

# WORLD RESEARCH OF BUSINESS ADMINISTRATION JOURNAL

**Vol.2, No.2, July 2022**

Print ISSN 2771-1161  
Online ISSN 2771-1153



THE SCIENCE  
PUBLISHING HOUSE

THE SCIENCE PUBLISHING HOUSE  
LLC, USA

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**Vol.2 No.2**

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## **Assessment of Markets Fire Emergency Preparedness in Tanzania A Case Study of 6 Markets in Ilala City Council -Dares Salaam**

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### **Abstract**

This study is intended to assess fire emergency preparedness in public and private markets in Dar es Salaam Region by measuring the specific market preparedness in fire emergency policies, fire safety equipment, signage and infrastructure, fire fighting knowledge and fire preparedness plans, and acknowledging areas of improvements. The study was comparative and adopted mixed approach design implying both quantitative and qualitative methods. Primary data were collected using questionnaires, semi-structured interview and observation. Secondary data were obtained reviewing published dissertations, articles, journals, textbooks and documents from the website. A total sample of 87 respondents from public markets were selected for the study. Quantitative data was analysed by using descriptive statistics with the help of SPSS. Qualitative data was analysed by using content analysis. The use of graphs and charts was encouraged to facilitate data presentation. The findings showed that fire emergency preparedness was good in private Markets compared to public market. The study revealed that both public and private markets had awareness on firefighting activities. However, public market did not offer much trainings compared to private markets which made majority of the respondents to have less knowledge on firefighting. Also, public markets lacked fire emergency policies, plans and some of firefighting equipment compared to private markets. The study recommended that markets should have fire emergency preparedness plans, policies, sufficient equipment, signage and infrastructure and monitoring and evaluation programs. Also separate fire preparedness budget and creation of awareness programs via different communication media to improve emergency preparedness.

**Keyword:** Fire Emergency, Preparedness in Fire Emergency, fire Policies, Fire safety, fire preparedness plans, Market and Tanzania

### **Introduction**

Fire outbreaks are disasters which are caused by actions of human beings directly or indirectly.

Fire safety entails all the activities which are geared towards fire prevention, fire detection and fire control. These activities and processes are done to safeguard human life and to preserve property.

Fire safety preparedness is one of the four phases of fire emergency management which is aimed at fire disaster risk reduction. It is a continuous cycle of planning, organizing, training, equipping, exercising, evaluating and improving strategies to ensure effective coordination and enhancement of capabilities to respond to fire disasters (FEMA, 2007).

Fire safety preparedness is an essential aspect in both environmental and occupational safety and health. Fires being an example of physical hazards have affected many workplaces and most of them are mainly caused by inadequate strategies in fire prevention, detection and/or fire control.

The notion of emergency preparedness is very crucial in preventing fire emergencies from happening and lessening the impacts by reducing the number of deaths, casualties and damage to properties. It is one of the important elements in emergency risk reduction which encompasses community awareness, readiness to render appropriate responses and quick recovery.

In most of the developing countries like Tanzania, little is documented on preparedness for specific types of emergencies like fire especially in markets. This is explained in various reports of fire statistics in different countries of the world (CTIF, 2020). However, there has been numerous fire outbreaks in Tanzania from the lowest unit of family to the highest level of the nation. According to (Ndibalema A. , 2015), some of these incidents include the 1989 Ministry of Home Affairs headquarters fire, the 2002 National Insurance Investment building, the 2009 Tanzania Breweries Limited fire, and 2013 Sunset Bungalows and White sands hotel in Zanzibar, Dar es Salaam Parastatal Pension Fund (PPF) Towers in 2013, the 2020 Byamungu Islamic School fire (VoA, 2020), and 2020 Kimbi family fire in Tanga region (Facebook, 2020). The Sunset Bungalows and White sands incidents of 2013 resulted to a loss of more than 400 million Tanzanian shillings and 800 million Tanzanian shillings respectively (Michuzi, 2013), the Byamungu Islamic fire resulted to a death of 10 students and the Kimbi family fire resulted to death of 4 people.

Luoga (2020) claims that, most of fire emergencies that happened in the past are due to negligence in unpreparedness and poor implementation of the laws and regulations. Also (Ndibalema A. , 2015) adds that, fire emergencies are a result of poor fire management systems and lack of awareness to respond to fire emergencies.

According to (UNDRR, 2015), less has been done globally to improve the levels of emergency preparedness despite its importance. Furthermore, the Hyogo Framework for DRR report in Tanzania underlines a need of developing high level of preparedness capacity for all types of emergencies (PMO, 2015). This rises a concern that no enough measures are put in place to prepare for fire emergency as a whole and particularly in markets regardless the impacts they cause.

Fire incidences are a common phenomenon in Tanzania even though the country has limited record on market fires. The Fire and Rescue Force have recorded a total of 3,456 fire events that happened all over Tanzania in the year 2020 (Fire Rescue Force, 2020). It is hypothesized that such emergencies resulted from negligence in preparedness and particularly inadequate trainings for different facility users, poor fire emergency management, low awareness on the use of firefighting gears and insufficient enlightenments on community awareness and cautions on fire incidences (Ndibalema, 2015). Most of the market fires happening around the world during Covid-19 pandemic were caused by gas explosions. Tanzania is facing the same challenge and the level of vulnerability is increasing due to the pandemic.

Markets are emergency centres by nature which are complex and surrounded by many hazards including explosive chemicals, electrical wiring, flammable liquids and gas tanks and cylinders which at the right environment can lead to fire emergency. Proper assessment is needed to be done in order to enhance fire emergency preparedness in markets especially during Covid-19 pandemic.

Less attention of fire emergency preparedness is also observed in African countries whereby various fire incidences particularly in markets continue to destroy lives and properties of people (Murage, 2012 ). This makes preparedness one of the crucial aspects that should be considered to avoid destruction of people's lives and properties associated with fire outbreak (Addai *et al.*, 2016). In Tanzania, unpreparedness of fire emergency is also evident in various fire

incidences especially in markets whereby various fire incidences have been reported to occur in various places of Dar Es Salaam, particularly in Ilala City Council public markets. The overall research problem is that, despite its importance, there have been frequent fire outbreaks in public markets across the nation which continues to destroy markets' infrastructures, peoples' properties and even loss of life. In addition to that, there is little academic information regarding fire emergency preparedness in Tanzania particularly in public markets. Therefore, this justifies a need to carry out the study in the respective areas

### **Literature Review**

Fire is one of the greatest discoveries in human life that has helped the world to evolve to where we are (Darwin, 1874). History explains that fire was discovered over 1,000,000 years ago in an open site in East Turkana, and site in the Chemoigut Formation at Chesowanja near Lake Baringo in Kenya (Gowlett, 2016). Ever since its discovery, fire has been used in various activities ranging from domestic use to technological discoveries including cooking, generating heat, light, incineration of wastes, smelting and forging of engines.

According to (Merriam-Webster, 2021) fire means the light and heat and especially the flame produced by burning. Many authors including (Pan American Health Organisation (PAHO), 2014) mentions three important elements in the fire occurrence; fuel, oxygen and source of ignition (heat) which form a fire triangle. If one of these elements misses then a catalyst must be present to help in the ignition process. The three elements are explained as follows;

Fuel; fire cannot start if there is nothing to burn. Fuel is any combustible material that can be used as the source of ignition of the fire, as well as to keep it burning example wood, paper, gas, animal fats, petroleum oil and electrical appliances. Some of these materials burn easier than others. In suppression of fire one element must be removed to discontinue the burning process and fuel is the hardest to be removed among all the three elements (Fire Risk Assessment Network, 2021).

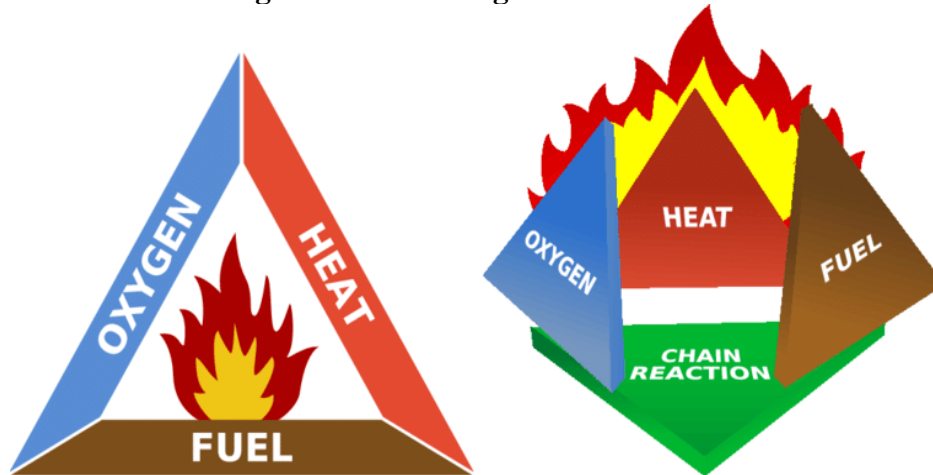
Oxygen as an oxidizing agent that reacts with the fuel to start and continue the fire. Lower concentrations of oxygen result in slower fuel combustion. Reports explain that atmosphere of the earth consists of 21 % oxygen and most fires start with 16% of oxygen which indicates that there's enough to trigger a fire anywhere as long as the other two components are present (Oregon State Univ, 2020).

Heat is responsible for the initial ignition of fire, and is also needed to maintain the fire and enable it to spread. Heat perpetuates fire to escalate quickly by preheating fuel and making the air around the area more warmer.

Currently, some authors have mentioned four elements which are important in the outbreak of fire. The elements are heat, oxygen, fuel and chain reaction which has altogether transformed the fire triangle into a tetrahedron. According to Fire Risk Assessment Network (2021), tetrahedron is a pyramid, which is a solid with four plane faces. This theory was reformulated after the discovery of the halon extinguishing agent.

Britez et al., (2019) further explains that, heat is the element used to start a fire, maintain and increase its spread. Oxidizer (oxygen) is in the air surrounding us and is needed for combustion. Fuel is the propagating element of fire and can be solid, liquid or gaseous. The chain reaction makes the burning process self-sustaining. Basically, the radiated heat from the flames reaches the fuel and it is broken down into smaller particles, which combine with oxygen and burn, radiating heat back into the fuel, thus forming a constant (self-sustaining) cycle.

**Figure 1 Fire Triangle and Fire Tetrahedron**



**Source** (Underhill, Hiltz John, & Moyst , 2007)

### **Classes of Fire**

Fire is classified in five classes which highly depend on the type of fuel / combustible material that is burning (Univ of Pennsilavania, 2014). The following are the classes of fire;

**CLASS "A"** stands for fires that leaves ash after burning. They are caused by ordinary combustible materials, such as paper, wood, cloth and plastics. This type of fire is best extinguished by removing the heat. Fire extinguishers for this purpose is dry chemical extinguisher and water.

**CLASS "B"** stands for fires that boil or bubble. They are caused by any non-metal in a liquid state such as flammable liquids, combustible liquids, petroleum greases, tars, oils, oil-based paints, solvents and lacquers. This type of fire is fast-spreading and can cover a very large area in a very short time. This fire accounted for only 2% of fires and a massive 21% of fatalities in 2010/11 in UK (HASpod, 2019). In Tanzania, the recent class 'B' fire that happened was in 2019 in Morogoro region resulting to more than 100 fatalities (BBC Swahili, 2019). The best way to extinguish it is by blanketing or smothering action (ABCs of Fire Extinguishers, 2021).

**CLASS "C"** stands for fires originating from flammable gases. The early steps of extinguishing this kind of fire is putting off electricity source to cut off current conduction. Generally, the fire extinguisher recommended is dry chemical or carbon dioxide. Water is highly not recommended in this class.

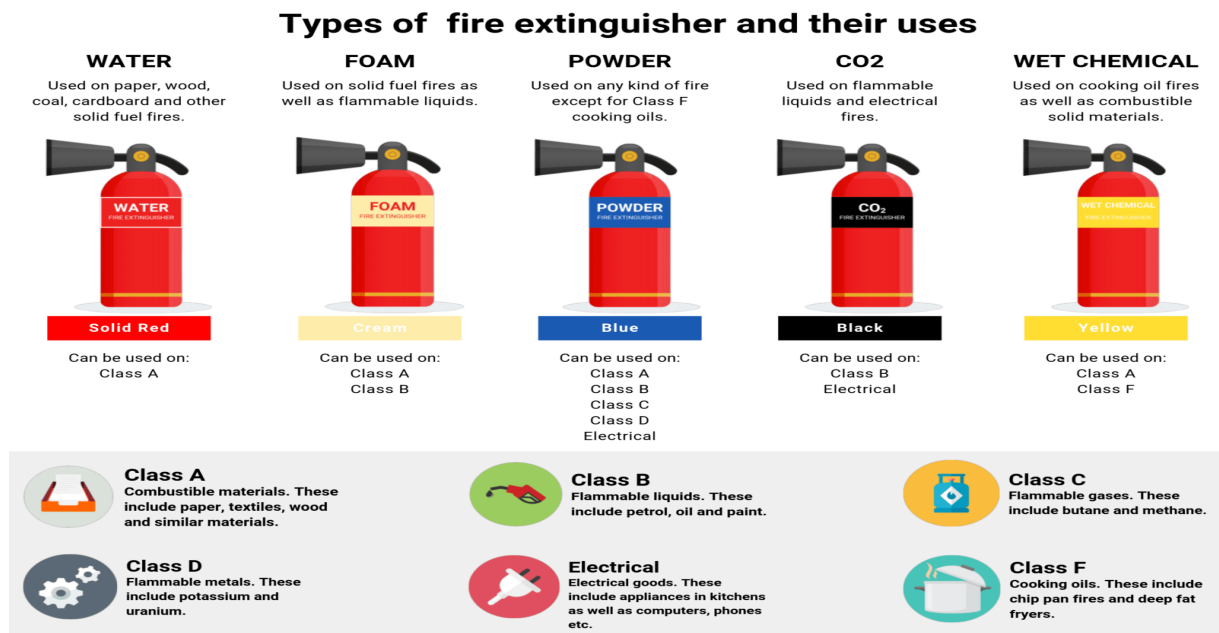
**CLASS "D"** fires stand for fires that have a dynamite effect as they involve combustible metals such as ammonium nitrate, sodium, lithium, potassium, titanium, magnesium and zirconium. In 2020, a port in Beirut Lebanon which did not properly store ammonium nitrate exploded and killed over 200 people, injured 7000 and displaced over 300,000 persons (Landry, Alameddine, Jesus, & et.al, 2020). This class is extinguished by dry powder.

**CLASS "F/K"** are fires caused by cooking appliances that involve combustible cooking oils such as vegetable or animal oils and fats. This class is extinguished by wet chemical.

Furthermore, fires from electrical currents do not have a clear distinction and they are not classified as electricity is not regarded as fuel but rather acts as heat source.



Figure 2 Types of Fire Extinguishers and Their Uses



Source; Google 2022

### Concept of Fire Emergency

Fire is very important but possess a great danger when used incorrectly. In the world we are living today, there are many hazards that can lead to emergencies like fire. WHO (2002) explain emergency as a state in which normal procedures are suspended and extra-ordinary measures are taken in order to avert a disaster. Fire emergencies may be triggered by human actions which increases or decreases the probability of fire outbreak. The probability of fire outbreak / fire risk is determined probabilistically as a function of hazard, exposure, vulnerability and capacity. It is defined as the potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time (UNDRR , 2021). Some literatures explain that fire risk is a probability of negative consequences that can happen as a result of fire emergency or disaster.

Fire emergencies have devastating consequences that may result into deaths, injuries, loss of properties, and extensive damage to business and homes (World Fire Statistics, 2014). In 2019, a fire department responded to a fire on average every 24 seconds in the United States (NFPA, 2015). A home fire was reported every 93 seconds, a home fire death occurred every three hours and 10 minutes, and a home fire injury occurred every 43 minutes. According to CTIF (2020), Barbados, Netherlands and USA, are among the top 15 countries with high fire emergencies per thousand people per year 2018, Barbados recording 6.95 fire events per thousand people, USA 4.05 fire events per thousand people and Netherlands 5.18 fires per thousand people.

In Africa, fire emergencies have occurred in all the countries and have resulted to injuries, deaths, loss of properties (CTIF, 2020). In East Africa, Tanzania is leading in fire deaths per year having an average of 2,808 deaths and being among top 25 countries in the world fire 2020 report with more than 2.0 deaths per 100,000 inhabitants having a rate of 5.2 deaths per 100,000 inhabitants (CTIF, 2020). The report further reveals that Kenya has a total number of 1,230 deaths per year which is an average of 2.5 deaths per 100,000 inhabitants while Uganda has an average of 2,228 deaths which is 5.4 deaths per 100,000 inhabitants per year.



Fire emergency has resulted to loss of lives, injuries and destruction of different facilities in various countries including public markets in Tanzania (Luoga, 2020), boarding schools (Nyagawa, 2017) and markets facilities in South Africa (SABC News, 2021).

### **Relevance of the Theory to the Study**

This theory provides that individuals tend to safeguard themselves from any of harm which is persuaded by four aspects which involve belief related to the risk, severity, belief related to the vulnerability and belief related to the perceived efficacy and self-efficacy. In addition to that, this theory is very crucial in this study as it provides the importance of protecting from various risks and dangers where for the purpose of this study, various strategies are taken into consideration and these are conducting inspection, providing education to the community about fire emergency preparedness, fire risk management and fire emergency preparedness plan.

### **Behavioral Theory**

This theory attempts to elaborate about human behaviour by analyzing what is commonly known as the antecedents and consequences present in the environment of individuals. Therefore, according to Ejeta (2015), preparedness for disasters and emergencies at individual, community and organizational levels could be more effective tools in mitigating (the growing incidence) of disaster risk and ameliorating their impacts. That is, to play more significant roles in Disaster Risk Reduction (DRR). Preparedness efforts focus on changing human behaviors in ways that reduce people's risk and increase their ability to cope with hazard consequences.

Disaster preparedness is one of the basic components of DRR. Preparedness identifies the steps necessary to increase the likelihood of avoiding or minimizing hazard effect consequences. Preparedness strategies are developed through a hazard identification and mapping, vulnerability analysis and risk assessment with behavior change strategies being used to inform how the outcome of this process can translate into protective actions. Effective preparedness reduces vulnerability, increases mitigation level, enables timely and effective response to a disaster event and so shortens the recovery period from a disaster, and increases community resilience.

### **The Concept of Emergency Preparedness**

The Sendai Framework for Disaster Risk Reduction 2015-2030 has preparedness amidst its four (4) priority of actions (UNDRR, 2015). This was an assessment done after the Hyogo Framework for Disaster Reduction 2005-2015 which showed an emphasis in increasing efforts in preparedness activities to reduce the impacts of potential emergencies. According to UNDRR (2021), emergency preparedness refers to all the knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from the outcomes of any hazard that may happen or is happening at a given time.

FEMA informs that, preparedness involves activities as planning, training, and educational activities for events that cannot be mitigated. Such activities may comprise of developing preparedness plans for what to do, where to go, or who to call for help in an emergency, exercising plans through drills; table top exercises and full-scale exercises, preparing a list of required items that can be used in case of emergency and acknowledging potential vulnerabilities by performing scenario identification.

Preparedness includes all activities and measures taken to assure that there is an operative reaction to the influence of hazards. These activities include forecasting and early warning, scenario identification (Manesh, 2017), temporary evacuation of people and property from threatened locations (AL-Fazari & Kasim, 2019), recruiting, assigning, and

training staff who can assist in key areas of response operations, identifying resources and supplies that may be required in an emergency, designating facilities for emergency use (Federal Emergency Management Agency, 2006) and planning and Monitoring.

In this study, preparedness has incorporated some elements of fire risk assessment to acknowledge the level of vulnerability and preparedness in the markets. According to HM Government (2006), fire risk assessment refers to an organised survey which is done step by step in a certain premise to understand the nature of the activities conducted and the possible causes of fire and the people that can be affected in the premise and in the surrounding areas. Fire risk assessment includes in identifying fire hazards, recognizing vulnerable people, evaluating the existing fire safety arrangements, recording findings; produce an emergency plan; instruct; inform and train, and arrange to regularly perform risk assessment (Fire Safety Section, 2013)

Fire risk assessment is important in markets to identify the fire hazards, reduce the risk of those hazards causing harm to as low as reasonably possible and decide what physical fire precautions and management arrangements are necessary to ensure the safety of people present in the market (Fire Safety Section, 2013)

#### **Strategies employed by Fire and Rescue Force in Fire Emergency Preparedness**

Baig and Ashraf (2016) on fire risk assessment at superstores in Pakistan showed that, the purposes of the fire risk assessment are to make an identification of the fire hazards or fire prone areas. The process of risk management can be done by dividing the process into different stages such as identification of risk, risk analysis and risk responses. There are many methods which can be used for assessment of risk such as expert judgment which is based on knowledge and experience, plan decomposition, analysis based on assumption and brainstorming for identification of risk factors. Moreover, the study revealed that, area accessibility of some stores increases the chances of hazard as if fire tenders are not able to reach them on time then loss of lives and property would be greater and even there is risk that it would convert into disaster. By studying the past cases of fire incident in super stores of Karachi it was found that there are two cases of fire had been reported in last 5years.

Twigg *et al.* (2017) on improved methods for fire risk assessment in low-income and informal settlements found that, fire policy and mitigation strategies in least developed nations are constrained by insufficient information on incidence, impacts, and causes, which is mainly due to a lack of ability and resources in collecting information, analysis, and modeling. Hence, community-based risk and vulnerability assessment methods which are widely used in disaster risk reduction could be adapted to urban fire risk assessment and could be enhanced by advances in crowd sourcing and citizen science for geospatial data creation and collection.

Likewise, the reviewed study by Twigg *et al.* (2017) attempted to provide detailed information related to the fire risk assessment including fire policy. However, the study only based on these strategies leaving behind other strategies such as fire inspection, provision of education, fire risk management and fire emergency preparedness plan.

In the same trail, Rawat (2003) on the fire risk assessment for forest fire control management in Chilla forest range of Rajaji national park Uttaranchal showed that the entire study area was vulnerable to forest fires during summer seasons. On the other hand, all existing forest roads need to be cut and burnt annually during winter. Also firewatchers should be engaged during fire season. Strict vigilance needs to be maintained to any kind of public entry inside park during fire season. In addition to that, the study stated that it is very crucial for raising the level of awareness of local people with regard to fauna, flora and to

help in protecting environment without the cooperation of the local people it would be difficult to protect that particular area.

The reviewed study by Rawat (2003) attempted to provide detailed information related to the fire risk assessment. However, the study only based on this strategy leaving behind other strategies such as fire inspection, provision of education, fire risk management and fire emergency preparedness plan.

Boakye (2017) on the emergency fire response in Ghana with reference to fire stations in Kumasi unveiled that comprehensive emergency management and response is crucial for disaster prevention and health emergencies. However, in African countries with an abundance of natural disasters and a rising surge in cardiovascular and obstetric emergencies, little research exists on emergency response. The study used Geographic Information Systems (GIS) tools including location -allocation modeling to evaluate the existing system of fire facilities, identify gaps in service, and suggest locations for new fire stations to maximize population coverage. Moreover, the study findings showed that, there is a poor distribution of fire stations within Kumasi Metropolitan Assembly (KMA) and large portions of the metropolis are underserved.

### **Methodology**

This research was carried out at Kariakoo International market, Ferry fish Intentional market City Mall, Imalaseko Super Market, Kisutu Central Market and Karume market. The justification of selecting this study area is the fact that most of the large public and private markets in Dar es Salaam are located in Ilala City Council in Dares salaam Region. The study was comparative and adopted mixed approach design implying both quantitative and qualitative methods. Primary data were collected using questionnaires, semi-structured interview and observation. Secondary data were obtained reviewing published dissertations, articles, journals textbooks and documents from the website. A total sample of 87 respondents from public markets were selected for the study. Quantitative data was analysed by using descriptive statistics with the help of SPSS. Qualitative data was analysed by using content analysis. The use of graphs and charts was encouraged to facilitate data presentation.

### **Findings and Discussion**

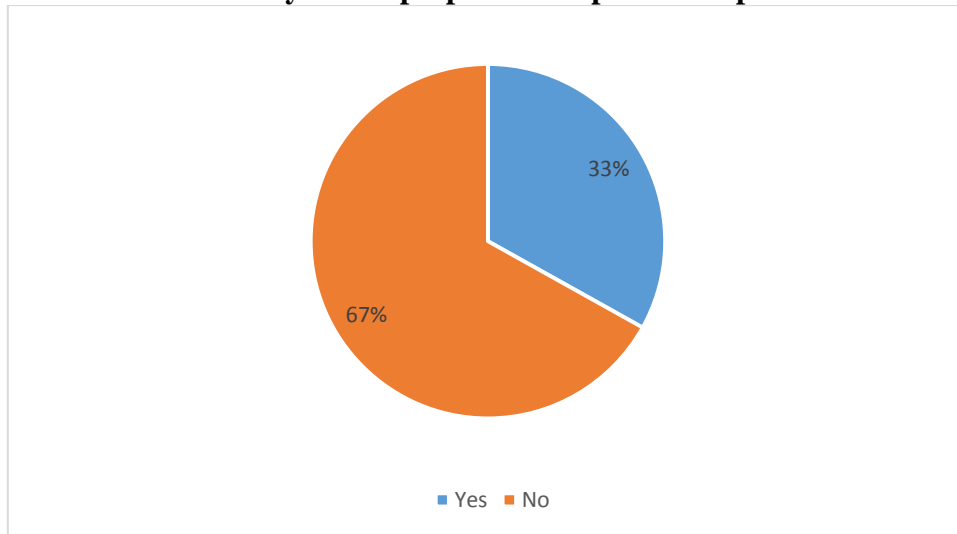
#### **Fire policies and fire safety equipment, signage and other infrastructure**

It is important to have emergency policies which offer guidance, consistency, accountability, efficiency, and clarity on how market fire emergency preparedness should be done (CMHC, 2021). The fire emergency preparedness policy carries a lot of weight in any institution so as to save the lives of other people and put a priority in their safety. Emergency policies are supposed to be under review annually to accommodate all the changes needed. Such policies enable markets preparedness in case of fire emergency along with fire safety equipment, signage and other supporting infrastructure. In this section the availability of the policies, fire safety equipment, signage and other supporting infrastructure and their efficiency.

#### **Availability of the fire emergency preparedness policy on fire emergency preparedness**

Public and private markets do differ in their practices as some have general policies for disaster preparedness and some have specific policy of fire emergency preparedness and some do not have at all.

Figure 3 shows the availability of fire preparedness policies in public markets.



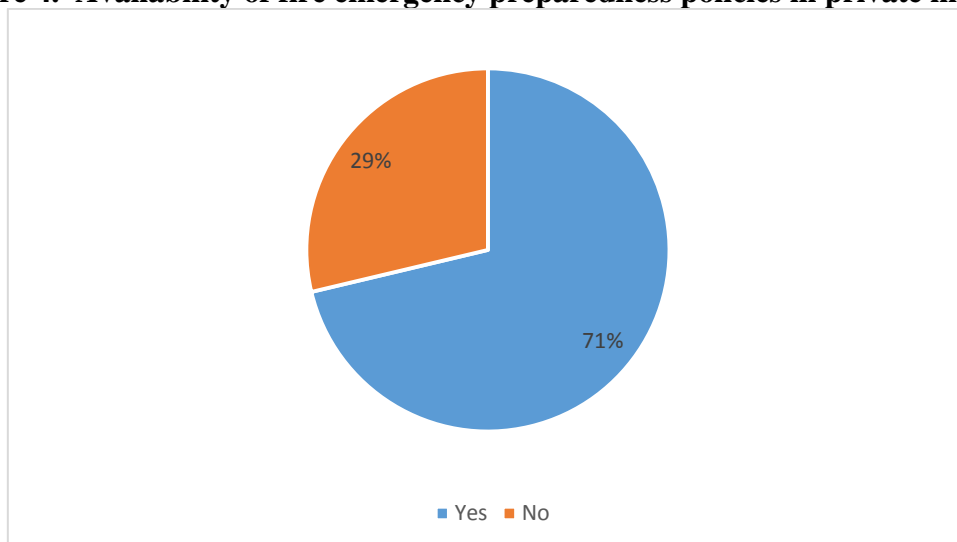
**Source: Field data (2022)**

The data from Figure 3 indicated that, 67% of public respondents confirmed no fire emergency preparedness policies were operational in their markets. The remaining 33% responded that there is a possibility that policies are operational. The respondents further informed that the markets do not have policies for general emergency preparedness and in case of any situation they do not have any emergency guidance.

This underlines the need to develop fire emergency preparedness policies in the markets as any successful emergency need guidance and clear procedures to be followed.

The availability of fire emergency preparedness policies in private markets is different from the public sector as the Figure 4 shows;

Figure 4. Availability of fire emergency preparedness policies in private markets



**Source: Field data (2022)**

The data from the analysis show that, private markets have prioritised on fire emergency preparedness policies through ensuring that the policies are formulated and put in operation through practices. From Figure 4, 71% indicates that there are policies formulated to provide guidance for fire emergency preparedness as part of enhancing the safety of their

facilities and the people within from the impacts that maybe resulted from fire emergencies. 29% of the respondents indicated that there are no policies formulated for fire emergencies.

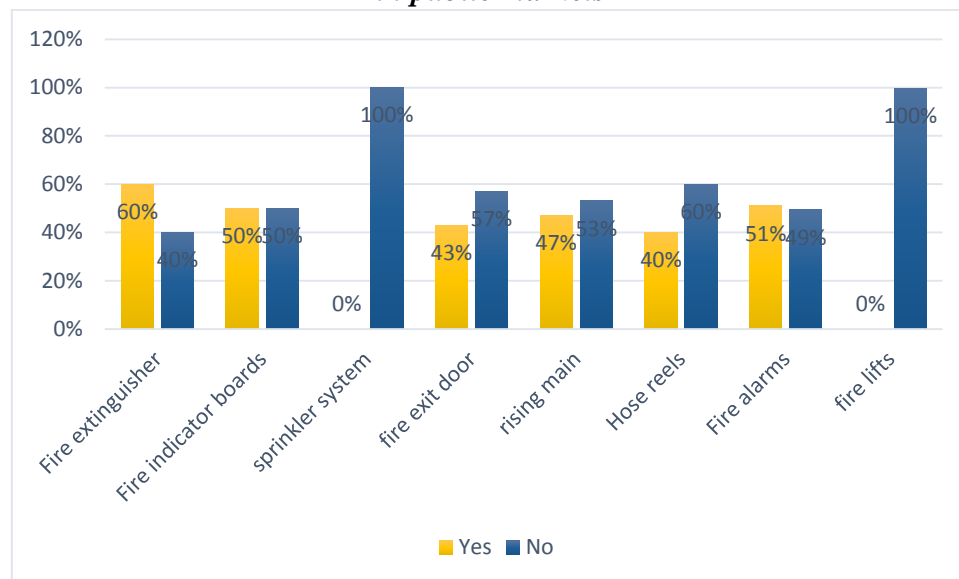
It was reported from the interview that one of the market had an operating fire emergency policy which is reviewed annually and communicated to their staff concerning the changes. The other market had already prepared a draft on fire emergency preparedness policy which was to be turned into a full policy and properly communicated to their staff. The study found that the 28.6% of respondents who denied on the availability of policy into lack of awareness on the availability of the draft because at that stage information remains with the administration alone.

The findings of this study show that, availability of fire emergency preparedness policies in both public markets and private markets has much difference. This is shown by the difference in percentage level which is more than 25% for availability of fire policies. This implies that there is more need to develop fire emergency preparedness policies in public markets compared to private markets.

#### Availability of fire safety equipment, signage and other supporting infrastructure

The Fire and Rescue Force Act of 2007 requires markets to have fire equipment, signage and other supporting infrastructure. In this section fire emergency preparedness was checked through availability of fire safety items including fire alarms, sprinkler systems, fire exit doors, hose reels, fire indicator boards and fire lifts. The Figure 5. Shows the availability status of these equipment in public markets:

**Figure 5 Availability of fire safety equipment, signage and other supporting infrastructure in public markets**

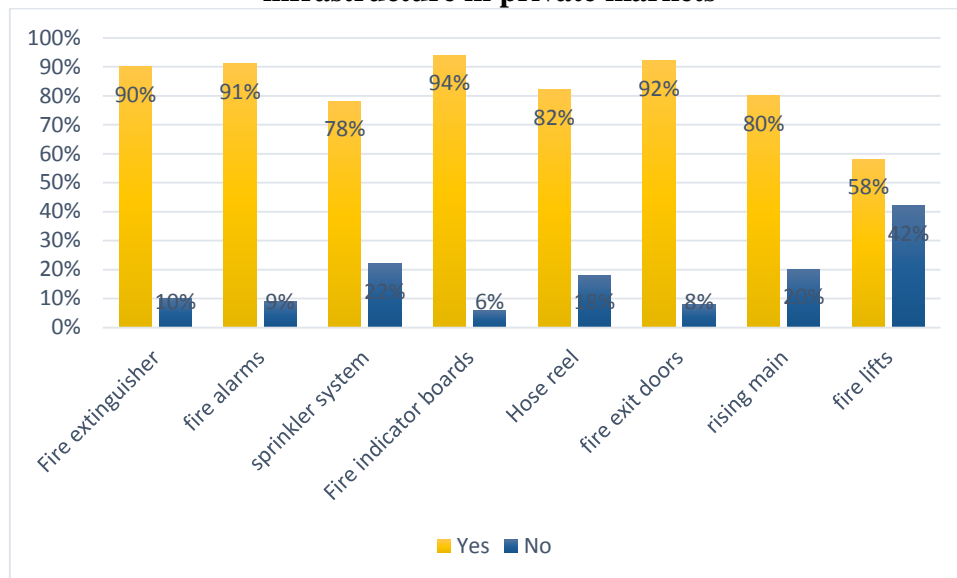


Source: Field data (2022)

The data from Figure 5 shows that availability of one fire safety item differs from another depending on the preparedness of the markets. The respondents from public markets explained that fire extinguishers are available at a rate of 60% while fire alarms are available at 50%, sprinkler 0%, fire exit doors 43%, rising main 40%, hose reel 40%, fire indicator boards 51% and fire lifts at 0%. The study informed that the availability of these equipment were not sufficient as none of these items have exceeded 50% except for fire alarms. One of the respondents from the interview informed that their market had only two fire extinguishers,

broken fire alarms and lacked rising main, hose reel and fire indicator boards. Availability of sprinkler system and fire lifts is the least in the public markets as their availability percent is 0%. The chosen markets in the case study do not have sprinkler system which is contradictory to Fire and Rescue Act of 2007. The Act states that any building which has from one floor onwards must have sprinkler system to protect itself from fire emergency. The situation is better in private markets as there is more availability of fire safety items compared to public markets. The Figure 6 explain the situation as follows;

**Figure 6 Availability of fire safety equipment, signage and other supporting infrastructure in private markets**



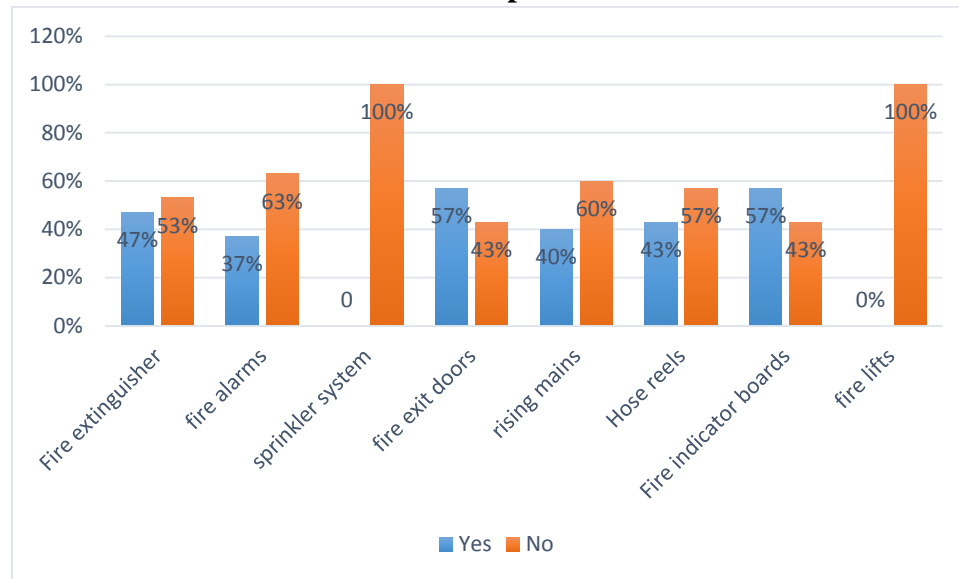
Source: Field data (2022)

The data from Figure 6 show that fire indicator boards are leading with an availability rate of 94%, followed by fire exit door at 92%, fire alarms at 91%, fire extinguisher 90%, hose reel 82%, rising main at 80%, sprinkler system at 78% and fire lifts at 58%. It was reported from the interview that sprinkler systems were not available in all the desired buildings according to Fire and Rescue Acts of 2007. Most of the buildings built before 2000 had no sprinkler systems which pose a threat to fire emergency. Fire lifts were not available in one of the markets but they had emergency stairs which are not really functional in rescue of patients with critical conditions. In both markets there is availability of hose reels and rising main although the percentage does not indicate total availability. The study observed that, there is a possibility that the respondents are not informed of the name “rising main” and “hose reel” but are aware of its availability. The plate 1 shows fire safety equipment, signage and infrastructure available in private markets.

In fire emergency preparedness it is important to ensure that fire safety items are working and in good condition so that when fire emergency occurs the items can be used to lessen the impacts of fire. In this section, the study explored the working conditions of fire safety equipment, signage and other working infrastructure. The working condition of fire items in public markets is not satisfactory as the figure7 shows;



**Figure 7 Working condition of fire safety equipment, signage and other supporting infrastructure in public markets**



**Source: Field data (2022)**

Data from Figure 7 show that none of the fire safety equipment in public markets have exceeded 50%. This shows that most of the equipment are not in good working conditions. Fire indicator boards are in better working condition of 43% compared from all the remaining items. Data collected from observation showed that the signs are in place and they all lead to exit doors in one of the markets but the other market one had none.

Fire extinguishers are working at 40% because some of the extinguishers are expired and not correctly stored as they are supposed to be serviced and hanged where anyone can see. Also some of them are obstructed with market equipment making it difficult to be accessible during emergencies.

Fire alarms are at 37% working condition because in one of the market the alarms are not working and the other markets the alarms are broken which makes it difficult to be used in emergencies.

Hose reels reached a 37% working condition because in one of the markets they are not available at all and in the other market they were not properly serviced. Observation showed that the last service for the hose reels was in January 2021 which reduced the chances of working well in real emergency.

Fire exit door are at a rate of 33% because they are normal exit doors which are large in size to help evacuate many people at once but are not designed to block fire from spreading to other parts of the market. The doors are operating from the outside and not inside which is not easy to help evacuate people during fire emergencies.

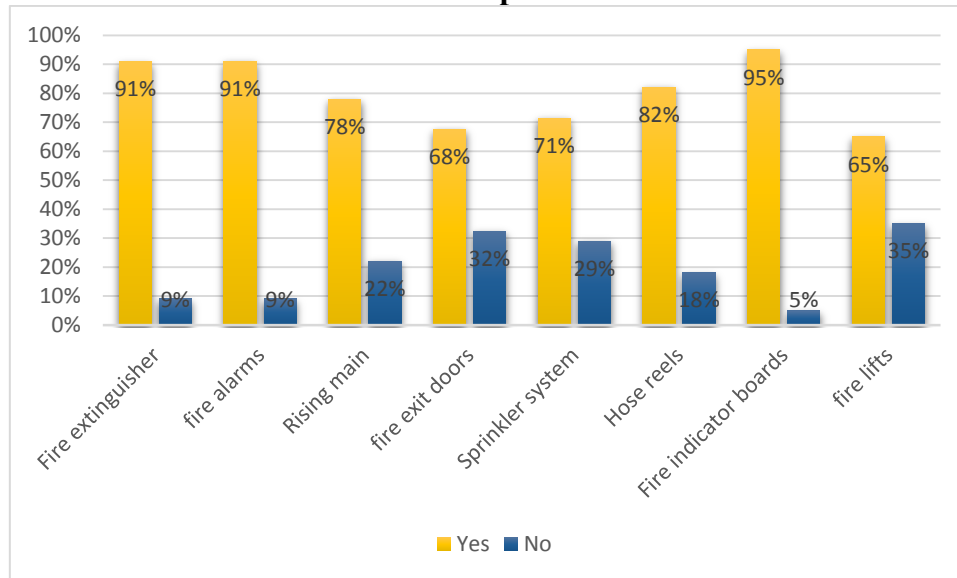
Sprinkler systems and fire lifts were not available at all which has a 0% of good working condition. In both markets there were neither ramps nor emergency stairs to be used alternatively in case of fire emergency.

Therefore, the data shows that working conditions of fire items in public markets is not good.

The working condition of fire safety items in private markets is different from the public as the Figure 8 shows;



**Figure 8 Working condition of fire safety equipment, signage and other supporting infrastructure in private markets**



Source: Field data (2022)

The situation in private markets is better than in public markets as the working condition of most of the items is above 50% which is good working condition.

Fire indicator boards are in better working condition of 95% compared from the rest of the items. Observation performed by the study revealed that indicator boards are in good working condition and they all lead to assembly points outside the market buildings.

Fire extinguishers and fire alarms are working at a good rate of 91% because they are regularly serviced, correctly hanged, not obstructed with market equipment and can be easily accessible during real emergencies.

Hose reels reached an 82% working condition, rising main 78% because in both market they are regularly service. Sprinkler showed a rate of 71% which indicated that there was uncertainty among the respondents because whenever drills are conducted the sprinklers are rarely used.

Fire exit door are at a rate of 68% because in one of the market the fire exit door is a normal door but larger in size helping to evacuate many people at once. Also the door opens from outside hindering people to pass smoothly in emergencies.

The study concluded that fire indicator boards, fire alarms and fire extinguishers are always in excellent working conditions as they are regularly monitored and serviced. The observation performed by the study revealed that other equipment including fire exit doors, hose reel and rising main are also serviced regularly and there are no obstructions from using the items.

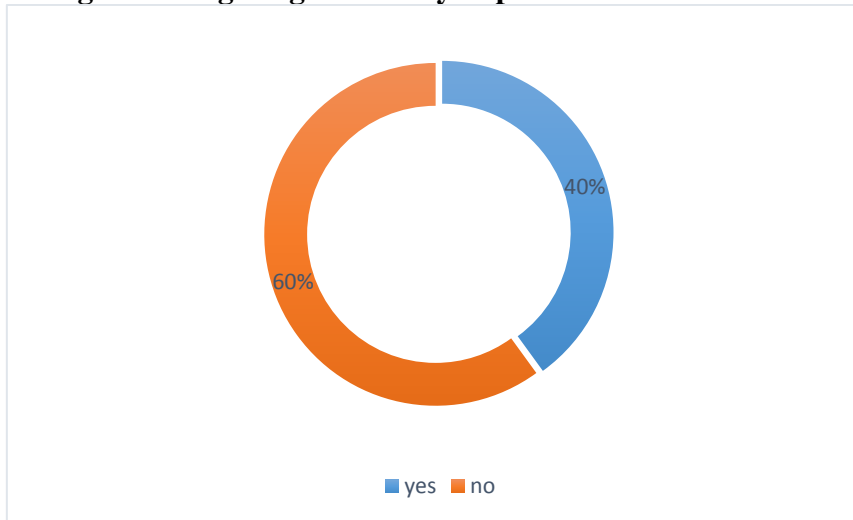
### **Fire preparedness knowledge and fire emergency preparedness plans in public and private markets**

#### **Knowledge on fire fighting**

Knowledge is one of the important items in emergency preparedness as it helps to make informed decisions and coordinate activities to respond effectively. The study explored the knowledge on firefighting among market workers in both public and private markets. 40% of the respondents in public markets informed that they have knowledge on firefighting while 60% had no knowledge. Data obtained from the interview declared that trainings have not

been conducted for more than two years in one of the markets. In the other markets training is mostly done to security guards and not all staff which makes the rest of the staff vulnerable to fire emergency. The study observed that firefighting knowledge in public markets is low as the majority of the respondents have poor knowledge. Figure 9 indicates the level of firefighting knowledge in public markets.

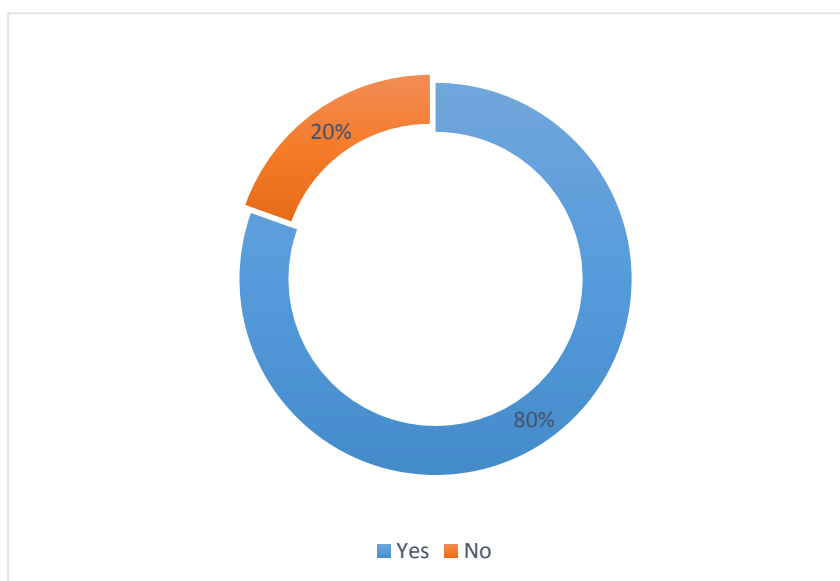
**Figure 9 Knowledge of firefighting and safety in public markets**



**Source: Field Data (2022)**

The data of respondents from private markets informed that 80% have knowledge on firefighting while 20% have no knowledge on firefighting. Majority of the respondents have awareness on firefighting which helps to act accordingly during fire emergency. This shows good preparedness level for private markets compared to public markets. The Figure 10 shows the level of knowledge in firefighting in private markets.

**Figure 10 Knowledge on firefighting and safety in private markets**



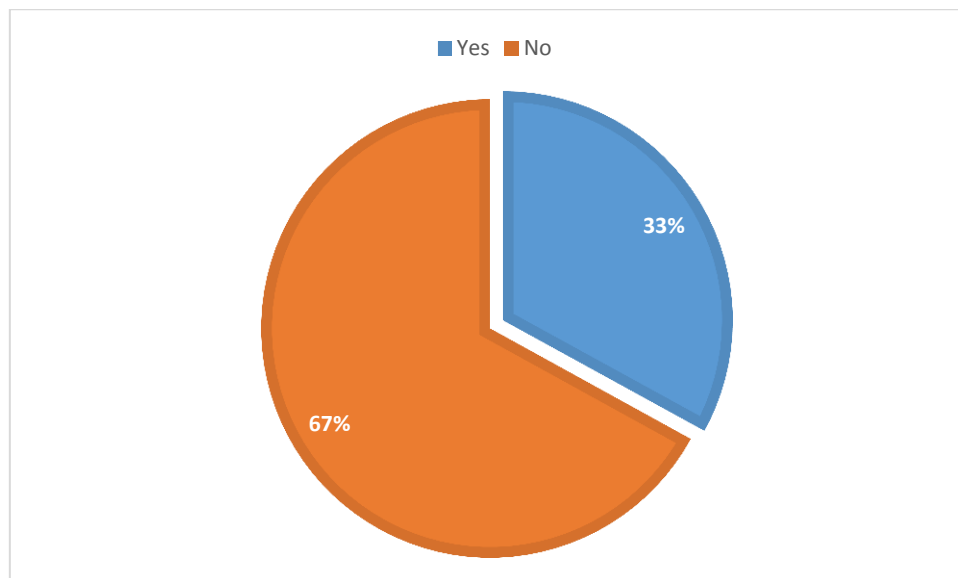
**Source: Field data (2022)**

In general, the level of firefighting in public markets is low as majority of the respondents have no knowledge. The study concluded that more efforts should be made to create awareness in firefighting in public markets.

#### Participation in firefighting drills/exercises

Efficiency in fire emergency preparedness includes participation of people in firefighting drills/exercise as one of the implementation strategy in both public and private markets. It was observed from the study that 33% of respondents from public markets participated in drills conducted at the market while majority of the respondents 67% have never participated on fire drills. The data collected from the interview declared that in one of the market drills have not been conducted for three years and which makes majority of the workers inexperienced of using fire safety items. Therefore, it can be concluded that firefighting drills/exercises are less efficient in public markets as they are rarely carried out in the markets. This situation is indicated by the Figure 11 as follows;

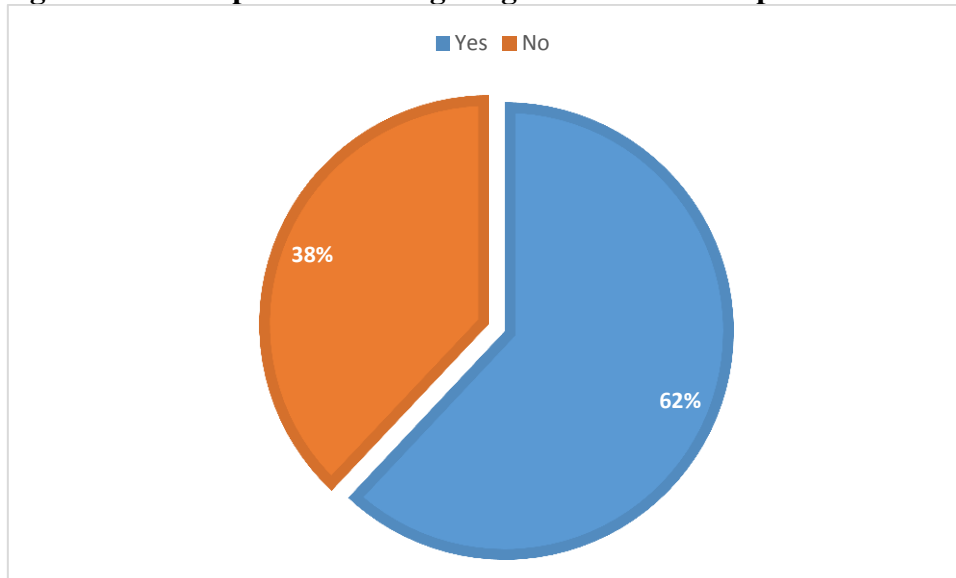
**Figure 11 Participation in firefighting drills/exercise in public markets**



Source: (Field data2022)

The respondents from private markets revealed that they were always participating to drills in firefighting drills/exercises. The data observed that 62% of the respondents from private markets participated in fire drills while 38% never participated in fire drills. The majority of respondents participated in fire drills in private markets therefore, it can be concluded that firefighting drills/exercises are efficient in private markets as they are always carried out in the markets than in public markets. This situation is indicated in Figure 12 as follows;

**Figure 12 Participation in firefighting drills/exercise in private markets**



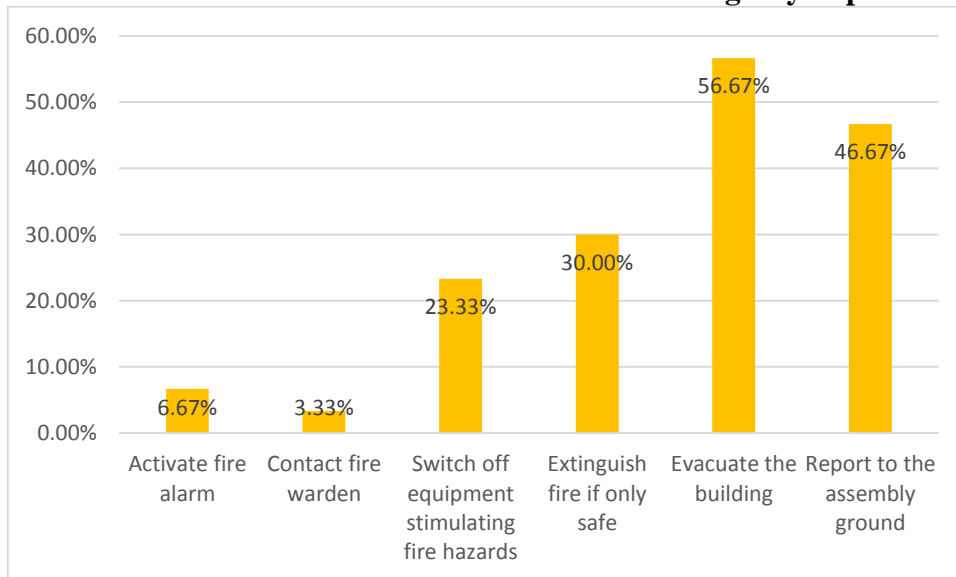
Source: Field data (2022)

In a nutshell, firefighting drills in public markets are lower than in private markets.

**Awareness on activities to do in case of fire emergency in public markets**

Awareness has reflected a number of activities ranging from evacuating the building, reporting to the assembly ground, extinguishing fire if only safe, switching off the equipment stimulating the fire hazards, activation of the fire alarm and contacting the warden. The data from the analysis shows awareness regarding the activities to be done in case of fire emergency in public markets.

**Figure 13 Awareness on activities to do in case of fire emergency in public markets**



Source; Field data, (2022)

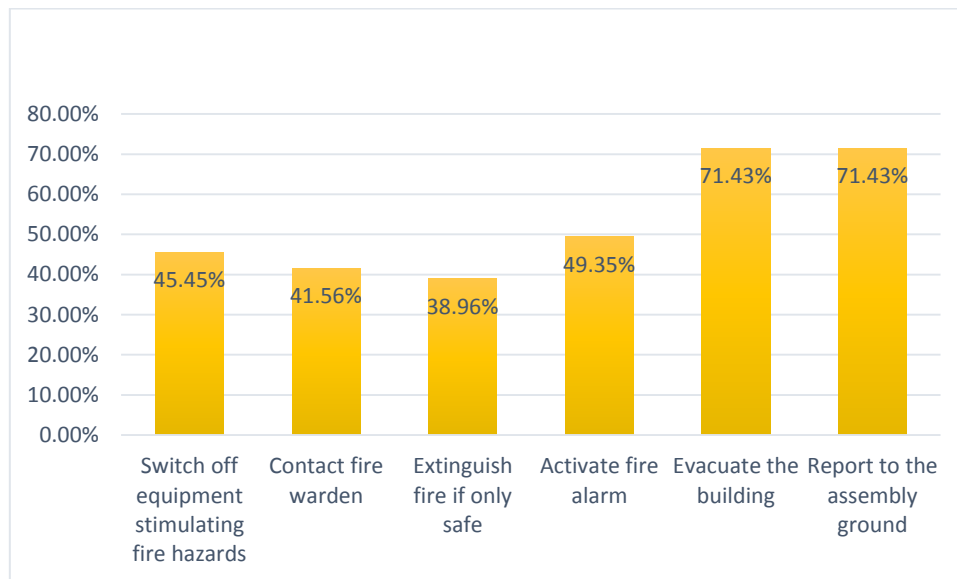
From the figure 13, 56.67% indicate the main activity which is to be done in case of fire emergency in the public market which is to evacuate the building, followed by 46.67% indicating reporting to the assembly ground, followed by 30% indicating to extinguish fire if only safe. 23.33% indicate the switching off equipment stimulating fire hazards while 6.67% indicates the activation of the fire alarm. Lastly, 3.33% indicate that the contact to the warden should be made.

This implies that, in case of fire emergency most of the public workers in these market will vacate the building heading to the assembly point as they have knowledge on how to use fire exit signs. The data informs that most of them do not have chronological order on the activities to be done in case of fire emergency. Figure 13 shows that majority of the workers will try to extinguish fire before pressing the fire alarms and switching off equipment stimulating to fire hazard.

However, if there will be a fire emergency most of the market workers might be in greater danger as the assembly points have been turned into parking lots for vehicles.

The results of the data collected from the private markets that were visited show that, the majority of the respondents were aware of activities to be done in case of fire emergency in the market. Figure 14 shows the percentage of awareness according to activities:

**Figure 14 Awareness on the activities to do in case of fire emergency in private markets**



Source; Field data, (2022)

From the Figure 14, 71% indicate the evacuation of the building is the main activity and reporting to the assembly ground. Followed by 49% indicating activating fire alarms, switching off all equipment stimulating fire hazard (45.5%) and contact fire warden (41.5%). Lastly the respondents indicated that 38.9% will extinguish fire if only safe. The study has concluded that, the respondents from the private sector are well aware of the activities to do in case of fire emergency compared to respondents from public markets.

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### **Improvement needs of fire emergency preparedness in public and private markets Monitoring and evaluation routine of fire emergency preparedness items**

The study considered market policies, fire equipment, signage and infrastructure, fire hazard and vulnerable groups, fire training and drills, and fire emergency preparedness plans in the monitoring and evaluation process of fire emergency preparedness items in the market.

The majority of the respondents acknowledged that there is no monitoring and evaluation in market policies and fire emergency preparedness plans in public market. The data from the respondents further informs that fire training and drills, and fire safety equipment, signage and other supporting infrastructure are the leading item in monitoring and evaluation routine by 57% and 53% respectively. The rest which are 50% include market policies 43%, fire hazard and vulnerable groups (37%) and fire plans by 13% in the same descending order. The level for fire emergency preparedness policies and plans is relatively higher than others because in public markets there are no such practices. The study concluded that public respondents are not aware of the importance of fire emergency plans or policies in their markets. It is therefore important to stress on the importance of fire policies and plans together with monitoring and evaluation practices in all the areas so as to enhance fire emergency preparedness in public markets.

The situation in public markets is different from private market. Monitoring and evaluation routine is always performed on fire emergency plans followed by safety equipment, signage and other infrastructure as these fire items are always serviced and tested on their working ability. The rest include fire drills, fire hazards and vulnerable groups and lastly fire policies. It was reported from the interview that fire drills are reviewed annually same as fire hazards and fire policies. The respondents also mentioned that monitoring and evaluation is done in fire training and drills so as to make sure the knowledge offered is relevant and time bounded.

Fire policies have carried the least weight because in one of the market there is a complete draft of fire policy waiting to be communicated to other staff.

### **Areas of improvements on fire emergency preparedness in the markets**

The study gave options to the respondents to choose areas of fire emergency preparedness improvements in the market. The respondents were given improvement areas including market policies, fire equipment, signage and infrastructure, fire hazard and vulnerable groups, fire training and drills, and fire emergency preparedness plans.

The data informs that majority of the respondents from the public market recommended improvement in fire training and drills by 60%, followed by fire safety equipment (50%) and fire hazard and vulnerable groups by (40%). The least recommended was fire emergency preparedness plans by 37%. This shows that majority of the respondents did not see the importance of these plans regarding the fact that they are not present in their markets.

On the other hand, the respondents from private markets recommended that much enhancement should be made on fire training and drills by 47% followed by fire equipment, signage and infrastructure (45%) and fire hazards and vulnerable groups by 39%. The least recommended both scored 32%, which are fire emergency preparedness policies and fire emergency preparedness plans. The data from the private markets also show that majority of the respondents do not give a lot of weight in policies and plans. These plans are as important as other fire emergency preparedness items and on further notice they help to instil a fire emergency preparedness culture among the workers by outlining clear directions on what to be done wherever an emergency occurs.

## **Conclusions**

In general, fire emergency preparedness in public market is lower than private markets. The percentage for preparedness in most of the listed items in the study is not satisfactory. This increases vulnerability of public markets towards the impacts of fire emergency. It is better that efforts be made by the government to help prevail the impacts that can be resulted. The situation in private markets is better and they should keep updating their preparedness measures to match the needs of the markets so as to keep their people and properties safer.

## **Recommendations**

Proper fire emergency preparedness reduces at a great level the impacts that are caused by emergency such as loss of properties, environmental pollution, anxiety, fear and panic attack. Preparedness also helps in responding to an emergency easily and returning back to normal in a shorter period of time (sherriff, 2021). The study recommended on the following;

### **Fire emergency preparedness policies**

The Occupation Safety and Health Act of 2003 stipulates that every office should have safety policies to act as guidance to their workers. The government should insist that every institution including markets whether be public or private should have fire emergency preparedness policies and be reviewed at least annually. This will help build market culture in preparation to fire emergencies.

### **Sufficient instalment of fire safety equipment, signage and infrastructure**

Fire emergency preparedness equipment, signage and infrastructure should be proper installed in markets according to the ratio as stipulated by Fire and Rescue Force Act of 2007. Fire and Rescue Force should delegate the responsibilities market fire inspections to other agents so that all markets can be checked and hold accountable in a convenient time.

### **Training and drills to improve fire preparedness skills**

Markets should maintain provision of training and conduct drills to help improve fire preparedness skills to their workers. Fire emergency preparedness training and drills will help people to know the right move to take and how to minimize risk before a real emergency. There is a huge difference between a person who has knowledge and the one who does not at all and the one who has knowledge and skills.

### **Conduct Monitoring and Evaluation of fire emergency preparedness**

Markets should have a culture of doing monitoring and evaluation of fire emergency preparedness items. This will help acknowledge hazardous areas, update training and drills and making sure that equipment, signage and infrastructure are well placed and in good condition to reduce the fire risk and offer better response in case of an emergency.

### **Emergency preparedness plan**

In order to be prepared, there is a need to have good plans for fire emergencies in the markets based on a risk and vulnerability analysis. The plans should be detailed to help emergency responders to understand the procedures for preparing and responding to fire emergency including; resource inventory planning; stockpiling planning; logistical planning; evacuation planning; communication planning; needs assessment planning.

### **Allocation of specific budget for fire emergency preparedness**

There is a need for markets to have separate budget for fire emergency preparedness. This budget will help allocate funds for purchase of fire safety equipment, training and drills conduction and periodic monitoring and evaluation.

### **Creation of fire awareness programs**

TAMISEMI and Local Government Authority should collaborate with Fire and Rescue Force to create fire emergency awareness programs to prepare people's mindset on what to do in case of real emergencies. This will also create emergency preparedness culture among people.



## REFERENCES

(2014). *Tanzania Red Cross Society*.

aa. (2020). *aa.com*. Retrieved 05 05, 2021, from <https://www.aa.com.tr/en/europe/hospital-fire-in-russia-kills-3-people/1851389>

ABCs of Fire Extinguishers. (2021). <https://www.uregina.ca>. Retrieved 06 07, 2021, from <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj9YDL44XxAhUXRkEAHSi2C2MQFnoECBcQAA&url=https://www.uregina.ca/Fhr/Fhsw/Fassets/Fdocs/Fpdf/FEmergency-Management/The-ABCs-of-Fire-Extinguishers.pdf&usg>

Aga Khan Hospital. (2021). *agakhanhospitals*. Retrieved 06 07, 2021, from <https://www.agakhanhospitals.org/DarEsSalaam>

AL-Fazari, S., & Kasim, N. (2019). *Role of Stakeholders in Mitigating Disaster Prevalence: Theoretical Perspective*. Universiti Tun Hussein Onn Malaysia, Department of Construction Management, Batu Pahat, Johor, Malaysia.

Altay, N., & Green, W. G. (2006). , OR/MS research in disaster operations management. *European Journal of Operational Resources*.(175), 475–493.

Baird, M. E. (2010). *The “Phases” of Emergency Management* . Background Paper , Intermodal Freight Transportation Institute (IFTI): University of Memphis, Vanderbilt Center for Transportation Research (VECTOR) , Mepmhis.

Banerjee, N., Chaterjee, A., Chaterjee, S., Chaterjee, S., Santra, T., Mondal, P., et al. (2015). FireRisk Assessment in High rise Hospital Building in Kolkata: Safety Issues from Ergonomics Perspective. *Researchgate*.

BBC. (2021). *BBC News*. Retrieved May 05, 2021, from <https://www.bbc.com/news/world-middle-east-56875804>

BBC. (2021, 04 02). *bbc.com/news/*. Retrieved from [www.bbc.com/news/world-europe](http://www.bbc.com/news/world-europe): <https://www.bbc.com/news/world-europe-56616779>

BBC Swahili. (2019). *BBC Swahili*. Retrieved 6 8, 2021, from <https://www.bbc.com/swahili/habari-49345162>

Bushesha, M., & Ndibalema, A. (2015). Towards Sustainable Disaster Management: An Assessment of Levels of Community Awareness on Fire Outbreaks and Safety among Public Universities in Tanzania. *Huria*, 24, 18.

CCFSC. (2006). *National Strategy and Action Plan for Disaster Prevention, Control and Mitigation in Vietnam 2001 to 2020*. Hanoi, Vietnam.

Citizen. (2020). *The citizen*. Retrieved 05 19, 2021, from <https://www.thecitizen.co.tz/tanzania/news/5-000-traders-in-limbo-after-fire-razes-market-2706774>

- Citizen. (2020, September). *thecitizen.co.tz*. Retrieved from [www.thecitizen.co.tz](http://www.thecitizen.co.tz):  
<https://www.thecitizen.co.tz/tanzania/news/fires-sorry-state-of-schools-readiness-2717032>
- CMHC. (2021, 09 02). *Canada Mortgage Housing Corporation*. Retrieved from  
<https://www.cmhc-schl.gc.ca>: <https://www.cmhc-schl.gc.ca/en/professionals/industry-innovation-and-leadership/industry-expertise/affordable-housing/managing-affordable-housing/manage-affordable-housing-projects/policy-information/why-are-policies-important>
- Creswell, J. W. (2009). *Research Design; Qualitative, Quantitative and Mixed Approaches Methods* (3rd Edition ed.). California: Sage Publication Inc.
- CTIF. (2020). *World Fire Statistics*. Russia, Germany, USA: Center of Fire Statistics.
- Darwin, C. R. (1874). *The descent of man, and selection in relation to sex*. (2nd ed.). London: John Murray.
- DW. (2020). *DW*. Retrieved 05 05, 2021, from <https://www.dw.com/en/turkey-covid-19-patients-killed-in-hospital-fire/a-55995464>
- EM-DAT. (2008). *Emergency Events Database*.
- Facebook. (2020, 12 28). <https://m.facebook.com/story>. Retrieved from  
<https://m.facebook.com/story>:  
[https://m.facebook.com/story.php?story\\_fbid=212852773657578&id=111093093833547](https://m.facebook.com/story.php?story_fbid=212852773657578&id=111093093833547)
- Federal Emergency Management Agency. (2006).
- FEMA. (2006).
- FEMA. (2015). *Federal Emergency Management Agency*. Retrieved 05 13, 2021, from  
<http://www.usfa.fema.gov/data/statistics/>
- Femoran. (2021, 23 06). *hospital-fires-what-are-the-hazards-2/*. Retrieved from  
[www.femoran.com/blog](http://www.femoran.com/blog): <https://www.femoran.com/blog/hospital-fires-what-are-the-hazards-2/>
- Finch, J. (1994). *Hospitals: definition and classification*. In: *Speller's Law Relating to Hospitals*. MA: Springer, Boston, MA.
- Fire and Rescue Force Regulations. (2015). *Fire and Rescue Force (Fire Precautions In Buildings) Regulations*. Dar es salaam: Government Gazette.
- Fire Rescue Force. (2020). [www.frf.go.tz](http://www.frf.go.tz). Retrieved 06 06, 2021, from <http://www.frf.go.tz>
- Fire Risk Assessment Network. (2021). [fire-risk-assessment-network.com/blog/fire-triangle-tetrahedron/](https://fire-risk-assessment-network.com/blog/fire-triangle-tetrahedron/). Retrieved 06 10, 2021, from <https://fire-risk-assessment-network.com/blog/fire-triangle-tetrahedron/>
- Fire Safety Section. (2013). *Fire Safety Risk Assessment*. London: Fire Safety Section, UK.

- Google. (2021, October). Retrieved from [https://www.google.com/search?q=map+of+dar+es+salaam&sxsrf=AOaemvJe64vLLCByn4x2Ooc0QSE4fxSprA:1633077264715&tbm=isch&source=iu&ictx=1&fir=ko3jWx0vMwNe-M%252CLWFbFh4jeuQTsM%252C\\_%253BCnz82y6QiXFQRM%252C5udaC78c5ennGM%252C\\_%253BkkBnOCEdHxvKfM%252Cmg\\_DIZRdf9](https://www.google.com/search?q=map+of+dar+es+salaam&sxsrf=AOaemvJe64vLLCByn4x2Ooc0QSE4fxSprA:1633077264715&tbm=isch&source=iu&ictx=1&fir=ko3jWx0vMwNe-M%252CLWFbFh4jeuQTsM%252C_%253BCnz82y6QiXFQRM%252C5udaC78c5ennGM%252C_%253BkkBnOCEdHxvKfM%252Cmg_DIZRdf9)
- Gowlett, J. (2016). *Discovery of Fire by Humans; A Long and Convolved Process*. Royal Society Publishing.
- HASpod. (2019). *haspod blog*. Retrieved 06 08, 2021, from <https://www.haspod.com/blog/fire/classes-of-fire>
- HKMH. (2021, Aug). <http://kairukihospital.org/>. Retrieved from <http://kairukihospital.org/>
- HM Government. (2006). *Fire Safety Risk Assessment; Healthcare premises*. London: The Department for Communities and Local Government, Eland House, Bressenden Place.
- ISDR. (2004). *Living with Risk: A Global Review of Disaster Reduction Initiatives. International Strategy for Disaster Reduction* .
- Iyer, G. V. (2006). *Important Elements of Disaster Management and Mitigation and Design and Development of A Software Tool.*, 36, p. 600 092. India.
- James, S. L., Lucchessi, L. R., Bisignano, C., & Castle, C. D. (2017). *Epidemiology of Injuries from fire, heat and hot substances: Global, regional and national morbidity and mortality estimates from Global Burden of Disease 2017 Study*. *PMC*.
- JCEM. (2021, 09). [www.calhospitalprepare.org](http://www.calhospitalprepare.org). Retrieved from Joint Commission on Emergency Management: <https://www.calhospitalprepare.org>
- Kenya OSHA. (2007). <http://kenyanlaw.org>. Retrieved from [https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjUjvXyqbrxAhULgVwKHUFnA58QFnoECAQQAA&url=http%3A%2F%2Fkenyalaw.org%2Fk1%2Ffileadmin%2Fpdfdownloads%2FActs%2FOccupationalSafetyandHealth\(No.15of2007\).pdf&usg=AOvVaw31a](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjUjvXyqbrxAhULgVwKHUFnA58QFnoECAQQAA&url=http%3A%2F%2Fkenyalaw.org%2Fk1%2Ffileadmin%2Fpdfdownloads%2FActs%2FOccupationalSafetyandHealth(No.15of2007).pdf&usg=AOvVaw31a)
- Kihila, J. M. (2017). 'Fire disaster preparedness and situational analysis in higher learning institutions of Tanzania. *Jàmbá: Journal of Disaster Risk Studies*, 9(1), (a311).
- Kothari, C. (2004). *Research Methodology, Methods and Techniques* (2nd Revised Edition ed.). New Delhi: New Age International Publishers.
- Kothari, C. R. (1985). *Research Methodology, Methods and Techniques*. New Delhi, India: New Age International (P) Ltd.
- Kothari, C. R., & Garg, G. (2019). *Research Methodology; Methods and Techniques* (Fourth Multi Colour Edition ed.). Delhi: New Age International (P) Ltd.

- Landry, M. D., Alameddine, M., Jesus, T. S., & et.al. (2020). The 2020 blast in the Port of Beirut: can the Lebanese health system “build back better”? *BMC Health Services Research*(1040).
- Luoga, M. D. (2020). *Fire Emergency Preparedness of Public Markets in Tanzania: A Case of Ilala Municipality, Dar Es Salaam*. Dar es salaam: University of Mzumbe.
- Lupala, J. M. (2002). *Rapidly Urbanizing Cities*. Dar es Salaam.
- Manesh, A. K. (2017). *Handbook of Disaster and Emergency Management*. Gothenburg Sweden: Kompendiet.
- Mboya, G. A. (2019). *Flood Risks and Coping Strategies of Social Groups in unplanned neighbourhood; The case of Pwani neighbourhood in kinondoni municipality*. Dar es salaam: Ardhi University.
- Mensah, I. (2014, August 30th). How to Determine the Sample from an Unknown Population. University Cape Coast.
- Merriam-Webster. (2021). *Merriam-Webster Dictionary*. Retrieved 05 13, 2021, from <https://www.merriam-webster.com/dictionary/fire>
- Michuzi. (2013, 09 08). <https://issamichuzi.blogspot.com/2013>. Retrieved from [www.issamichuzi.blogspot.com](http://www.issamichuzi.blogspot.com): <https://issamichuzi.blogspot.com/2013/09/balozi-seif-ali-iddi-akagua-hoteli.html>
- Mishra, D. B., & Alok, D. (2017). *Handbook of Research Methodology; A Compendium for Scholars and Researchers* (1st Edition ed.). New Delhi: Educreation Publishing.
- MNH. (2021). *Muhimbili National Hospital*. Retrieved 05 13, 2021, from <http://www.mnh.or.tz/>
- Mtanzania. (2014, 10 15). *Mtazania news*. Retrieved from [www.mtanzanianews.co.tz](http://www.mtanzanianews.co.tz): <https://mtanzania.co.tz/lori-la-mafuta-laleta-maafa-dar/>
- Muhimbili, N. H. (2021). *mnh.or.tz*. Retrieved April 28, 2021, from <http://www.mnh.or.tz/index.php/our-profile>
- Nachmias, C. (1992). *Research Methods in the Social Sciences*. . New York: St.: Martin's Press.
- Nachmias, D. (1996). *Research Methods in Social Sciences*. London: Martin Press Inc.
- Ndibalema, A. (2015). *An Assessment of Fire Preparedness Among Public Universities in Tanzania*. Dar es salaam: Open University of Tanzania.
- News24. (2019, Nov 13). *news24*. Retrieved from [www.news24.com](http://www.news24.com): <https://www.news24.com/news24/africa/news/huge-fire-at-kenya-hospital-forces-evacuation-of-100-patients-20191113>
- NFPA. (2013). *NFPA 101A, Guide on Alternative Approaches to Life Safety*. National Fire Protection Association. NFPA.

- NFPA. (2015). *National Fire Protection Association*. Retrieved 05 12, 2021, from <http://www.nfpa.org>
- Nyagawa, Z. M. (2017). AN INVESTIGATION OF THE IMMEDIATE CAUSES OF FIRE DISASTERS IN BOARDING SECONDARY SCHOOLS IN TANZANIA. *European Journal of Educational Studies*, 3(12).
- NYTimes. (2013, 27 07). *NYTIMES*. Retrieved from [www.nytimes.com](http://www.nytimes.com): <https://www.nytimes.com/2013/04/27/world/europe/fire-at-russian-psychiatric-hospital.html>
- Oliver Smith, A. (2016). Disaster Risk Reduction And Applied Anthropology: Annals of Anthropological Practice. pp. 40(1): 73-85.
- ORCI. (2021). *Ocean Road Cancer Institute*. Retrieved 05 21, 2021, from <https://www.orci.or.tz/organization-structure/>
- Oregon State Univ. (2020). <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwil0KOT-ozxoregonstate.edu>. Retrieved 06 10, 2021, from <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwil0KOT-ozxAhVxQ0EAHRdUBpwQFnoECAyQAA&url=https%3A%2F%2Fcatalog.extension.oregonstate.edu%2Fsites%2Fcatalog%2Ffiles%2Fproject%2Fpdf%2Fem9172-module1.pdf&usg=AOvVaw2IWh>
- Orodho, A. J., & Kombo, D. K. (2002). *Research Methods*. Institute of Open Learning, Kenyatta University, Nairobi.
- OSHA. (2003). *Occupational Health and Safety Act*. Dar es salaam: Government Gazette.
- Pan American Health Organisation (PAHO). (2014). *Hospitals Don't Burn; Hospital Fire Prevention and Evacuation*. Washington,DC: PAHO.
- Patton, M. Q. (1987). *How to use Questionnaire Methods in Evaluation*. London: SAGE Publications.
- Pelling, M., & Holloway, A. (2007). Legislation for Mainstreaming Disaster Risk Reduction. 33.
- PMO. (2015). *National progress report on the implementation of Hyogo Framework for Action 2013-2015*. Dar es salaam: Prime Minister's Office, Disaster Management Department.
- Rahmani, A., & Salem, M. (2018). Fire Risk Assessment in High Rise Hospital in Accordance with NFPA 101. *Open Journal System*.
- Regency Hospital. (2021). *regency medicalcentre*. Retrieved 06 07, 2021, from <https://www.regencymedicalcentre.com/about-rmc/>

- Reuters. (2021). *Reuters*. Retrieved 05 05, 2021, from <https://www.reuters.com/article/us-russia-fire-hospital-idUSKBN2BP10L>
- SABC News. (2021, May). *Sabc*. Retrieved May 05, 2021, from <https://www.sabcnews.com/sabcnews/limpopo-hospital-fire-claims-two-lives/>
- Samaritanpurse. (2018, February 12). *www.samaritanpurse*. Retrieved from <https://www.samaritanpurse.org/article/fire-destroys-building-at-tenwek-hospital-in-kenya/>
- Sharma , R., Barkshi, H., & Banerjee, A. (2020). How Safe are our Hospitals? *Indian Journal of Community Medicine*, 45, 104-105.
- sherriff. (2021). *www.sheriff.deschutes.org*. Retrieved from [www.sheriff.deschutes.org](http://www.sheriff.deschutes.org)
- Shree Hindu Mandal . (2021). <http://www.shm.or.tz/hospital>. Retrieved 06 07, 2021, from <http://www.shm.or.tz/hospital>
- The Guardian. (2020). *The Guardian*. Retrieved 05 05, 2021, from [www.theguardian.com/world/2020/may/12/russian-hospital-fire-kills-coronavirus-patients-ventilators-st-petersburg](http://www.theguardian.com/world/2020/may/12/russian-hospital-fire-kills-coronavirus-patients-ventilators-st-petersburg)
- Tromp, D. L., & Kombo, D. K. (2011). Proposal and thesis writing.
- Underhill, S. R., Hiltz John, & Moyst , H. (2007). A Discussion of Polymeric Materials for Fire-Safe Naval Applications. *Researchgate*.
- UNDHA. (1992). *Internationally agreed glossary of basic terms related to disaster management*. Geneva: (United Nations Department of Humanitarian Affairs).
- UNDRR . (2021). *United Nations Disaster Risk Reduction*. Retrieved 05 21, 2021, from <https://www.undrr.org/terminology/disaster>
- UNDRR. (2015). *Sendai Framework for Disaster Risk Reduction*. Geneva: UNDRR.
- UN-Habitat. (2010b). *The State of the World's Cities Report 2010/2011 – Cities for all: Bridging the Urban Divide*. Nairobi.
- UNISDR. (2009). *Terminology on Disaster Risk Reduction*. Geneva: UNISDR.
- Univ of Pennsylvania. (2014). *Guideline 5; Types of Fire, Fire Extinguishers, Inspection & Maintenance of Fire Extinguishers in University Buildings*. Pennsylvania: University of Pennsylvania.
- UN-SPIDER. (2021, 06 21). *United Nations Space-Based Information for Disaster Management and Emergency Response*. Retrieved from UN-SPIDER: <https://www.un-spider.org/risks-and-disasters/disaster-risk-management>
- URT. (2014). *Kinondoni Municipal profile* . Dar es Salaam: Government Publishers.
- URT. (2017). *Kinondoni Municipal Profile*. Government Publishers.



- USAID. (2011). Introduction to Disaster Risk Reduction. South Africa. Retrieved from [www.preventionweb.net>file>26081\\_kp1conceptdisasterrisk1.pdf](http://www.preventionweb.net/file/26081_kp1conceptdisasterrisk1.pdf)
- VoA. (2013, 26 04). *voanews.com*. Retrieved 05 05, 2021, from <https://www.voanews.com/gallery/38-die-russian-hospital-fire>
- VoA. (2013, 04 26). *voanews.com*. Retrieved 05 05, 2021, from <https://www.voanews.com/gallery/38-die-russian-hospital-fire>
- VoA. (2020, 09 14). <https://www.voaswahili.com/a/ajali-ya-moto-yauwa-wanafunzi-10-tanzania>. Retrieved from <https://www.voaswahili.com/a/ajali-ya-moto-yauwa-wanafunzi-10-tanzania>: <https://www.voaswahili.com/a/ajali-ya-moto-yauwa-wanafunzi-10-tanzania/5582672.html>
- VoA. (2021). *Voa News*. Retrieved May 05, 2021, from <https://www.voanews.com/africa/nearly-700-patients-evacuated-johannesburg-hospital-fire>
- Wapling , A., Heggie, C., Murray , V., Bagaria, J., & Philpott, C. (2009). *Emergency Preparedness Report; Review of five London Hospital Fires and their Management;2008-2009*. London: NHS.
- Washingtonpost. (2019, 09 24). *washingtonpost*. Retrieved from [www.washingtonpost.com](http://www.washingtonpost.com): <https://www.washingtonpost.com/world/2019/09/24/eight-newborns-killed-hospital-fire-possibly-started-by-mosquito-repellent-device/>
- WHO. (1963). *slideshare*. Retrieved 05 13, 2021, from <https://www.slideshare.net/zulfiqer732/definition-classification-and-function-of-hospital>
- WHO. (1998). *Health Sector Emergency Preparedness Guidelines*. Geneva: WHO.
- WHO. (2002). *Disaster and Emergency Definitions*. Addis Ababa: Panafrican Emergency Centre.
- WHO. (2019, March). Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/311314/WHO-HIS-HWF-Gender-WP1-2019.1-eng.pdf>
- World Fire Statistics. (2014). Fire as a Vulnerability”: The Value Added from Adopting Vulnerability Approach. *World Fire Statistics Bulletin*, 29.
- Yin, R. K. (1994). *Case Study Research, Design and Methods* (Vol. 5). London: SAGE Publications.



## **Analyzing the Accounting Recognition and Measurement: The Case of NPS**

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### **Abstract:**

The NPS tend to follow social accounting requirements that are based on “Logical and systematic analysis of the organization activities impact on the society and other stakeholders and to show this effect information in the financial statements” Due to the social nature of the NPS’ activities. In this sense the accounting recognition is the start point of the comprehensive accounting function. While the accounting measurement is one of the influencing elements of the accounting function, and its importance increased by moving towards the accounting compatibility for this sector organizations. Therefore, the organizations must be in an accountable position, Not only for the owners or shareholders (traditional concept), but to the society for its overall operations and activities. So, the researchers addressed and analyzed in this paper the following. First, the accounting recognition and measurement in the NPS. Second, the accounting presentation and disclosure in the NPS.

**Keywords:** NPS, Accounting Recognition, Social Capital, Disclosure.

### **1- Introduction:**

Accounting has emerged as a bookkeeping art in the fourteenth century. Then it has been turned into a knowledge based on scientific principles and logical assumptions with the late 18th century. Then the need to develop a general theory for accounting has been emerged in the early twentieth century. In that sense, the Accounting thought - academic and applied - cared about the need to set a general accounting theory consists of a set of accounting concepts, principles and assumptions that can regulate the professional accounting performance. In order to adjust and control the comprehensive accounting function in terms of the accounting recognition, measurement, presentation and disclosure of the applied performance in businesses and services organizations (Albaz & Albaz, 2019). But, according to existence of fundamental difference in the NPS’ nature, activities, fund-resources, expenditures and the usage of these funds as NPOs from the FPOs. It became necessary to develop appropriate accounting practices to regulate the financial operations and events carried out by these NPOs in order to enable them to prepare and submit financial statements and reports characterized by a high level of fairness and transparency. So these proposed



practices must focus on clarifying the financial reporting objectives, and identify the requirements of the accounting recognition, measurement, presentation and disclosure. In addition to identify the required financial statements in the financial reports. Which motivate the researcher to determine the comprehensive accounting function's dimensions in the NPS in the light of these differences.

It is worth noting that the accounting thought is brimming with previous studies in the field of the development of the accounting function at the level of for-profit organizations, but in contrast to the non-profit, although more than 35 over the year with the conclusion about the weakness of the accounting practices in NPOs (Kaba, 2021) But till now this conclusion still the main conclusion of the academic studies in this field.

The NPS tend to follow social accounting requirements that are based on “Logical and systematic analysis of the organization activities impact on the society and other stakeholders and to show this effect information in the financial statements” (Clerkin, 2021) Due to the social nature of the NPS’ activities. In this sense the accounting recognition is the start point of the comprehensive accounting function. While the accounting measurement is one of the influencing elements of the accounting function, and its importance increased by moving towards the accounting compatibility for this sector organizations. Moreover, the accounting presentation and disclosure issue are the most controversially debate in the NPS. Furthermore, Academic studies tended to assert that the accounting in the contemporary concept must serve the organizations and society at the same time, regardless of Organization’s objective, and Based on the concept of accountability and especially the social accountability ( (Andreas & Costa, 2014)& Costa, 2014). Therefore, the organizations must be in an accountable position, Not only for the owners or shareholders (traditional concept), but to the society for its overall operations and activities. So, the researchers addressed in this paper the following: First: the accounting recognition and measurement in the NPS. Second: the accounting presentation and disclosure in the NPS.

## **2- The Accounting Recognition and Measurement in the NPS:**

### **2.1- The Accounting Recognition and Measurement’s Concept:**

Accounting recognition is the first step in the comprehensive accounting function. And the framework of the financial statements Preparation and presentation in the Egyptian financial accounting standards has provided in 2006 a definition for the accounting recognition as. “Recognition is the process of an enrollment in the balance sheet or income statement that meets the definition of an element and satisfies the criteria for recognition”. It is expected that item achieves future economic benefits, and has a cost or value which can be measured with degree of confidence.

Also the accounting recognition defined by the generally accepted accounting practice in the United Kingdom (UK GAAP). As “The official recording process or including the item in the entity financial statements as an asset or liability or revenue or expense or the like”. And at the international level, international financial reporting standard (IFRS1) Provided a definition for the accounting recognition as. “The accounting recording process or show the entity’s items officially in the financial statements, when These items apply to the definition of element and meet the recognition criteria, and the recognition includes Item description in words and cash amount and show that amount in the balance sheet or income statement”. Moreover, the conceptual framework of the International Accounting Standards Board (IASB) identified in paragraph (83) the requirements of the accounting recognition that must be met in any item in order to be recognized in the financial statements and reports and in the following:

- The Item should meet the element definition.
- Assess the degree of uncertainty with regard to economic benefits associated with the item to or from the entity.
- The cost or value of the item can be measured reliably and can be expressed in the form of monetary units.
- Appropriate and reliability of the item.

On the other hand, the Accounting Measurement for items after the accounting recognition is the second step in the comprehensive accounting function. (Pianezzi, 2021 ) And the Egyptian Accounting Standards provided a definition for the accounting measurement as. “Measurement is the process of determining the monetary value at which the elements of the financial statements are to be recognized and carried in the balance sheet and income statement. This involves the determination of the particular basis of measurement.”. And it is correspondence to the definition given by the International Accounting Standards Board (IASB) in the conceptual framework paragraph (99). Simplifying a little, the accounting measurement’s concept is determining the value of the recognized item using the monetary unit in the financial statements and reports.

From above, The Accounting recognition represents a vital importance in the NPS. (Kuruppu & Lodhia, 2020)Where it plays an essential role in determining the degree of credibility associated with the information of financial statements. Due to its ability to show the real essence of the recognized items. Especially with regard to the revenue elements. On the other hand, the NPS prepare the financial statements in order to enable the stakeholders in decisions- making. So these statements should be realistic and reflect the financial events carried out by the NPO and also be appropriate to the needs of decision makers. And free from errors and complexity. This suggests that, the financial statements are prepared and presented after elements measurement.

Accordingly, the importance of accounting measurement appeared. Therefore, the choice of the appropriate accounting measurement basis to achieve these purposes and financial statements characteristics must be far from bias and confers more transparency and reliability. So if the measurement process has done accurately and efficiently. It reflects that in financial statements with high quality financial information (G. & Valahi, 2010) Either if any problems emerged in the measurement process, it reflects inappropriate financial statements to decisions-making. Consequently, the NPS need to identify and unify the accounting policies used in the following areas:

- 1- Justifications about the accounting practices for fixed assets, depreciation and the used approach.
- 2- How to determine the value of the fund-resources, especially restricted funds and volunteer services?
- 3- The How to express equity, especially, it’s not similar in concept and nature of the FPS.

## **2.2- The consequences of the NPS’ nature on the accounting recognition and measurement’s dimensions with the financial statements and reports items:**

There has been considerable debate surrounding the accounting function’s Dimensions, where The NPS’ nature influences the criteria of the accounting recognition and measurement with the financial statement items and elements. The researcher reviewed these consequences as following:



### **2.2.1. Assets:**

the main argument between the professional bodies represented in that questions: Are all fixed assets' categories must capitalize and depreciate? In reality, there are several reasons why NPOs do not depreciate their fixed assets: (Iatridis & Valahi, 2010 )

If capital assets are purchased by using the donations and contributions, there is no cost to the charities. Therefore, there is no need to cover the cost from revenues and no depreciation charge is needed. This argument assumes that the fixed assets will either not be replaced or when they are, there will be a fresh set of willing donors.

- A. In the most NPOs has a depreciation which not consistent with current fund accounting system, which reflects a receipts and payments situation since depreciation is an expense not a payment.
- B. NPOs believe that fixed assets are provided by past generations for current capital needs, so future needs should be provided by future generations. Therefore, there is no need for accounting depreciation.
- C. NPOs prefer to acknowledge expense fixed assets at once because it would reduce their reported surplus and the level of fixed assets held. This would portray an appealing image of a lack of funds. It may be argued, however, that an impoverished image may also be achieved by capitalizing their fixed assets and then depreciating them to reduce income
- D. NPOs believe that the assets will be maintained by the current condition and therefore there is no need to amortize it.

Where ( Hooper, Sinclair, Hui, & Mataira, 2008) study provided a response to these justifications, and referred to the necessity of assets capitalization and depreciation. Because In the case of non-depreciation, the asset value will be exaggerated in the financial statements. It is illogically that asset value continues to remain stable for a period of five consecutive years for example. Although the researcher observed different views in the academic research about the treatment of asset's depreciation in NPOs and summarized it in two main point of views:

The First point of view: The supporters of these point of view believe that the bases and methods of asset depreciation did not apply to NPO, (Pianezzi, 2021 ) but the organization must recognise assets as operating expenses, carry on the year in which it acquired, Similar to the government's accounting system. Based on, these organizations are non-profit.

The Second point of view: The supporters of these points of view believe that assets must be capitalized and depreciated in NPOs, since the effect of the decrease in productivity value of assets per year, as it will affect the asset's performance, and causes more expenses associated with the asset.

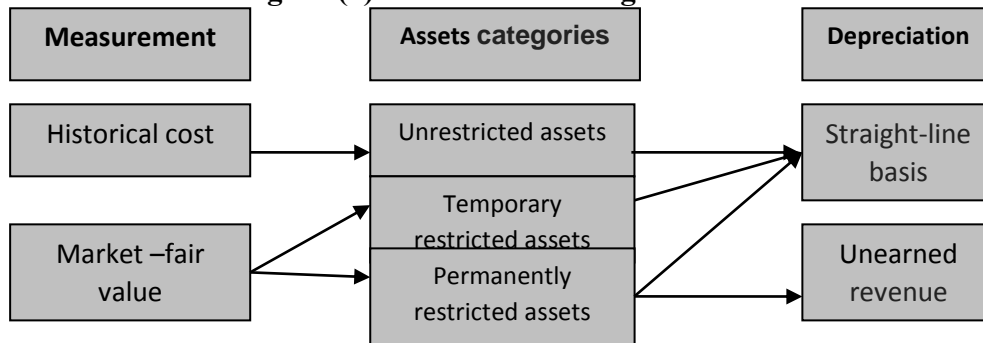
The Researchers point of view consistent with the second point of view. And suggests to divide the Egyptian NPS' assets into three main categories from the management's ability to make-decisions view. Where the first category is an Assets owned by the NPO from their own money or unrestricted fund or donations (unrestricted assets), the second category is an Assets owned by the NPO from contributions with a temporary restriction (temporary restricted assets), the third category is an Assets owned by the NPO from endowment (permanently restricted assets). So according to this proposed classification. There is a need for a special accounting treatment for each of these asset categories to provide credibility to the value of these assets in financial statements and reports.

International Accounting Standard (IAS16) determined the rules of the accounting recognition and measurement with fixed assets and depreciation in general. And it gave preference to the historical cost over the fair value (Barth, 2014). And this standard agreed

with the Egyptian Accounting Standard No. (10) That. Requires to measure any fixed assets to use the historical cost. while the American Institute of Certified Public Accountants (AICPA) provided a treatment to the contributions of fixed assets in NPOs as follows: "contributions of property and equipment should be recognized at fair value". Also, financial accounting standard board (FASB) issued Standard No. 93 for Accounting in non-profit units, this standard requires to depreciate all fixed asset. And according to the requirements of (SORP) in the United Kingdom. All assets should be capitalized and depreciated (Pianezzi, 2021 ). The disagreement here from the researcher perspective is that: If the accounting recognition and measurement of assets and its depreciation will be with the same manner for these three categories. And what is the best depreciation method to the NPS' nature According to the Egyptian environment?

The Researchers think that the NPO must recognize and measure assets with its historical cost if this asset was bought or created by the NPO (the first category). And if the assets came from a donation or contribution. Its value should be measured based on the fair market value at the acquisition date (second category). But for the assets (third category) in addition to measure its value with fair market value. Its value should record in the debt side of the SOFP. And the NPO needs to add the same value to unearned revenue account in the credit side. And after that. The NPO should depreciate all assets, according to (matching) principle. On a straight-line basis over the expected useful economic life. So the Researcher summarized assets' accounting treatments as following:

**Figure (1) Assets' accounting treatments in NPS**



After the expiry of economic life, the original was kept totally within the record of fixed asset which was totally depreciated, in case if it is still in use. And re-assessing its value, and calculating the depreciation in the same previous method and rate. In order to ensure a complete account of all NPO's assets. Regardless their book value as long as it still used in the NPO's operational activities.

### 2.2.2- Liabilities:

the Academic Views varied on how to recognize and measure Liabilities in NPOs. But most of these Views have agreed that there is no difference between the accounting recognition and measurement's requirements with Liabilities in NPOs and FPOs. Especially with The absence of a relative weight of these liabilities in the financial reports of NPOs. Consequently, Liabilities are recognized when it is expected outflow of the resources which included economic benefits. And resulting from the payment of a current pledge (Goncharenko, 2021). And this amount can be measured with a degree of confidence. Therefore, the NPO should use the historical cost as a measurement method when the liability occurs, then settled in the best estimate if it remained as a liability at the date of financial





reporting, but if these Liabilities have a long-term feature, it should be recognized and measured at the present value. (SORP)

### **2.2.3- Social capital (net assets):**

Equity is the residual interest in the assets of the entity after deducting all its liabilities. (IFRS, CFFR). Where the equity's concept in the NPS is different from its concept in the traditional accounting thought. Whereas there are no shareholders or owners or real capital can be traded between individuals (Boomsma, 2021). And therefore the equity in the NPS is considered as a social capital represents the net assets (unrestricted; temporary restricted; permanent restricted). And in the case of liquidation, the social capital goes to the Subsidy fund of NPS and institutions.

### **2.2.4- Expenditures:**

Expenditures considered that the amount of funds which spent on the NPO's activities from fund-resources. Where expense is each decrease in the value of the NPS's assets or increase in their obligations. And items recognized as expenses in the financial statements of the CA if it met the following three criteria: (Goncharenko, 2021)

- **Obligation:** The existence of a present obligation in the financial report time resulting from previous operations.
- **Probabilism:** If the prospect of Economic benefits transmission including funds more than not.
- **Measurement:** If the cash value of the obligation can be measured or estimated accurately.

At the international level, the general failures of the NPOs to transparently report expenditure within the financial statements to allow identification of the apportionment of central costs to the activities being funded has been observed (Mack, Morgan, Breen, & Cordery, 2017 ) Where the accounting recognition with expenditure facing several challenges:

- The recognition with volunteer services, especially with the non-availability of the second condition for the recognition which requires item to have a cost or Value can be measured with degree of confidence.
- Recognition with non-current restricted fund, it is recognized as an asset or an expense.
- The difficulty of linking the activities of NPO outputs with its costs.

From the organizational aspect, at international level, many Regulators have established such criteria for the expenses. For example, the US Better Business Bureau sets a threshold of 65 percent; that is, at least 65 percent of expenses should go directed to charitable activity programs (van der Heijden, 2013). The U.S Accounting Standard No. (117) highlighted the need to report for expenditure in functional form, and classified according to the services programs or supporting services in the statement of activities. And prepare a separate statement for expenditure with functional classification. Where the lack of uniformity in the recognition and measurement's methods with expenditure will lead to a lack of consistency and ability to compare between the percentage of each item of expenditure over different financial periods and the sector as a whole. (Breen, 2013)

Therefore, the researchers think that the expenditure recognition and measurement in the NPS' financial statements must be in functional form According to an accrual basis. And when any reduction in the future economic benefits happened Due to a decrease in an asset or an increase in the obligation. This means that the recognition of expenses occurs simultaneously with the recognition of assets decrease or Liabilities increase.

### 2.2.5. Revenues:

Revenue has identified according to the Egyptian Accounting Standard No. (11) As. “The total economic benefits flow within the entity, during the financial period, which arises from the practice of the entity ordinary activities”. Where the problems related to revenues in the NPOs usually associated with the accounting policies which adopted in the accounting recognition and measurement. (Albaz & Albaz, 2019)

In general, the accountants allowed to use both of cash basis and accrual basis (Aldoseri et al., 2022) at the same time in the financial reporting. But the usage of accrual basis is the common basis where most of the donations and contributions are in the form of future pledges to pay certain funds. And often a few of these pledges are honest (Hooper, Sinclair, Hui, & Mataira, 2008) On the other hand, International Accounting Standard (IAS18) in paragraph (9/10) illustrated that revenue must be measured at fair value of the amount received or recoverable. And Due to the special nature and the diversity of revenue resources in the NPOs. Financial Accounting Standard Board (FASB) issued accounting standard No. 116; under entitle “accounting for contributions received and contributions made”. Although (SORP) in the United Kingdom identified several criteria for the revenue recognition in general as follows: (SORP)

- Entitlement – control over the expected economic benefits that flow from the donation has passed to the charity and any performance conditions attached to the donation have been fully met.
- Probabilism – it is more likely than not that the economic benefits associated with the donated item will flow to the charity.
- Measurement – the cash value or value to the charity of the donated item can be measured reliably.

In practical reality, the revenue recognition represents the most difficult accounting problems facing NPOs, due to the variation of the accounting treatments followed in the financial reports from organization to another in this sector. Where the organization is characterized by the multiplicity and diversity of revenue sources and its difference in terms of nature, characteristics and usage conditions and the degree of certainty. Therefore, the organization cannot rely on one standard for revenue recognition (Clerkin, 2021)

So the main question facing the accounting thought about revenue in NPOs is that How can the organization recognize in-kind donations and volunteer services? Which led many NPS to non-recognition or include this type of revenue in the financial reports due to the difficulty of the accounting recognition. From above Researcher will review the following accounting treatments for revenue in the NPS:

**2.2.5.1. Current Unrestricted Funds:** grants, donations and contributions received by the CA without any restrictions or conditions on its usage. Therefore, they are considered the financial resources that used by the NPO to meet the general current spending fields as one of the unrestricted revenue types. And usually these funds are in cash form. Thus, these funds should be recognized as income at the date of acquisition.

**2.2.5.2. Non-Current Restricted Funds:** Contributions received by NPO and used in a certain aspect of spending or purposes. So these funds are considered as additions to the NPO equity. Where the terms and conditions for its usage have determined by the donor. And these funds valued by fair value. but when there is no direct evidence of fair value for an equivalent item, SORP has provided alternatives (Goncharenko, 2021)

- To recognise the value that incurred by the donor to earn these contributions to the society.





- In the case of goods that are expected to be sold, the estimated of resale value after deducting the cost to sell the goods.
- So, the Common types of these fund units are:
- Endowment contributions, such as the suspended funds, land endowment.
- Gifts and donations for the purchase of fixed assets.

**2.2.5.3. Legacies:** funds or assets which donors recommend to transfer/convert its ownership to the NPS. And in accounting thought, the accounting recognition with Legacies is divided into two themes:

- Legacies' recognition as assets: Legacy should be recorded as an asset when the NPO confirmed legally that it became one of the beneficiaries in a Legacy with a specified asset or fund. But if this asset or fund doesn't have a specified value, it does not allow for the NPO to record the Legacy as an asset in the SOFP with any estimated value. And it's sufficient to make a note about the Legacy in the financial report. And Considered as investment assets or assets for private purposes.
- Legacies recognized as revenue: If Legacy is unrestricted or in the form of an endowment fund. Legacy should be recorded as revenue when the NPO receives it, and it appears in the SOFA at the same time which have been recorded as an asset in the SOFP. However, if it restricted for Current spending purposes or for fixed asset additions. It must be treated in the same manner in which the NPO treats the contributions allocated for the purchase of fixed assets or contributions allocated to current expenditure.

#### **2.2.5.4. Voluntary Services:**

Voluntary service is an important source for NPOs and the third sector in general. It's considered one of the most important factors of these organizations to survive and achieve its operational sustainability (van der Heijden, 2013) Indeed, voluntary Services contributions rarely represented in the financial reports with the same degree that represented the financial resource contributions. Despite the fact that a large percentage of the value generated in the NPOs comes through voluntary Services (Kaba, 2021). Therefore, as a result of the unique characteristics and the spread of recognition widely with the volunteers' contributions as an essential source for the implementation of social activities, there are calls for NPOs for the recognition of all volunteer services in the financial reports in a monetary manner. (Narraway, 2009, p.11; O'Brien and Tooley, 2013, p. 280)

In the Arab Republic of Egypt, the NPS rely on the implementation of some of their activities mainly on voluntary services from their members or others, Such as legal and advisory, facilities and other, so, Are these services recognized and disclosed in the financial statements? Whereas the researcher can determine the Voluntary service's recognition requirements in the following points:

- These Voluntary services should represent an important part of the activities carried by the CA, usually not provided by unpaid volunteers, but get paid by NPO
- There must be control of performing these services.
- There must be a reliable basis of an objective evaluation of the Voluntary services.
- These Voluntary services should be having significant value in the NPO activities, and the omission of record it leads to misreporting about the financial situation of the NPO.
- Results of Voluntary services provided to the NPO must be useful not only to members of the NPO, but to the general public.

Through the literature of many studies. The researcher found varied methods for Voluntary services' recognition in the financial reports of NPOs at the international level as follows:

- Volunteer services have disclosed in form of thanking those in charge within the Board of Directors Report, with an explanatory diagram of the nature of these services.
- Disclose the number of volunteer work hours
- Disclose the number of social activities that have been performed through Voluntary work.

In other words, the recognition with the vital role of the Voluntary contributions in achieving the operational sustainability in NPOs, so, the lack of disclosure about these contributions in the financial reports means that it doesn't impact on the operational capacity of the NPOs. In contrast to the actual reality.

Therefore, there are Varying Academic views about how to measure the value of volunteer services. Indeed, there are two main approaches: firstly; Voluntary Services' Evaluation based on the output, this approach indicates to evaluate volunteer services with the output's value which contributed to achieve. But despite the realism of this approach, but it faces a big challenge represented in the difficulty of determining the volunteer service's contribution in the final output, in addition to the difficulty of calculating the output value in itself. (Albaz & Albaz, 2019) so, the Researcher suggests to adopt the second approach, which is, Voluntary Services' Evaluation based on replacement cost, this approach means, Volunteer services can be measured with the replacement basis, its imply, Through the "replacement cost" or "market cost" per hour Volunteerism, In case if the NPO replace them with unpaid hours to perform the same activities carried out by volunteer services, and After the recognition and measurement of these services value, Its value is recognized as revenue in the SOFA in a separate item in unrestricted funds, and On the expenditure side The services value appear loaded on certain activities. Or appear in the SOFP in form of an asset if these services are crystallized in the end, in the form of fixed asset, then the nature and accounting treatment of these services must be attached to the financial report.

#### **2.2.5.5. Non- Monetary Contributions:**

The CA receives several types of Non-monetary contributions, which are in the form of fixed assets or in-kind. And these contributions should be recognized and recorded in the financial statements. Thus, these contributions should be recorded at market value (fair) at the date of acquisition, where the market value is the price of buying a similar or the same asset at the date of acquisition, and occasionally the NPO gets the right to use certain asset without owning it. (Albaz & Albaz, 2019) In this case, the recognition of these facilities depending on the price Which the NPO can get from the market at the date of acquisition, and recorded in the financial statements as a revenue and expense at the same time. And the evaluation of these services should be with the minimum value.

It is worth mentioning that, if these facilities were granted to the NPO for more than one financial year. Its value appears in each financial year as revenue and expense, and it is sufficient to be referred to the value of the facilities for future years in the financial statements notes, and the value of each year appears in the statements of the relevant year

#### **2.2.5.6. Pledges:**

Pledges are promises from donors to contribute with a specific amount of fund to the NPO. Where we find that donors pledge in writing form to the NPO to pay a specific value on secondary payments, these contributions may be in the form of Bills of exchange or promissory notes, where US standard (116) requires NPOs to record pledges as revenue in the financial period of this pledge. But some academic views considered that this treatment may lead to a lack of credibility in the financial statements and distort the financial indicators (Andon, 2015) Where it is necessary to recognize and record these contributions as it arise as assets and unearned revenues at the same time. And reduce both of asset and unearned



revenue annually by the actual amount which received from these pledges (ASB). Thus, the researcher summarized the difference between this treatment and the Standard No. (116) in the time of pledge's recognition as income in the financial statements in order to avoid the risk of uncertainty.

#### **2.2.5.7. Governmental Grants and Subsidies:**

Governmental Grants and subsidies are considered one of the main fund-resources for the NPS (Kuruppu & Lodhia, 2020), the Egyptian Accounting Standard No. (12) And international standard No.20 Identified the governmental grants as. "Assistance from the government in the form of transfers of resources to an entity in return for past or future compliance with certain conditions relating to the operating activities of the entity". But here the NPO must distinguish between the concept of subsidy and grant, where the Subsidies are short-term assistance to fund activities associated with the organization's main operations or funding the organization activities in extraordinary circumstances. Meanwhile grants are long-term assistance to fund activities associated with the investment activities, and the NPO should not recognize the governmental grants and subsidies until it has assurance that:

- The NPO will comply with the conditions related to the grants or subsidies.
- The grants or subsidies will be delivered to the NPO at specific time
- the possibility to determine the fair value of the subsidy or grant with a degree of confidence
- The possibility to record the expenses related to the terms of the subsidy.

In the accounting thought, there are two methods for the accounting treatment about the governmental grants that have been discussed (Stănciulescu, 2021) in the International Accounting Standard (IAS20) and the Egyptian Accounting Standard No. (12), the first method is the capital approach, and the second method is the income approach, but the international standard did not give a preference to any approach, the researcher think that the reliance on the income approach is the best method for the NPS in accordance with the following reasons:

- The absence of the traditional concept of capital in the NPS.
- Government grants considered as financial resources received by the NPO and are often in the cash form
- The nature of governmental grants for NPS differs from those provided to FPOs, which are often state recovered after a certain period in contrast to the NPS' grants that are not recovered.
- Governmental grants are restricted, therefore, the NPO gaining government grant through a commitment to certain conditions or commitments linked to the grant, and therefore it should be recognized as income to match the expenses related to it.
- In the case, governmental grants are in the form of in-kind resources grants it's imply non-cash, the recognition of the grant and the asset Shall be with fair value, and record it in the financial statements.

The Researchers summarized the key considerations for the accounting recognition and measurement with the governmental subsidies and grants as follows:

- Tax advantages or reduction granted on governmental benefits or exemptions do not fall within the scope of the governmental subsidies and grants
- The governmental subsidies and grants measured with the fair value of the assets that were acquired by the NPO to commitment to the implementation of the governmental policies or programs
- Governmental cash subsidies and grants should be included in the SOFA in a separate item of revenue

- Governmental in-kind subsidies and grants should be included in the SOFP as a separate item According to the terms of the grant or subsidy granted as an asset (unrestricted; restricted temporarily; permanently restricted), and shall apply the followed depreciation method.
- Governmental Subsidies or grants received in advance, which are for more than one financial period must be included in the SOFP as a separate item and record within the unearned revenue
- cash flows resulting from subsidies related to the operational activities (cash) Classified in the SOCFs in the cash flows of operational activities either cash flows resulting from government grants (assets) recorded within the investment activities.

From the above, there are some considerations should be taken into account when the NPO disclosing the governmental subsidies and grants such as:

- A. The Nature, conditions and commitments associated with the governmental subsidies or grants.
- B. Accounting policies used in the treatment of the governmental subsidies and grants (cash; in-kind)
- C. Conditions or contingent commitments which led to the failure of the NPO's commitment to the subsidy or grant.
- D. The governmental subsidies and grants account at the end of each financial period. and it provide logical justification for this balance

### **3. Conclusion:**

This paper aims to unify the accounting recognition and measurement practices in the NPS and reduce existing differences in order to improve the information quality and increase the reliability to serve the decision-making and performance evaluation as the second Part aims to set the foundations for the accounting presentation and disclosure of the elements of the financial statements and reports in the NPS. The researchers think 'although the NPS' commitment to implement the regulations issued by the Ministry of Social Solidarity and the concerned authorities'', but they note the following:

- The limited role of the Central Auditing Agency in controlling the NPS and its interest only with the formal aspects and the extent of the application of the financial regulations, regardless for the content and substance which decreases the confidence in the financial control over the Private NPOs system.
- The generality of the NPO's financial regulations led each NPO to interpret these regulations according to its view.
- The financial regulations didn't include the accounting treatments for all the NPS' operations
- The dependence on the personal judgment significantly in some accounting treatments, due to the absence of a unified accounting standard for the NPS. which led to the difficulty of making comparisons between the NPS in the economic, social and accounting terms despite the similarity of economic and social activity of NPS in general



## References :

- B & ,Quinn, M. Clerkin .(2021) .Institutional agents missing in action?: Management accounting at non-governmental organisations .*Critical Perspectives on Accounting* , <https://doi.org/10.1016/j.cpa.2020.102276.80> ,
- D. Pianezzi .( 2021) .We are what we tell: an enquiry into NGOs 'organizational identity and accountability . . *Accounting, Auditing and Accountability Journal* , . [https://doi.org/10.1108/AAAJ-06-2020-4647.\(8\)34](https://doi.org/10.1108/AAAJ-06-2020-4647.(8)34) ,
- E. Stănciulescu .(2021) .LLC vs. NGO, Similarities and Differences in the Accounting Treatment of Intangible and Tangible Assets . .*CECCAR Business Review* , . [https://doi.org/10.37945/cbr.2021.06.02.\(6\)2](https://doi.org/10.37945/cbr.2021.06.02.(6)2) ,
- G. Goncharenko .(2021) .In the spotlight: Rethinking NGO accountability in the #MeToo era . .*Critical Perspectives on Accounting*. <https://doi.org/10.1016/j.cpa.2021.102308.80> ,
- G. Iatridis , S. Valahi .( 2010) .Voluntary IAS 1 accounting disclosures prior to official IAS adoption: An empirical investigation of UK firms . .*Research in International Business and Finance*,. [https://doi.org/10.1016/j.ribaf.2008.04.001.\(1\)24](https://doi.org/10.1016/j.ribaf.2008.04.001.(1)24) ,
- G & ,Valahi, S. Iatridis .(2010) .Voluntary IAS 1 accounting disclosures prior to official IAS adoption: An empirical investigation of UK firms . .*Research in International Business and Finance* ,[https://doi.org/10.1016/j.ribaf.2008.04.001.\(1\)24](https://doi.org/10.1016/j.ribaf.2008.04.001.(1)24) ,
- H. van der Heijden .(2013) .Charities in competition: Effects of accounting information on donating adjustments . .*Behavioral Research in Accounting* , [https://doi.org/10.2308/bria-50295.\(1\)25](https://doi.org/10.2308/bria-50295.(1)25) ,
- Iatridis. G , S. Valahi .(2010) .Voluntary IAS 1 accounting disclosures prior to official IAS adoption: An empirical investigation of UK firms .*Research in International Business and Finance* , . [https://doi.org/10.1016/j.ribaf.2008.04.001.\(1\)24](https://doi.org/10.1016/j.ribaf.2008.04.001.(1)24) ,
- J. Mack ,G. G. Morgan ,O. B. Breen , C. J. Cordery .( 2017) .Financial reporting by charities: a matched case study analysis from four countries .*Public Money and Management*, [https://doi.org/10.1080/09540962.2017.1281638.\(3\)37](https://doi.org/10.1080/09540962.2017.1281638.(3)37) ,
- K. Hooper ,R. Sinclair ,D. Hui , K. Mataira .(2008) .Financial reporting by New Zealand charities: Finding a way forward .*Managerial Auditing Journal* , [https://doi.org/10.1108/02686900810838173.\(1\)23](https://doi.org/10.1108/02686900810838173.(1)23) ,
- Kuruppu, S. C., & Lodhia, S. (2020). Shaping accountability at an NGO: a Bourdieusian perspective. *Accounting, Auditing and Accountability Journal*, [https://doi.org/10.1108/AAAJ-09-2016-2696, 33\(1\)](https://doi.org/10.1108/AAAJ-09-2016-2696, 33(1)).
- M. Albaz , M. Albaz .(2019) .Core perspectives of performance measurement in NPOs: In search of accountability and legitimacy. *Economic Archive*, September.
- M. Andreaus , E. Costa .(2014) .Toward an integrated accountability model for nonprofit organizations . .*Advances in Public Interest Accounting*, <https://doi.org/10.1108/S1041-706020140000017006. .17> ,

- 
- M. E. Barth .(2014) .*Measurement in financial reporting: The need for concepts* . .In *Accounting Horizons*. <https://doi.org/10.2308/acch-50689>) (Vol. 28, Issue 2.(
- M. Kaba .(2021) .*NGO accountability: A conceptual review across the engaged disciplines* . .In *International Studies Review*<https://doi.org/10.1093/isr/viaa094>) (Vol. 23, Issue 3 .(
- O. B. Breen .(2013) .*The Disclosure Panacea* . :*A Comparative Perspective on Charity Financial Reporting*. *Voluntas* ,<https://doi.org/10.1007/s11266-013-9377-2>.(3)24 ‘
- P., Baxter, J & ,Chua, W. F. Andon .(2015) .*Accounting for Stakeholders and Making Accounting Useful* . .*Journal of Management Studies*, <https://doi.org/10.1111/joms.12142>.(7)52 ‘
- R. Boomsma .(2021) .*On Jeffrey Unerman and the Future of NGO Accountability* . .*Social and Environmental Accountability Journal*, . <https://doi.org/10.1080/0969160X.2021.2003215>.(3)41 ‘



## **Accounting Presentation and Disclosure in the CAs: A Review**

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### **Abstract:**

The CAs tend to follow social accounting requirements that are based on “Logical and systematic analysis of the organization activities impact on the society and other stakeholders and to show this effect information in the financial statements”. Due to the social nature of the CA’s activities. In this sense the accounting recognition is the start point of the comprehensive accounting function. While the accounting measurement is one of the influencing elements of the accounting function, and its importance increased by moving towards the accounting compatibility for this sector organizations. Moreover, the accounting presentation and disclosure issue are the most controversially debate in the NPS. Furthermore, Academic studies tended to assert that the accounting in the contemporary concept must serve the organizations and society at the same time, regardless of Organization’s objective, and Based on the concept of accountability and especially the social accountability. Therefore, the organizations must be in an accountable position, Not only for the owners or shareholders (traditional concept), but to the society for its overall operations and activities.

**Keywords:** Accounting Presentation/ Disclosure/ CAs/ NPOs

### **1. Introduction:**

The Accounting thought and academic research interest significantly with the accounting presentation and disclosure in the FPOs (Albaz et.al, 2022) but did have the same level of interest with the NPOs. Where there are arguments on the concept of the accounting disclosure and information that should be disclosed in financial reporting in organizations this sector.

First of all, there are many concepts associated with the accounting presentation and disclosure in the accounting literature such as. “The announcement of all accounting policies which the entity relied on in the preparation process of the financial statement and reports, and the announcement of all accounting and non-accounting information and data in a comprehensive manner, in order to provide additional information to stakeholders” (Albaz & Albaz, 2019) And another concept, the accounting disclosure and Presentation are the Presentation of financial information about the transaction which have been done by the CA in the financial reports with the manner that helps financial reports users in decision-making

correctly. It implies that the disclosure aims to provide useful financial information for decision-making with the necessity of the financial reports to include all information required to give users correct image about the association.

From the above, the Researcher summarized the accounting presentation concept in the manner or method in which the association presents and organizes data and items contained in the financial reports and statements. Either the disclosure means the quantity and quality of the financial data and information in the financial reports. Where the disclosure concept in the accounting thought about NPOs is associated with the transparency concept in United Kingdom. And Transparency itself has been defined in many ways and in a variety of contexts. With respect to governance and accountability, it is often seen as enabling the public to gain information about an organization, including: its processes and performance; its structures; and information regarding who gains from, or pays for the organization's activities (Esposito & Antonucci, 2022). In this issue, the charities committee in the United Kingdom sets a concept of transparency as. "The provision of relevant reliable information to stakeholders, free from bias and with a degree of comparability and understanding and focused on their legitimate needs" (Stanculescu, 2021). In other words, Transparency can also be described as the accounting disclosure that goes beyond general accepted accounting principles, standards and legislative requirements in the financial report to provide financial information for stakeholders' decision-making. And to achieve the manner in which external user can get the same information that are available to management.

## **2. Presentation and disclosure of the accounting information in accordance with the accounting standards:**

The Presentation and disclosure of the accounting information in the financial statements and reports based on the following fundamentals criteria according to the Egyptian Standard No. (1) and the international standard No. (1):

- A. Determine the accounting information users: the determination of the accounting information users could determine the characteristics that must be met in this information in terms of form and content. because users have different levels in the information's interpretation
- B. Determine the accounting information purposes: The determination of the accounting information purposes could achieve the relevant characteristic, so that the user takes advantage of the information and help him in decision-making.
- C. Determine the nature and quality of disclosing accounting information: The disclosed accounting information is the financial information which included in the fundamental financial statements. In Addition, the information included in the accompanying notes and appendices that are a part of the financial report.
- D. Determine the methods of the accounting information disclosure: the disclosure of important information that affects the decisions-making at the fundamental financial statements. While the disclosure of other information in the Notes attached to those financial statements or other complementary schedules attached to the financial report.
- E. Accounting disclosure time: Timeliness is considered one of the most important characteristics of the relevant characteristic. In addition to the requirement of this information to be sufficient, reliable, comparable and understandable, information



must be timely in its preparation and presentation. Where the benefits of information associated with its disclosure time.

- F. Accounting policies Disclosure: Accounting policies contain several alternative bases, and Accounting standards have allowed to choose between the accounting policies according to the circumstances and the organization nature and this choice Subject to three basic considerations: conservatism, substance over form and materiality.

The researcher observed that these accounting standards (Egyptian and international) don't have any reference to the disclosure requirements in the NPS. Where these standards have developed according to an economic perspective for the economic FPOs without paying attention to the social perspective (social disclosure). This considered as an obstacle to these standards in meeting the needs of NPO's stakeholders. Although the accounting disclosure has a vital role in the comprehensive accounting function in NPOs by its ability to achieve the following objectives:

- A. Providing information about activities' outcomes and analysis it to be useful in planning and controlling the association's performance.
- B. Provide information about the surplus or deficit resulting from activities, and the methods to invest this surplus or resources that can cover the deficit
- C. Providing information about capital and operating expenses.
- D. Providing information about the organization's financial position (Assets and liabilities) to assess its ability to continue and survive
- E. Providing information through the reports and notes on the performance and the extent of the commitment rules, regulations, policies and specific plans to meet its objectives.

### **3. The CAs' nature consequences on the dimensions and level of accounting presentation and disclosure in the financial statements:**

According to stakeholder theory, the accounting disclosure is a strategy that the organization reacts by to determine their relationships with stakeholder (Deegan, 2011). And it is often used to explain the accounting policies –especially- used in social disclosure. The Academic studies have confirmed the weakness and sometimes NPOs refrain from the financial information disclosed in the annual financial reports (Behn, Devries, & LIN, 2010); (Burger & Owens, 2010). As they tend to reduce the degree of disclosure in order to evade stakeholders' censorship.

Recently, the CAs face an accusation of misconduct in the fund resources and lack of transparency at the accounting presentation and disclosure about its financial operations results. That due to the lack of efficient accounting information systems and their inability to follow and control the fund movements. This reason has prompted the researcher to determine the effect of the CAs' nature on the accounting presentation and disclosure requirements to meet stakeholders' requirements and needs in the following:

- A. The Accounting disclosure is divided into three types (Aldoseri, Albaz, & Ghali, 2022) as follows: Comprehensive disclosure, Preventive Disclosure and informative disclosure, the researcher believes that the reliance on an informative disclosure paradigm is the best method in the NPOs. Because of the service nature of its activities. Where the concept of informative disclosure emerged in the accounting thought as a result of the increase in the importance degree of relevance characteristic

in the financial reports as one of the accounting information quality characteristics. Moreover, Informative disclosure depends on the separation of the financial statements elements according to their materiality. This type of disclosure is considered the most appropriate method for the nature and characteristics of the CAs. In this sense, The Researcher will depend on the informative disclosure paradigm to develop the proposed financial statements for the Egyptian CAs.

- B. The Accounting disclosure derives its importance in the CAs from its major influence on the association's fund-structure. Through the accounting disclosure's ability to attract donors through approving the association's ability to meet the required performance criteria. This led in the end to achieve the public benefits.
- C. Service nature of the CA – as NPO- Requires the expansion in the descriptive disclosure about the main objective of the activities and services (Albaz & Albaz, 2019). Which are difficult to convert into quantitative form? Because of the inadequacy of the financial statements only to express the activity's results (Beattie, 2014)
- D. The term “Accounting to stakeholders” is relatively new and finds its expression in calls for new forms of disclosure, in the light of the target group (primary) of stakeholders in the sector, which we want to develop the accounting disclosure (Andon et.al, 2015), according to stakeholder theory.
- E. The expansion in the accounting disclosure would deliver more information to stakeholders and meet their different needs. This information will support and enhance their confidence in the social and financial performance of the CA and affect the fund-decisions. Therefore, the volume of available financial resources, which ultimately leads to increase the public benefit.
- F. The expansion in the accounting disclosure about fund-resources. It's imply, disclosure about the amount, nature and conditions associated with the different fund-resources. In addition to the accounting recognition and measurement policies followed for each category. Where the disclosure should be through a special account or record that provides more detailed information on the fund-resources (Kuruppu, Dissanayake, & de Villiers, 2022). This record; account includes the donor's name, the nature and size of each fund-resource, the terms and conditions and Activities or purposes which This fund allocated to (SORP). moreover, this distinction must be made between the contributions that lead to an increase in unrestricted net assets, or an increase in temporarily restricted net assets, or an increase in permanent restricted net assets
- G. The expansion in the accounting disclosure about expenditures to the extent enable stakeholders to assess the degree of efficiency and effectiveness. Where the accounting disclosure about the expenditures plays significant role in assessing the degree of managers' fulfillment with their responsibilities. And reduce the doubts associated with the agency theory.
- H. The absence of uniform accounts guide/manual to encode revenues and expenses, assets and liabilities is one of the main obstacles that facing the accounting disclosure in the financial statements of the CAs (Pazzi & Svetlova, 2021). Resulting in revenues



and expenses classification contrast, and make the financial statements of the CAs not comparable.

furthermore, the expansion in the accounting disclosure in order to ensure the report on the value-added of activities and social performance (Aldoseri, Albaz, & Ghali, 2022), which is the primary purpose of the CA, the expansion in the accounting disclosure to ensure the cost-benefit from the society's perspective (Thomas, 2020), not only from the managers' perspective, as the traditional financial reporting based on, the expansion in the accounting disclosure about intangible assets such as human resources. And the CA degree of rely on it in the achievement of its operational sustainability. The expansion in the accounting disclosure about asset categories and restrictions of ownership or usage with more details, in order to serve control and performance measurement purposes. The effectiveness of the accounting disclosure based on whether the risk of non-compliance is greater than the burden of compliance, where If the conditions and requirements of Disclosure are Significant great, and there are no penalties for noncompliance, is likely, the NPOs do not adhere to these requirements. (Breen, 2013) The expansion in the accounting disclosure about programs or activities that were carried out through volunteer services, Including the scope and nature of the services provided by volunteers and its value. According to stakeholder theory, (Deegan, 2011) Pointed out that when there is interest conflict or needs between stakeholders. The organization tends to provide information to the primary stakeholder groups that affect the organization's survival (donors). The accounting disclosure development importance is growing due to its ability to limit and control the financial report manipulation (Cazenave & Morales, 2021) in order to serve certain purposes, especially influencing the donors. (Jegers, 2013)

#### **4. The Social Performance Disclosure in NPOs:**

According to the stakeholder theory. The role of social reports is to provide the society (principle) with information (accountability) about the extent to which the organization commitment with (agent) its responsibility (according to the rules and laws). Where the social responsibility became a moral law that all organizations must comply with it. And allocate a portion of its budget to it, in order to share the benefits with the society. (Pianezzi, 2021 ) Considering the NPO. The main purpose of its establishment is providing social activities, thus the social responsibility maximizes in such organizations. So if we want to ascertain from the achievement of the Social mission of these organizations which have established for it. The Operational efficiency and effectiveness should be reflected in their financial reporting. Through the disclosure about fund-resources. And determining how the organization had spent these resources and their usage in details, bearing in mind the social responsibility in the financial reports (Andreini et.al, 2014). Where the researcher noticed that the financial statements and reports' Information Still dominated by the accounting thought of economic activities, in a professional manner. And a lot of the social aspects are still difficult to be measured and often the organization doesn't disclose about it. Thus, in the following the researcher presents the different models to disclose the social performance in the CAs:

##### **4.1. Social information's Disclosure in a separate report in the annual financial report and this Separate report has three methods to disclose the social information:**



- A. A descriptive report includes a description of the organization's social activities, without any analysis about the cost of these activities or the benefit values.
- B. A Report discloses the social costs only, and this disclosure is limited to the total cost of each activity without disclosure about the benefits achieved by the activities.
- C. A Report discloses all of the social cost and benefits, and this report includes the benefits and cost of each activity, which have been achieved for the beneficiaries.

#### **4.2. Social information's Disclosure with the financial information in one/single report:**

The disclosure of the financial and social information will be in one report and merge the social information within the traditional reports which produced by the accounting system (Felix, Gaynor, Pevzner, & Williams, 2018). So the social information becomes a part of the traditional financial information. This approach helps in the integration of financial and social information without the need to make a material adjustment to the accounting system.

#### **5. Conclusion:**

the accounting disclosure in the simplest sense is the process of Publishing and distributing data and information to help stakeholders to understand the financial statements and their content from figures and treatments. So The Researcher suggests to divide the accounting disclosure in CAs into three main groups: the first group includes the association's general framework. This consists of the association's establishment, strategic objectives, plan and administrative structure, (in the Board of Directors' report). The second group is the Traditional accounting disclosure which expresses the minimum mandatory accounting disclosure. And includes the basic financial information and financial statements. Where the third group will be associated with the performance measurement which will be in the form of a report which includes financial and non-financial indicators to ensure the association's achievements according to its main objectives and activities. Therefore, this classification will help to achieve the informative function of the financial reports and improving the accounting disclosure quality. And leads to increase stakeholders' confidence in the association's decision (Administrative, financial and operational). Thereby increasing the credibility of the economic and social performance of the CAs.

#### **References :**

1. Albaz, M., & Albaz, M. (2019). Core perspectives of performance measurement in NPOs: In search of accountability and legitimacy. *Economic Archive*, September.
2. Aldoseri, M. M., Albaz, M. M., & Ghali, A. A. (2022). The Impact of Organizational Characteristics on Corporate Cash Holdings: Evidence from Saudi Arabia During COVID-19 Period. *Information Sciences Letters*, <https://doi.org/10.18576/isl/110415>, 11(4).
3. Andon, P. B. (2015). Accounting for Stakeholders and Making Accounting Useful. *Journal of Management Studies*, <https://doi.org/10.1111/joms.12142>, 52(7).
4. Andreaus, M., & Costa, E. (2014). Toward an integrated accountability model for nonprofit organizations. *Advances in Public Interest Accounting*, <https://doi.org/10.1108/S1041-706020140000017006>, 17.
5. Barth, M. E. (2014). Measurement in financial reporting: The need for concepts. *In Accounting Horizons*. <https://doi.org/10.2308/acch-50689>, (Vol. 28, Issue 2).
6. Beattie, V. (2014). Accounting narratives and the narrative turn in accounting research: Issues, theory, methodology, methods and a research framework. *The British Accounting Review*, 46(2), pp. 111-134.





7. Behn, B., Devries, D., & LIN, J. (2010). The determinants of transparency in nonprofit organizations: An exploratory study. *Advances in Accounting, incorporating Advances in International Accounting*, 26(1), pp. 6-12.
8. Boomsma, R. (2021). On Jeffrey Unerman and the Future of NGO Accountability. . *Social and Environmental Accountability Journal*, . <https://doi.org/10.1080/0969160X.2021.2003215>, 41(3).
9. Breen, O. B. (2013). The Disclosure Panacea: . *A Comparative Perspective on Charity Financial Reporting. Voluntas*, <https://doi.org/10.1007/s11266-013-9377-2>, 24(3).
10. Burger, R., & Owens, T. (2010). Promoting Transparency in the NGO Sector: Examining the Availability and Reliability of Self- Reported Data. . *World Development*, , 38(9), pp. 1263-1277.
11. Cazenave, B., & Morales, J. (2021). NGO responses to financial evaluation: auditability, purification and performance. . *Accounting, Auditing and Accountability Journal*, <https://doi.org/10.1108/AAAJ-01-2020-4397>, 34(4).
12. Deegan, C. (2011). . *Financial accounting theory*. 2nd European ed. / Craig Deegan, Jeffrey Unerman. Edn.: London: . London, McGraw-Hill.
13. Esposito, P., & Antonucci, G. (2022). NGOs, corporate social responsibility and sustainable development trajectories in a new reformative spectrum: ‘New wine in old bottles or old wine in new bottles?’. *Corporate Social Responsibility and Environmental Management*, <https://doi.org/10.1002/csr.2223>, 29(3).
14. Felix, R., Gaynor, G., Pevzner, M., & Williams, J. L. (2018). Societal Trust and the Economic Behavior of Non-Profit Organizations. . *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2799466>.
15. Jegers, M. (2013). Do Nonprofit Organisations Manage Earnings? An Empirical Study. . *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations; Official journal of the International Society for Third-Sector Research*,, 24(4), pp. 953-968.
16. Thomas, C. (2020). Legitimacy Accountability in Government-NGO Relationships. . *Political Science Undergraduate Review*,. <https://doi.org/10.29173/psur132>, 5(1).

## **The Accounting Measurement and Disclosure of Public Expenditure Return and Its Impact on Rationalizing Allocation Decisions**

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### **Abstract**

The research aims to identify the essential variables that cause the inefficiency of decisions to allocate public expenditures and that cause the inability to determine the optimal mix of aspects of public expenditure, in addition to providing a suggested approach to reduce these variables and rationalize allocation decisions.

Through this research, the researcher tries to answer the research question related to how to rationalize public expenditure allocation decisions?

The researcher conducted an analytical study of a number of previous research studies in both the accounting and economic literature which discussed public expenditure allocation and the measurement of social benefits, The researcher also conducted a practical study based on a survey of a number of experts in both economic and accounting literature and public finance science in a number of countries registered in the International Monetary Fund database, with the aim of testing the research hypotheses and the proposed methodologies that he thinks as their ability to reduce the causes of inefficiency decisions allocation.

The results of this research are the acceptance of the research hypotheses that have been formulated and concluded that the process of allocating public expenditures lacks an objective measurement of information related to the inputs and outputs of the allocation, and the possibility of achieving this information through the accounting measurement of the return on public expenditure that the researcher put forward as a new target for measurement.

**Keywords:** Accounting Measurement, Accounting Disclosure, Return on Public Expenditure, Rationalization of Allocation Decisions.

### **1. Introduction**

Jacob Soll stated in his book *Financial Accounting and the Rise and Fall of Nations* in 2014 that accounting is designed to produce high-quality information that supports sound economic decision-making and effective allocation of resources, and that the main role of the accounting profession is to provide appropriate information to decision-makers in order to achieve economic development at the macro and micro levels (Venter, Gordon, & Street, 2018), But achieving economic development and increasing the level of citizens' welfare requires more expenditure, which is already being undertaken by many governments of the world, due to their role in economic activity and their social responsibility towards citizens, but the results are contrary to expectations, However the increase in expenditure rates, this increase was offset by a decrease in citizens' incomes and a decrease in the level of their Welfare, this is what happened in the Arab Republic of Egypt from 2014 to 2017, where this period witnessed a significant increase in the volume of public expenditure distributed among infrastructure projects and road construction, but the percentage of citizens below the poverty line increased by 3% (El Sabaa, 2017).

These phenomena placed more burden on researchers especially with regard to



evaluating decisions to allocate public expenditure and to determine, are these decisions efficient and effective in the creation of the optimal mix of aspects of public expenditure - which is necessary to maximize the public benefit of citizens - or not?, A number of few research studies have discussed the issue of public expenditures allocation decisions to answer the question related to the efficiency of these decisions, Many results have been reached but they raise many questions (Pradhan, 1996).

It has been shown that the efficiency of these decisions is affected by inefficiency in consumption and inefficiency in production, Inefficiency in consumption means that society as a whole is provided with goods and services that it would not have chosen if individuals practiced their rights to choose goods and services that meet their desires, As for inefficiency in production means that the goods and services that are provided to society are not produced in more efficient ways (Smith, 1981), And also These decisions are tainted by a great corruption, as the allocation is increased to some aspects of expenditure which it is easy with it to seize public money, such as defense, security and public safety (Moschovis, 2010)

One of the variables that also affect the efficiency of allocation decisions are the restrictions imposed on the public budget, which are faced by policy makers determining relative weights to citizens' needs for goods and services, but these relative weights are inaccurate because they are based on the experiences of policy makers not based on an objective measure of needs, in addition the lack of impartiality of policy makers in the assessment (Mogues, 2015), and affected them by the poverty of resources and the lack of information, as well as the pressure factors on the side of the political economy and their impact on determining the components of public spending (Ben-David & Tavor, 2011).

Another factor affecting the efficiency of the allocation of public expenditures is the absence of measurement of the outputs of these expenditures, as the economic and social information system has become unable to record and evaluate the desired social outputs, which are always in a state of change, and there has been an increase in dissatisfaction with the use of economic statistics. alone to measure social performance (McBain & Alsamawi, 2014). Which requires a quantitative measurement in a monetary form that shows the value of the social return, which is one of the most important necessary measures and challenges facing the governments of countries, especially after the global financial crisis and the funding problems faced by countries, including, for example, the problems faced by the United States of America after 2009 with regard to Refinance the same social programs year after year with the absence of a measurement of the returns of these programs, which led to large debts estimated at that time 4 trillion dollars (Saul, 2013).

It became necessary to answer an important question, which is what is the priority to be achieved in order to correct economic and social conditions and improve the quality of life for citizens, whether at work or at home?, As well as answering the following question: Why is it not possible to obtain a good measure of economic and social performance?, According to the findings of research studies in this regard, the priority to be achieved is the social welfare of citizens or the so-called social welfare. But economic and social information systems will not be able to determine the required level of social welfare and what resources must be allocated to achieve this level, Therefore, it is necessary to rely on a complementary information system that enables policy makers to develop an integrated strategy of the aspects of public expenditure which are necessary to maximize the social benefit of citizens. (Moss, 1980)

This is in addition to the challenge faced by a number of countries in the world, which is the increase in the volume of public expenditure with the decline in the level of public revenue, This challenge is considered one of the most important challenges in the twenty-first century, which leads these countries to the necessity of applying some austerity measures (Wirtz, Lütje, & Schierz, 2010), But care must be taken when composing a package of these

measures in order to avoid the negative impact of reducing some aspects of public expenditure - such as education - on the overall economic growth rate (Castro, 2018), As the optimal rationalization of expenditure depends on the efficiency of allocation that entails the change in the structure of goods and services that are provided to (Postuła, 2017), The efficiency of public expenditure also depends on the optimal allocation of resources (Dutu, 2016 ), It should be noted that the social values of services chosen to be provided to citizens must correspond to the different levels of resource allocation decisions (Ahmed, 1988)

According to the foregoing, the rationalizing of public expenditures allocating decisions has become a very important necessity because of its fundamental impact in a path of the development process, Hence, the research problem discussed in this research is: How to rationalize the allocating decisions of public expenditures in the presence of the impact of a number of variables surrounding the allocation process, which would lead to the failure of the allocation decisions in maximizing the public benefit of citizens.

In order to form a vision for answering the research question represented in: How can we rationalize public expenditure allocation decisions?, In order to form a vision for answering the research question represented in: How can public expenditure allocation decisions be rationalized? The researcher will further discuss and analyze a number of research studies that dealt with the issue of allocating public expenditures and measuring the return on allocating these expenditures as it represents the feedback to the allocation process.

The researcher will also do practical study based on the survey of experts and insiders in the field of research in order to test the validity of the research hypotheses formulated by the researcher in light of the results he reached from discussing a number of previous research studies related to the causes of the research problem These hypotheses were as follows:-

- First Hypothesis: There is a significant relationship with statistical significance between the absence of feedback on the process of allocating public expenditures, and the inefficiency of allocation decisions.
- The second hypothesis: There is a significant relationship with statistical significance between achieving the accounting measurement of public expenditure return, and achieving the feedback of public expenditures allocating process.

## **2. literatures Review**

Public expenditure in many countries represents between 50-60% of the total demand in the national economy, and no way less than 30% in most countries of the world. Therefore, any change in public expenditure has an impact in determining the path of economic growth, The degree of this effect depends on the change in the components of public expenditure (Dewan & Ettliger, 2009), Research studies indicate that the impact of a change in the structure of public expenditure varies according to the size and quality of this component. The effect resulting from a change in export subsidies differs from the effect resulting from a change in the volume of other transfers to the education or health sector and also differs from the effect resulting from a change in subsidizing energy products.

The impact of the change in the structure of public expenditure is not limited to the growth path, but extends to the distributive dimension of this change, which is a very important issue, If there is a decision to compare between energy subsidies, education subsidies, health subsidies, or food subsidies, the decision to increase or reduce these types - or to substitute one type of subsidy for another, such as cash subsidies instead of in-kind subsidies - has distributional effects that cannot be ignored on income distribution and on peace social in society (Shehata, 2009), In light of this, the decision to determine the aspects and priorities of public expenditure is a great matter in influencing the growth path, and this



always raises the question of how the aspects and priorities of public expenditure are determined?

## **2.1 literatures Review that discussed the allocation of public expenditures**

This part of the research in which the researcher discusses and analyzes a number of research efforts that dealt with the issue of the allocation of public expenditures, trying to identify the variables affecting the efficiency of the allocation process and the research gap through which these causes can be avoided.

### **2.1.1 Study (Tridimas, 1999 )**

Tridimas carried out this study in order to test the effect of the opportunity cost of public spending allocations on the allocation of these expenditures in light of the available amount of public resources, Tridimas has also studied the extent to which the government's orientation in the allocation of public expenditures is affected by the prices of public services provided to the public.

Tridimas used UK public spending data for the period from 1963 to 1996, And he prepared a model for allocating public expenditures based on the Rotterdam model of demand, by entering a variable representing the value of the error in the demand equation for this model, It is worth noting that this model is a model for determining the amount of demand from public services according to the prices of these services.

The study concluded that there is a significant impact of the prices of public services in the allocation of expenditures for these services, As well as the presence of an important impact of demographic variables on the allocation process, The study also concluded that there is no effect of total public expenditures as an influential variable in the allocation of expenditure; Although other research studies have found an effect of the total value of expenditure on the allocation process.

### **2.1.2 Study (Paternostro, Rajaram, & Tiongson, 2005 )**

Paternostro et al. carried out this study is a result of the growing concern about the scientific foundations and concepts related to the belief that the level of poverty can be reduced through public expenditure targets, Although this approach to allocating public expenditure is exposed to criticism because of its negative impact on the rate of economic growth; as a result of directing expenditure directly to confront the poverty of citizens and not to productive operations. Paternostro et al. said that: There is no appropriate framework for assessing the impact of public expenditure on both poverty and growth, A combination of macroeconomic principles and growth theory is needed in order to develop a theoretical framework for public spending policy.

The study dealt with the literature on the allocation of public expenditure, which tried to answer the question of how governments work with regard to allocating public expenditure among different sectors in order to increase opportunities for achieving development, The study also attempted to answer the question about what are the principles and technical tools that guide the allocation of public expenditures, Paternostro et al. have been mentioned A number of approaches to allocating overheads, which are: cost-effectiveness analysis, multi-criteria analysis, surveys, expenditure tracking and cost- social benefit analysis.

The study concluded that there is no optimal policy for determining aspects of public expenditure; Rather, determining the aspects of public spending is due to the theory of market failure, which is intended to provide goods and services that markets cannot provide to citizens. The study also found that there is no specific methodology for allocating public expenditure, Some of them depend on quantitative measures, and some of them depend on the experiences of the persons involved in allocating, which differ from one country to another.



Paternostro et al. have indicated to the existence of future research challenges in defining a reference guide to be used by policy makers in the allocation of public expenditures; This is due to the inability of economic theories currently to solve this problem and not keep pace with the challenges of development policies, and this in turn led to a widening of the gap between theory and practice.

### **2.1.3 Study (Moschovis, 2010)**

This study was conducted with the aim of testing the impact of corruption on decisions related to public expenditure and Execution of the public budget, especially in the presence of financial fluctuations, The study also focused on reviewing the relevant literature related to the impact of corruption on public expenditure. Relying on an econometric method, Moschovis reviewed the literature on the allocation of public expenditure to defense, security, public safety systems, economic and cultural affairs, and public services; This is for the case of 15 countries of the European Union, with more attention given to the case of Greece, during the period from 1995 to 2006, The study concluded that there is an effect of corruption on expenditure accuracy and pushing towards financial crises. Moschovis stated that his study differs from other studies, as it dealt with aspects of public expenditure under study as a percentage of total public expenditure and not like most other studies that dealt with aspects of expenditure as a percentage of GDP.

### **2.1.4 Study (Ben-David & Tavor, 2011)**

This study was conducted with the aim of measuring the social loss as a result of the government's inability to use the public demand function, which is due to the absence of information related to the volume of demand for public goods and services. In this study, Ben-David and Tavor have developed a model through which the government can maximize the public benefit to citizens under the assumption that the social benefit is determined according to the public demand for goods and services, which can be a substitute for the value of the public benefit, And the value of public demand was determined through a field survey of a group of citizens.

This study discussed the methodology of allocating public expenditures directly, as the study stated that the allocation process is carried out according to the relative weights specified for each functional sector by the planners; Where the allocation starts from the sector with the highest relative weight, then the lowest, and so on, but the study stated that there is no agreement on the accuracy of these relative weights which can Creating the optimal mix of public expenditures to maximize the public benefit of citizens, The study faced criticism regarding the hypothesis of the model Where it has not been fully accepted, under the pretext that it is impossible to obtain an adequate assessment of the social benefit of citizens through field surveys.

### **2.1.5 Study (Carboni & Medda, 2011 )**

This study tested the relationship between public expenditure and the growth rate of domestic product, through an econometric model, where public expenditure represents one of its variables. The study found the possibility of maximizing the growth rate of output by controlling the volume of public expenditure, It is even possible to increase the growth rate through reallocation between aspects of public expenditure and the transfer of expenditure from one functional sector to another, The study also found a positive relationship between public expenditure and the increase in the productivity of private expenditure, The study also found that neglecting the linear relationship between public expenditure and the growth rate would lead to biased and subjective results.





### **2.1.6 Study (Liu, 2014 )**

This study was conducted with the aim of examining the impact of public sector employee corruption on the volume and allocation of public expenditure in the United States of America, Liu and Mikesell made an analytical study of the data recorded during the period from 1997 to 2008. The study found an increase in the allocation of US public expenditure in aspects of expenditure that increase the opportunity to receive bribes, such as expenditure on infrastructure, road construction, salaries and wages.

### **2.1.7 Study (Cordes, 2017 )**

This study examined the relationship between government corruption and the components of public expenditure in the United States of America, Where Cordis conducted an empirical study for the period from 1986 to 2008 using data on corruption cases filed by the federal attorney general in order to measure the level of government corruption at the level of all US states and to overcome the discrepancy in the level of corruption among all states, Cordis also used the results of annual surveys conducted by the US Census Bureau to analyze components of US public expenditure.

The study concluded that there is a significant impact of government corruption in determining the components of public expenditure in the United States of America, And the study specifically mentioned that government corruption leads to a reduction in allocations directed to spending in the field of higher education, as well as a reduction in allocations directed to social reform and an increase in the welfare of citizens, On the other hand, government corruption leads to an increase in the allocations directed to expenditure in the field of health, hospitals and housing.

### **2.1.8 Study (Kasdin & Lin, 2015 )**

This study was conducted with the aim of examining the effect of the political environment on the response of federal institutions in the allocation of public expenditure; This is done by analyzing public expenditure in the United States of America from 2006 to 2010, Whereas in 2006 the helm of government moved from the hands of the Republicans to the Democrats and vice versa in 2010. The study found that American government institutions are affected by the existing system of government when allocating public expenditure and directing expenditure according to the desires of the regime.

### **2.1.9 Study (Calligaris, 2015 )**

This study was conducted with the aim of explaining the phenomenon of the increasing decline in the productivity of the factors of production within the industrial sector in Italy compared to the rest of the countries of the continent of Europe, As this phenomenon increased, attention began to increase to the efficiency of expenditure allocation, and there was an urgent question regarding the impact of misallocation allocation of expenditure on the productivity of factors of production? and what are the causes of misallocation?

The answer to this question was the focus of this study, The Italian case represented a good example for studying the misallocation of expenditure and became interesting, especially in light of the increasing decline in the productivity of production factors over time after Italy achieved the best growth among the countries of the continent of Europe in the period from 1970 to 1980, Calligaris conducted an empirical study by analyzing production inputs in Italian factories over a time series during the period from 1993 to 2011, Calligaris assumed a basic hypothesis for this study: the absence of misallocation with the expectation that the productivity of the factors of production would increase by 58% in 1993, by 67% in 2006, and by 80% in 2011. The study reached a very important conclusion, which is: the

increase in misallocation over time and that misallocation plays an influential role in the inefficiency of production in the Italian industrial sector, The study stated that the reason for the misallocation is due to a number of determinants represented in the nature of Italian companies and the geographical scope.

#### **2.1.10 Study (Mogues, 2015 )**

This study aimed to test the impact of the determinants of political economy on the allocation of public expenditure, by discussing a number of research studies that dealt with this topic, The study dealt with the discussion of the agricultural sector allocations as one of the areas of public expenditure; Mogues studied the impact of these determinants on these allocations in both developed and developing countries. The study discussed a number of previous research studies that tested the effect of each of the incentives and constraints of politicians, bureaucrats, and donors on expenditure allocation, The study also tested the impact of the characteristics of goods and services provided to the public and the impact of the political environment in determining public investment priorities.

The study concluded that the determinants of political economy have a significant impact on the process of allocating public expenditures, But, Mogues has shed light on a number of areas that need further research in the future, including the strong empirical evidence on the impact of these determinants in the allocation process and identified three basic determinants that are: (the incentives of authorities in the allocation process - the characteristics of public goods and services provided to citizens - the vision of those responsible for determining Public expenditure priorities).

#### **2.1.11 Study (Fonchamnyo & Sama, 2016 )**

Fonchamnyo and Sama conducted this study with the aim of testing the efficiency of public expenditure in the education and health sectors in three African countries: Cameroon, Chad and the Central African Republic, This study also aimed to test the effect of institutional and economic factors on the efficiency of public expenditure in these two sectors, The study stated that expenditure efficiency depends on two factors: technical efficiency and allocation efficiency. The study concluded that when analyzing the efficiency of expenditure allocation to determine its impact on expenditure efficiency, a more in-depth analysis is required with regard to input prices according to the cost-benefit analysis approach.

#### **2.1.12 tudy (Neduziak, 2017 )**

This study tested the effect of public expenditure allocation on the GDP growth rate in Brazil during the period from 1995 to 2011 through an empirical study using the fixed effects model – Which is a statistical model characterized by the stability of parameters - In order to know the effect of public spending components on the rate of the GDP growth. The study found a positive relationship between some components of public expenditure and the rate of the GDP growth. These components were represented in expenditure directed to administrative institutions, planning, housing and social assistance, while there is a negative relationship between the rate of the GDP growth and expenditure directed to education, culture and the legislative authority.

#### **2.1.13 Study (El Sabaa, 2017)**

This study was conducted with the aim of testing the effect of allocating public expenditure on solving problems and facing the economic challenges facing the Arab Republic of Egypt, The study developed a basic hypothesis which is: the misallocation of economic resources in Egypt leads to inflation, through over-investment in infrastructure and



reduce- expenditure on the productive economy. El Sabaa analyzed public expenditure data for a time series from 2000 to 2014; El Sabaa inferred that the January 2011 revolution resulted in an increase in poverty and inequality in the distribution of income.

The study concluded that, Although, the increase in the volume of public expenditure especially in the recent period, the percentage of the population below the poverty line has increased, This was indicated by El Sabaa on the inefficiency of the allocation of public expenditure in the Arab Republic of Egypt and that: it was not optimal to face the economic challenges and help improve income distribution and alleviate poverty.

#### **1.2.14 Study (Anríquez, 2018 )**

This study was conducted with the aim of measuring and evaluating the impact of public expenditure distributed between (subsidies - public goods) in achieving social welfare for the citizens of rural areas, The study also aimed to discuss whether public expenditure in the agricultural sector is the real cause of social welfare for citizens in rural areas. Anríquez et al. used the econometric approach to test the relationship between the components of public expenditure in the agricultural sector and the performance of this sector; As well as testing the extent of homogeneity between the applied public spending policies and the level of sector performance, for a time series of data on public expenditures for the agricultural sector in Latin America from 1982 to 2012.

The study found a significant impact of the components of public expenditure in the agricultural sector on the performance level of the sector, And that redirecting the allocation among the aspects of expenditure within the agricultural sector for 10% will lead to an increase in the added value for the individual in this sector equivalent to 5%, with an emphasis on the stability of the total value of expenditure for this sector; While achieving this level of value added increase in case of the absence of redirecting requires an increase in the level of expenditure directed to the sector as a whole by 50%.

#### **1.2.15 Study (Gemmell, Kneller, & Sanz, 2016)**

This study was conducted with the aim of knowing the effect of the change in the components of total public expenditure, as well as the change in the shares of expenditure categories on the gross domestic product (GDP) for a sample of the group of member countries of the Organization for Economic Cooperation and Development (OECD), About the period since the seventies of the last century taking into consideration the methods of financing expenditures and the possible internal relationships between aspects of expenditures.

The study found empirical evidence that is more systematic than the evidence found in the studies that preceded this study that is: the reallocation of both education and infrastructure expenditure has a significant impact on the level of GDP in the long run, and the reallocation of social expenditure may be accompanied by negative effects.

#### **2.1.16 The Discussion of Results**

It is clear to the researcher from the findings of the studies presented that dealt with the issue of the allocation of public expenditures that the efficiency or inefficiency of the allocation process is not absolute, but is due to the influence of some of the variables surrounding the allocation process and the methodology used in the allocation.

On the level of variables, there is a substantial impact on: corruption in all its forms, the prevailing system of governance, the geographical scope, the political economy, the vision of those responsible for the allocation process, the opportunity cost of expenditure allocation, the prices of services provided to the public and the absence of information related to the volume of demand for public goods and services, On the level of the methodology used in the

allocation, the results show that there is no optimal methodology and there is no specific methodology for the allocation process.

The results of those studies also showed that the problem of inefficiency in allocating public expenditures is not limited to developing and emerging countries only, as it exists in the Arab Republic of Egypt and a number of countries in Africa and Latin America, but that this problem also exists in developed countries such as the United States of America and the United Kingdom, as well as A number of member countries of the Organization for Economic Co-operation and Development (OECD) and a number of European Union countries.

This result indicates the similarity of the variables affecting the allocation process in all countries - with the different degree of the influencing variable - as well as the similarity of the causes of the inefficiency of the adopted methodology, and the inability of one science alone - as a specialized science - to provide an appropriate methodology for allocation that is able to remove these causes and be Capable of maximizing the general benefit of citizens and achieving social welfare.

The researcher believes that it requires more research with regard to the fundamental causes affecting the allocation of public expenditures, This is because of the most studies that indicated the existence of a problem with regard to the efficiency of the allocation has approved this result based on analyzes related to the inputs of the allocation process and the variables surrounding it, As well as relying on the link between some of the phenomena that appeared in conjunction with the absence of tangible and influential results for the allocation process in maximizing the public benefit of citizens, without the real touch by these studies to research and analyze the results of the privatization process.

Also, these studies did not indicate the existence of a measurement of the benefits achieved and the outputs of the allocation process, either in a descriptive form or in a quantitative form that can be used as a financial value for the return on expenditure and can be offset by the value of what was spent to be considered as a feedback to the allocation process, which helps in determining the appropriate relative weights for expenditure priorities.

The researcher believes that there is a necessity to discuss the research efforts that dealt with measuring the benefits achieved from public allocation as a return to these expenditure, in terms of the possibility of measuring them, the extent of the objectivity of this measurement and the possibility of developing it and relying on it in providing feedback information for the allocation process. Therefore, the researcher will address this matter in the next part.

## **2.2 literatures Review that discussed measuring social benefits**

The literature of scientific research in both the economic and accounting fields suffers from the lack of research studies that dealt with measuring the benefits achieved from public expenditure, The previous research efforts made several attempts to achieve this measurement, using a number of different scales according to the vision of the researcher and the practical field of the study, The following is the discussion a number of those studies in order to establish the latest findings of the scientific research regarding this measurement.

### **2.2.1 Study (Starrett, 1977)**

This study was undertaken with the aim of building a broadly usable measure of Social Welfare achieved through the provision of technology products, This is based on the theory of homogeneous functions, where the return is measured for a group of products and considered as one unit according to the degree of homogeneity; The concept of social welfare is one of the important topics in economic studies.



Starrett has developed a basic hypothesis in order to measure the level of social welfare, and this hypothesis is that: "Society consists of specific groups of individuals who agree in their tastes and abilities. The social welfare of the community depends on its consumption of goods and on the available resources, and the resources used."

### **2.2.2 Study (Pina, 2005 )**

This study was conducted with the aim of discussing the Pereira 2000 methodology related to the rate of return on public investment (ROPI), The study also aimed to avoid the criticisms which was directed to this methodology, which considered the return on public investment as the rate of return included in the calculation of average productivity, which is measured through the relationship between four variables: public investment, private investment, employment in the private sector and national output from the private sector.

The study stated that this methodology relied on the Vectorial Auto Regressive (VAR) model, which is an autoregressive model that measures the mutual linear relationships between a number of variables in multivariate time series through an equation that combines the logarithm of the dependent variable and the previous logarithms of the independent variables.

Pina agreed with the Pereira 2000 methodology on the importance of taking into account the indirect effects of the outputs of public investment and their relationships with private investment inputs. Pina differed with the Pereira 2000 methodology in the way investment costs are measured, as well as with regard to the position of costs as an influential variable in public sector outputs.

### **2.2.3 Study (Li & Lofgren, 2006)**

This study tested the measure of Net national product as a measure of social welfare achieved as a result of public spending, The study concluded that the measure of net national product in general does not reflect social welfare, because of the net national product is measured according to consumer and fixed prices; And this is not correct when measuring the level of progress in social welfare. The study suggested deducting fixed prices and replacing them with variable prices according to the consumer price index, and the study provided an alternative measure for expressing the level of social welfare represented in the rate of return on the net relative weight of public investment.

### **2.2.4 Study (Junankar, 2003 )**

This study was conducted with the aim of discussing the results of public investment in education in Australia, and Junankar measured the so-called social rate of return (SROI), and this return reflects the amount of benefits that have been achieved for the Australian citizen as a result of public investment expenditure in education, The social rate of return was determined as a measure of public expenditure results, similar to the rate of return on investment in commercial projects (ROI).

The methodology for measuring the social return achieved as a result of public expenditure in education was like the methodology for estimating the return on private investment in education, through the potential income achieved as a result of the high level of education compared to the cost paid as a result of this rise in the educational level; and the difference between them represents the return, bearing in mind that education services Introduction is priced.

The study methodology in estimating the social return to education has been subjected to a number of criticisms, the most important of which are: overestimating the rate of return, and bias in estimating profits.



### **2.2.5 Study (Moretti, 2010 )**

This study was conducted with the aim of contributing to the research argument surrounding the idea of the Local Multiplier (LM3), which originates from the economic literature which says that: job creation in certain sectors results from an increase in expenditure in other sectors; Thus, governments can attract more investment into the national economy by expenditure more tax proceeds to create demand in certain sectors.

Moretti has come to confirm the idea of the domestic multiplier, but taking into account the rate of elasticity between supply and demand between sectors of the economy, as it was found that creating more jobs in the commercial sector, had a significant impact in creating more jobs in the construction sector, wholesale trade and services Personal.

### **2.2.6 Study (Alston, 2011 )**

This study was carried out with the aim of making a new estimate for the returns of US public expenditure in the field of agricultural research, which can serve as a benchmark for evaluating the returns achieved as a result of expenditure on agricultural research, Alston et al. They presented a model of estimation different from the models presented by previous research studies that dealt with this topic, as the model was based on the agricultural productivity and the investments of the central and local government in the field of agricultural research, Agricultural productivity was measured by measuring the change in productivity as a result of both agricultural research and public expenditure on agricultural expansion.

### **2.2.7 Study (Millar & Hall, 2013 )**

Millar and Hall conducted this study in response to the call for scientific research to find and develop an appropriate mechanism for evaluating social institutions and organizations, The study aimed to analyze performance measures used in institutions and social organizations, with more attention given in the analysis to the social rate of return (SROI) in order to contribute to the discussion about the usefulness of using it as a measure of performance in institutions and social organizations after increasing interest in it and supporting its use by many countries of the world such as China and France.

This scale is based on accounting principles and the principle of cost-benefit analysis, and it works to determine a monetary value for each of the environmental and social returns of social programs in order to show the real added value to society as a result of these programs. This scale expresses the social benefits achieved relative to what has been spent in order to achieve these benefits .

The study found that despite the successes achieved by the use of this scale by many social institutions in evaluating their performance, such as institutions working in the field of health, social care and education, it is not used by other institutions; The reason for this is due to the difficulty of determining a financial value for some of the achieved results of social programs such as confidence and self-esteem, which is due in its estimation to personal judgment.

The reason for not using this scale by some organizations is also due to the assumptions that are made to reach this scale, which conflict with the way these organizations are managed, for example: that these organizations have a database and financial agents, and often the data in these organizations are not Reliable, which leads to poor quality of reports prepared according to this metric, Also, this scale requires that there be knowledge about what could happen, and data on this is rarely available, which leads to arithmetic errors in estimation, data inconsistency, and inability to compare this scale between different institutions.





### **2.2.8 Study (Kakwani, 2015 )**

This study was conducted with the aim of evaluating public expenditure programs related to the social aspect, in light of the continuous increase in the percentage of investment in social programs by many developing countries with the aim of increasing the level of Welfare of their people, especially the poor and the weak.

Kakwani and Son applied the social rate of return (SROI) methodology to evaluate these programs, and the study defined this rate as "the social welfare achieved as a result of public expenditure programs related to social aspects, which represents a percentage of the cost of these programs."; Measuring this rate requires determining the amount of the increase in the level of social welfare in monetary form, which represents the direct change in social welfare due to income, and the indirect change as a result of the benefits distributed after the implementation of the social program.

In order to measure the social rate of return (SROI) according to the concept presented by this study, which is "representing a percentage of the cost of the implemented social program", it is necessary to measure the cost of this program.

### **2.2.9 Study (Thomas, 2015 )**

This study was conducted with the aim of discussing previous research studies that dealt with the field of evaluating public expenditure in the field of health, as well as evaluating the standard methods that were used to estimate the value of money, in order to improve the efficiency of the allocation of public resources to face the pressures imposed by this situation of increasing scarcity resources. Thomas et al. evaluated 40 research studies that dealt with public expenditure in health between January 1996 and December 2014.

Thomas et al. concluded that these studies used a number of different standard approaches in order to measure the effects achieved as a result of public spending on health programs. These approaches were represented in cost-benefit analysis, cost-effectiveness and the social rate of return on investment (SROI); The most widely used of these approaches is the social rate of return on investment, But A decline in the use of this approach has been observed since 2011. Thomas et al. presented some recommendations that they consider the necessity of research in the future in order to apply the methodology of the social rate of return on investment (SROI) objectively in the field of measuring the benefits of public expenditure in health, The most important of these recommendations were:

- The need to identify the actual beneficiaries of the benefits achieved from expenditure, not all stakeholders.
- The need to provide explanations and justifications related to the discount rates used in finding the present value of each of the financial value of social benefits and the cost of expenditure.
- And the need to provide objective models with regard to estimating the financial value of the outputs of social programs.

### **2.2.10 Study (Nicholls, 2016)**

This study was conducted with the aim of discussing the developments that the social rate of return (SROI) has gone through, in order to identify the aspects of this scale that need further scientific research in the future in order to reach a comparable standard with other standards to provide information that suits each of the purposes of financial accounting and public expenditure allocation decisions, and achieving sustainability in the private sector, and commensurate with cost-benefit analysis in the public sector, and arranging the relative importance of the results achieved from public spending according to their relative weight in

achieving the return.

Nicholls searched for the reasons for the emergence of this scale, and he concluded that it was represented in: The need for an indicator that shows whether the activities performed by the institutions have affected the lives of people or not. Nicholls also mentioned other reasons for the interest in this indicator, which is represented in: As a result of the presence of several unanswered questions, these questions were as follows:

- How can the success of the efforts of social institutions and organizations be measured?
- How can the level of progress in the activities and efforts undertaken by social institutions and organizations be measured?
- How can we convince others of what we think is true?
- Are resource allocation decisions efficient?

The study showed that the social rate of return cannot be fully relied upon in the process of resource allocation by social organizations, and there is a need to develop this measure over time to become a criterion which social organizations depend on the decision-making process.

#### **2.2.11 Study (Brown, 2016)**

This study was conducted with the aim of estimating the average return on investment in the activities of public health administrations in the state of California, Brown used the ROI methodology using the present value of a number of health economics variables, These variables were obtained from a number of specialized articles, these variables were represented in: the present value of avoiding deaths, the present value of improving health status and the present value of public expenditure on health.

The present value for avoiding deaths is obtained through the estimated statistical value of life used by environmental protection organizations, and this value is obtained through the causal relationship between the volume of public expenditure on health and the avoidance of death. As for the present value of the improvement in health, it is obtained through the standard value expressing good health, which is measured through the causal relationship between the proportion of the population whose health has improved and the volume of public expenditure on health, As for the present value of public expenditure on health, it is obtained by the value of public expenditure on health and the prevailing discount rate.

#### **2.2.12 Study (Pastor, 2016 )**

This study was conducted with the aim of presenting a different methodology from the previous studies that dealt with measuring the return on public expenditure on public universities. These methodologies were divided into two types of methodologies, The first is: the methodology based on measuring the direct returns from public expenditure on universities through the impact of education on employment and the second is: the methodology based on measuring the indirect effects on the local economy as a result of public expenditure on universities through the relationship between inputs and outputs.

Pastor and Peraita used a Monte Carlo model that included a set of random elements to estimate the tax returns of public expenditure on university in the Basque Country in Spain. The study concluded that public investment in university education is a financially profitable investment.

#### **2.2.13 Study (Cordes, 2017 )**

As a result of the growing interest in SROI since the early 2000s, This study aimed to discuss the uses and shortcomings related to both the Cost and Benefits Analysis (CBA)



methodology and the Social Rate of Return (SROI) methodology as tools that governments, the private sector, investors, as well as donors can use in prioritizing programs and social assistance and evaluating performance.

The study found the ability of the social rate of return to evaluate performance. The study also addressed the objections to this measure, which were summarized in the following: Difficulty in accessing a monetary value that represents a quantitative measure of the outputs of programs implemented by non-profit institutions.

#### **2.2.14 Study (Yates & Mita, 2017)**

This study discussed the problems of applying the social rate of return (SROI) as a measure to evaluate performance and measure the social benefits resulting from expenditure in social programs to increase the level of citizens' welfare. The study stated that cost-based analyzes, including the social rate of return on investment analyzes, are relatively recent and cannot be fully relied upon in the decision-making process, And, The relevant organizations and bodies, such as the Social Value International Organization (SVI), which is the organization concerned with the social value that is achieved for societies through social programs, must work to develop a methodology for its measurement.

#### **2.2.15 Study (Gargani, 2017)**

This study aimed to discuss the standard framework of the social rate of return on investment (SROI) methodology, which is basically based on the standard framework of the methodology for measuring the rate of return on investment in commercial projects ROI.

The study stated that the same problems facing the investor in choosing between different projects, which required the need for a criterion that enables rational choice, are the same problems facing investors in choosing between social programs, which required the existence of a criterion on the basis of which the appropriate choice can be made.

#### **2.2.16 Study (Watson & Whitley, 2017)**

After the social rate of return on investment (SROI) methodology has become the most developed and used method for measuring the intangible social effects of investment in the United Kingdom, the United States of America and some European countries, this study was conducted with the aim of discussing and exploring this methodology by applying it to the investment case in building health clinics, And also to determine whether there is a criticism related to this methodology, and to indicate whether there is a need for future research efforts that can be conducted in order to develop this measure.

Watson and Whitley calculated the rate of social return achieved as a result of building a group of health clinics according to the procedures manual for how to measure this return, which is represented in the number of six stages starting with the stage of determining the areas under measurement through conducting field surveys, And finally, calculating the value of the rate and finding the present value of it during the program's lifetime, and then reporting on this value.

Watson and Whitley found the ability of the social rate of return on investment to express the social benefits related to building clinics and health buildings, But, they pointed out that there is one aspect of criticism that can be directed to this methodology, which is related to the uncertainty of the causal relationship between the social benefits that were reached through field surveys of citizens in the areas under measurement, and the construction of these buildings.

Watson and Whitley mentioned a number of recommendations that must be taken into account in the future in order to continue applying this methodology to measure social

benefits. The most important of these recommendations are related to the quality of preparing surveys, identifying the surveyed individuals and their motives, how to evaluate benefits, and what is the benchmark of the social program costs.

#### **2.2.17 Study (Van Dijk, 2017)**

This study was conducted in order to reach a more accurate estimate of the local employment multiplier in the United States of America, which Van Dijk defined in this study as the number of additional jobs that were created in the non-commercial sector as a result of adding one job in the commercial sector in the same city.

Van Dijk found that adding one job to the commercial sector increases jobs in the non-commercial sector by an average of 1.6 to 1.7 jobs, and this result is a strong explanation for the growth rate in the non-commercial sector.

#### **2.2.18 Study (Hall & Millo, 2018 )**

This study was conducted with the aim of finding out why governments and policy makers choose accounting methods in clarifying and rationalizing their chosen policies for applying.

This study concluded that the accounting approaches have the ability to clarify and explain the content of the applied public policies, which makes them eligible for strong use by policy makers in communicating the content of their policies to the relevant parties, primarily citizens. The study also found that the social rate of return (SROI) is The accounting approaches - currently in use - are most capable of expressing the social benefits achieved as a result of expenditure on social programs, But, Hall and Millo called for future research studies regarding the validity of their findings regarding the ability of accounting to explain and clarify the content of public policies.

#### **2.2.19 Study (Purwohedi & Gurd, 2019 )**

This study was conducted with the aim of clarifying the possibility of using the social rate of return on investment in improving the management of public projects undertaken by local governments, Purwohedi and Gurd conducted a case study of a sanitation project in an Indonesian city. The study found a significant improvement in project management through the use of the social rate of return on investment, as a result of determining project priorities and implementation preferences, better measuring performance, and achieving the principle of accountability.

#### **2.2.20 Study (Krucien, Fleury, & Gafni, 2019 )**

This study was conducted with the aim of developing a special methodology that enables the selection of the best expected outputs for public expenditure, especially in the field of health, as the decision-maker cannot allocate public expenditure among health programs due to the lack of knowledge of the possible outcomes in advance, as well as the uncertainty related to these outcomes.

Krucien et al. They applied the (cost-effectiveness plane) (CEP) methodology to select the best outputs for public expenditure for health programs. This methodology is based on the principle of maximizing the benefit resulting from the change in both cost and effectiveness as a result of switching from one drug to another and comparing both cost and effectiveness. For the previous drug with the cost and effectiveness of the current drug.

#### **2.2.21 The Discussion of Results**

It is clear to the researcher from the results of the studies that were discussed that these studies' handling of the issue of measuring the benefits achieved for citizens as a result of the



allocation of public expenditures was done at the level of specific economic sectors and not at the level of all macroeconomic sectors, which led to the absence of feedback on the process of allocating public expenditures at the aggregate level for the state's general budget.

It is also clear that these studies use - through their chronological sequence - a number of methods of measuring social benefits, which started with the theory of homogeneous functions, which is one of the important topics in the economic literature, leading to the methodology of the social rate of return on investment (SROI), which is currently the most important and most commonly used measure in the field of measuring social benefits.

the social rate of return on investment (SROI), derives his philosophy from the principle of cost-benefit analysis and derives its mathematical formula from the mathematical framework of the rate of return on investment in commercial projects (ROI) - which is one of the important topics in the accounting literature - which emphasizes the idea of integration between social sciences to achieve the Welfare of peoples.

Despite the number of methods used in trying to achieve an objective measurement of the social benefits achieved for citizens through the concept of social welfare, as well as the research efforts related to developing methodologies for this measurement, But, these methods did not provide an objective measurement of these benefits. This is because it did not achieve a real and direct measure of the change in the level of social welfare achieved as a result of public spending; The reason for this is due to many shortcomings in the methodologies used in the measurement, as well as a number of issues related to the concept of social welfare itself.

On the level of measurement methodologies, many aspects of criticism have been directed at these methodologies, especially the criticisms related to the social rate of return on investment (SROI) methodology with regard to how to determine social benefits, which are based on field surveys of a number of individuals who are assumed to be the beneficiaries of the implementation of social programs, as well as criticism related to how to determine the value of financial benefits.

As for matters related to the concept of social welfare as a reason for not achieving a real and direct measurement of the change in the level of social welfare achieved as a result of public spending, this may be due primarily to the difficulty of measuring the concept of social welfare in itself, which went through many stages of development during the period from 1970 until 1980 by a number of researchers, including: Sen, Starret, Blackorby, Donaldson (Geoffrey, 1990), As a result of the difficulty of measuring the concept of social welfare compared to output, governments refuge to maximizing output instead of maximizing welfare. (Misch, Gemmell, & Kneller, 2013).

The difficulty of measuring the concept of social welfare is due to several reasons, namely:

- This concept is based on individual preferences of citizens, not society as a whole (Weymark, 2013)
- It is also a multi-dimensional and contextual concept that: is constantly modified to reflect the prevailing social realities, and it consists of a physical dimension which includes some economic indicators such as income, employment, level of education and social security services, and another personal dimension such as happiness, satisfaction, availability or general insecurity (Moss, 1980 )

This is in addition to the fact that: this concept cannot be generalized as it does not take into account the different aspects of citizens' lives, which require continuous review and evaluation to find out what these aspects mean for each country and each region; and reflects



the prevailing social realities and contributes to meeting the needs of citizens (Martinez, Rodriguez, Lombe, & Rossi, 2017). Since the ability of individuals to meet their needs depends on the income they obtain to enable them to meet them, the concept of social welfare has been defined by a number of researchers as “the available income after reducing it by the coefficient of inequality in the income distribution.”, And, It was used as an indicator of inequality in the distribution of income by the researcher Dalton in 1920 as the first researcher to use this concept to express inequality in the distribution, It was also used for the same purpose by researcher Atkinson in 1970.

Among the studies that defined the concept of social welfare in this context and used it as a measure to express the efficiency of resource allocation is a study (Villar, 2001), The study (Creedy & Hérault, 2012) defined it as “the average per capita disposable national income,” and the study (Quentin & Shlomo, 2002) defined it as “the level of per capita income” in light of the individuals’ concept of well-being and based on their view and evaluation of what they get from Income or what they consume in comparing to others, not in absolute terms of what they receive in income or what they consume.

The process of measuring the level of social welfare - given that it is defined as the disposable income after deducting it by the coefficient of inequality in the income distribution - faces a number of challenges, the most important of which are:

- Determining the transfers that will be made to individuals for the purpose of improving the level of welfare, as well as the appropriate measurement tools (Magdalou, 2018).
- Measuring the level of social welfare for society as a whole requires studying a number of variables, namely (employment and unemployment, income distribution, taxes and social expenditures, social security pensions, health care, education, housing, poverty and social assistance (Mesa-Lago, 2017).
- Studying the variables that have a fundamental impact on the level of well-being, the most important of which are taxes, because of their impact on the level of economic and social life through the level of income (Selen & Karas, 2018), as well as the effect of corruption by government officials for their possession of most incentives, which leads to a decrease in the amount transferred from incentives to individuals, which entails Inability to meet their needs (Toukan, 2017).

The researcher believes that: there is another matter related to the concept of social welfare as a reason for not achieving a real and direct measurement of the change in the level of social welfare achieved as a result of public expenditure, which is related to the content of this concept itself, where the concept of social welfare - in light of the welfare economy - expresses the preferences and priorities of society. However, due to the difference of individuals in their preferences and priorities, the concept of social welfare “represents the weighted sum of the benefits obtained by individuals” (Suzumura, 2002); (Fleurbaey, 2014), and therefore the concept of social welfare does not fully reflect the preferences of all members of society, and the choices of individuals Goods and services are not entirely subject to free choice, and in order for social welfare to be fully representative of the preferences and desires of individuals, the preferences of society as a whole for a commodity must be the same as the preferences of any individual in society. (Haradhan; 2011)

Hence, the researcher believes that although the concept of social welfare is a strategic goal for public spending (van de Walle, 1996 ), it is not considered an appropriate approach point for achieving objective measurement of the benefits achieved as a result of this spending, due to the difficulty of measuring it and related to the difference of its real content





from its philosophy.

Therefore, rationalizing the decisions of allocating public expenditures lies in achieving and making available information related to the volume of demand for public goods and services, as well as achieving and making available information about the feedback process of the allocation process, which is represented in the value of social benefits achieved for citizens as a return as a result of this expenditure.

So, we must work to find the appropriate approach to achieve and make this information available to enable policy makers and persons who are responsible for allocation to direct expenditure towards aspects that maximize the public benefit of citizens at the level of all economic sectors.

### **3. The Approach of Rationalizing Allocation Decisions**

The researcher proposes the accounting measurement of public expenditure return as an appropriate approach to rationalize the allocation decisions, because the return on public expenditure represents the feedback information that the allocation process is missing. Based on that, and also based on the pillars of the accounting measurement process, on top of which is the feature that is being measured, in the next part, the researcher will discuss the concept of public expenditure return as the measured feature, which is hoped to achieve the information necessary to rationalize allocation decisions.

#### **3.1 The concept of public expenditure return**

The researcher found that the term “public expenditure return” was rarely used in research studies, and in the few studies in which the term “return” was mentioned, it was associated with one of the aspects of public spending; But it was mentioned missing the linguistic meaning of the word “return,” which was defined in both Arabic and English as “revenue, income, or the profit from trade or investment.” This term was also mentioned missing the scientific content of the term return, which is based on comparing the income achieved with the cost expended to achieve this income according to the principle of cost-benefit analysis as well as the principle of accounting matching.

The concept of public expenditure return was not explicitly mentioned as a term that expresses the return achieved by citizens from public expenditure at the level of all economic sectors in the country, and the economic and accounting literature did not include a specific definition of this concept.

The study (Benin, 2015 ) was one of the studies in which the term “return” was mentioned in conjunction with one of the aspects of public expenditure, which aimed to measure the impact of public expenditure on the agricultural sector in Africa. Where, in this study, the researcher used a measure of the added value (increase in productivity) per hectare of agricultural land as a result of public expenditure in the field of agriculture. The term (return) was also mentioned in the study (Cappelen, 2013 ), which was conducted with the aim of measuring the impact of expenditure by the Norwegian Research Council in the field of research and development by analyzing the performance of a group of institutions during the period from 2001 to 2009.

The researcher believes that: the reason for the loss of the term (public expenditure return) to its scientific content and linguistic meaning in the studies which discussed it, is due to the interest of those conducting these studies in measuring the impact of public expenditure in a particular sector through the productivity scale, without trying to actually measure the value of income achieved for citizens within this sector and using Productivity scale to express the return on this expenditure.

The researcher believes that: the possibility of using the term (public expenditure

return) as an accounting concept that reflects the financial value of the social benefits achieved for citizens, At the same time, it reflects what the state has spent to meet the citizens' demand for public goods and services that have brought them these benefits Especially in light of the following determinants:

- the strategic objective of public expenditure is to increase the level of Welfare of citizens (van de Walle, 1996 ).
- That: the role of the state in economic activity, according to the theory of market failure, is providing the markets with goods and services that are in the interest of society but that markets have failed to provide to citizens as a result of the individual preferences of market participants and their desire to achieve profits (Furton and Martin; 2019).
- And that: the state's social responsibility is to support its citizens and achieve social justice among them through the redistribution of income. (Khemani, 2017 )

Then the researcher can define the concept (return on public spending) from an accounting perspective - taking into account the determinants related to the goal of public spending and the role of the state in economic activity and its social responsibility - this definition is represented in " The improvement in the level of Welfare of citizens due to the increase in their income level or the savings achieved for them in expenditure as a result of obtaining public goods and services, and direct and indirect cash transfers provided by the government".

Considering that: the citizens mentioned in the definition are the citizens who are deserve to services, goods and cash transfers provided by the government in accordance with the eligibility criterion determined by the competent authority in the country, It is worth mentioning that: there are some cases in which these citizens obtain the goods and services provided by the government or even cash transfers, but there is no improvement in their level of welfare, as happens in the case of the death of patients in governmental hospitals or the failure of students in public schools and universities, The researcher believes that in these cases, accounting must be recognized for what we can call public expenditure losses, which can be defined as "the cost of public goods and services and direct and indirect cash transfers obtained by citizens and did not lead to an improvement in their level of welfare. To complement the researcher's discussion of the accounting measurement methodology for the public expenditure return as a measurement methodology whose purpose is to achieve the information necessary to rationalize the allocation decisions, which the economic information system is unable to achieve, the researcher will discuss in the next part how to achieve this measurement and then how to disclose it.

### **3.2 The Achieving Approach of The Accounting Measurement of Public Expenditure Return**

The researcher believes that: the achieved part of the citizens' aggregate demand for public goods and services, which we can call (Real Public Demand), represents the appropriate approach to measure the term (return on public spending), This approach has been used previously in relation to the unrealized portion of demand for public goods and services to express and measure the concept of social loss (SL) by researchers (Ben-David and Tavor) in 2011.

The researcher believes that this approach enables the persons responsible for the allocation to ensure that the full impact of governmental expenditure is transferred to the citizens, It also expresses the content of the definition that was established for the public



expenditure return, Whereas, the realized part of the total demand for public goods and services expresses the increase in citizens' income or the savings achieved for them in spending due to obtaining goods and services provided by the state represented by its government; without these citizens paying the money they were willing to give up in order to get it from the market, Hence, this leads to an increase in the level of social welfare for the citizens who obtain these goods and services.

And, supports the researcher's vision of using this approach to measure the public expenditure return; The use of this approach to estimate the optimal volume of production for public goods and services - as a result of the restrictions imposed on the general budget and the lack of the economy of public goods and services the measuring of production return (Van den Nouweland, 2018 ). The researcher's vision is also supported by the effect of joint consumption, which means that public goods and services are used simultaneously by all consumers and there are no demand curves for public goods and services. (Agiobenebo, 2004 )

Hence, using the (demand for public goods and services) approach to measure the public expenditure return achieves a double measurement, the first is: data related to the outputs of the allocation process by measuring the return on allocation decisions, The second is: data related to the inputs to the allocation process by measuring the demand for public goods and services; This information is very important, as the availability of this information leads the government to reconsider the combinations of production in order to achieve the appropriate supply of goods and services that achieve balance at the overall level of the national economy and maximize the public benefit of citizens.

The researcher believes that: achieving the accounting measurement of the public expenditure return in light of the proposed approach; requires discussing the variables that are compatible with this approach and achieving the measurement of the monetary value of that part of the total demand for public goods and services, which expresses the benefits achieved for citizens as a result of the allocation of public expenditures, these variables will be discussed in the next part.

### **3.3 The Achieving Model of The Accounting Measurement of Public Expenditure Return**

Achieving the accounting measurement of transactions requires that these transactions be capable of monetary measurement, and this is the essence of the measurement process; which results in determining the monetary value of these transactions, recording them in the accounting books, and disclosing them in the financial statements and reports, Hence, the accounting measurement of the public expenditure return requires a specification of the variables of the measuring model that achieve the monetary value of this return through the proposed measurement approach. The researcher believes that these variables are represented in:

- The total actual cost of producing one unit of the good or service provided by the state in a particular sector.
- The number of units of goods and services that the citizen obtains as a result of the demand for them in this sector.

Hence, the mathematical function of the model to achieve the accounting measurement of the public expenditure return for the citizen in one of the economic sectors is represented in:

$$\mathbf{Rg_{PS} = CS_{Per Unit} * TU_{Per Person} \longrightarrow 1}$$

$$\mathbf{P = 1, S = 1}$$

Whereas:

$Rg_{ps}$	Citizen Public Expenditure Return in One of The Sectors.
$CS_{per\ Unit}$	The Total Actual Cost of Producing One Unit of The Good or Service.
$TU_{Per\ Person}$	The Number of Units of Goods And Services That The Citizen Obtains.
$P$	The Number of Person.
$S$	The Number Sector.

By aggregating the return achieved for the same citizen within all sectors of the national economy, the total return on public spending achieved for this citizen at the level of the national economy is obtained, and this is illustrated by the following function:

$$Rg_P = \sum_{P=1, S=1:n} Rg_{ps} \longrightarrow 2$$

By aggregating the return achieved for all citizens within this sector, the total return on public spending in this sector is produced, and this is illustrated by the following function:

$$Rg_S = \sum Rg_{ps} \longrightarrow 3$$

The researcher believes that in addition to determining the variables of the measurement model, it is necessary for governmental agencies to determine the nature of the good or service they provide, according to the nature of their activity in the economic sector in which they operate, and to use cost accounting systems to measure the actual cost of unit production of this good or service, Bearing in mind that, the unit production cost is represented in:

- the total current expenses incurred for producing this unit.
- The unit's share of the depreciation of existing capital assets in the production process.
- The unit's share of the administrative expenses necessary to ensure that the facility continues to provide its own good or service, Provided that the administrative expenses include the annual depreciation of infrastructure, facilities and assets of all kinds.

### 3.4 Accounting Recognition and Disclosure of Public Expenditure Return

The researcher believes that: in spite of the importance of achieving the accounting measurement of the public expenditure return as a feedback information for the process of allocating public expenditures, But, it is an ineffective measure in achieving the required rationalization for the allocation decisions; This is due to the failure to adequately recognize and disclose this financial information.

For this reason, the researcher sees the importance and necessity of disclosing both the revenue and losses of public expenditure in an independent statement that must be added to the financial statements that the administrative authorities and the general government are obligated to prepare, This is for the purpose of disclosing the social performance of the government sector; Whereas IPSAS 1 - Presentation of Financial Statements - omitted a statement that discloses the users of financial statements and those related to administrative authorities and the general government about the social performance of the government sector.

The standard did not provide for a statement regarding disclosure of social performance, although the primary goal of governmental performance is a social goal not a financial goal, and therefore the evaluation of governmental performance must be through the evaluation of social performance next to the evaluation of financial performance. (IPSAS1)

The researcher's vision with regard to the accounting recognition and disclosure



methodology for the public expenditure return is represented in: recognizing this return as social revenue and disclosing it within the social performance statement and recognizing the same value as an asset and disclosing it within the items of the statement of financial position as one of the items of intangible assets under the name of human capital. This is illustrated by the following double entry.

**Debit / Assets (Intangible Assets - Human Capital)**

**Credit / Social Revenue (Public Expenditure Return)**

As for the accounting disclosure and recognition methodology for public expenditure losses, it is represented in recognizing the value of these losses as a reduction in the value of the social revenue achieved during the year and disclosing them within the statement of social performance, And recognizing the same value as a reduction in the value of human capital in the statement of financial position, as human capital has previously been increased by the value of what citizens receive from goods and services through the public expenditure return (social revenue); As a result of their lack of improvement in their level of welfare, whatever the reason may be, human capital must be reduced by the amount it has been increased so that the disclosure of social performance is objective. This is illustrated by the following double entry.

**Debit / Public Expenditure Losses**

**Credit / Assets (Intangible Assets - Human Capital)**

Hence, the researcher believes that: the social performance statement is very important as it is a channel for disclosing the social performance of the administrative authorities and the general government; And this helps in the parliamentary and popular oversight process and the competent authorities on governmental performance with regard to achieving the objectives of the state's general budget and maximizing the public benefit of citizens. the presence of the social performance statement within the other financial statements is also very important, as it is a control tool that translates the achieved social benefits to the community in the form of monetary values that are compared with the monetary values in the financial performance statement; and an indication of whether there is a good use of the available financial resources, or whether there is a waste of these resources. This is in addition to considering this statement a digital disclosure tool for the annual contribution of the governmental sector to the country's human capital.

### **3.5 Public Expenditure Allocation Model**

The impact of the allocation of public expenditures on economic development is significant and is of great interest to specialists in this field, given that it is an approach to face the constraints imposed on the state's general budget, and also as the result of the impact of the reallocation process on growth rates. This is in addition to the fact that when governments reach a certain amount of expenditure, they cannot do anything beyond this amount that affects growth rates except for the mechanism they have for reallocation. (Neduziak and Correia; 2017)

The researcher in the next part, discusses the impact of providing information related to the public expenditure return - given the feedback that the allocation process was missing - on rationalizing the allocation decisions, through a proposed model for the allocation of public expenditures that depends on the achieved accounting measurement of the public expenditure return.



Building this model depends on measuring the return achieved as a result of the previous allocation of expenditures, and this measurement is in accordance with the previously discussed methodology in the previous parts of this research, which is based mainly on the accounting measurement of the public expenditure return, which represents the social benefits achieved for citizens through the approach of the real public demand for public goods and services.

The researcher believes that building a model for allocating public expenditures would maximize public benefits for citizens in light of the available amount of resources, and work on redistributing income and achieving social justice among members of society in all economic sectors, and working to achieve equality between the percentage of social benefits achieved for citizens within each sector; This requires that: this model be based on the philosophy of distributing public expenditures between sectors according to the volume of demand faced by each sector, which expresses the total value of social benefits that the state is required to provide to citizens through this sector, These benefits can be measured through the so-called (public expenditure targeted return) (TRgs) based on what has been measured for the public expenditure return for the individual, which can be measured through the following function:

$$TRgs = CS_{\text{per Unit}} * TU_{\text{Per Person}} * TP_D \longrightarrow 4$$

Whereas:

<b>TRgs</b>	Targeted Return on Public Expenditure for The Sector.
<b>CS<sub>per Unit</sub></b>	The Total Actual Cost of Producing One Unit of The Good or Service.
<b>TU<sub>Per Person</sub></b>	The Number of Units of Goods And Services That The Citizen Obtains.
<b>TP<sub>D</sub></b>	The Number of Individuals Requesting Goods and Services in This Sector.
<b>S</b>	The Number Sector.

By reviewing the previous function, we find that it represents the product of the variables of the public expenditure return for the individual in the sector **Rg<sub>p s</sub>** and the variable of the total number of individuals requesting the goods and services provided by the state in this sector **TP<sub>D</sub>**, and these variables, especially the total number of individuals requesting, require an accounting measurement of the results of the allocation process the previous one, with an adjustment according to the expected growth rates.

The difference between the public expenditure return achieved within the sector (**Rg<sub>s</sub>**) and the targeted public expenditure return (**TRg<sub>s</sub>**) that is for this sector represents the deficit of social benefits for this sector or what we can call social losses for this sector, because this difference is that unrealized part of the demand for goods and services provided by this sector as a result of the deficit resource or misallocation, these social losses are denoted by the symbol (**SL**) and are indicated by the following function:

$$SL_s = TRg_s - Rg_s \longrightarrow 5$$

The researcher believes that: it is necessary to disclose the value of each of the target public expenditure return (**TRg**) and social losses (**SL**) within the complementary notes to the financial statements, as they are important information related to the social performance of the administrative Institutions and the general government. The following function represents the final version of the public expenditure allocation model, which depends on the relative weight of the target public expenditure return.





$$\text{Allocation Model} = \text{B P} * \text{W TRg}_s \longrightarrow 6$$

$$S = 1$$

Whereas:

<b>B P</b>	Total Resources Available for Allocation.
<b>W TRg<sub>s</sub></b>	The Relative Weight of The Target Public Expenditure Return For The Sector.

Hence, the accounting measurement of the results of economic operations, including the process of allocating public expenditures, represents a necessary and important input to ensure the effectiveness of achieving social justice and achieving economic development at the level of the national economy by achieving effectiveness with regard to the potential allocation of public expenditures in the coming periods.

#### 4. The Results of Practical Study

The researcher presented the subject of the research for the survey inside and outside the Arab Republic of Egypt, where the original community of the study consisted of the group of member states of the International Monetary Fund, which numbered 183 countries, including the state of the Arab Republic of Egypt, and the researcher relied in obtaining the data for the study on survey lists sent to The sample items numbered (750) from the vocabulary of the study community, regardless of their field of work and scientific specializations. The participants in the study belonged to governmental and non-governmental agencies and international institutions.

The number of lists that were answered reached (502) lists, and this represents a rate of 67%, of which the researcher excluded 25 lists due to their scientific and practical specialization in the field of the research topic under study, and thus the number of lists on which the statistical analysis was conducted is 477 lists, or 64%, by 366 List inside the Arab Republic of Egypt 109 List outside the Arab Republic of Egypt.

The researcher faced a number of difficulties to obtain this number of responses, the most important of which is the small number of the target group with scientific and practical background in the subject of the research, and this is evident from the neutral responses to many of the survey statements. The results were:

#### 4.1 The Results of The Research Hypothesis Test

- **The First Hypothesis:**

Pearson's correlation coefficient for the first research hypothesis

	Number	Average	Pearson Correlation	Sig. (2-tailed)
Absence of feedback	477	3.992	.691**	.000
Inefficiency in allocating decisions	477	4.0733		

\*\* . Correlation is significant at the 0.01 level (2-tailed).

We note from the previous table that:

The relationship between the absence of feedback on the process of allocating public expenditures and the inefficiency of the allocation decisions is direct and highly statistically significant, as the value of the Pearson correlation coefficient reached 69% at the level of statistical significance 0.00, which is less than the level of significance 0.05, meaning that we are 95% confident that the absence of The feedback on the process of allocating public expenditures leads to the inefficiency of the allocation decisions and vice versa, Therefore, we can accept the research hypothesis that there is a statistically significant relationship between

the absence of feedback on the process of allocating public expenditures, and the inefficiency of the allocation decisions.

- **The Second Hypothesis:**

**Pearson's correlation coefficient for the second research hypothesis**

	Number	Average	Pearson Correlation	Sig. (2-tailed)
Achieving the accounting measurement of the public expenditure return	477	4.021	.612**	.000
Achieving feedback	477	3.7866		

\*\* . Correlation is significant at the 0.01 level (2-tailed).

We note from the previous table that:

The relationship between achieving the accounting measurement of the public expenditure return, and achieving the feedback on the process of allocating public expenditures is positive and highly statistically significant, as the value of the Pearson correlation coefficient reached 61% with a statistical significance level of 0.00, which is smaller than the level of significance 0.05, meaning that we are confident with a percentage of 95 % of that achieving the accounting measurement of the public expenditure return leads to the achievement of the feedback on the process of allocating public expenditures and vice versa, Therefore, we can accept the second research hypothesis which says that there is a statistically significant relationship between the achievement of the accounting measurement of the public expenditures return, and the achievement of the feedback on the process of allocation of expenditures the public.

#### 4.2 The results of testing the effectiveness of the proposed definition of the concept of public expenditure return

**T-test to evaluate the proposed definition of the concept of return on public spending**

One-Sample Test						
Test Value = 3						
	Number	Average	Standard Deviation	T	Df	Sig. (2-tailed)
Definition	477	3.8205	0.59578	30.080	476	.000

We note from the previous table that:

The level of statistical significance corresponding to the T-test equals 0.00, which is less than the level of significance 0.05, and therefore we can accept the hypothesis that the average opinions of the sample members differ from the neutral mean of the five-point Likert scale equal to 3, and by noting that the average opinions of the sample members equal 3.82, which is Greater than the impartial mean of the five-point Likert scale, equal to 3, if we can judge that the real average of the opinions of the sample members is greater than 3, that is, they tend to agree with the proposed definition.



### 4.3 The results of testing the effectiveness of the approach to measuring the concept of public expenditure return

T-test to assess the effectiveness of the approach to measuring the concept of public expenditure return

One-Sample Test						
Test Value = 3						
	Number	Average	Standard Deviation	T	Df	Sig. (2-tailed)
Approach of Measuring	477	3.8172	0.58104	30.717	476	.000

We note from the previous table that:

The level of statistical significance corresponding to the T-test equals 0.00, which is less than the level of significance 0.05, and therefore we can accept the hypothesis that the average opinions of the sample members differ from the neutral mean of the five-point Likert scale equal to 3, and by noting that the average opinions of the sample members equal 3.82, which is greater than the impartial mean of the five-point Likert scale, which is equal to 3. If we can judge that the average opinions of the real sample members are greater than 3, that is, they tend to agree to the proposed approach to measure the concept of return on public spending.

### 4.4 The results of testing the effectiveness of the methodology for measuring the concept of return on public spending

T-test to assess the effectiveness of the methodology for measuring the concept of public expenditure return

One-Sample Test						
Test Value = 3						
	Number	Average	Standard Deviation	T	Df	Sig. (2-tailed)
Methodology for Measuring	477	3.6990	0.59812	25.522	476	.000

We note from the previous table that:

The level of statistical significance corresponding to the T-test equals 0.00, which is less than the level of significance 0.05, and therefore we can accept the hypothesis that the average opinions of the sample members differ from the neutral mean of the five-point Likert scale equal to 3, and by noting that the average opinions of the sample members equal 3.7, which is greater than the impartial mean of the five-point Likert scale, which is equal to 3, so we can judge that the average opinions of the real sample members are greater than 3, that is, they tend to agree with the proposed methodology for measuring the concept of return on public spending.

### 4.5 Results of testing the effectiveness of the proposed methodology for allocating public expenditure

T-test to assess the effectiveness of of the proposed methodology for allocating public expenditure

One-Sample Test						
Test Value = 3						
	Number	Average	Standard Deviation	T	Df	Sig. (2-tailed)
Methodology for Measuring	477	3.7925	0.60940	28.401	476	.000

We note from the previous table that:

That the level of statistical significance corresponding to the T-test equals 0.00, which is less than the level of significance 0.05, and therefore we can accept the hypothesis that the average opinions of the sample members differ from the impartial mean of the five-point Likert scale, equal to 3, and noting that the average opinions of the sample members equal 3.79, which is Greater than the impartial mean of the five-point Likert scale, which is equal to 3, if we can judge that the real average of the opinions of the sample members is greater than 3, that is, they tend to agree with the proposed methodology for allocating public expenditures.

The findings of the researcher with regard to testing the hypotheses, the concept and the proposed methodologies can be summarized as follows:

- There is a direct relationship of 69% with statistical significance between the absence of feedback on the process of allocating public expenditures and the inefficiency of allocation decisions at a level of significance of 0.05.
- There is a direct relationship of 61% with statistical significance between achieving the accounting measurement of the public expenditure return, and achieving the feedback on the process of allocating public expenditures at a level of significance of 0.05.
- The opinions of the sample members tend to agree on the proposed definition of the concept of public expenditure return.
- The opinions of the sample members tend to agree on the proposed approach to measure the concept of public expenditure return.
- The opinions of the sample members tend to agree on the proposed methodology for measuring the concept of public expenditure return.
- The opinions of the sample members tend to agree on the proposed methodology for allocating public expenditures.

## **5. Summary**

Through this research, the researcher discussed how to rationalize decisions to allocate public expenditures as one of the problems that greatly affect the welfare of peoples, and whose intellectual basis is due to the economic literature, The researcher discussed many previous research studies in both economic literature and accounting literature that discussed how to allocate public expenditures and measure the social benefits that accrue to citizens as a result of these expenditures.

The researcher used the deductive approach in order to identify the fundamental causes of the problem of misallocation of public expenditures, which turned out to be mainly due to many variables, but the most important of them is the absence of feedback on the allocation process and the absence of information related to the volume of demand for goods and services provided by the governmental sector to citizens in light of The state's commitment to its social responsibilities and its role in economic activity.

To complement the research plan established by the researcher and for the purpose of accepting or rejecting his findings during the analytical study of some of the previous research efforts, the researcher conducted a practical study that included a field study based on the survey to poll the opinion of those with knowledge and experience inside and outside the Arab Republic of Egypt regarding his position of Hypotheses about the causes of the problem of misallocation of public expenditures and how to confront them, assuming that they identify the problem and provide a solution.



The results of this study came by accepting the formulated research hypotheses, emphasizing the causes identified by the researcher for the problem of poor allocation process, and agreeing to accept the proposed approach to reduce the impact of the causes of this problem, and confidence in his ability to confront it.

This emphasized the essential role that accounting literature can play in achieving economic development and using it as an appropriate approach for reform and development processes.

The researcher used the concept of human capital in order to disclose the public expenditure return within the items of the financial statements, and the researcher believes that the concept of human capital for the country as a whole is very important because of its significant impact on public expenditure trends, which makes it an area for further discussion and research in the future.

#### **References :**

- A. A. al-Salam Ahmed .(1988) .Using the cost-benefit analysis method in developing the budget for infrastructure projects in local authorities .,unpublished Ph.D. thesis; Cairo University † ,pp.: 1 - 256.
- A. M. Pina .( 2005) .How Should We Measure The Return On Public Investment In a VAR ? Working Papers Department of Economics from ISEG - Lisbon School of Economics and Management . ,Department of Economics, Universidade de Lisboa † ,No 2005/04.
- A. Toukan .(2017) .Corruption In Public Procurement And Social Welfare . ,The Journal of Developing Areas † ,Vol. 51, no. 2, pp.: 315-327.
- A. Van den Nouweland .( 2018) .Demand for public good as a correspondence of cost shares , .Society for the Advancement of Economic Theory † ,Vol. June, PP.: 1-11.
- A., O., B., Madaj, B., Charles, A., and Nynke, V., D., B. Thomas .( 2015) .Social Return on Investment (SROI) methodology to account for value for money of public health interventions: a systematic review . ,BMC Public Health † ,Vol. 15, no. 1, PP.:1-14.
- A., Raknerud, A. and Rybalka, M. Cappelen .( 2013) .Returns to public R&D grants and subsidies . ,Statistics Norway Research department, Discussion Papers † ,No. 740, PP.: 1-32.
- Abdullah Shehata .(2009) .Political Economy for Determining Public Expenditure Priorities: A General View . ,Research Paper, Faculty of Economics and Political Science, Cairo University † ,pp.: 1-16.
- Antonio Villar .(2001) .Multidimensional Inequality And Social Welfare, Valenciano de Investigaciones Económicas . ,S.A. working papers † ,PP.: 1-27.
- B. Magdalou .(2018) .A model of social welfare improving transfer . ,CEE-M Working Paper 2018 ,13 †-PP.: 27.
- B. T. Yates † , M. Mita .(2017) .Social Return On Investment (SROI): Problems, solutions and is SROI a good investment .,?Evaluation and Program Planning, Elsevier † , vol. 64, no. C, PP.:136-144.

- B. Wirtz ,S. Lütje و ,P. G. Schierz .(2010) .An Empirical Analysis of the Acceptance of E – Procurement in the German Public Sector . ,International Journal of Public Administration ,Vol. 33, pp.:26.42–
- C. Mesa-Lago .(2017) .Social Welfare and Structural Reforms in Cuba, 2006 . ,2017–Cuba in Transition, ASCE , , PP.: 1-16.
- C. Z. Li و ,K. G. Lofgren .(2006) .Comprehensive NNP, social welfare, and the rate of return . , Economics Letters ,Vol. 90, PP.:254.259–
- C., and Mikesell, J., L. Liu .( 2014) .The Impact of Public Officials ’Corruption on the Size and Allocation of U.S. State Spending . ,Public Administration Review ,Vol. 74, no. 3, PP.:346.359–
- D McBain و ,A. Alsamawi .(2014) .Quantitative accounting for social economic indicators . , Natural Resources Forum ,no. 38, PP.: 193.202–
- D. A. Starrett .(1977) .Measuring Returns to Scale in the Aggregate, and the Scale Effect of Public Goods . ,Econometrica ,Vol. 45, no. 6, PP.:1439-1455.
- D. C. Fonchamnyo و ,m., c. Sama .( 2016) .Determinants of public spending efficiency in education and health: evidence from selected CEMAC countries .,J Econ Finan , VOL. 40, PP.:199.210–
- D. Smith .(1981) .Briefing Paper: The Public Expenditure Debate . ,Economic Outlook ,PP.: 28-40.
- D. van de Walle .( 1996) .Assessing the Welfare Impacts of Public Spending . ,The World Bank Policy Research Department Public Economics Division, Working Papers , no.1670, PP.: 1-30.
- E. Moretti .( 2010) .Local Multipliers, American Economic Review . :Papers & Proceedings , Vol. 100, no. 2, PP.: 373.377–
- E., R. Venter ,E., A. Gordon و ,D., L. Street .(2018) .The Role of Accounting And The Accountancy Profession in Economic Development: A research Agenda . ,J Int Finance Manage Account ,Vol. 29 pp.:195.218–
- F. Misch ,N. Gemmell و ,R. Kneller .(2013) .Growth and Welfare Maximization in Models of Public Finance and Endogenous Growth . ,Journal of Public Economic Theory ,Vol. 15, no. 6, PP.:939.967–
- G. Moschovis .(2010) .Public Spending Allocation .,Fiscal Performance and Corruption, Economic Papers ,Vol. 29, no. 1, pp.: 64.79–
- G. Tridimas .( 1999) .A Demand -Theoretic Analysis of Public Consumption Priorities in The United Kingdom . ,Public Finance Review ,Vol. 27, no. 6, PP.: 599-623.
- G., Foster, W., and Ortega, J. Anríquez .( 2018) .Development costs of misallocated public resources . :Rural and agricultural subsidies in Latin America, 1985 ,2012–doi : /10.1111dpr.12389.





- J. A. Weymark .(2013) .Social Welfare Functions .,Vanderbilt University Department of Economics Working Papers.
- J. Creedy و ،N. Héroult .(2012) .Decomposing Inequality and Social Welfare Changes: The Use of Alternative Welfare Metrics . ,Victoria Business School Working Papers ،no. 06, PP.: 1-38.
- J. Gargani .(2017) .The leap from ROI to SROI: Farther than expected . ,?Evaluation and Program Planning, Elsevier ،Vol. 64(C), PP.:116-126.
- J. Geoffrey .(1990) .Inequality in Pakistan: A Social Welfare Approach .,Pakstan Journal of Applied Economics ، Vol. 9, no. 2, PP.: 165-193.
- J. J., Van Dijk .(2017) .Local employment multipliers in U.S. cities . ,Journal of Economic Geography ، Vol. 17, no.2, PP.: 465-487.
- J. Nicholls .(2016) .Social return on investment—Development and convergence .,Evaluation and Program Planning ، Vol.64, PP.: 127-135.
- J. Saul .(2013) .The Difference Between Spending Money and Buying Outcomes . ,The Public Manager ، PP.: 24-25.
- J., M., and Peraita, C. Pastor .( 2016) .The Tax Returns of Public Spending on Universities: An Estimate with Monte Carlo Simulations . ,Regional Studies ، Vol. 50, no. 11, PP.:1863-1875.
- J., M., Andersen, M., A., James, J., S., and Pardey, P., G. Alston .( 2011) .The Economic Returns to U.S. Public Agricultural Research . ,American Journal of agricultural Economics ، Vol. 93, no. 5, PP.: 1257.1277–
- J.J. Cordes .( 2017) .Using cost-benefit analysis and social return on investment to evaluate the impact of social enterprise: Promises, implementation, and limitations . , Evaluation and Program Planning ، Vol. 64, no. C, PP.: 98-104.
- K. J. Watson و ،T Whitley .(2017) .Applying Social Return on Investment (SROI) to the built environment . ,Building Research & Information ، Vol. 45, no. 8, PP.: 875.891–
- K. Suzumura .(2002) .Introduction to social choice and welfare . ,Institute of Economic Research Hitotsubashi University, Tokyo, Japan ،PP.: 1-46.
- L., C., R., Correia, F., M. Neduziak .( 2017) .The allocation of government spending and economic growth: a panel data study of Brazilian states .,Brazilian Journal of Public Administration ، Vol. 51, no. 4, PP.:616-632.
- M. Fleurbaey .(2014) .On Sustainability and Social Welfare . ,Journal of Environmental Economics and Management ، PP.: 1-40.
- M. Hall و ،Y. Millo .( 2018) .Choosing an Accounting Method to Explain Public Policy: Social Return on Investment and UK Nonprofit Sector Policy . ,European Accounting Review ، vol. 27, no. 2, PP.:339-361.

- M. Moss .( 1980) .Social Challenges to Economic Accounting And Economic Challenges to Social Accounting .,Review of Income and Wealth ‘ ,Vol. 26, no.1, pp.:1-17.
- M. Postuła .(2017) .Spending Reviews – a Tool to Support the Efficient Management of Public Funds . ,Journal of Management and Business Administration. Central Europe , ‘Vol. 25, no. 2, PP.: 63.90–
- N. Ben-David و ,T. Tavor .(2011) .Measurement of the social loss of wrong public budget allocation .,International Journal of Social Economics ‘ ,Vol. 38 Iss 3 pp.: 209 - 217.
- N. Gemmell ‘R. Kneller و ,I. Sanz .(2016) .Does the Composition of Government Expenditure Matter for Long-Run GDP Levels . ,?Oxford Bulletin of Economic and Statistics ‘ , Vol. 78, no. 4, PP.: 525.547–
- N. Krucien ‘N. P. Fleury و ,A. Gafni .( 2019) .Measuring Public Preferences for Health Outcomes and Expenditures in a Context of Healthcare Resource Re-Allocation . , Pharmacoeconomics ‘ ,Vol. 37, no 3, PP.: 407-417.
- N., and Son, H., H. Kakwani .( 2015) .Social rate of return: A new tool for evaluating social programs . ,Ecineq Working Paper Series ‘ ,no. 383, PP.: 1-45.
- O. A. M. Martinez ‘A. M. V. Rodriguez ‘M. Lombe و ,P. G. Rossi .(2017) .Incorporating Public Insecurity Indicators: A New Approach to Measuring Social Welfare in Mexico . ,Springer Science + Business Media Dordrecht ‘ ,PP.: 1-23.
- O., A. Carboni و ,G. Medda .( 2011) .Size and Composition of Public Spending in A neoclassical Growth Model . ,Metroeconomica ‘ ,Vol. 62 no.1, PP.: 150-170.
- P., N. Junankar .( 2003) .Estimating the Social Rate of Return to Education for Indigenous Australians . ,Education Economics ‘ ,Vol. 11, no. 2, PP. 169-192.
- R. Dutu .( 2016) .Raising Public Spending Efficiency in Switzerland . ,OECD Economics Department Working Papers ‘ ,no. 1280, PP.: 1-35.
- R. Millar و ,K. Hall .( 2013) .Social Return on Investment (SROI) and Performance Measurement .,Public Management Review ‘ ,Vol. 15, no. 6, PP.: 923-941.
- S. Benin .( 2015) .Returns to Agricultural Public Spending in Africa South of the Sahara, International Food Policy Research Institute . ,IFPRI Discussion Paper 01491 ‘ ,PP.: 1-30.
- S. Calligaris .( 2015) .Misallocation and Total Factor Productivity in Italy . :Evidence from Firm-Level Data ‘ ,Labour Vol. 29, no ,4 .PP.: 367.393–
- S. Dewan و ,M. Ettliger .(2009) .Comparing Public Spending and Priorities Across OECD Countries, Center for American Progress . ,available at: [www.americanprogress.org](http://www.americanprogress.org).
- S. Kasdin و ,L. Lin .( 2015) .Strategic behavior by federal agencies in the allocation of public resources . ,Public Choice ‘ ,Vol. 164, PP.:309.329–



- S. Khemani .( 2017) .Demand and Supply Curves in Political Markets Understanding the Problem of Public Goods and Why Governments Fail Them . ,world Bank Policy Research Working Paper ,no. 8213, PP.: 1-54.
- S. Paternostro ,A. Rajaram و ,E. R., Tiongson .( 2005) .How Does The Composition of Public Spending Matter . ,?World Bank Policy Research Working Paper 3555, March , ,PP.: 1-37.
- S. Pradhan .(1996) .Evaluating Public Spending A Framework for Public Expenditure Reviews . ,World Bank Discussion Papers , ,no. 323, PP.: 1-134.
- S., El Sabaa .(2017) .The Allocation of Economic Resources And Income Distribution in Egypt . ,International Journal of Business and Economics Perspectives , ,Vol.12, no.1, pp.:30-40.
- T. Mogue .( 2015) .Political Economy Determinants of Public Spending Allocations: A Review of Theories, and Implications for Agricultural Public Investment . ,European Journal of Development Research , ,Vol. 27, pp. 452.473–
- T. T. Brown .(2016) .Returns on Investment in California County Departments of Public Health . ,AJPH Research , ,Vol. 106, no. 8, PP.: 1477-1482.
- T., J. Agiobenebo .( 2004) .On the Optimal Quantity of Public Goods and Some Related Issues . ,PHD Theses, Public Economics 0408002, University Library of Munich, Germany.
- U. Purwohedi و ,B. Gurd .( 2019) .Using Social Return on Investment (SROI) to measure project impact in local government .,Public Money & Management , ,Vol. 39, no. 1, PP.: 56 - 63.
- U. Selen و ,E. Karas .(2018) .The Relationship Between Social Welfare and Taxation in The Context of Welfare Economics: Evaluation of Turkish Revenue Tax . , Business and Economics Research Journal , ,Vol.9 no. 4, PP.: 979-993.
- V. Castro .(2018) .Functional components of public expenditure, fiscal consolidations, and economic activity .,Economic & Politics Polit , ,no. 30, pp.:124.150–
- W. Quentin و ,Y. Shlomo .(2002) .Inequality and Social Welfare, Munich Personal RePEc Archive . ,Working Paper , no., 12298, PP.: 6-57.

## **The Role of E-Training in Improving the Quality of Work Life for Workers in Business Organizations: a field study**

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### **Abstract:**

**Purpose:** The purpose of this research is to improve the quality of work life for workers in the Egyptian tourism sector through the e-training entrance.

**Practical implications:** Companies seek to adopt improving the quality of life for workers in the Egyptian tourism sector in order to have strategic solutions to promote Egyptian tourism locally and globally in light of the development strategy.

**Originality/Value:** The e-training programs should be geared towards adopting the quality of work life for employees. A research paper covering the framework of achieving development for the Egyptian tourism sector under study.

**Results:** The Egyptian tourism sector needs to adopt e-training in seminars, workshops, modern curricula and additional training, with continuous evaluation of the performance of the various services provided to promote Egyptian tourism globally.

**Keywords:** E-Training, Quality of work life, the Egyptian Tourism Sector.

**JEL: M1**

### **First: Introduction:**

Since the beginning of the eighties of this century, African countries began to use technology in various sectors in order to provide integrated services and communicate more effectively to various human resources. Planned to modify behavior, knowledge or skill through learning experiences to achieve effective performance in an activity or set of activities. Business organizations today have begun to offer a variety of training programs to meet their organizational needs. They rely on information technology, systems, processes, procedures, industry-specific training, management training or Supervisory, interpersonal skills, executive development, core skills, new employee orientation, customer service and quality. (Mwangi & Anjum, 2019 )

Quality is the important concept that every individual seeks to reach in all aspects of his life, and this concept has also been extended to include the tasks, activities and jobs in which a person works in order to earn money and provide a stable life. There is an inventory of research and studies to arrive at an accurate description of this concept. The quality of the job life does not mean the job titles only, but it goes deeper in describing the job concept, which is an essential part of the life of every employee; Especially since many people spend the greater part of their day at their workplace, whether in public or private institutions, and therefore; The work environment, style and management system, and the application of



quality and safety standards within the work organization and others come within one comprehensive concept, which is the concept of career life (Younger)

The tourism sector is one of the most important strategic and vital sectors in many national economies, as many countries of the world that believe in the prospects of tourism and understand the need to use its capabilities to achieve various administrative, economic and social impacts, and as a result of the development of this sector large-scale qualitative and quantitative changes occur Tourism, as a phenomenon operating in a multifaceted and complex environment, in the process of its development is a means to solve many problems of many industries and sectors in the country, the social development of the country, and raising the level and quality of life (I., 2022 ), as a result of the preparation of the Egyptian Ministry of Tourism many promotional initiatives for the sector in accordance with the strategy Egypt. And within the framework of analyzing and visualizing the tourism sector, one of the studies showed that the tourism industry is an industry that attracts employment, provides a set of jobs, and represents a lifestyle that a group of individuals seeks in order to find job opportunities, change their lifestyle and improve their living standards. (March. Xiong, 2019 )

## **Second: The main text:**

### **1. Research Problem:**

The Egyptian tourism sector faces many human, service and health challenges as a result of the emergence of the Corona virus pandemic. The reasons for the deterioration, finding practical solutions and proposals to meet the challenges of this sector, and defining the role of E-Training in improving the quality of work life for workers in the Egyptian tourism sector.

### **2. Research Importance:**

- 2.1 The subject of E-Training is a relatively recent topic in the field of Management.
- 2.2 The research paper is concerned with analyzing and studying the relationship between E-Training and the quality of career in the Egyptian Tourism Sector.
- 2.3 This research paper contributes to identifying the challenges and shortcomings facing the Egyptian tourism sector.
- 2.4 The study derives its importance from the field of application, which is the tourism and hotels sector, which represents one of the main pillars of the Egyptian economy, with revenues amounting to 4 billion dollars compared to revenues in 2019 of 13.03 billion dollars, and the state received about 3.5 million tourists (Farrag, 2021).

### **3. Research Objectives:**

- 3.1 Identify the reasons for the deterioration of the Egyptian Tourism Sector under study, and identify the factors that led to the poor quality of performance for workers in the sector.
- 3.2 Analyzing the role of E-Training in improving the quality of work life for workers in Tourism Organizations.
- 3.3 Attempting to improve the quality of work life for employees within the framework of adopting e-training in the Egyptian tourism sector.
- 3.4 Coming up with recommendations that contribute to improving the quality of work life for workers in the Egyptian Tourism Sector.

#### **4. Study framework:**

When analyzing and studying the Tourism Sector in Egypt, the following was found:

- 4.1 The Egyptian Tourism Sector suffers from many shortcomings related to the impact of the global coronavirus pandemic.
- 4.2 The Tourism Sector faces a significant decline in the social level and cultural awareness of human resources as a result of the lack of modern technological capabilities compared to global capabilities, in addition to the shortcomings in the equipment of training centers and their inadequacy to achieve the quality of career life for workers in the sector.
- 4.3 There is a shortfall in the volume of revenues for the Tourism Sector as a result of the imposition of travel restrictions to various countries, which led to large financial losses and the layoff of many workers in the sector.
- 4.4 It was found that there are shortcomings in Tourism Organizations in the number of trained workers, low rates of electronic services, and the spread of unemployment and inflation in the sector.

The study (Janna, et. al, 2021) confirmed the impact of E-training, Career development and Employee flexibility on employee productivity in Companies in Indonesia., The study sample was 270 individuals from employees of one of the state-owned companies under study., The research method used was a quantitative method. The data was collected by distributing questionnaires using Likert scale, and the results showed that e-training and career development had a significant positive impact on employee flexibility, Career development and employee flexibility had a significant positive impact on employee productivity., But On the other hand, E-Training does not affect employee productivity. The study also found that there are beneficial effects for policy makers to determine the company's strategies related to E-Training, career development, and employee flexibility to increase employee productivity (Janna, Wolor, & Suhud, 2021 ).

**Another study also** aims to determine the impact of the quality of working life and organizational commitment on performance through the moderation of organizational culture for the study of health workers in puskesmas in the Gabus region, Pati Regency, where this research was conducted on 108 workers under study. The data was analyzed using SPSS software tools. And the study concluded that the quality of working life has a positive impact on the performance of employees at the GAPS Health Center, and the organizational culture works to modify the impact of the quality of working life on the performance of the employee in the GAPS Health Center, and the organizational culture also works to modify the impact of organizational commitment on the employee's performance At Jabs Health Center (Astuti & Soliha, 2021 )

Quality of working life (QWL) also refers to the preference or disapproval of the work environment for people working in the organization, as the quality of working life is becoming more and more important, employers have redesigned and modified their own jobs to provide them with good quality QWL, reduce work stress, and improve the relationship with peers, motivating teamwork, providing effective human resource development and creating a learning environment for employees, QWL also shapes the work environment, work methods and results and also encourages employees of all levels to actively participate in the organization. One of the main objectives of QWL is (1). Creating a positive attitude, (2)





increasing productivity, (3) improving an employee's standard of living, and (4). It increases the effectiveness of the organization. As several recent studies have shown that the new path of employee retention in the organization can be increased by paying attention to the employee's requirements/needs and only then; The company can benefit from productivity, employee loyalty, and the company's long-term reputation. QWL has a significant impact on organizational effectiveness (Majumder & Biswas, 2021 ).

The impact of the new Corona virus (Covid-19), which is one of the types of humanitarian disasters, has affected individuals and companies all over the world, causing many global crises, including economic, administrative and social crises, which had a significant impact on the tourism sector, which led to a decrease in the rate of returns Foreign exchange and various regional developments and reduced employment opportunities, which led to the disruption of local communities as a whole. The current study confirmed a significant decrease in the arrival of foreign tourists to India in 2020, the paper aims to predict the arrival of foreign tourists to India and analyze the impact of COVID-19 based on four scenarios taking into account the closure and without it in terms of loss and gain, and the study reached to take decisions The strategy and operational needed to resolve the crisis, along with maximizing environmental and management fees (March, Jaipuria, Parida, & Ray, 2020 ).

**Based on the above**, the researcher believes that the E-Training approach has a strategic role in improving the quality of career for workers in the tourism sector, which maximizes performance rates, by supporting business organizations to adopt quality standards and supporting creativity and innovation processes for human resources while providing all modern technological and informational requirements and providing models In light of the foregoing, a proposed strategy can be clarified to increase the role of the E-training entrance in improving the quality of workers' careers, as shown in the following table:

**Table No. (1)**

**A proposed strategy to improve the quality of career in the Tourism Sector in light of the adoption of the E-Training approach**

To transform Tourism Companies into development companies whose goal is to spread and enhance the role of the E-Training portal to improve the quality of workers so that they become leading companies in the Sector.	<b>Strategic Vision</b>	<b>1</b>
Egyptian Companies seek to maximize their role in developing the quality of performance rates of their employees, in a way that helps support e-training requirements to improve the quality of career life.	<b>Strategy Message</b>	<b>2</b>
The strategy aims at the role of the E-Training Approach in developing the quality of workers' performance, and increasing their ability to meet the challenges faced by Egyptian companies in achieving sustainable career development.	<b>The goal of the strategy</b>	<b>3</b>
- Administrative leaders adopt improvement and development strategies related to the quality of work life.	<b>Strategic sub objectives</b>	<b>4</b>

<ul style="list-style-type: none"> <li>- Develop a plan aimed at providing all the supporting requirements for the tourism sector.</li> <li>- Developing the technological and research infrastructure for the tourism sector.</li> </ul> <p>Providing specialized human cadres necessary to improve the quality of the tourism sector.</p> <p>Providing the financial, human and technological requirements to support the e-training entrance.</p> <ul style="list-style-type: none"> <li>- Conducting awareness and education programs on the importance of the e-training portal's role in developing job performance rates for workers in the tourism sector.</li> </ul>	<p><b>(strategic options)</b></p>	
<ul style="list-style-type: none"> <li>- Strategic Management Leadership.</li> <li>- Flexible Organizational Structures.</li> <li>- Technology Programs and means of Training.</li> <li>- Modern Technological Infrastructure and Technologically qualified human cadres</li> <li>- Integration and support capabilities in the field of data, information and communications.</li> <li>- Distinguished public relations management and flexible crisis management.</li> <li>- A budget earmarked for financing.</li> <li>- Organized records that include the situation and strategic plans of the tourism sector.</li> </ul>	<p><b>Implementation Ingredients The success of the strategy</b></p>	<p><b>5</b></p>
<ul style="list-style-type: none"> <li>- Conducting continuous survey studies to find out what is new about the tourism sector.</li> </ul> <p>Preparing accurate and flexible strategic plans for the company's needs from various studies.</p> <ul style="list-style-type: none"> <li>- The presence of administrative leaders who believe in the idea of electronic development and openness to the outside world.</li> <li>- Providing the informational, financial and technological requirements that support the achievement of functional quality.</li> <li>- Take immediate decisions to reward creators and innovators, while building an effective system to reward and motivate those conducting research while supporting the necessary technological processes and means.</li> <li>- Providing the appropriate organizational climate to encourage employees to think strategically.</li> <li>- At least semi-annual follow-up in providing the necessary requirements for the E-Training entrance.</li> </ul>	<p><b>The strategy implementation actions</b></p>	<p><b>6</b></p>
<p>The administrative leaders meet to develop a proposed timetable for implementing the strategy, provided that the potentials of tourism companies are taken into consideration before defining the timetable for implementing the strategy to ensure its success.</p>	<p><b>Time schedule</b></p>	<p><b>7</b></p>
<ul style="list-style-type: none"> <li>- Forming a committee of administrative leaders to follow up and evaluate the extent of the implementation of the strategy's provisions and compare the achieved results with what is targeted.</li> <li>- Following up the timetable for implementing the strategy, identifying the obstacles facing the implementation of the strategy,</li> </ul>	<p><b>Methods for monitoring and evaluating the implementation of</b></p>	<p><b>8</b></p>



<p>evaluating the levels of the dimensions of development, and following up on the commitment of each party to the roles assigned to them.</p> <ul style="list-style-type: none"> <li>- Measuring the role of E-Training in improving the quality of work life for employees.</li> <li>- Recognizing the effect of E-Training on the quality of performance of workers in the Tourism Sector.</li> </ul>	<b>the strategy</b>	
<ul style="list-style-type: none"> <li>- Resources are available to many organizations and open channels of communication with developed world countries.</li> <li>- The desire to increase the number of innovative and creative proposals necessary for the development of the quality of the career of employees.</li> <li>- E-Training leads to an increase in the quality of performance rates for employees.</li> <li>- Transferring the experiences and expertise of other countries leads to an improvement in the performance rates of employees.</li> <li>- The desire to improve the added value of the tourism sector under study.</li> </ul>	<b>Justifications</b>	<b>9</b>

**Source:** Prepared by the researcher, and based on the theoretical framework of the study and Previous studies in the research.

**In light of the foregoing,** the researcher presents some special recommendations to improve the quality of work life for workers in the Egyptian tourism sector in light of the challenges and current conditions they are facing at the present time, as follows:

1. Develop advanced training programs of a technological nature, by preparing innovative plans and mechanisms to raise the efficiency of human cadres in the tourism sector.
2. State support for the development of creativity and innovation processes, through the establishment of innovative electronic training courses to develop and maximize human resource skills.
3. Achieving cooperation and coordination between the various concerned bodies by launching initiatives to support the Egyptian tourism sector to develop, replace and renew tourism organizations and support employment.
4. Restructuring tourism companies by launching new tourist destinations through electronic platforms.
5. Opening channels of communication with local and foreign companies in order to provide technological training programs for the development of human resources, and to cooperate in the establishment of global events necessary to promote and revitalize Egyptian tourism.

**Conclusion:**

The current era has witnessed an amazing revolution in the fields of science and technology and its applications in practical life. This information revolution has brought about a qualitative leap or what is known as the global transformations that have affected all educational processes, especially with regard to teaching methods and training methods. Which made some specialists in the field of training to employ these techniques in the

development of training programs and the emergence of what is known as E-Training, and with the advent of the Internet, the interest in using this network in developing training programs appeared, and as a result, what is known as the concept of E-Training via the Internet appeared. And adapting it to reduce social and cultural differences, and overcome the restrictions of time and place and the scarcity of human resources.

This article focuses on the most important strategic topics in the current era, which is the E-Training entrance and its role in improving the quality of the career life of employees, through the study of the tourism sector. With reference to the preparation of a proposed strategy to benefit from in the future in order to improve the quality of the performance of employees.

### **References :**

- J. Astuti ; E. Soliha .( 2021) .THE EFFECT OF QUALITY OF WORK LIFE AND ORGANIZATIONAL COMMITMENT ON PERFORMANCE WITH MODERATION OF ORGANIZATIONAL CULTURE . ,International Journal of Social and Management Studies , Vol. 2, No. 6 , Pp.89-99, Dec.
- J. Mwangi ; D., Anjum .( 2019) .EFFECTS OF E-RECRUITMENT AND E-TRAINING ON HUMAN RESOURCE PERFORMANCE: A CASE STUDY OF TELKOM KENYA , International Journal of Research Publications (IJRP.ORG) ,(Aug .Liu, X, D., Bai, Y., Haun ,Vol.35, Issue. 2 ,Pp.1-14.,
- M. Farrag .(2021) .Tourism in Egypt .. Betting on 2021 despite the Corona pandemic . , Available online :<https://www.skynewsarabia.com/business/1412624>, Feb.
- March ;S. Jaipuria ,R. Parida و ,P. Ray .( 2020) .The impact of COVID-19 on tourism sector in India .,journal of Tourism Recreation Research , <https://doiz.org/10.1080/02508281.2020.1846971>, 29 Nov ,Vol. 46, Issue. 2.,
- N. Janna ,C. Wolor ; U. Suhud .( 2021) .THE ROLE OF E-TRAINING, CAREER DEVELOPMENT, AND EMPLOYEE RESILIENCE IN INCREASING EMPLOYEE PRODUCTIVITY IN INDOONESIAN STATE-OWNED ENTERPRISES . ,Journal of Business Excellence and Management , Vol. 11, Issue. 3, Pp.5-2.
- Parents Younger ' (بلا تاريخ). Quality of Life during the COVID-19 Pandemic: Do Job Changes and Family Conflicts Matter, ?A available Online: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8815772> ,/Vol. 9, Issue 1, Pp.1-9, Jan.
- Rakhmatov A. I .( 2022) .Prospects and Forecast of Training of Highly Qualified Staff in Tourism .,Journal of Ethics and Diversity in International Communication , e-ISSN: 2792-4017, Vol. 2 , Issue 3, Pp.66-70. ,
- S. Majumder و ,D. Biswas .( 2021) .COVID-19: impact on quality of work life in real estate sector . ,Available online: <https://link.springer.com/article/10.1007/s11135-021-01136-4>, Quality & Quantity ,Pp. 413- 427, 24.



Y., Zhang, Y., Lee, T. March. Xiong .( 2019) .The rural creative class: An analysis of in - migration tourism entrepreneurship . ,International Journal of Tourism Research , <https://onlinelibrary.wiley.com/doi/full/10.1002/jtr.2317> ,Pp.42-53.