamination of water sources and separate from other materials. Surplus spray mix, oil, and chemical containers should be disposed of in an environmentally responsible way (e.g., returned to the vendor) with no risk of contamination of water sources or to human health. The disposal instructions on manufacturer's labels should be adhered to.  Local interpretation could include, as appropriate: details of any relevant national laws or policies, a list of waste types which must be considered, suggestions for how particular waste should be dealt with, any types of disposal which are not acceptable (e.g. untreated waste water may not be discharged directly into streams or rivers).  [Also relevant to aspect(s)/issue(s): <a href="#">1.3</a> Productive capacity of land; and <a href="#">1.7</a> Air quality.]
1.9 Environmental sustainability (cross-cutting)  <a href="#">Back to table of contents</a>	3. Environmental Management	3.2 Assessing and managing environmental impacts  3.2.1 An assessment of environmental impacts should be undertaken.	3.2.1 Assessment of environmental impacts can range from an independent Environmental Impact Assessment (EIA) through a formal internal assessment carried out by the grower to a relatively informal consideration of possible impacts carried out by a smallholder. The appropriate degree of formality and independence will depend on legal requirements, the size of the operation and the local context. There must be an assessment of the environmental (and social - see also 4.1.1) impacts of: <ul style="list-style-type: none"> <li>• the farm at both a landscape and an operational level, such as clearance, chemical use, etc</li> <li>• roads, transport and other infrastructure associated with production,</li> <li>• energy use.</li> </ul>

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1.9 Environmental sustainability (cross-cutting) (continued)  <a href="#">Back to table of contents</a>	3. Environmental Management (continued)	3.2 Assessing and managing environmental impacts  3.2.1 An assessment of environmental impacts should be undertaken. (continued)	The assessment covers impacts on soil, water, air, biodiversity and people. Individual smallholders would not be expected to undertake formal impact assessments (unless there is a legal requirement) but should have a good understanding of the potential negative impacts of their activities and appropriate mitigation techniques.  Local interpretation should consider any national legal requirements together with any other issues that are not required by law but are nevertheless important.
		3.2 Assessing and managing environmental impacts  3.2.2. The results of the assessment should be incorporated into operating procedures.	3.2.2 The results of the assessment(s) should be documented and reviewed by management and appropriate actions planned to minimise negative impacts and maximise positive ones. Where this means changing current practices, a timetable for change should be developed. Monitoring should be adequate to ensure that impacts are within acceptable limits and that targets are met. Individual smallholders would not be expected to have a documented plan, but should be able to demonstrate that their activities are designed to minimise the impacts identified.  [Also relevant to aspect9s)/issue(s): <a href="#">2.7</a> Good management practice and continuous improvement.]
		3.2 Assessing and managing environmental impacts  3.2.3 The use of fire for land clearance should be avoided wherever possible.	3.2.3 Fire should not be used except in exceptional circumstances and then only when permitted by regulations clearly justified and with evidence that fire-use is carefully controlled. Fire should not be used for land clearance in areas that are contiguous with natural vegetation.
<b>2. SOCIO-ECONOMIC</b>			
2.1 Land tenure/access	4. Social	4.4 Land tenure	4.4.1 The right of the grower to the land must be clear. This should be



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and displacement	Management	4.4.1 The right to use the land can be demonstrated and does not diminish the legal or customary rights of other users.	<p>demonstrated through proof of ownership or use rights. Where there are disputes, additional information to provide proof of legal acquisition of title and fair compensation of previous owners and occupants may also be needed.</p> <p>Where there are other potential rights, the grower must demonstrate that these rights are understood and are not being threatened or reduced.</p> <p>For local interpretations any customary land use rights or disputes which are likely to be relevant should be identified.</p>
2.2 Rural and social development	4. Social Management	<p>4.3 Welfare and security</p> <p>4.3.4 Growers should deal fairly with local businesses and make efforts to contribute to the local economy wherever possible.</p>	<p>4.3.4 Growers should invest in local development by:</p> <ul style="list-style-type: none"> <li>• Maximising local employment,</li> <li>• Using local goods and services wherever possible,</li> <li>• Paying for goods and services promptly,</li> <li>• Supporting, as far as is practical, any projects that improve local infrastructure or facilities;</li> </ul> <p>This criterion does not apply to individual smallholders.</p> <p>Local interpretations should identify any other specific activities, as well as any minimum thresholds which would be appropriate.</p>
2.3 Access to water and other natural resources <a href="#">Back to table of contents</a>	2. Technical Management	<p>2.1 Maintaining soil and water quality</p> <p>2.1.5 Water use for irrigation, where used, should be efficient and sustainable.</p>	<p>See <a href="#">general guidance 2.1.5</a> on sustainable use of water from local groundwater and surface water resources for irrigation at aspect/issue 1.5 Water availability and quality.</p>

BASEL CRITERIA FOR RESPONSIBLE SOY PRODUCTION			
ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
2.4 Employment, wages and labor conditions  <a href="#">Back to table of contents</a>	4. Social Management	4.2 Workers rights and working relationships  4.2.1 All workers should have acceptable pay and conditions.	4.2.1 Employees and contractors should have pay and conditions in accordance with national laws and regulations or sector or trade union standards. Pay meets or exceeds the national minimum wage or a regional average if no minimum wage exists and must enable an adequate standard of living. A minimum wage should be established and adjusted from time to time in consultation with relevant parties. Labour laws, union agreements or direct contracts of employment detailing payments and conditions of employment (e.g., working hours, deductions, overtime, sickness, holiday entitlement, maternity leave, reasons for dismissal, period of notice, etc) should be available in the languages understood by the workers or explained carefully to them by a senior company official. Workers should have access to potable water and segregated sanitary and bathing facilities. If any worker or contractor is required to live on the farm, then adequate, affordable housing, medical, educational and welfare amenities must be provided (not applicable to smallholders).  For local interpretation performance levels such as acceptable minimum wages and conditions should be specified, together with means of verification.  [Also relevant to aspect(s)/issue(s): <a href="#">4.3 Food utilization.</a> ]
		4.2 Workers rights and working relationships  4.2.2 Workers should have freedom of association and bargaining.	4.2.2 The right of employees and contractors to form associations and bargain collectively with their employer should be respected, in accordance with Conventions 87 and 98 of the International Labour Organisation.

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ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
2.4 Employment, wages and labor conditions (continued)  <a href="#">Back to table of contents</a>	4. Social Management (continued)	4.2 Workers rights and working relationships  4.2.3 There should be equality of opportunity for all employees and contractors.	4.2.3 The grower must ensure equality of opportunity and treatment for all employees and contractors, regardless of race, colour, sex, religion, political opinion, nationality, social origin or other distinguishing characteristics.
		4.3 Welfare and security  4.3.1 Child labour and forced labour should not be used on the farm.	4.3.1 Only workers above the minimum school leaving age in the country or who are at least 15 years old may be employed. No workers under the age of 18 should conduct hazardous work. Adequate transitional economic assistance and appropriate educational opportunities must be offered to any child workers who may have to be dismissed.  In places where whole families work together on farms, children and other relatives may work on family-owned and run farms provided that they are not thereby prevented from attending school.  Forced labour, including slave labour, debt bondage and exploitation of prison inmates must be prohibited. Workers must not be obliged to lodge a 'guarantee payment' or the originals of their identity papers with their employer.
		4.3 Welfare and security  4.3.2 There should be a health and safety policy which applies to all workers, both employees and contractors, and is adequate, implemented and monitored.	See <a href="#">general guidance 4.3.2</a> on safe and healthy working environment at aspect/issue 2.5 Human health and safety.

BASEL CRITERIA FOR RESPONSIBLE SOY PRODUCTION			
ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
		<p>4.3 Welfare and security</p> <p>4.3.3 Workers and contractors should be adequately trained and competent.</p>	<p>4.3.3 Training must be given to all workers operating dangerous or complex equipment or substances. Records of training for each employee should be kept in the interests of operator safety. For smallholders training records should not be required but anyone working on the farm should be adequately trained for the job they are doing.</p> <p>For local interpretation, best management practices should be identified, including appropriate occupational training qualifications.</p>
<p>2.5 Human health and safety</p> <p><a href="#">Back to table of contents</a></p>	<p>2. Technical Management</p>	<p>2.2 Chemical use and crop protection</p> <p>2.2.1 Integrated Crop Protection (ICP) methods should be used wherever possible and chemical use minimised.</p>	<p>See <a href="#">general guidance 2.2.1</a> on <b>workers and consumers health</b> at aspect/issue 1.4 Crop management and agrochemical use.</p>
		<p>2.2 Chemical use and crop protection</p> <p>2.2.2 All chemical use should be properly managed and records of pesticide use maintained.</p>	<p>See <a href="#">general guidance 2.2.2</a> on <b>precautions on aerial application</b> to avoid drift to water bodies and human settlement at aspect/issue 1.4 Crop management and agrochemical use.</p>
	<p>4. Social Management</p>	<p>4.3 Welfare and security</p> <p>4.3.2 There should be a <b>health and safety policy</b> which applies to all workers, both employees and contractors, and is adequate, implemented and monitored.</p>	<p>4.3.2 A safe and healthy working environment should be provided for all workers whether they are employees or contractors. Adequate protective equipment should be available to labourers at the place of work to cover all potentially hazardous operations, such as pesticide application, land preparation, harvesting and, if it is used, burning. Accident and emergency procedures should exist and instructions should be clearly understood by all workers. Accident procedures should be visually displayed and in the appropriate language of the</p>

BASEL CRITERIA FOR RESPONSIBLE SOY PRODUCTION			
ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
2.5 Human health and safety (continued)	4. Social Management (continued)	4.3 Welfare and security  4.3.2 There should be a <b>health and safety policy</b> which applies to all workers, both employees and contractors, and is adequate, implemented and monitored. (continued)	workforce. Workers trained in First Aid should be present in both field and other farm operations and first aid equipment should be available at worksites. Records should be kept of all accidents and sick days and periodically reviewed. Workers should be covered by accident insurance. For individual smallholders, a more informal approach is acceptable, provided that working practices for all workers are safe.  For local interpretation, all legal requirements together with any local or national guidance on safe working practice in agriculture should be identified and used. It will also be important to identify what constitutes a 'hazardous' operation in the local context.  [Also relevant to aspect(s)/issue(s): <a href="#">2.4</a> Employment, wages and labor conditions.]
2.7 Good management practices and continuous improvement  <a href="#">Back to table of contents</a>	2. Technical Management	2.1 Maintaining soil and water quality  2.1.1 Soil suitability for soy cultivation should be established to ensure the long-term suitability of land for soy cultivation and the results should be used to plan field operations.	See <a href="#">general guidance 2.1.1</a> on use of soil suitability maps or soil surveys to plan rotation and planting programmes, etc. at aspect/issue 1.3 Productive capacity of land.
		2.4 Harvest and post harvest management  2.4.1 Crop yield should be maximised through efficient harvesting.	2.4.1 Harvesting should be done in a timely fashion to <b>minimise pre-harvest losses</b> . Harvest losses should be assessed and appropriate machinery used to reduce losses (this does not apply to smallholders).

BASEL CRITERIA FOR RESPONSIBLE SOY PRODUCTION			
ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
2.7 Good management practices and continuous improvement (continued)  <a href="#">Back to table of contents</a>	2. Technical Management (continued)	2.4 Harvest and post harvest management  2.4.2 Post-harvest land management should be adequate to <b>maintain soil fertility and prevent erosion.</b>	2.4.2 After harvest, residue should be retained where soil erosion risk is significant or a cover crop or rotation crop should be planted. Burning should not be used to remove residues.  Local interpretation should identify best management practices for maintaining soil quality in local conditions including guidance on soil types where maintaining residues is not appropriate.
		2.4 Harvest and post harvest management  2.4.3 <b>Post-harvest crop management</b> should be adequate to maintain high quality product.	2.4.3 Market requirements for quality should be met through appropriate storage and treatment. If any post-harvest chemicals are used, this should be done only in accordance with the manufacturers' instructions and must not include chemicals that are not officially registered in the country of production or that are banned in the country of destination. Records of all post-harvest chemical applications should be maintained. Suppliers and/or large to medium scale growers must be able to provide evidence that levels of chemical residue are within limits acceptable to the country of destination through residue testing. When growers or suppliers are drying stored soybeans using wood or charcoal they should be able to demonstrate that it was not sourced from areas that are being deforested.
	3. Environmental Management	3.2 Assessing and managing environmental impacts  3.2.2. The results of the assessment should be incorporated into operating procedures.	See <a href="#">general guidance 3.2.2</a> on documentation, review, monitor and incorporation of environmental impact assessment result into operating procedures at aspect/issue 1.9 Environmental sustainability (cross-cutting).
		4.1 Managing social impacts	

BASEL CRITERIA FOR RESPONSIBLE SOY PRODUCTION			
ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
2.7 Good management practices and continuous improvement (continued)  <a href="#">Back to table of contents</a>	4. Social Management	<p>4.1.1 An assessment of social impacts should be carried out and the results taken into account in management planning and operational procedures.</p> <p><i>This criterion does not apply to individual smallholders. However, it applies to associations, groups of producers or co-operatives.</i></p>	See <a href="#">general guidance 4.1.1</a> on incorporation of social impact assessment findings in management plans and operational procedures at aspect/issue 2.8 Social sustainability (cross-cutting).
	5. Continuous improvement	<p>5.1 Continuous improvement in achieving full compliance with the criteria</p> <p>5.1.1 If there is not full compliance initially with the criteria, the grower should make a written commitment to comply within a defined time.</p>	5.1.1 The grower should provide a <b>written commitment to purchasers detailing their commitment to meeting all criteria in full within a specified timeframe</b> , together with a plan for how this will be achieved as required by 5.1.2. This does not apply to Criteria 2.3.1 and 3.1.1, which must be met from the beginning.
		<p>5.1 Continuous improvement in achieving full compliance with the criteria</p> <p>5.1.2 There should be a plan setting out how compliance will be achieved within the timeframe agreed.</p>	<p>5.1.2 For each criterion where there is <b>not full compliance, the plan should set out the activities that will be undertaken including who is responsible, any resources that will be needed and the timing.</b> Any budgets and business plans should include provision of adequate resources in order to implement the plan.</p> <p>For individual smallholders, the plan can be relatively simple.</p>

BASEL CRITERIA FOR RESPONSIBLE SOY PRODUCTION			
ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
		<p>5.1 Continuous improvement in achieving full compliance with the criteria</p> <p>5.1.3 Continuous improvement in line with the plan should be demonstrated through independent verification at least annually.</p>	<p>5.1.3 <b>Contracts with independent verifiers</b> will need to be agreed and verification undertaken.</p>
<p>2.8 Social sustainability (cross-cutting)</p>	<p>4. Social Management</p>	<p>4.1 Managing social impacts</p> <p>4.1.1 An assessment of social impacts should be carried out and the results taken into account in management planning and operational procedures.</p> <p><i>This criterion does not apply to individual smallholders. However, it applies to associations, groups of producers or co-operatives.</i></p>	<p>4.1.1 Assessment of social impacts may be carried out by independent experts or internally by the grower as appropriate to the situation. It should be sufficient to ensure that all actual and potential impacts (both positive and negative) are identified (see also criterion 4.2.1 assessing environmental impacts). This should include adequate consideration of the impacts on the customary or traditional rights of local communities and indigenous people, where these exist.</p> <p>Management planning should incorporate the findings of the social impact assessment and these plans should be implemented in operational procedures.</p> <p>As social impacts are particularly dependent on local social conditions, it is very important that the national interpretation should provide identify what issues should be considered as well as appropriate methodologies for collecting data and using the results.</p> <p>[Also relevant to aspect(s)/issue(s):  <a href="#">2.7</a> Good management practices and continuous improvement.]</p>
<b>3. GOVERNANCE</b>			
<p>3.1 Compliance</p> <p><a href="#">Back to table of contents</a></p>	<p>1. Legal compliance</p>	<p>1.1 Compliance with relevant legislation</p> <p>1.1.1 The grower should be aware</p>	<p>1.1.1 In order to meet the law, it is necessary that growers:</p> <ul style="list-style-type: none"> <li>• know what the requirements of the law are,</li> <li>• Have a way of ensuring that the requirements are implemented.</li> </ul> <p>Relevant legislation includes, but is not limited to, regulations</p>



BASEL CRITERIA FOR RESPONSIBLE SOY PRODUCTION			
ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
3.1 Compliance (continued)  <a href="#">Back to table of contents</a>	1. Legal compliance (continued)	of all applicable laws and conventions, and have a mechanism for ensuring that they are implemented.	governing land tenure and land-use rights, labour, agricultural practices (e.g., chemical use), environment (e.g., wildlife laws, pollution). It also includes any relevant international laws or conventions such as the Convention on Biodiversity (CBD). The system used to understand and implement the law should be appropriate to the scale of the organisation. It is usually expected that large growers have written information on legal requirements, whereas for small-scale producers the focus should be on the grower having adequate knowledge of the main legal requirements. For local interpretation, all relevant legislation should be identified, and any particularly important requirements identified. Areas highlighted may be: <ul style="list-style-type: none"> <li>• requirements which are frequently not met in practice,</li> <li>• new requirements which the grower or audit team members may not be aware of,</li> </ul> requirements are considered particularly important.
		1.1 Compliance with relevant legislation  1.1.2 There is compliance with all relevant laws and codes of practice.	1.1.2 Implementing all legal requirements is an essential baseline requirement for all growers whatever their location or size. There should also be compliance with any voluntary codes to which the organisation subscribes.
	3. Environmental Management	3.2 Assessing and managing environmental impacts  3.3.2 A plan to maintain and increase biodiversity in and around the farm should be developed and implemented.	See <a href="#">general guidance 3.3.2</a> on <b>legal requirement in impact management</b> at aspect/issue 1.2 Biodiversity and ecosystem services.

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ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
3.1 Compliance (continued)	6. Traceability	6.1 Traceability of product  6.1.1 All of the product about which statements of compliance with these criteria are made should be traceable to the farm where it has been grown.	6.1.1 This can be provided by: <ul style="list-style-type: none"> <li>Any certified chain of custody or ‘Hard Identity Preserved’ scheme that confirms that the product can be traced from the farm through all stages of processing and transport, e.g., EUREPGAP, organic; or</li> <li>Systems being in place which ensure that products can be traced from the farm through all stages of processing and transportation through documentation, identification and segregation of soy and soy products produced in compliance with the Basel Criteria.</li> </ul> For smallholders, this may be fulfilled by a smallholder association, smallholder group or by the company that buys soybeans from individual smallholders.
3.2 Participation and transparency  <a href="#">Back to table of contents</a>	4. Social Management	4.1 Managing social impacts  4.1.2 There should be an <b>effective method for communication and consultation</b> with local communities and other affected or interested parties.  <i>This criterion does not apply to individual smallholders. However, it applies to associations, groups of producers or co-operatives.</i>	4.1.2 There should be a documented consultation and communication strategy, a nominated manager responsible, a list of stakeholders, records of all communication and records of actions taken in response to input from stakeholders. Communication and consultation mechanisms should be designed or agreed with local communities and other affected or interested parties.  Local interpretation should consider issues such as appropriate levels of consultation and the types of organisations or individuals that should be included.
		4.1 Managing social impacts  4.1.3 There should be a system for <b>dealing with complaints and grievances</b> which is implemented and effective.	4.1.3 The basis of the system must be to try to resolve disputes in a timely and appropriate manner. Both the process by which a dispute was resolved and the results must be documented. Large organisations and groups should document both the system they use and the details of any complaints or disputes including how they were resolved. Individual smallholders should not be expected to

BASEL CRITERIA FOR RESPONSIBLE SOY PRODUCTION			
ASPECTS/ISSUES	PRINCIPLES	CRITERIA	GENERAL GUIDANCE
			have a documented system, but must be able to show that they respond constructively to any issue or complaint.
4. FOOD SECURITY			
4.3 Food utilization <a href="#">Back to table of contents</a>	4. Social Management	4.2 Workers rights and working relationships 4.2.1 All workers should have acceptable pay and conditions	See <a href="#">general guidance 4.2.1</a> on <b>potable water, sanitary and bathing facilities, adequate housing, educational</b> and welfare amenities on farm at aspect/issue 2.4 Employment, wages and labor conditions.