

# PROFORMA FOR ENVIRONMENTAL APPRAISAL OF NEW TOWNS

## I Preliminary:

Name of New Town:

Location..... Tehsil/ Subdivision.....District.....State.....

Access by rail.....By road.....By air.....

Agency Establishing the New Town.....

Purpose which the New Town will serve:

## II. Background Information

State here why it has been found necessary to establish the new town, the manner in which it will serve the Industry/activity, the volume of investment contemplated reasons for selecting this location, etc.

## III. Existing State of Environment

### A. Situation: (Regional)

- General Topography: Flat/Rolling/Sloping/Hilly/Coastal/Delta/Others specify general features of land: including vegetation and presence of endangered species, if any, fauna, water bodies, flood prone areas and flood planes.
- Geological: base, soils climate and seismological trait, fault line distance if any.
- Transport Systems: Road, Rail, Air and water
- Land Use: Agriculture, Deserts, Swamps, etc.
- Settlement Status in the region with functions.
- Industrial Development in the region.
- Minerals and Mining Development in the Region (for towns near to mines)
- Special features of Interest: such as Tourist Spots, Natural Monuments, Archaeological Sites, Religious places and places of other interests.
- Environmental Problems: faced in the region, such as water and air pollution, land spoilation by floods, salination or other causes, desertification, posts, endemic diseases, toxic chemicals, etc.

### B. Site (Local and immediate vicinity – within 7 km)

1. General Description: Topography, drainage, vegetation, ground conditions, soil, any fault or other geological observations, etc.
2. Existing Land Use: including agriculture, non-agricultural uses, forests (wooden scrub, grass land etc.) barren land or wastes, deserts, water bodies and water courses, drainage courses, urban and rural settlements, highways and other roads, places of tourist historic, archaeological and religious interests etc.

3. Natural resources
  - Water: ground water, water table, yield, quality of water (biological, chemical, physical), surface water, location source and yield, patterns of present utilization of water resources for agriculture, human consumption, industry, etc.
  - Drainage patterns: Drainage flows, possible flooding, flood plains, erosion, etc. Site meteorological data, (if available)
  - Flora: Common trees, shrubs, rarer species and other vegetation, crops, cropping pattern, irrigation systems, forest (type, area, forest products, and forest management patterns)
  - Fauna: Domestic animals, type, number, pattern of management, rare species, Wildlife land animals, aquatic life and birdlife.
  - Energy: Production and consumption patterns of coal, firewood, oil, gas, electricity and non-conventional energy resources.
4. Human Resources:
  - Population rural-urban, growth, settlement pattern and growth, functional differentiation of settlements.
  - Economic and social conditions, employment, skills, income levels, life styles, traditions and customs.
  - Health: Endemic diseases, Mortality, Epidemics.
- C Environmental assessment of the situation and site in regard to its capability to receive the proposed new development, specifically identifying the limits.

#### **IV. Details of New Town**

1. Provide a Key map showing the location of the New Town
2. Area of the New Town.
3. Population (Dwelling units).
4. Township density:
  - (a) gross density
  - (b) net density
5. Provide a land use map of the proposed town giving the break up of area and percentages under different land use types
6. Total number of houses to be constructed and percentage of the demand which these will satisfy.
7. House types-Areas/Income levels.
8. Attach master plan for the New Town, indicating sectors/neighborhoods with densities/population and amenities provided.

**V. Details of cities provided in the New Town**

Educational: No. Areas  
a. Nursery school  
b. Primary school  
c. Higher secondary school  
d. College  
e. Technical/Vocational Training Institutes

Health No. Areas  
a. Dispensaries  
b. Health Clinics  
c. Nursing Homes (No. of beds)

Parks, Playgrounds: No. Areas  
a. Totlots  
b. Cluster Open spaces  
c. Neighborhood open spaces.  
d. Sector open spaces  
e. Open spaces at town level

Commercial No of shops Areas  
a. Convenient shops  
b. Shopping Centers  
c. Central Business District

Other facilities No  
a. Post Office  
b. Bank  
c. Telephone Booth  
d. Milk Booth  
e. Police Station  
f. Any other, specify

**Infrastructural Facilities:**

**Transport**

- a. Mode of travel from residence to work place
- b. Mode of travel to surrounding areas
- c. Mode of travel within the town.

**Water Supply:**

- a. Source of water supply and quantities to be drawn.
- b. Type of treatment, if any.
- c. Continuous/Intermittent supply
- d. Storage facility
- e. Details of Distribution System

## Sewage

- a. Mode of collection of
- b. Domestic effluent
  - Surface drains
  - Underground sewage
  - System and capacity
- c. Mode of treatment
  - Septic tank and filters and capacity
  - Biological treatment and capacity
- d. Mode of disposal
  - Soak pits
  - Disposal into water bodies, specify
  - Use of cultivation

## Solid Wastes:

- estimated quantity and types of solid wastage
- Mode of collection and disposal
- Recycling to be instituted, if any.

## Power System:

- Sources of Power and Supply Capability
- Distribution System
- Alternate supply for essential services when main supply fails

## **VI. Phase wise development of the New Town**

1. Provide a phasewise breakup of area, population and facilities planned.
2. Indicate the time lag between the phases
3. Densities at different phases of town development
4. Future development envisaged

## **VII. Impact of the new Town on Surrounding Areas**

1. Proposed land use plan for peripheral area, if any
2. Is there a buffer zone planned around the new town? Details thereof.
3. What are the activities that are likely to come up in the surrounding areas relating to the demand of the proposed new town during the construction phase (stone quarrying, manufacturing of lime, bricks, extraction of timber, etc)
4. Agencies and the measures proposed to regulate development in the periphery.

State briefly changes anticipated in the quality and quantity of natural resources after town has been established:

- Resources
- Animal/Aquatic life
- Surface/Ground Water

Sand/ Soil

Indicate likely changes on:

- Crops/ cropping pattern
- Existing settlement
- Tourist spots

Indicate the likely changes that may be brought out by the New Town on:

- Literacy
- Employment
- Sanitation
- Income levels
- Traditional jobs
- House hold industries

Impact of the New Town on the Energy Resources:

- Firewood
- Fossil fuels
- Electricity
- Others

Impact on Transport Linkages:

- a. Road
- b. Rail
- c. Water
- d. Air
- e. Others

Is the new town population likely to utilize any of the facilities in the surrounding region?

Specify the extent of use in each case:

- a. Education
- b. Health
- c. Transport
- d. Commerce
- e. Recreation
- f. Others

Are there any mining/industrial activities being/to be carried out by the project proponents in the surrounding region?

- a. Location with respect to the new town.
- b. Raw materials used –quantities involved, storage and transport
- c. Product quantity involved, storage and transport
- d. Industrial wastes –description and quantity
- e. Treatment of wastes
- f. Method of disposal

## **VII Environmental Characteristics of New Town**

1. Proposed institutional set up
  - a. Management of the town –  
Name of the authority and functions.
  - b. Association of residents, if any
2. Socio-cultural aspects:
  - a. Existing population at the site, if any, and variation in that population during the last decade.
  - b. Projected population in the next two decades.
  - c. Age-sex distribution (projected)
  - d. Percentage of working population (planned)
  - e. Workers distribution in formal/informal sectors (projected)
  - f. Areas the neighborhood/sectors divided according to class, ethnic, religion, occupation, etc.
  - g. If they are mixed, type of mixing.
  - h. Relationship between family sizes and dwelling sizes.
  - i. Tenure status
  - j. No of families to be used in self-owned, rented or Government/Company accommodation
  - k. Demand and Supply of housing for different income groups

## **VIII Environmental Aspects of different parts of the New Town**

1. Residential
  - i. Type of development - low rise/high rise/medium rise/mixed. Specify the number of storeys in each case.
  - ii. Population in each of the neighborhood sectors.
  - iii. Density, plot size, floor area ration, site coverage
  - iv. Development controls , if any
2. Commercial
  - i. Hierarchy of commercial activities and approximate population served by each.
  - ii. Types and numbers of commercial establishments
  - iii. Extent of commercial activities in the formal sector/informal sector
3. Amenities  
Provide the norms adopted for each of the facilities
  - i. Education:
    - a. Nursery school
    - b. Primary school
    - c. Secondary school
    - d. College

- ii. Medical:
  - a. No. of doctors
  - b. Para medical staff
  - c. No of dispensaries and population served
  - d. Bed strength
  - e. Bio-medical waste management
  
- iii. Recreational:
  - a. Area and percentage of open spaces under recreation
  - b. Cinema Hall
  - c. Swimming pools
  - d. Water-based recreation
  - e. Others

#### Utilities

- i. Supply and Distribution of :
  - a. Electricity
  - b. Water Supply:
    - (a) Whether separate supply system exists for drinking water, domestic use, gardening, etc.
    - (b) Quantity of water supply (Mention separately, if quality varies according to usage) and specify details of treatment
    - (c) Per capita water proposed in liters/day
      - a. Are there any sources for water consumption other than main supply, hand pumps, streams, etc.
      - b. Schemes for future needs, if any
- ii. Sewerage/drainage
  - (a) What are the proposed treatments before disposal (centralized/de-centralized)
  - (b) Quality of effluents before disposal
    - a. Physical
    - b. Chemical
    - c. Biological
    - d. Pathogenic
  - (c) Method of disposal
- iii. Storms water drainage
  - a. Collection
  - b. Disposal
  - c. Treatment, if any

#### 5. Water Harvesting and Recharging Scheme

#### 6. Transportation

- i. Mode of Transport
- ii. Net work
- iii. Area under roads/pedestrian movement

- iv. Parking facilities in public areas and with residences.

## 7 Landscaping /Tree Plantation

- (i) Indicate the approximate numbers and types of trees to be planted in:
  - a. Residential plots
  - b. Parks and gardens
  - c. Along roads and pedestrian movement
  - d. In public areas
- ii. Other special features of landscape, if any
- iii. Attach landscape plan if prepared

## **IX Other information**

- (i) Measures proposed for construction labour – their living requirement, health and hygienic conditions, sewage treatment and disposal arrangements etc.
- (ii) Measures proposed to counter encroachments in and near the new town.
- (iii) Housing of construction workers in the different construction phases and the amenities provided for them. What is the future of such Housing?
- (iv) How are the service population proposed to be accommodated in the new town? What percentage of service population has been catered to?
- (v) How are the informal sector population proposed to be accommodated in the New Town in regard to their living and working.
- (vi) Does the New Town intend to provide services and amenities (ex Education, Health, Recreation, etc) to population living in the surrounding areas? Specify the type of services and approximate number of people likely to utilize these services.
- (vii) How are the running costs of the town proposed to be met? Mention the approximate amount and percentage of total - by residents, town authorities and others
- (viii) Proposed employment prospects within the New Town to dependents of the employees other than jobs in the agency building the New Town.
- (ix) Any other relevant information

Describe in detail the manner in which the promoters of new town will interact with the township management, township population and township amenities on a day-to-day and month-to-month basis.



## CHECKLIST OF ENCLOSURES

1. Land purchase agreement
2. Landuse/ Zoning particulars-relevant portions from the prevailing local Regulations
3. Cost estimates inclusive of land cost
4. Landscape plans with proposed tree plantation
5. Water balance statement
6. Rainwater harvesting plan
7. Storm water drainage
8. Sewage treatment plant-details (Common/De-centralized) with a write up
10. Fire protection measures & approvals obtained
11. Proceedings of Environmental Public Hearing also provide response to points raised in the public hearing
12. Approval of competent authorities in case of conversion of agricultural land, change of landuse.
13. Construction schedule (CPM/PERT chart)
14. Approval from special bodies (Financial institutions etc.)
15. Approvals if applicable from ASI, Civil Aviation, ecologically sensitive areas, coastal development regulations, etc
16. Solid waste collection, treatment, storage, transportation and disposal plan
17. Vehicle parking and management
18. Environment Impact Assessment Study (including Executive summary)
19. Schedule-II Application Form for EC
20. Questionnaire for New Towns

*May be addressed to:*

**Shri R.Chandramohan,  
Joint Secretary(CCI-II),  
Ministry of Environment & Forests,  
Paryavaran Bhawan,C.G.O Complex,  
Lodi Road,  
New Delhi 110003  
Telefax:24362551    email:- chandramohan@nic.in**

**Shri S.Shiva Kumar,  
Director,IA Division,  
Ministry of Environment & Forests,  
C.G.O.Complex, Lodi Road,  
New Delhi 110003  
Telefax:24360695    email:- biossk@menf.delhi.nic.in**