

INTEGRATING ENVIRONMENTAL ASSESSMENT IN THE PLANNING PROCESS IN EGYPT

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Abstract

Keywords:

Environmental Assessments (EA), PPP (Policy, Plan, Program), SEA, and planning strategies

1. Introduction

In response to the loss of natural resources in the world, protecting the environment became a vital issue in the last twenty years. This means that it is vital to consider the environment in all development activities that man is conducting on Earth.

This requires making the principles of sustainable development an integral part of all policies, programs and plans. This also implies that environmental issues should be considered when making decisions as much economic and social issues are considered. Strategic Environmental Assessment (SEA) is the most promising way to make this happen. (OCED, 2006)

In Egypt Environmental Assessments (EA) has developed rapidly in the last few years. Environmental Awareness has also increased in the public arena. As a result of this public Awareness many projects had been reconsidered before implementation as a response of the public pressure, and in some cases these projects have been put to halt. One of these latest projects was the petrochemical factory ‘‘Agrium’’ in the governorate of Damietta. Due to public pressure it will be relocated somewhere else because of the strong local opposition to the project; despite the presence of an EIS held by the project initiators and approved by the Egyptian Environmental Affairs Agency (EEAA)¹.

This case is expected to rise from time to time in Egypt because there is no legalised or even systematic approach to handle environmental assessment when preparing Policies, Program and Strategic Planning in Egypt. According to the Egyptian environmental law only projects and buildings must be checked or the need of an EIA. This is to be followed with the regular building permits. There is no clear reference in the environmental law to the environmental assessment of plans, program or strategic planning.

1 The Egyptian Environmental Affairs Agency (EEAA): The Egyptian Environmental Affairs Agency (EEAA) is the central institution involved in environmental protection and co-ordination in Egypt. EEAA, it operates under the Ministry of Environment under Laws No. 4/94 and No. 102/83.

The cumulative impact is another important aspect that does not seem to have been given much attention. As a result, allocation of uses in Egypt came without calculating the carrying capacity of the natural environment. The cumulative impacts of industrial uses, for example, should be a main aspect when evaluating the impact of a new industrial facility. This is not always the case and in many cases left to subjective judgement of the evaluator.

Having portrayed the above situation in Egypt, this paper aims at exploring the current practice of environmental assessments studies in Egypt and emphasizing how the environmental impact assessment processes could be integrated at an early stage of the planning process in Egypt. This should hold a higher probability for cleaner environments and achieve goals of sustainability Egypt.

2. Environmental Studies in Egypt

Environmental studies in Egypt have been carried out mainly in three professional fields. The first is the architectural design where environment is considered a component of the design. The architectural artifact has to respond to the environmental conditions to create a more suitable living condition as well as reducing energy consumption.

The second is in the urban and rural planning, where the environment is reduced to the natural environment. Almost all physical planning projects include section on the environmental studies. However, these studies are carried out as an inventory of the natural environment conditions of the site and description of the natural characteristics of the site, which will have an impact on the planning like description of wind direction, temperature, north direction, contour of the land and other related natural data. The opposite, i.e. impact of the plan on the environment has not been strongly considered.

The Third is the Environmental Impact Assessment which is performed for new establishments or projects and for expansions or renovations of existing establishments according to the Law for the Environment (Law no. 4 of 1994) (EEAA, 2008)

The purpose of EIA is to ensure the protection and conservation of the environment and natural resources including human health aspects against uncontrolled development. The long-term objective is to ensure a sustainable development that meets present needs without compromising future generations' ability to meet their own needs. Guidelines for EIA are currently available on eight sectors and the assessment of urban development is one of them. (EEAA, 2008)

There is also a specific EIA guideline for Urban Development project, and this assessment is carried on the following levels of projects;

- The change in the existing use of an establishment within the urban area and the introduction of new activities.
- The new cities established outside the existing urban boundaries.
- Tourist zones in areas of special nature.
- Extensions of existing areas.

3. Rethinking Environmental Studies in Egypt

The ongoing development in Egypt threatens the safety of many of the natural resources. The ongoing conflicts between aims of development and aims of preserving the environment in Egypt raise many questions about the feasibility of current impact assessment at the level of projects. It therefore points to the need to start environmental studies at the strategic level.

Egypt is undergoing rapid industrialization, urbanization and population growth, thus environmental problems are on the increase. Although Environmental Impact Assessment (EIA) has been applied to individual projects in Egypt since 1994, natural environment has continued to be negatively affected because of human activities. Today, parallel to the developments in the world, it has been discussed that it is necessary to strengthen project-level Environmental Assessment (EA) and to introduce the Strategic Environmental Assessment (SEA). Still, till now there is no mention to the environmental assessment at the high levels (plans, programs and policy).

A lot of Discussions and preparations have started about regulation which provides the legal and institutional framework for SEA in The Ministry of Environment and GOPP (CEIAC, 2008). However, since the scientific approach into the subject is recently introduced in Egypt, it will take time to answer the questions of how and in which fields it should be practiced.

To start answering these questions, the principles of sustainable development should be an integral part of the PPPs. the environment must be considered when making decisions, just as considering economic and social issues. SEA is the most efficient way to make this happen. SEA helps decision makers reach a better understanding of how environmental, social and economic considerations fit together. Without that understanding, there is a risk of turning today's development successes into tomorrow's environmental challenges. In short, SEA helps decision makers think through forecasting the consequences of their actions.

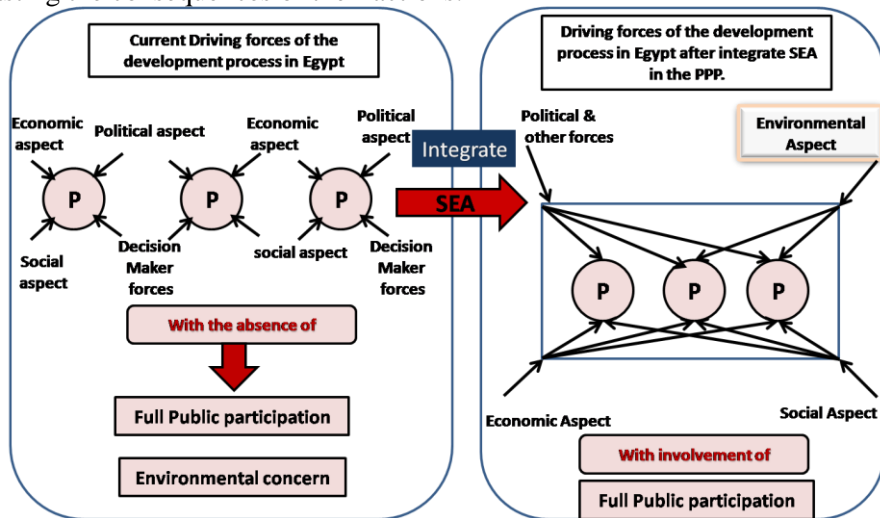


Figure (1): Current driving forces of the development process in Egypt and the proposed model

with the integration of SEA. Source: The Authors

Generally, there are many driving forces governing the development process in Egypt through the PPPs. Unfortunately, environmental issue is not one of these driving forces until now. There is a negligence of the role of public hearing and participation through most of this decision making process.

Lack of transparency and public participation along the engagement of other political forces helped in the ongoing deterioration of Egyptian environment. Despite all the efforts being made many projects in Egypt are yet being established despite their apparent impact on the environment. Over and above, projects come at a later stage after important decisions were taken at the regional level without sufficient environmental assessments on the policy level.

4. Planning process in Egypt

The planning levels in Egypt start at the National Development Plan (Five-Year Development Plan) then it cascades down to the rest of development plans as shown in the next figure. Egypt inaugurated its first five-year development program in 1960, but due to wars this development plans stopped and replaced with annual plans. Starting from 1982 Egyptian government started to make the five-year development plans again.

These plans are mandatory for public investments and guiding principles for private investments. They have a quality which guides and sets objectives for other plans in the country. Therefore, they can be evaluated as the main reasons of successes and failures of sectoral investments or the problems that they cause directly or indirectly.

After National Development Plan, other programs and development plans start in all fields including urban development and planning projects. These projects follow the instructions and guidelines set in the five year plan. Each ministry and administrative body will have its own plans and programs.



Figure (2): Planning Process in Egypt from the National Development plan till detailed urban planning.

Source: the Authors

4-1 Central bodies responsible for planning in Egypt

i. Ministry of Housing, Utilities and Urban Communities

Ministry of Housing, Utilities and Urban communities (HUUC) is one of the state sectors, concerned with the Egypt's comprehensive development, including urban, communal and economic one. Comprehensive development is usually initiated by the study of Egypt's built up area and its available capabilities. Accordingly, comprehensive and structural plans of development are developed and translated into detailed plans of infrastructure networks including roads, bridges potable water and sewerage plants through the appropriate domicile and different relevant services for development success and sustainability. (Ministry of housing, 2008)

Establishment Decree

According to Decree 164/1996 the HUUC is responsible for the following:-

- Drawing HUUC policy, study and preparation of urban development and programs, inter co-ordination with production and service programs in the framework of the state national plan, as well as the control of metropolitan and rural planning projects and different types of Housing.
- Design and execution of the different types and levels of construction and building projects whether for private or public housing as the construction of public buildings housing and utilities building major structures, different types of factories and setting relevant specifications standards, models and rates , subject to the state general policy.
- Study and preparation, designing, setting rules, standards and technical specifications, control of execution and follow up of the design / execution / operation / management of potable water and sanitary drainage plans, projects and executive programs.
- Study and preparation of the regional and comprehensive planning of the economic & community priority areas, subject to the cabinet decided projects in this planning.
- Study and preparation of the urban development plans of cities, villages, new communities and deserts to guarantee the full use of the capabilities of the geographical location and environment, follow up and working out any material or technical obstacles and evaluation of accomplishments to ensure the realization of the set goals.
- Preparation of the technical and applied researches, pertinent to the Ministry activities to keep pace with the scientific promotion in Housing, utilities, urban communities and development of executive programs as well as Provision of necessary capabilities.
- Setting standards, models and rates of Housing field, bases of design and executive rules of structural and building works, according to the respective laws and decrees, and their updating in terms of the scientific progress of this field.
- Design, control of execution and proposal of public and housing buildings and proposal of the general policy of public buildings maintenance field.
- Undertaking relevant studies for the investment of Arab and foreign capital in the field of the Ministry activity, subject to the relevant regulations.

- Provision in cooperation with the competent Ministries organizations and authorities of basic building supplies and requirements of construction and utility sectors.
- Inter- organization and co-ordination with the authorities' public organizations, working in the fields of HUUC.
- Development of the relevant training programs for the Provision of technical staff in different categories for raising their productive efficiency.
- Participation in relevant local and international conferences, meetings and workshops.
- Drawing the general policy of the cooperative sectors activation, development and upgrading for the fulfillment of the set goals in the Housing and Urban communities Activity and provision of assistance and control of Housing cooperative societies.
- provision of technical assistance and follow up of local administration areas-control and technical inspection of planning and organization works-direction, upgrading and encouraging the public sector activity in the Housing different fields, whether in local areas or the urban communities, in the framework of the realization of the Ministry goals and policies.

ii. General Organization for Physical Planning (GOPP)

According to the instructions of ministry of housing, the General Organization for Physical Planning (GOPP) is the administrative body responsible for making all regional and urban planning for any administrative unit in Egypt. More recently Law 106 / 2008 stated that the regional branches of the GOPP are also responsible for the revision of the detailed planning schemes developed by the local authorities.

Establishment Decree

According to the Republican decree 1093 / 1973 the GOPP is responsible for the following:

- Proposal and development of physical development legislations.
- Fixing the planning rates, conditions and indicators for the national and regional urban organization.
- Preparation and approval of urban development plans, on all (national – regional – local) levels.
- Approval of urban and rural built up areas.
- Preparation of physical, environmental, economic, communal, demographic researches and studies.
- Upgrading the skills of workers in GOPP and local authorities.
- Exchange of information, conclusion of agreements, participation and organization of international competition.
- Preparation and organization of international and local scientific conferences of urban development.
- Preparation and approval of geotechnical and infrastructure studies.

iii. Housing and Building Research Centre (HBRC)

The Housing and Building National Research Center (HBRC) of Cairo, Egypt is an independent governmental research establishment which has a board of directors and a Chairman working under the supervision of the Minister of Housing, Utilities and Urban Development. The organization is very largely financed through the annual governmental fund and substantial resources are also drawn from, the construction industry for work done at the organization. Another source of finance is the joint research work done with foreign agencies such as UNESCO, and domestic research agencies such as the Egyptian Academy for Scientific Research and Technology. This research center acts as the research institute for the planning in Egypt and it is involved with the GOPP in a lot of projects and development plans.

4-2 Analysis of Current Environmental Studies in the Planning Process

Environmental studies are carried from the social economic plan (five years plans) till the project level study. But these environmental studies varied from the upper scale till the project scale. The full environmental assessment EIA according to law is carried on the project level and no environmental assessment needed for upper scale. But we cannot neglect the other environmental studies which carried from five years plans till master planning process, this environmental studies is varied from general goals and recommendations in the five –years development plan and environmental inventory to the current environment status in the other levels of planning.

The following table shows the different level of the planning process in Egypt and the role of the environmental studies in it.

Planning	type	frame	Environmental studies
Socioeconomic plans, national	development plan (five – year development plan)	Written statements (economic targets, sectoral aims, social development	General description of the current environment and future determinations and recommendations
			These Plans are done by ministry of economy and planning and no assessment is carried on it to assess its impact on environment and no involvements from EEAA in accept or refuse it.
Physical plans	Regional (on the region level) Sub regional	Regional scale (superior physical plan)	General description of the current environment and future determinations and recommendations
			No environmental assessment, no involvements from EEAA in accept or refuse it.
	Strategic plan (city level)	City level scale	Environmental inventory & general recommendations for protecting the environment
			No environmental assessment, no involvements from EEAA in accept or refuse it.
			Environmental inventory
Strategic rural plan (villages)		No environmental assessment, no involvements from EEAA in accept or refuse it.	
Master plan	Urban 1/5000	Environmental inventory	

			No environmental assessment, no involvements from EEAA in accept or refuse it.
Project level	Full design for all buildings	Design scale	EIA studies (the developer must make the study according to law and have the approval from EEAA)
			The EEAA have the right to refuse any projects

Table 1: *Role of Environmental studies in the planning process in Egypt. (Source: The Authors)*

From the previous table we can conclude the following; Major conflict in the planning process in Egypt that there no relation between the environmental studies that came in the strategic plans or programs and the environmental efforts and projects that is held by the EEAA, as the EEAA is responsible for analyze the environmental assessment made by developer on specific projects.

According to that; till now there is no role for the EEAA in accept or refuse any plan or physical planning because according to law only projects situated to EIA and there is no mention of strategic assessment on the higher levels of planning.

When we analyze the development plans and strategic plans, we can say that it includes economic, social and political targets but no environmental assessment was conducted during the preparation phases.

Environmental studies are carried now on the PPP (policy, plans, and programs) are done by the administrative body to investigate the current environmental status and to mention some recommendations for achieving sustainable development and protect the environment. But there is no strategic assessment carried on the policy, programs or plans in Egypt, so the environment deterioration happened early before assessing the impacts of specific project.

Environmental studied playing as supportive study in the whole program but not a tool to judge on the plan or the physical planning by it; as there is no legislation for assess the plans or programs in Egypt.

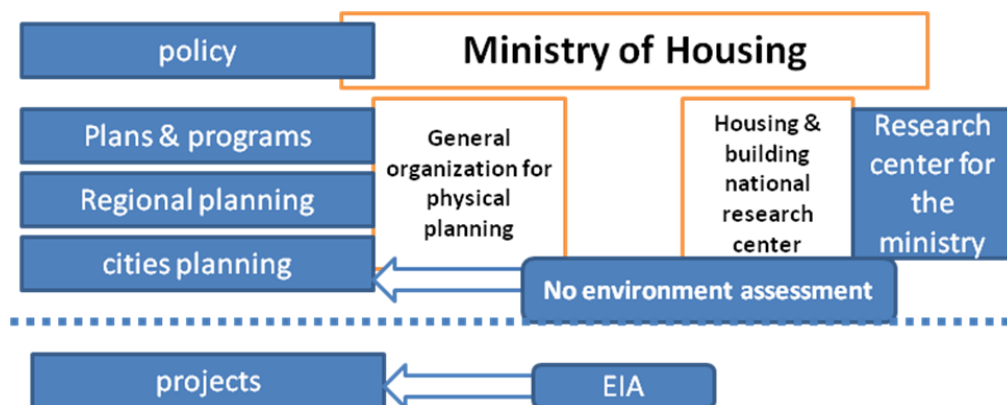


Figure (3): current environmental assessment from policy, plans and program till project level assessment.

Source: the Authors

As a result of that a lot of environmental deterioration happened in the environment in the last years because we don't assess the environmental impact of the physical planning or the programs. The EEAA only demand an assessment for projects and neglect the cumulative impacts, for example in planning an industrial zone there is no assess for the cumulative impacts from the total number of factories, although each factory has a separated environmental assessment study.

5. Need for Strategic Environmental Assessment Level in Egypt

Many authors (*e.g., see Briffett, 1999*) suggest that despite the existence of good EIA guidelines and legislation, environmental degradation continues to be a major concern in developing countries. EIAs have not been able to provide ESA for these countries (*Sadler, 1999*). Originally, SEA was conceived to identify and communicate the potential environmental consequences of higher-order planning and policy decisions to decision-makers. It came to solve a lot of limitations in project-level EIA, such as the late timing of analysis and the failure to consider the cumulative impact of projects.

A lot of debates are raised to discuss the need of strategic environmental assessment; however the general perception is that EIAs are conducted only because they are required by the government legislation not to ensure sustainability of projects or to develop better management plans. In many cases, EIA is a tool to justify projects rather than using it as a means to derive the best decision. (*Momtaz, 2002*)

These short comings threat the environment and make many authors and Authors think again about environment. As how we manage the environment will affect the long-term success of development and play a significant part in our progress towards the Millennium Development Goals (MDGs). (*OCED, 2005*)

So In the last two decades, the world realizes that the change needed is to involve environmental assessment in early stages of decision making process. As shown in the next figure this is the change in the perception of pillars of sustainable development by that we can integrate the principles of sustainable development to be a part of our policies and programs.

We must consider the environment when making decisions, just as we consider economic and social issues. Strategic Environmental Assessment (SEA) is the most promising way to make this happen. SEA helps decision makers reach a better understanding of how environmental, social and economic considerations fit together. Without that understanding, we risk turning today's development successes into tomorrow's environmental challenges. In short, SEA helps decision makers think through the consequences of their actions.

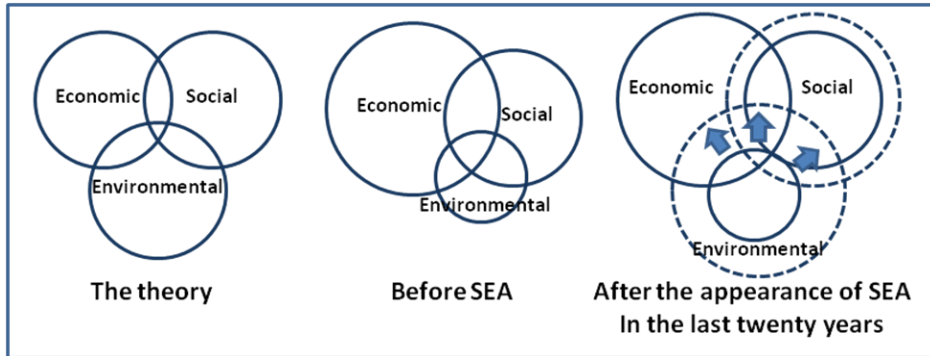


Figure (4): The Three pillars of sustainable development, from left to right, the theory, the reality and the change needed to better balance the model.
 Source: the Authors

6. Brief Overview of SEA:

SEA is recognized as an important decision support tool for integrating environmental considerations along with social and economic considerations into proposed PPPs. The concept has been defined as: "Strategic Environmental Assessment (SEA) is a systematic process in which environmental, economic and social consequences of proposed policies, plans and programs are evaluated at the earliest appropriate stage of decision-making (Lee and Walsh, 1992; Wood and Djeddour, 1992; Therivel et al., 1992; Buckley, 1994; Sadler and Verheem, 1996; Partidario, 1996; Partidario and Clark, 2000; Fischer, 2002).

Moreover, it is often considered as a complement to project-based Environmental Impact Assessment (EIA) so that environmental assessments are conducted at all levels of decision-making; from policy/plan/program formulation to project management and implementation.

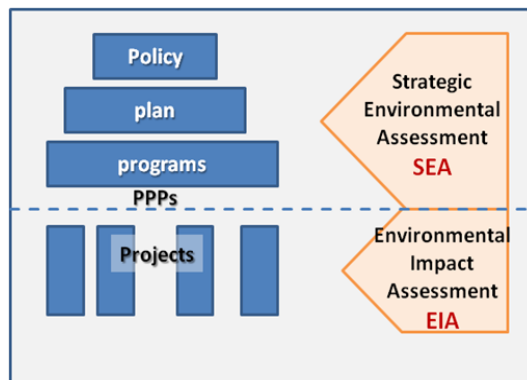


Figure (5): level of SEA & EIA.
 Source: The Authors

In light of the evolving nature of environmental assessment, SEA is currently perceived as a second-generation paradigm moving EIA principles upstream in the decision-making process (Table 1).

A lot of debates are raised to discuss the need of strategic environmental assessment; however the general perception is that EIAs are conducted only because they are required by the government legislation not to ensure sustainability of projects or to develop better management plans. In many cases, EIA is a tool to justify projects rather than using it as a means to derive the best decision. (Momtaz, 2002)

The following table shows the different generations of environmental assessment.

Table 2 - The evolving paradigm—from EIA to SEA Source: adapted from (Sadler, 2003)

1st Generation	Project EIA Includes social, health and other impacts, cumulative effects and biodiversity
2nd Generation	SEA Applies to PPPs and legislation

7. Proposed SEA Process for Egypt

The process for a SEA, at first, should be informed by the political, institutional, socio-cultural, financial, economic, technical and biophysical environment in which the plan or program is being developed. The focus is on the identification of key elements for SEA, to be integrated into context-specific processes for plan and program formulation such as integrated development plans. Thus, SEA would be adapted to local requirements for decision-making. (Altunbas D, Palabiyik H, 2007)

SEA process is divided into four stages and can be summarized in the following section:

Stage 1: Establishing the context for the SEA (screening)

An early step in the SEA process is “screening” to decide whether an SEA is appropriate and relevant in relation to the development of a PPP in the area under consideration.

SEA is designed to explore and evaluate suitable alternatives. The sooner an SEA is introduced to policy formulation and plan-making, the greater the chances are to identify opportunities and influence outcomes. (

When it is decided that an SEA is appropriate, it is important to secure governmental support. The explicit focus throughout the subsequent process should be on integrating environmental considerations (alongside economic and social ones) into key decision-makers.

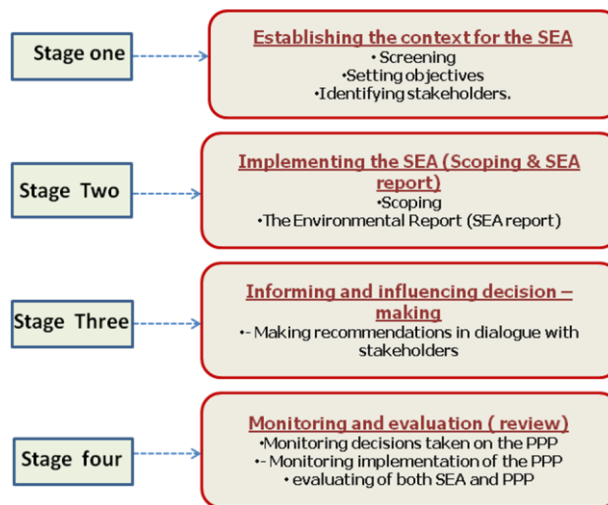


Figure (6): the four stages of strategic environmental assessment. Source: adapted from (oced, 2002) & (Altunbas D, Palabiyik H, 2007)

Stage 2: Implementing the SEA (Scoping & SEA Report):

Scoping is an initial stage in the SEA, where possible impacts are listed. These are then analyzed to see which need further study and at what level (European Commission, 1998). At this stage framework of the study is described. The data that should be collected, environmental objectives and indicators to be accounted for in the SEA; environmental impacts to be considered; alternatives to be elaborated and assessed; links with the scope of assessments at other tiers; the approach to the assessment, justification for leaving any issues out of the SEA that were proposed during the scoping process (for example, in public hearings).

The Environmental Report (SEA report) is a key output of the SEA process, and should describe the whole process and its results. Coming to this phase, initially the question of why do I need a SEA is answered in screening phase, what will I do question is answered in scoping phase by preparing a framework for the future study and where will I develop question will be answered at this stage.

This means the planning alternatives should be ready at this stage and with their assessment by the environment criteria.

Stage 3: Informing and Influencing Decision Making

Presentation of the draft and final reports are important to influence key decisions.

A clear, understandable and concise Briefing Note or Issues Paper can help to ensure that decision makers are fully aware of key environmental issues linked to the PPP. From the outset, through steering committees, other structures and public engagement mechanisms, decision makers and stakeholders have opportunities to shape the outcome of the SEA, *e.g.* identification of issues, choice of indicators, scope of work, and selection and evaluation of proposed development options and alternatives.

It is often a learning process for authorities and civil society to work together on a PPP.

Decision makers need to know the options open to them, what the likely effects of choices are, and what the consequences would be if they failed to reach a decision. This information should be clearly set out in the advice given by the SEA team.

Stage 4: Monitoring and evaluation (review)

Monitoring decisions taken on the PPP and the results of their implementation

It is important to monitor the extent to which environmental objectives or recommendations made in the SEA report or the PPP are being met. Information tracking systems can be used to monitor and check progress of the PPP. Monitoring of cumulative effects may be appropriate for initiatives that will initiate regional-scale change in critical natural assets. Methods and indicators for this purpose need to be developed on a case-by case basis.

Evaluation of monitoring results and feed back in PPP renewal

At some point a formal evaluation of the monitoring results should take place as part of the revision or renewal of the PPP.

8. Integration of SEA on the planning process in Egypt

In line with the sustainable development principles, it is required to analyze the environmental conditions, to make future-oriented prediction and to take precautions accordingly in every phase of decision-making process. EIA practices enable the evaluation of projects in the last phase. On the other hand, SEA is practiced at early stages and gives an opportunity for a broad environmental evaluation.

To integrate the SEA in the planning process in Egypt the planning procedure must be discussed then move to the method of integrating the SEA in this procedure.

8.1 The planning procedure as per the GOPP practice

It is possible to say that the preparation of physical planning takes the following steps:

- Data collection
- Determination of the plan strategy
- Public participation in upgrading current strategic plans for cities and rural area
- Preparation of the draft plan
- Issuance of the final plan

(a) Data collection: GOPP has the authority to request all the necessary information related to its tasks directly from all the public institutions and other natural and legal persons. They have to provide the required information on time.

This work can be done by the GOPP or assigned to private offices or special expertise upon a request from GOPP, and the work is reviewed by the GOPP in all steps.

(b) Determination of the plan strategies: in the second phase of the process, the plan strategies are prepared depending on the government targets and policies. This document is clarified in parallel to the feedback from the government. It includes the aims, technical and political basis and targets, also the methods to be used.

(c) Public participation: in the preparing of plans or programs public participation is neglected in all steps, but in making the strategic planning for existing cities or rural areas, public participation & city consultation is an essential part of the planning process.

(d) Preparation of the draft plan: preparation of the draft of plans or strategic planning is done by the different network of expertise in all fields, environment expert is one of this experts. This draft plan is done with the public participation in case of preparing a strategic plan for an existing city or rural area, but new compounds o areas doesn't include any public participation.

(e) Issuance of the final plan: after many reviewing steps the draft plan is now accepted from the GOPP and other detailed planning can be started. When we integrate the SEA in the planning process we must know that the there is a big difference between project-level EA and SEA practice; as SEA is a parallel and continuing assessment system to the process which is from draft planning to confirmation.



Figure (7): The planning procedure as per the GOPP practice
Source: The Authors

8.2 The method of integrating the SEA in the planning procedure

When the main principles of SEA process (Dalal-Clayton and Sadler, 2005a,b; ODPM, 2004; Say and Yu' cel, 2001; Noble, 2001; Verheem and Tonk, 2000; Partidario, 2000; Von Shet, 1999; Sadler and Verheem, 1996; Partidario, 1996) and the SEA practice in some countries are taken into account, it can be suggested that there should be some phases related to the legal framework of SEA to be utilized in Egypt. These phases are summarized under the following titles.

1. Establishment of the commissions:

the commissions that are responsible for the process of SEA, this commission is responsible of make all SEA steps parallel to the planning process, and the experts in this commission will be from governmental organization and non governmental organizations.

2. Establishing the context for the SEA:

An early step in the SEA process is "screening" to decide whether an SEA is appropriate and relevant in relation to the development of a PPP in the area under consideration. SEA is designed to explore and evaluate suitable alternatives. The sooner an SEA is introduced to policy formulation and plan-making, the greater the chances are to identify opportunities and influence outcomes.

3. Implementing the SEA (Scoping &SEA reports):

Determination and practice of the assessment methods and preparation of SEA documents. In this phase, future-oriented projections should be assessed in terms of environmental indicators. For this reason, different assessment methods should be used (cost-benefit analysis, cost effectiveness analysis, GIS, LCA, etc.). A part of these methods is introduced in this research project.

This phase can be regarded as the hardest and the most demanding one. As a result of the findings from this phase; the SEA reports will be prepared and the frame of the possible policies will be figured out.

4. Informing and influencing decision making (public participation):

At present, the involvement of public transportation in the planning process is limited in the upgrading of existing areas, but there is no public participation in plans or programs or policies. In this step public participation is an essential part; as Effective public participation will increase the accountability and transparency of decision-making process. To achieve effective public participation the public must have access to environmental information, data and knowledge.

On the other hand, it is technically not possible to expect participation from people in all statues since the subjects are political, economical, technical and wide-ranging ones. Also, it is difficult to take into consideration for such participation. With regard to this, the representative group for all involved parties is requested to share their point of views on plan targets. In this phase, non-governmental organizations and public institutes will have an important role (Say & Yu' cel, 2005).

The representative group can be:

- Universities, research centers, institutes, . . .
- Local governments,
- Occupational organizations,
- Media (printed press, etc.),
- Non-governmental organizations.

In addition, the Internet, one of the most important technological opportunities, should be used to have an access to the draft version of documents and these documents should be presented to the volunteers for their point of views (Say & Yu' cel, 2005).

5. final report & monitoring:

In this step the final reports are now ready to be reviewed, it is important that this step is come parallel to the making of the draft of strategic planning or proposed plan or program.

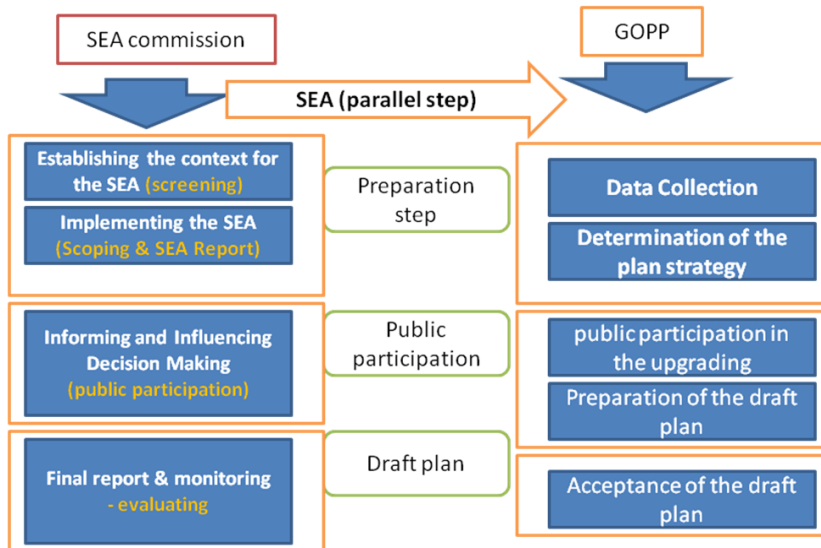


Figure (8): integration of SEA in the planning process in Egypt.

Source: The Authors]

9. Conclusions and Recommendations

Strategic Environmental Assessment (SEA) can be defined as a systematic process in which environmental, economic and social consequences of proposed policies, plans and programs are evaluated at the earliest appropriate stage of decision-making (Lee and Walsh, 1992; Wood and Djeddour, 1992; Therivel et al., 1992; Buckley, 1994; Sadler and Verheem, 1996; Partidario, 1996; Partidario and Clark, 2000; Fischer, 2002). SEA, as an approach to achieve sustainable development, undertakes to integrate environmental considerations into decision-making processes in relation with governmental policies.

But When the planning process till today have been analyzed, it can be said that planning process in Egypt till now have no environmental assessment from five years development plan till detailed urban planning.

Although the application of EIA on projects started since 1994 but environmental degradation continues to be a major concern in Egypt. And until now EIAs have not been able to provide sustainability and save the Egyptian environment.

The planning process (policy, plans and programs) in Egypt are came before any establishment of projects, so deterioration of environment is happened in an early stage before cascading down to project level.

So it is important to take the environmental issue into consideration from first point of planning process (five year development plans till detailed urban planning).

In parallel to the planning process there is must be a commission responsible of the process of SEA; this commission is responsible of make all SEA steps parallel to the planning process.

In all SEA steps involving of public is an important issue from the first draft of SEA report till final report of SEA.

Environmental issue must be a major driving force in the planning process in Egypt like other driving forces that govern the planning process.

Involving the environment assessment as a supporting and parallel tool to the planning process; will save the Egyptian environment and save it to the coming generations.

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