

## CHECKLIST #2 BUILDING CONSTRUCTION

Construction of buildings, such as schools, including vocational schools, sports facilities, health clinics, community centres, small businesses and workshops (tannery, dyeing, handicraft, and so on).

### A. Questions relating to the construction site

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1. What are the uses and activities on the proposed site of project implementation? What are the existing infrastructures? What is the town planning scheme? What is the legislative context? What is the traffic rate of the site and the proximity of residences? What are the expectations of the local population? Could the project lead to:
  - displacements of the population (immigration, migration or transfer and resettlement);
  - changes in ways of life and/or the loss of territory (for indigenous peoples, unplanned urbanization, a disruption in the organizational structure and means of subsistence of the local population through the introduction of "modern" methods of production without prior analysis, a decrease in food security due to an increase in cash crops or industrial activities, and so on);
  - the accentuation of social inequalities (for example, due to control by industrial entrepreneurs);
  - incompatible uses (industrial area versus residential area, sacred land and so on) and/or social and value conflicts between the various possible land uses and building uses (for example, if the proposed uses are in conflict with cultural and traditional characteristics);
  - problems in supplying water, energy, fuelwood, materials, and other resources and services such as sanitation facilities and electrical equipment;
  - a decrease or an improvement in the quality of life;
  - greater awareness of the importance of a healthy environment;
  - better, more abundant and more accessible goods and services (teaching, medical care, community services, industry, the economy)?
  
1. What types of environment, landscape, flora and fauna are present in the area? What is their specific importance? Are there any bodies of water, wooded areas, slopes, wetlands or other vulnerable sites nearby? Is the area prone to flooding, heavy rainfall, earthquakes and other disasters? What are the soil texture, drainage and topographical features? Is the soil sufficiently stable? Are anti-erosion measures and protective measures against flooding and heavy rainfall necessary to avoid damage to the building and its structures? Has the durability of the building been studied in relation to environmental characteristics? Could the project have an effect on:
  - environments or sites of economic, ecological, cultural, archaeological or historical importance and the natural resources (water, soil, vegetation and so on) they contain;
  - rare or vulnerable species and/or species of economic, cultural or ecological importance (biodiversity)?

### B. Questions relating to building construction

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1. What are the various activities associated with site preparation and construction? Will there be demolition, excavation, levelling, clearing, soil denudation, filling, backfilling or wetland reclamation? Is there a need to build temporary shelter and supply services such as sanitation facilities, wells, water supply systems, access roads, and so on (see the appropriate checklists for these projects)? What are the types, quantities and source of construction materials? How will the materials be conveyed to the site and stored? What are the surface area, height, style and location of the buildings? Could the project lead to:

- changes in, encroachments on and/or the destruction of environments or sites of economic, ecological, cultural, archaeological or historical importance and the natural resources they contain;
- landslides and soil instability;
- erosion of fragile and thin soils, on sloping land or near bodies of water, if trees are to be cut;
- soil compaction or changes in drainage, soil permeability and/or loss of soil fertility;
- nuisances (foul odours, airborne dust, noise, vibrations, traffic), risks of accidents and/or health risks to workers and the local population during site preparation, building construction, and associated transport;
- soil pollution, surface water pollution (as well as groundwater pollution, if there is seepage of contaminated water or pollutants), and air pollution, if there is poor management of construction materials and wastes;
- changes to the visual quality of the landscape (aesthetics) and/or incompatibility with the landscape, architectural style and local architectural customs;
- fair and equitable participation of the local work force, and a positive effect on the economy?

### **C. Questions relating to the building's operational phase**

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1. What activities will be carried out during the operational phase? Is there a possibility of the population increasing in the area as a result of migration? Will this lead to unplanned and spontaneous human settlements? Will there be a greater demand for natural, financial, energy and agricultural resources, and so on? Could the project lead to:
  - a decrease in the quantity and quality of natural resources (water, wood, minerals and so on), if these resources cannot sustain an increase in demand resulting from an increase in population and/or increased extraction of resources for the operational activities of various types of buildings, using harmful methods of extraction;
  - additional pressures on infrastructures and local services;
  - social conflicts or conflicts over ownership rights and land use (especially if an agreement has not been reached among users and recipients and with local authorities, if the marketing system for traditional products and handicrafts is affected, if there are local rivalries, and so on);
  - an increase or decrease in local market prices;
  - socio-economic development that benefits the population and all its specific groups, and a decline in rural outmigration through socio-economic development;
  - a reinvestment of knowledge and profits into the community, and an increase in the skills of the population and all its specific groups (women, children and so on);
  - increased involvement of communities in taking charge of their own development, by monitoring and maintaining the building and its operations?
2. Depending on the use of the building, and the technologies and techniques involved, will pollutants (liquid, solid or gas waste) be used or generated? Could these substances infiltrate or be discharged into surface waters and groundwater, soil, habitats and air? How will they be managed? Are these pollutants associated with nuisances (noise, foul odours, vibrations, dust, smoke, traffic), risks of accidents (transportation, spills, explosions, fires and so on), health risks (health hazards, poisoning, and respiratory and skin problems) for workers, users of the building and the local population? Can the work environment help address these problems? More specifically:
  - will sanitation facilities pollute surface water, groundwater and soil; will organic products, toxic chemicals or radioactive substances, gaseous, liquid and/or solid, be used (for example, in medical and school laboratories, factories, and so on);

- will biological and medical liquid and solid waste be produced (medication, syringes, blood-contaminated linen or bandages, bacterial and viral sources, animal waste, and so on);
- will heavy metals, for example, resulting from laboratory activities and/or processing techniques, be discharged into the environment where they may accumulate and cause pollution;
- will hazardous products (oil, lubricants, batteries, dyes, glue, solvents, acids and so on) be used;
- will cooling waters, soaking waters, or water containing suspended matter, mercury, lead, soaps or other previously mentioned products, and so on, be discharged;
- will there be storage, sorting, reclamation, recycling, treatment, burial or incineration of solid, liquid and gaseous waste/emissions (see appropriate checklist)?