

# A Concept Note on Integrated Environment Management

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Integrated Environment management (IEM) is designed to ensure that the environmental consequences of development proposals are understood and adequately considered in the planning process. The term environmental is used in its broad sense, encompassing biophysical and Socio-economic components. The purpose of IEM is to resolve or integrate any negative impacts and to enhance positive aspects of development proposals. (Department of Environmental Affairs 1992)

The definition of IEM according to the Department of Environmental Affairs and tourism, (1998) is: "A philosophy which prescribes a code of practice for ensuring that environmental consideration are fully integrated into all stages of the development process on order to achieve a desirable balance between conservation and development." The vision for IEM, according to the Department of Environmental Affairs and Tourism, (1998), is to lay the foundation for environmentally sustainable development based on integrated and holistic environmental management practices and process.

## The Basic Principles of IEM

- ✓ (Informed decision – Making
- ✓ Accountability for information on which decisions are taken.
- ✓ Accountability for decisions taken.
- ✓ A broad meaning given to the term environment (i.e, one that includes physical, biological, social, economic, cultural, historical & political component)
- ✓ An open, participatory approach in the planning of proposals.
- ✓ Consultation with interested and affected parties.
- ✓ Due consideration of alternative options.

- ✓ An attempt to mitigate negative impacts and enhance positive aspect of proposals.

## Integrated Environmental management

Sustainable urban development requires an integrated approach and the thematic strategy advocates that national and regional authorities support municipalities in achieving more integrated management at the local level. This approach is supported by both the Council and the European parliament. Integrated approaches include long term strategic visions and link different policies at different administrative levels to ensure coherency. Integrated environment Management also means tackling related issues together such as urban management and governance, integrated spatial planning, economic wellbeing and competitiveness, social inclusion, and environmental stewardship. For example the implementation of community law on urban air quality not only has implications for pollution control and traffic management, but also requires combined effort to address city and town center management, spatial planning and urban design, health impacts and social justice (taking account of the different social group's affected and disproportionate burdens of environment impacts)

## Benefits of Environment Management System

- ✓ Improved organization of operational environment protection.
- ✓ Legal certainty by way of systematic identification and evaluation of laws and constraints cost savings as a result of systematics and pro-active through and action.
- ✓ Improved environmental performance of organization to include the environmental quality of products and services.

- ✓ Increased confidence of customers, authorities banks, insurance companies and the public in the organization environmental performance.
- ✓ Employee identification and motivation
- ✓ Enhanced image & competitive ability.

## Why Integrated Environmental Management (IEM)

Municipal authorities are responsible for a range of different function. These are performed or managed by many different part of their organizations, after with limited resources. Integrated environment management (IEM) after to improve the consistency and coherence between different policy from an environmental perspective and a means to maximize the effectiveness of those policies within available budgets. It can also offer greater transparency in policy development and encourage a greater public insolvent and acceptance. Integrated Environmental Management is entirely consistent with the Lisbon Strategy for innovation, competitiveness, growth and employment and experience demonstrates that establishing a system of IEM can help to promote the objectives of sustainability. Possible benefits of an IEM system may include some or all of the following.

Achieve compliance with the existing environmental legislation efficiently and cost effectively.

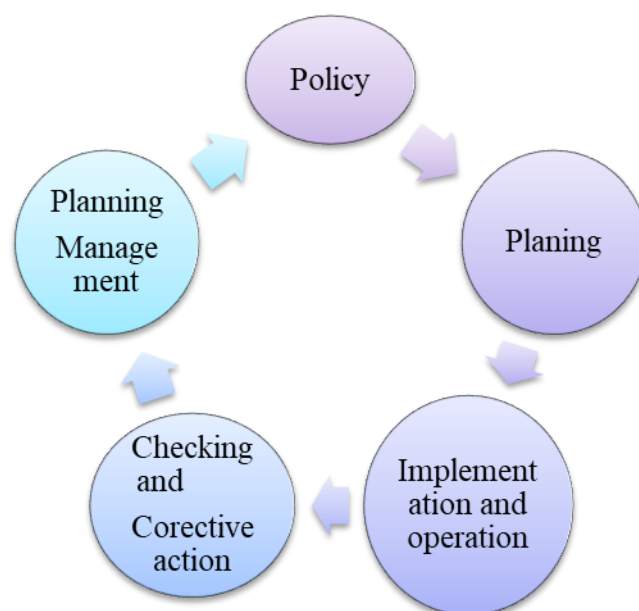
- ✓ Improved cost - effectiveness of different policy measures.
- ✓ Improved reputation/ fame and “Competitiveness” of the city (local authority)
- ✓ Enhanced environmental awareness of citizens, local authority staff and stakeholders.
- ✓ Enhanced partnership and communication between the citizens and the leaders of the city, creating networks.
- ✓ Cost savings through reduced resources and utilities, improving economic competitiveness through cutting cost.
- ✓ Harmonization of reporting responsibilities.
- ✓ Contribute to national and European objectives on the environment and Lisbon

strategy to make Europe a more attractive place to work and invest’.

## Integrated Environmental Plan

### The IDP and the Integrated Environmental Plan

The IDP is a strategic planning instrument which guides and informs all planning, budgeting, management and decision making in municipality. According to the Municipal system Act (32 of 2000), all municipalities (i.e. Metro District Municipalities and Local Municipalities) have to undertake an integrated development planning process to produce integrated development plans (IDPs). As the IDP is a legislative requirement it has a legal status and it supersedes all other plans that guide development at local government level.



## Local Environmental Management Issues

Apart from the potential environment issues from the manage IDP, the municipality recently completed its first state of the Environment Report as well as a Environmental legal compliance Audit of its functions and facilities the key priority areas and identified issues within these document were summarized and grouped according to the frame work for environment management local authority level during a workshop held on 1<sup>st</sup> April 2004 with senior Management of MLM.

### Issues to cover

Beyond the key elements it is important to demonstrate what issues could be addressed by an

integrated approach. Based upon available information and experience to date, an IEM system could tackle some or all of the following topics of relevance to sustainable urban development. The list is not exhaustive but illustrates what others have included in their IEM planning.

- ✓ Improving water quality
- ✓ Improving waste management
- ✓ Increasing energy efficiency and use of renewable energy
- ✓ Reducing greenhouse gas emission
- ✓ Improving outdoor air quality
- ✓ Improving urban transport
- ✓ Preventing and reducing noise and protecting quiet areas
- ✓ Better local governance
- ✓ Better land use and planning
- ✓ Increasing biodiversity and green space
- ✓ Reducing environmental risks

### **Implementation Programmes**

The implementation programmes include the following

#### **(1) Community Based planning and Management Programme (CBPP)**

This programme will aim to promote and co-ordinate community ownership of their environmental resources.

#### **(2) Management Programme (MANP)**

This programme will aim constantly manage and control environmental impacts through strategic studies.

#### **(3) Public Awareness and Training Programme (PATP)**

This programme will aim to create awareness the general public regarding various environmental issues as well as ensure training for bath the community.

#### **(4) Standard and Guidelines Programme (STGP)**

This programme will aim to provide standards, guideline and or manuals for any procedural activities to address the environmental issues.

#### **(5) Law enforcement Programme (LAWP)**

This programme will aim to formulate and enforce such policy positions, by laws and law enforcement procedures as is required to address the identified environmental issues.

#### **(6) Organization Structuring Programme (ORGP)**

This Programme will aim to create effective coordinating structures to address the various environmental issues.

#### **(7) Equipment and Technology Programme (EQPP)**

This Programme aim to upgrade and replace municipal equipment and Technology which are not resources efficient or which might have negative impacts on the environment.

#### **(8) Conservation Programme (CONP)**

Promote, co-ordinate manage the conservation of resources within the municipal area.

#### **(9) Rehabilitation programme (RHBP)**

Promote, co-ordinate and manage the rehabilitation of area which have been degraded within the municipal area.

Agriculture plays a vital role in the Indian economy, employing a significant portion of the population and contributing to food security and rural development. In recent years, the emergence of Agri-entrepreneurs has brought about a transformative change in the agricultural sector. This paper explores the development of agriculture in India through the contributions of Agri-entrepreneurs and highlights their role in driving innovation, technology adoption, and sustainable practices.

### **Empowering Farmers**

Agri-entrepreneurs have empowered farmers by bridging the gap between traditional farming practices and modern techniques. They provide farmers with access to advanced technologies, improved farming methods, and quality inputs such as seeds, fertilizers, and machinery. By promoting knowledge-sharing and skill development, Agri-entrepreneurs help farmers enhance their productivity and profitability, ultimately leading to the socio-economic development of rural communities.

### **Technological Advancements**

Agri-entrepreneurs have been at the forefront of integrating technology into agriculture. They have leveraged innovations like precision farming, IoT (Internet of Things), data analytics, and automation to optimize resource utilization, monitor crop health, and enhance overall farm management. These technological advancements have led to increased efficiency, reduced wastage, and improved crop yields. Agri-entrepreneurs have played a pivotal role in bringing such cutting-edge solutions to the doorstep of Indian farmers.

### Market Linkages

One of the significant challenges faced by farmers in India is the lack of direct market access. Agri-entrepreneurs have addressed this issue by establishing direct market linkages between farmers and consumers, eliminating intermediaries and ensuring fair prices for agricultural produce. They have created platforms for farmers to sell their products directly to consumers, hotels, restaurants, and export markets. This not only increases farmers' incomes but also ensures the availability of fresh and quality produce to consumers.

### Sustainable Agriculture Practices

Agri-entrepreneurs are driving the adoption of sustainable agriculture practices in India. They promote organic farming, crop diversification, water conservation, and efficient use of resources. Through education and training programs, they create awareness about the importance of environmental stewardship and the long-term benefits of sustainable practices. Agri-entrepreneurs also encourage the use of renewable energy sources, such as solar-powered irrigation systems, to reduce dependence on fossil fuels and mitigate the environmental impact of agriculture.

### Start-up Ecosystem

The rise of agri-entrepreneurs has contributed to the growth of a vibrant start-up ecosystem in the agricultural sector. Entrepreneurial ventures focusing on agri-tech, farm management, agricultural logistics, and value addition have proliferated in India. These start-ups attract investment, generate employment opportunities, and foster innovation. The government and various organizations have also launched

initiatives and incubation centres to support agri-entrepreneurs, providing them with funding, mentorship, and a conducive environment to thrive.

### Women Empowerment

Agri-entrepreneurship has emerged as a pathway for women's empowerment in rural areas. Women-led agri-enterprises are providing employment opportunities and financial independence to women. By promoting women's participation in agricultural activities, agri-entrepreneurs are breaking gender barriers and challenging traditional norms. The increased involvement of women in agriculture not only boosts the sector's productivity but also enhances gender equality and social development.

### Policy Reforms and Government Support

Recognizing the significance of agri-entrepreneurship in agricultural development, the Indian government has implemented policy reforms and provided support to encourage entrepreneurship in the sector. Initiatives like the Atam nirbhar Bharat Abhiyan and the Start-up India campaign have created a favourable environment for agri-entrepreneurs to flourish. The government has introduced schemes for easy access to credit, subsidies, research and development grants, and infrastructure development, enabling agri-entrepreneurs to overcome challenges and scale their operations.

### Conclusion

Agri-entrepreneurs have emerged as catalysts of change, revolutionizing the agriculture sector in India. Their contributions in empowering farmers, adopting technology, creating market linkages, promoting sustainable practices, and fostering a thriving start-up ecosystem have had a profound impact on agricultural development. The combined efforts of agri-entrepreneurs, government support, and policy reforms are paving the way for a more resilient, productive, and sustainable agriculture sector in India. It is imperative to continue nurturing and promoting agri-entrepreneurship to achieve long-term agricultural growth, rural prosperity, and food security.

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