## Environmental Checklist: 24. Forestry Projects (1)

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
1 Permits and Explanation	Permits	Have EIA reports been officially completed? Have EIA reports been approved by authorities of the host country's government? Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied? In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	
		Are contents of the project and the potential impacts adequately explained to the public based on appropriate procedures, including information disclosure? Is understanding obtained from the public?  Are proper responses made to comments from the public and regulatory authorities?	
2 Mitigation Measures	(4) 11 0 11	Do air pollutants, such as dust, soot and dust, sulfur oxides (SOx), nitrogen oxides (NOx), and organic chemical substances emitted from various sources, such as logging operations, forest products manufacturing processes, and incinerators comply with the country's emission standards and ambient air quality standards?	
	(2) Water Quality	Is there a possibility that the use of chemicals, such as fertilizers, and agrochemicals will cause water pollution?  Where facilities, such as forest products manufacturing facilities are installed, do effluents from the facilities comply with the country's effluent standards and ambient water quality standards?	
	(3) Wastes	Are wastes properly treated and disposed of in accordance with the country's standards?	
	(4) Soil Contamination	Are adequate measures taken to prevent contamination of soil and groundwater by use of chemicals, such as agrochemicals?	
3 Natural Environment	(1) Protected Areas	Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	

## Environmental Checklist: 24. Forestry Projects (2)

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
3 Natural Environment	(2) Ecosystem	Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)?  Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions?  Is there a possibility that changes in localized micro-meteorological conditions, such as solar radiation, temperature, and humidity due to a large-scale timber harvesting will affect the surrounding vegetation?  Is there a possibility that a large-scale timber harvesting will result in loss of breeding and feeding grounds for wildlife?  In the case of reforestation projects, is there a possibility that mono-species plantations will adversely affect wildlife habitats? Is there a possibility that mono-species plantations will cause outbreaks of pests?  If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem?	
	(3) Hydrology	Is there a possibility that alteration of rainwater runoff and runoff characteristics due to a large-scale timber harvesting and access road construction will cause impacts on the hydrology of the surrounding areas?  Is there a possibility that decreased water retention capacity due to deforestation will affect the existing drainage patterns of the forest?  Is there a possibility that loss of forest stability due to timber harvesting will	
	(4) Topography and Geology	cause slope failures or landslides?	
	(3) Management of Abandoned Sites	Are adequate restoration and revegetation plans considered for the harvested areas? In particular, are adequate measures taken to prevent soil runoff from the harvested areas?  Is a sustainable management system for the harvested areas established?  Are adequate financial provisions secured to manage the harvested areas?	

## Environmental Checklist: 24. Forestry Projects (3)

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
4 Social Environment	(1) Resettlement	Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement?  Is adequate explanation on relocation and compensation given to affected persons prior to resettlement?  Is the resettlement plan, including proper compensation, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement?  Does the resettlement plan pay particular attention to vulnerable groups or persons, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples?  Are agreements with the affected persons obtained prior to resettlement?  Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan?  Is a plan developed to monitor the impacts of resettlement?	
		Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary? Is particular attention paid to the inhabitants whose livelihoods are based on primary industries, such as farming, raising livestock, or hunting and gathering in the forests?  Are adequate measures taken to prevent illegal entry into the forestry resource areas from the outside through newly constructed access roads?	
	I(J) HCHage	Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage sites? Are adequate measures considered to protect these sites in accordance with the country's laws?	
	(4) Landscape	Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	
	(5) Ethnic Minorities and Indigenous Peoples	Does the project comply with the country's laws for rights of ethnic minorities and indigenous peoples?  Are considerations given to reduce the impacts on culture and lifestyle of ethnic minorities and indigenous peoples?	

## Environmental Checklist: 24. Forestry Projects (4)

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
5 Others	(1) Impacts during Construction	Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)?  If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce impacts?  If construction activities adversely affect the social environment, are adequate measures considered to reduce impacts?  If necessary, is health and safety education (e.g., traffic safety, public health) provided for project personnel, including workers?	
	(2) Monitoring	Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts?  Are the items, methods and frequencies included in the monitoring program judged to be appropriate?  Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)?  Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?	
6 Note	Reference to Checklist of Other Sectors	Where necessary, pertinent items described in the Agriculture and Livestock Projects, and Irrigation Projects checklists should also be checked.	
	Note on Using Environmental Checklist	If necessary, the impacts to transboundary or global issues should be confirmed (e.g., the project includes factors that may cause problems, such as transboundary waste treatment, acid rain, destruction of the ozone layer, or global warming).	

<sup>1)</sup> Regarding the term "Country's Standards" mentioned in the above table, in the event that environmental standards in the country where the project is located diverge significantly from international standards, appropriate environmental considerations are made, if necessary.

In cases where local environmental regulations are yet to be established in some areas, considerations should be made based on comparisons with appropriate standards of other countries (including Japan' experience).

<sup>2)</sup> Environmental checklist provides general environmental items to be checked. It may be necessary to add or delete an item taking into account the characteristics of the project and the particular circumstances of the country and locality in which it is located.