

# **Economic Waste**

## **Analytical Study**

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## **Preface**

There are multiple pivotal elements that constitute Egyptian strength. We have a unique geographical location, convenient climate throughout the year, the Nile and its lakes, long extended coasts on both the Red Sea and the Mediterranean Sea which enable us to possess enormous fisheries. We also have the Suez Canal with its strategic importance and important ports on the Mediterranean Sea and the Red Sea, thus creating a pivotal center for global and multiple means of transportation. Moreover, we have ancient monuments that represent almost one third of the world's antiquities, making Egypt eligible for attracting 80% of global tourism turnover within the field of archaeological tourism. Along with archaeological tourism, we have diving tourism in splendid locations in Sharm el-Sheikh, Hurghada and the Red Sea Coast in general as well as other locations for medical tourism in Safaga and other promising areas. We have abundance in terms of human resources, whose positive points, if they are better developed, may be a strategic service both at home and abroad. We have many industries, commodities and products that are widely spread throughout the cities and villages of Egypt. We have new cities and an infrastructure that has grown and expanded over the recent years. We have universities and specialized research centers in different realms of knowledge and science. Egypt, with its great culture, ancient origin and heritage, is fortunes that are not available in many developed countries.

Thus, Egypt's economic problems are not attributed to its limited resources, but rather to the manner with which these resources are managed.

In this regard, we will tackle the policies, tools and methods of managing the economic shift in Egypt to achieve a production surge that grants the country an appropriate status on the threshold of the 21<sup>st</sup> Century. I want to present this study as an attempt to shed light on an important determinant of economic development, for its profound impact on Egyptian economy – that is, the "Waste of Egyptian Potentials and Resources". We must counter such a determinant so as to raise productivity rates and achieve the desired economic development.

### **First: The Difference between Loss and Waste:**

There is a big difference between the lost and the wasted resources and potential.

**Loss** is the unpreventable lost of resources and potentials, such as the water loss in, for instance, the Lake High Dam whether through evaporation or seepage from the bottom of the lake to the groundwater or through the African Rift beneath the lake.

**Waste** is the preventable lost of resources and potentials, yet we do not prevent it whether because of negligence, inadvertence or ignorance.

### **Second: The Important Value of Wasted Resources**

In order to illustrate the economic importance of the wasted resources, we could just state that the economic instrument needed to achieve a net profit of LE 1000 is no less than LE 50,000. The mentioned sum is divided between fixed assets, know-how, training and employing labor, human resource management, raw materials, capital, provision of sources of energy in different forms, and establishment of a marketing and vending body with its costs expenses needed for making the commodity continue not only in markets but also in the minds of consumers as well.

To make a profit of LE 1,000 through addressing wasted resources, this doesn't incur any financial costs.

Accordingly, doubling the achieved profit through halting the depletion of wasted resources and potentials is an objective that overtops many economic goals both at the institution and the State levels.

### **Third: Manifestations of Waste of the Most Important Resources:**

#### **1- Waste of Human Resources:**

##### **All forms of unemployment:**

A- **Overt Unemployment** and the increasing number of unemployed graduates of universities, higher and intermediary institutes. Overt unemployment means that there are individuals, who are able to work and look for it, but they don't find job opportunities and thus their time is unfruitful. Since time is the only source that cannot be stored or kept for a certain period to be later used after this period, as it is not used immediately it can never be benefited from, overt unemployment is invisible enormous waste.

It is known that a huge number of graduates are not employed except after the elapse of a long time after graduation. Thus, it's quite natural that the productivity rates of these individuals would be very low as they are employed after they had, due to their long unemployment periods, forgotten all what they had studied, not to mention the negative effects of unemployment on the graduates and their relatives. Hence, overt unemployment has negative impacts on national productivity.

**B- Disguised Unemployment:** means that large numbers of employees receive salaries and wages without adding to the gross domestic product GDP. This in turn connotes the loss of large sums that could have been used in supporting investment. Thus, the disguised unemployment reduces the State's ability to invest.

Undoubtedly, the decrease in the State's investment capacity increases the magnitude of disguised unemployment and so on. This is the nature of things; one of the facts of life is that failure (or success) entails factors of promotion and strengthening.

**C- High illiteracy rates** and its impact on the Egyptian society add to this waste.

**D- The waste of talents**, represented in wasting talents of youth through the application of an enrollment system in universities that does not fit the youth talents, thus undermining the creative capacities and abilities of the majority of youth, despite the fact that the youth are the future of this nation.

## **2- Waste Resulting from Accrual of Cargo in Ports:**

Performance in ports is not developed in the same pace with international developments in the realms of technologies employed in maritime transportation and stevedoring despite of the continuous rise in the size of foreign trade. This leads to the accumulation of cargo in ports and the delay of stevedoring operations in ports. Eventually we pay penalties in hard currencies to foreign ships for this delay, which is considered a big accumulative waste, besides the waste of time and the consequent negatives that are inconsistent with Egypt entering the 21<sup>st</sup> Century.

### **3- Waste in Current Irrigation System:**

Immediate interference should be sought to change the current irrigation flooding system through the introduction of modern irrigation systems, such as sprinkler and drip irrigation systems. The currently applied system is no longer suitable. We should capitalize on what nature had endowed us of abundant water in reclaiming all our cultivatable lands. We possess the credentials of this, including abundant workforce which is a quite rare element in many neighboring countries.

### **4- Waste of Drinking Water:**

The enormous increase in wasted drinking water, hitting 70%, represents a big increase in the expenses in purifying water and making it drinkable. Such an increase could be evaded if we were able to decrease the rate of this wasted water to an acceptable rate that conforms with global rates (7-10%) through implementing standard specifications to domestic and exported valves and connectors and implementing graduated price segments for water consumption.

### **5- Waste in Using Loans:**

Delay in using available loans leads to huge waste represented in freezing financing instruments available in banks and turning them from active dynamic to inactive static funds. Undoubtedly, not using the available loans seems to be a reason behind the decrease in the aggregate volume of annual investments. At the same time, it cuts off investments that could enhance domestic product and contribute to the acceleration of the privatization process, making this sector serve as a driving force for the economy after it used to be a burden upon it for years.

#### **6- Waste Resulting from Non-Recycling of Resources:**

Up till now, the State's has failed to establish a system for recycling the used commodities immediately following their disposal. The output can be used in recycling and manufacturing unprocessed plastics, aluminum, glass and paper in factories to be built specifically for this purpose.

Such a matter entails material benefits as well as other secondary benefits that are no less important, such as preserving the environment, raising levels of environmental awareness among citizens and preventing the spread of nonstandard packages used in commercial fraud.

#### **7- Waste Resulting from Insufficient Maintenance of Machines and Equipments:**

It is quite unfortunate that paying no attention to setting and implementing preventive maintenance programs of machines and equipments reduces their efficiency and increases their breakdowns. This has enormous negative effects on productivity.

#### **8- Waste Resulting from Using Worn Machines and Equipments:**

The use of worn machines and equipments increases in the rate of depreciation in raw materials used in production, the energy needed for production operations and decreases the quality of products in a way that negatively affects national productivity to a great extent.

#### **9- Non-Exploitation of Available Energy in Transporting Cargo by Train**

Non exploitation of a portion of available production capacities leads to general decrease in existing productivity, representing waste of available



resources. This negatively affects national economy. For example, the Egyptian railways are strategic advantage in transporting cargo. This advantage does not exist in Middle East countries whether those located east or west Egypt. Suffice it to state that Egypt's railways are the second oldest, after India, in the world outside Europe.

Although this facility is efficient in transporting passengers and provides a cheap and regular means of transporting passengers and linking cities, however its performance in transporting cargo is greatly backward in terms of the role it can actually perform in the light of its available potentials. Suffice it to state statistics about the transportation rate (ton/Km) by train in comparison to other land and river transportation. When we know that the Railway Authority owns railroad lines that cover 90% of Egyptian cities, in addition warehouses, facilities and courtyards covering these areas as well as a State-owned administrative apparatus that is able to receive and deliver cargo, parcels and commodities and collect their charges and hand them over to the shipping body, we would clearly realize the magnitude of waste of potential capacities in this important facility.

### **10- Waste of Raw Materials:**

There is enormous waste in raw materials used in many production fields:

- Waste resulting from using incompetent technologies.
- Waste resulting from untrained labor
- Waste resulting from uninformed labor.
- Waste resulting from lack of thoroughly studied plans and rates.
- Waste because of lack of discipline.

### **11- Waste of Energy:**

There are many manifestations of the waste of all sorts of energy:

- Wasteful use of electric energy.
- Wasted energy in machines and equipments due to lack of dereliction in maintenance operations.
- Wasted energy in the means of transportation because of traffic jams.
- Waste of abundant solar energy and not using it, although it is a cheap and clean source of energy.

### **12- Sizable Waste in Agricultural Commodities:**

Waste in this field is represented in stages of collecting, harvesting, packaging, storing, transporting and distributing crops.

### **13- Waste in Benefiting from Academic Cadres:**

Egypt abounds with many universities and specialized scientific research centers in all fields. Everyday there are scientific degrees granted in all fields of science and knowledge. The extent of benefiting from these resources is still limited and the majority of which are still shelved and unused. It is really a substantial waste.

### **14- Waste Resulting from Bad Utilization of Housing Units:**

There are many residences that are being built yet remain unoccupied for long years, at a time when the country suffers a severe housing crisis. The State can play a positive role in solving this problem. It can develop a banking mechanism to supervise the activities of building and construction operations on the one hand and the possession and reselling on the other. This can take place through changing interest rates whether by increasing or decreasing, thus creating a benefit to one party against another and accordingly prompting construction activities or possession of housing units

in a manner that prevents accumulation of an asset that threatens to cause a state of recession.

### **15- Waste Resulting from Non-Preservation of the Environment:**

Wherever one looks around, he finds various manifestations of waste resulting from non preservation of the environment and its resources, at a time when all countries of the world are devoting their efforts wholeheartedly to preserve the environment and its resources. It's no secret that the cost of eliminating damage greatly exceeds the cost of preventing damage.

### **16- Continuous Waste Resulting from Traffic Jams and Technically Bad Conditions of Many Means of Transportation:**

The unsmooth traffic as well as the deteriorated technical status of many means of transportation leads to daily breakdowns in the middle of roads, thus impeding traffic, blocking part of the road for some time, having to purchase needed spare parts and losing much time in this process and in fixing these vehicles. Surely, all these factors increase the financial and psychological costs incurred by owners of these means of transportations, drivers and passengers.

Unsmooth traffic forces means of transportation to cross distances in longer time than planned. This results in a decrease in the number of daily shifts and failure to reach the optimum usage of these means.

Accordingly, we find that a large number of employees arrive late to work and in a state of fatigue and in bad mental and nervous conditions. This in turn affects their way of dealing with customers. In fact, all of these factors have their negative impact on national productivity. On their way home, employees suffer the same difficulties they go through in the morning. This

worsens their psychological and mental conditions, affects their familial relationships and gravely decreases their productivity.

### **17- Considerable Waste of Human Rights and the Ensuing Economic Waste:**

A- Negligence in the process of water purification for the sake of decreasing costs, without considering that it could lead to the infection of huge numbers of people with hazardous diseases. Consequently, enormous costs are spent on treatment, importing medications, decreasing productivity of workers and breakdowns of the production process for long periods.

Students may also be infected with these diseases, making them unable to study and assimilate information and in some cases leading to retardation in studying.

This means that negligence of the water purification process for the sake of decreasing costs is a 'grave mistake', not only because it wastes the simplest rights of contemporary humans in attaining pure and bacteria-free water but also because it costs the government many times as much as it saves of expenses needed for water purification, hence a grave waste.

B- The deterioration of health of Egyptian individual is attributed to many reasons, mostly including the constant decrease in nutrition especially in the animal protein which is essentially needed for health of human beings. We have vast fresh and salty bodies of water, extended long coasts, old and new lakes and seas that are full of fisheries. God bestowed them with infinite sustenance. Egyptian individuals also suffer the absence of good therapeutic services with reasonable prices attainable by the masses in the

production community. They also suffer from the sluggishness of medical development as well as the deteriorated health conditions in many workplaces and clear and growing environmental pollution. The deterioration of the health of Egyptian individuals is undoubtedly reflected in invisible waste of production capacities.

C- Ethical Waste Resulting from the Severe Exacerbating Housing Crisis:

D- Speculations on real estates and land, which are mostly illusive, raised prices of houses and construction due to insufficient legislation and regulations in creating effective relationships between landlords and leaseholders. Hadn't this forced hundreds of thousands or rather millions of people to stay in indecent accommodation without clean water or electricity? Hadn't this intentional crime forced poor and needy people to sleep in tens in small rooms or yards? Hadn't this tragic phenomenon spoilt the shyness of children and young men and women? Hadn't such a phenomenon emboldened them to commit forbidden actions and eliminated their ethical values? Isn't all this a direct result to the existence of slums which are a fertile ground for crime, indecency, perversity and deviation? Isn't all this a waste of our most important resources, which are the human resources that represent the backbone of the production, development and making the future? Moreover, the waste of human rights of Egyptian citizens is in fact the chief reason behind the state of passivity and egoism, a phenomenon in progress. The same applies to the phenomenon of emigration and alienation among returnees and incomers.

## **These are some manifestations of waste**

It's true that there are various interrelated and interconnected reasons and causes. Yet we are definitely able to face them. It's not quite easy but it is possible. The Egyptian society was able to make the October 1973 War victory when it succeeded to organize and utilize its capacities and potentials. Thus it is definite that it can be able to address such waste of resources.

### **Fourth: Addressing Waste:**

Such a matter requires the adoption of a set of integrated policies, plans and programs which should be set and implemented by all the community institutions and sectors, on the grounds that responsibility is collective.

It requires an effective role by all Egyptian media means in order to raise comprehensive awareness of the manifestations of waste and its damages on the society and individuals.

We really need an influential role by preachers in mosques and churches in order to stress the fact that divine religions forbid waste.

We need the synergy of all societal forces in addressing waste along with planned and well-advised comprehensive mobilization.

Only this way, we will be able to address waste.

**The following are the most important axes, policies and objectives for addressing waste:**

- 1- Raising awareness of the manifestations of waste, its impact on the individual and the society and teaching this subject in schools.
- 2- Establishing an agency that is assigned the task of addressing waste and provided with trained professional qualified staff according to the needs of the society.
- 3- Alleviating the unemployment crisis through qualifying untrained labor to work in foreign markets and compete with foreign labor in these markets.
- 4- Making the best use of ideas, policies, methods and regulations of Mubarak-Kohl initiative for technical cooperation in a way that increases the overall productive capacity of the society.
- 5- Expanding small industries and enhancing their performance and devising a national plan to develop and expand environmental industries, as well as solving the problems facing these industries so that the Egyptian society with all its categories and individuals would shift to production.
- 6- Establishing a scientific infrastructure in Egypt that can take the country to the 21<sup>st</sup> century. In this regard, the government and the private sector can work together to benefit from the capacities and potentials of Egyptian emigrants so that we can become technology producers not consumers. Perhaps what facilitates this mission is the fact that the government is aware of the need to realize this goal. The government established Mubarak City for Scientific Research. Moreover, there are many Egyptian scientists and experts who can make the community

benefit from the scientific achievements, once they are given the chance. Besides, we can seek the help of those experts owing to their distinct administrative expertise in the fields of professional training, and corporate restructuring. They can also assist the private sector to select the type of technology that suits the community in a way that contributes to absorbing large number of labor and achieving self-sufficiency in many imported goods depending on local materials. In this regard, we can benefit from the successful Indian experience in the same field.

The Egyptian expatriates can help the private sector in elaborating on the characteristics of imported technology, its sources, how to benefit from it and to what extent it suits the nature of the Egyptian society, without having flagrant social costs. But they should also be in reasonable prices. There large numbers of Egyptian expatriates working in major multinational companies. Some own consulting firms. This can be useful in concluding contracts and deals with foreign agencies. Finally, they can contribute to using this technology in a way that fits the Egyptian conditions and training those in charge in order to avoid the waste of national resources and preserve and maintain them.

- 7- Increasing the number of docks in current ports, especially container docks as much as needed to meet the requirements of absorbing current and future imports for years to come.
- 8- Enhancing and doubling development operations in the capacity and installations of the current seaports through putting idle docks back in service and deepening the draft of current docks and elongating their length to be compatible with the developments in the sizes and loads of modern giant ships.



- 9- Equipping all ports with modern technologies of loading, unloading, measurement, integrated laboratories to examine imported goods, and storehouses or silos sufficient for storage.
- 10- Using methods of operations research in scheduling incoming ships and distributing them to docks as well as scheduling stevedoring and transporting operations and controlling them.
- 11- Increasing the number of seaports on both the Mediterranean Sea and Red Sea to face the expected increase in maritime transportation, especially after the implementation of the GATT treaty, thus qualifying Egypt to play an influential role in the cargo transit transportation between Asia, Africa and Europe.
- 12- Conducting pricing studies based on an integrated and modernized structure of information and data in order to make customs duties in Egyptian ports competitive with its counterparts in other ports in the region.
- 13- Improving the efficiency of administrative performance in Egyptian ports through wise and meticulous selection of administrative staff and providing them with continuous and effective training opportunities. The process also includes the development of the rules and regulations to keep pace with various environmental variables that influence the administrative performance. This is in addition to wise selection, development, evaluation of labor.
- 14- Maximizing utilization of solar energy as a clean, cheap source of energy.

- 15- Enhancing the growing role of the government in preserving the environment through improving the role of local and public authorities to carry out more effective roles and enforcing deterrent laws.
- 16- Reviewing the methods and systems used in agricultural products and minimizing waste, lost and damaged in the process of collection, storage, packaging, transportation, circulation...etc
- 17- Devoting more attention to the Egyptian citizen since he is the governing element of all these axes.
- 18- Paying attention to more effective solutions to the housing crisis. Is it conceivable that the crisis continues and aggravates despite the presence of a large number of vacant housing units for long years?

It's quite true that the housing systems failed to create a harmonious system between landlords and inhabitants.

The continuation of building more housing units and leaving them vacant makes a great economic benefit to landlords; that is to say the rise in the value of the asset exceeds the interest of the capital turnover. This means that the continuation of the status quo creates an economic advantage that is higher than transforming capital into real estate and vice versa, especially in the light of the absence of an active cycle that complies with all local trends and standards in managing capital. Perhaps, there is a transformation mechanism that can solve the problem, yet it is absent.

More precisely, the role of the banks and real estate investment is absent. There can be a variable interest rate so as to encourage buying lands and financing constructions until indicators point out a strategic surplus that should not be exceeded. In such a case, land buying and establishing facilities upon them should be abated through raising interest rates on the one hand and

decreasing the interest rate on real estate owners. This in turn creates an active movement that activates the utilization of capital that was previously used in funding and re-injecting it in activities to fund buying lands and establishing facilities on them along with decreasing the interest rate to cope with the new situation of the presence of financing surpluses.

It is extremely important that an effective and efficient mechanism for the banking system should be available to promote the housing and construction sector and play a vital role in creating a movement of exchanging residences between old and new landlords. Accordingly, this could facilitate the process of exchanging a big lodging with a smaller one and vice versa, promoting the movement of citizens between cities without sticking to one place, which is in fact an illusive restriction.

19- Establishing a system for recycling used materials. This project could be first started in Cairo and Alexandria and then to other cities. In this regard, our scientists and researchers can examine experiments of the developed countries in this field.

For example, in mid-April 1996, the French Ministry of Environment inaugurated a research center for recycling plastic materials. The center used developed technology in the field of recycling different types of plastic wastage and producing new reusable plastic material, saving resources and solving the problem of plastic wastage.

20- Stopping our detrimental practices that pollute the River Nile and poison its water. How can we spoil the Nile, our source of sustenance and life since ancient times? How can we throw our sewerage and waste of public and private facilities into the Nile until it becomes a grave for dead animals and a major dump for our wastages? Shouldn't we better develop and protect and take full advantage of the Nile as a source of

sustenance? Shouldn't this be sought instead of transforming irrigation canals into a nest of insects and worms, a fertile ground for growing bacteria and viruses, a source of diseases, and a model of ugliness? Canals had become lethal places that poison all elements of life. Fish die in the source of life, killing or sickening whoever eats it. Is this conceivable at a time when we are making our way in the 21<sup>st</sup> Century?

The world is making progress and moving forward, but what we do to ourselves, our sources and environment is a leap backward and waste of resources. We all participate in this. It is a serious matter that should be addressed. it needs a comprehensive national mobilization.

At the end, I assert that addressing waste is an objective that should top all other economic objectives both at the institutional and governmental levels.