



CIANEA GUIDE  
ON ENVIRONMENTAL ASSESSMENT AND SOUND DESIGN  
FOR COMMUNITY-BASED SMALL SCALE ACTIVITIES

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**GUIDE 1 :: INTRODUCTION AND  
ENVIRONMENTAL MANAGEMENT  
OVERVIEW**



**PRINCIPAL CONTRIBUTORS**

Alfred Balinda, NAPE | Anthony Kariuki, Pact/MWENGO | David Kinyua, USAID/REDSO/ESA  
Douglas Ouma, Pact/MWENGO | Dr. Victor Odenyo, Moi University | Duncan Oyaro, Pact/MWENGO  
Mark Stoughton, Tellus Institute | Tito Kodiaga, Pact/MWENGO | Wes Fisher, Tellus Institute

# **GUIDE 1 :: INTRODUCTION AND ENVIRONMENTAL MANAGEMENT OVERVIEW**

## **What is Environmental Impact Assessment (EIA)?**

EIA is defined as a detailed study of the environmental consequences (impacts) of a proposed course of action, including mitigation of those impacts and monitoring to ensure that mitigation is working. It is an instrument, which makes it possible to introduce at an early stage of the planning and design process, a systematic methodology to help ensure the environmental, social and economic sustainability of development interventions. It is a tried and tested instrument for analyzing the effects of development proposals on the environment and to mitigate their impacts.

An environmental impact assessment should take into consideration direct or indirect effects on the following:

- Bio-physical Environment (water, land, vegetation, animals, atmosphere,) etc.
- Human Welfare
- Socio cultural environment (religion, culture, population, community structures) etc.
- Economic environment

## **General objectives of EIA**

The overall objective of carrying out an Environmental Impact Assessment is to determine the likely impacts of a given project, might have on the environment, propose possible mitigative measures and monitoring. Other objectives include:

- Ensuring that environmental considerations are explicitly addressed and incorporate into the development decision making process
- To anticipate and avoid, minimize or offset the adverse significant biophysical social and other relevant effects of development proposals;
- To protect and sustain the productivity and capacity of natural systems and the ecological processes which maintain their functions and
- To promote development that is sustainable and optimizes resources use and management opportunities

## **Genesis of EIA and its Development Context**

### **Development problems and genesis of Sustainable development**

Environmental Impact Assessment can be defined as: -The process of identifying, predicting, evaluating and mitigating the biophysical social and other relevant effects of development proposals prior to major decisions being taken and commitments made. It is intertwined with sustainable development.

Increasingly Sustainable development has become a necessity. Sustainable development can be defined as meeting the needs of the present without limiting the potential to meet the needs of future generations. Awareness about sustainable development can be traced from a report written in 1987 by Brundtland Commission titled *Our common future*. However the sequence starts much earlier to the UN Conference on the Human Environment (Stockholm, 1972) followed by UNEP and UNCTAD's seminar on Patterns of Resource use, Environment and Development Strategies (1974). IUCN and UN produced World Conservation Strategy in 1980. Subsequent effort has included UN Conference on Environment and Development (Rio- Summit), in 1992, Commission on Sustainable Development (1992), World Conference on Human Rights (1993), Conference on Population and Development (1994), World Summit for Social Development (1995), UN conference on Human Settlements (Habitat II) (1996), Earth Summit + Five (1997), World Summit on Sustainable Development (Johannesburg (2002).

### **Tenets of Sustainable development**

- Ensure renewable resource use where possible
- Work for substitution where resources are not renewable
- Maintain the integrity of wider ecosystem
- Including ecosystem services to communities
- Reduce wastes, recycle materials, efficient use of energy

### **Community Based Small Scale Activities**

Small scale community based projects are defined in this guide as those activities that utilize natural resources for basic and livelihood needs and require little capital, small spatial extent and size, and low technology to operate. Brief description of case examples of community based small scale activities used in the guide include boreholes, charcoal production, fish ponds, pit latrines, brick making, cattle dip, sand harvesting, informal slaughter house, artisan garage, ballast quarrying, woodcarving, among many more.

Traditionally environmental assessments and reviews have targeted large scale infrastructure, agriculture, industrial projects, and large scale mining projects among others. These assessments have been targeted towards determining the probable adverse impacts of the activities on the environment and develop mitigative measures through sound design of projects.

Whereas it is evident that major/large-scale projects are the greatest threat to our environment hence subject to intensive reviews, small scale community based projects can also have significant cumulative adverse impact on the environment. Failures of small scale activities are no less devastating at the local level than failures of large scale projects to which environmental assessments and review techniques have been historically applied. The environmental damage caused by small scale projects which currently constitute the bulk of international development can add to and compound a community's problems.

In this context, although the environmental destruction caused by small scale activities may not be as obvious or dramatic as that caused by large infrastructure projects, small scale projects with careless environmental practices contribute substantially and cumulatively to the slow degradation of environmental and human resources which will imperil future economic and social development.

### **Examples of Impacts of Small Scale Community Based Activities**

1. Pit latrines

A community project to erect pit latrines in a community where domestic water is principally shallow wells, boreholes and surface streams. Seepage from the latrines potentially contaminates the water sources.

2. Small dams and reservoirs

Small dams and reservoirs to provide water for irrigation, water supply and aquaculture, to control floods and to generate micro-hydropower. These may involve relatively low structures (weirs) to divert water to other uses without creating a reservoir. These may involve clearing of vegetation; structures that divert water to other uses may reduce downstream flows with consequent effects on surface and groundwater hydrology, aquatic habits, and water users.

3. Rural water supply and Sanitation  
Small rural water supply project to provide safe, reliable and convenient water supply to a village. These projects have sanitation components as well to prevent contamination and minimize spread of waterborne diseases.
4. Rural access roads  
Rural access roads for enhancing access have substantial economic and social benefits. Roads may involve upgrading existing roads or tracks to improve access to markets, or to services such as health care or schools.
5. Community forestry  
Community forestry for timber and fuel wood production, soil and water conservation, and micro-watershed management. They may also involve tree nurseries or elements of agro forestry that yield forest products besides wood (e.g. fruits, nuts)
6. Health Projects (Clinics, dispensaries, Centers)  
Health projects often consist of a combination of activities, some of which have an environmental risk and some of which do not. Capacity building, education, training and awareness activities have no environmental risk. But activities such as construction of health centers and disposal of healthcare waste pose environmental risks that should be considered in project planning. The issues associated with construction of health care facilities are similar to those for other building construction. Any project providing health care facilities (dispensaries, clinics etc) should always provide for disposal of healthcare waste, even if funds are limited. Health care waste can pose serious environmental risks.
7. Disposal of healthcare waste  
Health care waste is hazardous and can poison people, animals and wildlife. It can consist of infectious material, pathological material, chemicals, pharmaceuticals, sharps, blood and other infections body fluids, stools from patients with cholera or other forms of diarrhoea, and other forms of waste. If funds are scarce, simple low-cost methods can be used which greatly reduce the environmental risk such as open air burning, simple brick or drum incinerators, or safe burying.

## **Definition of small scale activities by different development assistance agencies**

### **USAID/ENCAP**

In principle USAID does not provide development assistance (Fund) to large scale development projects. The USAID/ENCAP training manual provides a set of development activities which in essence comprise USAID understanding of small scale projects. (See ENCAP),

USAID also tags the amount of funding ploughed into a project to determine its scale. It has a certain ceiling of funding used as a bearing scale for small scale activities. As such projects requiring funding beyond the ceiling stated automatically become large scale projects.

### **World Bank**

World Bank in their operational manual has categorized their projects into different sets namely A, B, C, and D respectively. Projects under category C would likely fall under small scale activities as they are stated not to require EIA.

### **World Bank's Community Driven Development (CDD)**

Community Driven Development (CDD) Projects are defined by World Bank broadly as the process of giving control of development decisions and resources to community groups. Communities can be geographical entities, such as urban neighborhoods or villages, or groups with common interests, such as water user associations, parent-teacher associations, herders, members of a micro credit society, or women s groups. Once formed, these groups typically work in partnership with support organizations and service providers local governments, the private sector, or NGOs to develop and implement projects that meet their immediate priorities in education, health, sanitation, transportation, resource management, economic activities, and other livelihood issues.

This is a relatively new concept in World Bank that is getting due prominence and is closely linked to the safeguards policies of the institution. These types of projects can be referred to as small scale community based activities.

### **Canadian International Development Agency (CIDA)**

Defines small scale community based activities as community development projects found in both urban and rural areas, and initiated by and controlled by local communities. These are projects that tend to instill confidence in communities and respond directly to the needs of their members.

### **UNEP**

Has no definition of small scale activities. However, in the screening list, projects classified as (A) require no environmental analysis. It may be deduced that such projects then would qualify for small scale activities.

## Community Based Small Scale Activities

Types of small scale activities community based small scale activities existing in the training guide.

### Activities Existing in Training Manuals (List not exhaustive)

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- |   |  |
|---|--|
| <input type="checkbox"/> Fish ponds   | <input type="checkbox"/> Small dams and reservoirs |
| <input type="checkbox"/> Small micro-enterprises                                    | <input type="checkbox"/> Small scale abattoirs     |
| <input type="checkbox"/> Farm woodlots  | <input type="checkbox"/> Poultry farming           |
| <input type="checkbox"/> Springs and catchments protection                          | <input type="checkbox"/> Motor garage              |
| <input type="checkbox"/> Settlements( planned and unplanned)                        | <input type="checkbox"/> Ballast Harvesting        |
| <input type="checkbox"/> Small scale mining   | <input type="checkbox"/> Charcoal burning          |
| <input type="checkbox"/> Shallow wells, boreholes, small earth dams, and water pans | <input type="checkbox"/> Earth brick Making        |
| <input type="checkbox"/> Leather processing   | <input type="checkbox"/> Pit latrines              |
| <input type="checkbox"/> Health centers   | <input type="checkbox"/> Firewood harvesting       |
| <input type="checkbox"/> Rural access roads   | <input type="checkbox"/> Woodcarving               |
| <input type="checkbox"/> Fertilizer application                                     | <input type="checkbox"/> Groundwater harvesting    |
| <input type="checkbox"/> Building and construction                                  | <input type="checkbox"/> Stone quarrying           |
| <input type="checkbox"/> Metal work   | <input type="checkbox"/> Micro-enterprise credit   |

### Activities Not reflected in Training Manuals (List not exhaustive)

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- Maize milling
- Car wash
- Sand harvesting
- Jua-kali* (informal artisanal enterprises)
- Informal slaughter houses
- Cattle track route
- Fish sheds

Based on the above definitions, small scale activities according to different development agencies may mean something different from the traditional small-scale activities that local communities are engaged in. Projects at household level may not qualify to be called small-scale by these manuals.

Those minor community activities that are considered insignificant on the environment are what are defined as small-scale in this manual. These activities are normally ignored as having no impact on the environment yet their cumulative effects are worth considering. Therefore this manual attempts to define the impacts of 'micro' small scale activities that have potential to affect the environment but has for along time been ignored by donor agencies and legislations.

### **What is a Community?**

A community may be defined by geographic boundaries of a region, a municipality, or a neighborhood, as well as specific social characteristics that members have in common, such as resources, religious, political, or ethnic affiliation.

Communities can be geographical entities, such as urban neighborhoods or villages, or groups with common interests, such as water user associations, parent-teacher associations, herders, members of a micro credit society, or women s groups. Once formed, these groups typically work in partnership with support organizations and service providers local governments, the private sector, or NGOs to develop and implement projects that meet their immediate priorities in education, health, sanitation, transportation, resource management, economic activities, and other livelihood issues. Hence small scale community based activities are micro small scale activities.

The environment plays a prominent role in the well being of every community whether small or large, rural or urban. A vibrant environment contributes to a healthier population and a more robust economy. Likewise, the environment is itself influenced by economic and social factors.

## **Community Dynamics**

Local communities rely heavily on their indigenous knowledge to manage the environment. They believe in it, thus has been adequate for their survival. The close interaction between communities and their environment

## **Community Based Organizations**

Community organizations have been recognized as key to attaining sustainable livelihoods. Consequently, decentralized management systems for the environment are needed. Community's meaningful participation is sought not only in the environmental matters, but also, on other issues such as good governance, conflict resolution, peace initiatives, food security etc.

Community organizations are diverse and fall within; learning and research institutions, religious organizations, NGOs, youth groups, welfare associations and self help groups, women groups and philanthropic organizations. These organizations offer critical avenues for promoting environmental conservation. Thus environmentalists should target them and ensure that environmental concerns are mainstreamed in their activities. The foregoing task of an environmentalist is to show the linkages between people's activities and their environmental problems on one hand, and the linkages between practices that promote sustainable livelihood with their needs on the other hand. Moreover, these community organizations cherish their independence, security of tenure and respect for their cultural values and norms.

## **Community Development and Environment**

Community development projects play important role in development process. These small projects, which are found in both rural and urban areas, are initiated and controlled by local communities and organizations. They tend to instill confidence in communities and respond directly to the needs of their members (Dean Pallen 1996)

In rural areas, ecological problems can cause suffering to the community because the social fabric of rural people is dependent on viable ecosystems. The major environmental issues in urban settings revolve around land use and transportation, the quality and availability of water and sanitation services, air quality, solid and liquid waste management, as well as noise and the aesthetic role of the environment.

Many people believe that small community-based projects do not harm the environment, yet environmental damage caused by small-scale projects (e.g. micro-enterprises, water, sanitation, irrigation, agriculture, animal husbandry and construction projects) can add to and compound a community problems.