

Assessing the Relationships among Rural Organizations Working Within Decent Life Initiative in Assiut Governorate using the Graph-Theoretic Technique

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ABSTRACT

This research aims to: 1) list the organizations or agents working within the decent life initiative in Assiut governorate, and 2) assess the linkages between such organizations using Graph-Theoretic Technique. Data were collected (from villages of Mesara and Sao belonging to Dayrout district, Assiut Governorate) using key informants' meetings with three key persons from each village to determine the list of organizations working within the Decent Life Initiative. Then 16 Focus Group Discussions (FGDs) were conducted to collect data from the nominated organization during the period from November to December 2023. Graph-Theoretic Technique and Microsoft Excel were used for data analysis and presentation. Results show the existence of 173 linkages out of the supposed 240 linkages and the absence of 67 linkages. The density of linkages among the studied organizations reaches 0.72. It was also found that the components Orphan Sponsorship Association (P), Abna-Masara Association (B), Legitimacy Assembly (G), AL-Rahma Association (U), and Al- Taqwa Association (T) are the dominant components, their effect on other components is much greater than others' influence on it. It could be concluded that it has considerable control over the system. On the contrary, the components of Decent life Initiative (D), The rural local unit (L), Community development association (C), Schools (S), and Health Unit (H) are subordinate; they found to be the sink of influence since they are influenced by others more than they influences them. This finding is not surprising, because these components as service receivers are the final target of all components within the system. Interestingly, Orman Association (O) and Misr El- Kheir Foundation (M) are highly interactive with the rest of the components and is followed by Resala charity Organization (R). The work nature for the components as large-scale NGOs requires this high interaction with all system's components to be conducting in the field activities as well as providing their charity services.

Keywords: Rural organizations, Decent Life Initiative, Graph-theoretic Technique, Linkages assessment, Assiut Governorate.

INTRODUCTION

Fueled by significant donor commitments in the 1970s and 1980s, the Integrated Rural Development (IRD) approach gained popularity in the 1970s. IRD was a comprehensive strategy for enhancing a community unit's well-being on the social, economic, and environmental levels. The strategy drew on observations that economic progress was not always immediately helping the rural poor, systems thinking, and an emphasis on local engagement and community ownership. Even if there were a few exceptional IRD triumphs, scaling them up appeared to be the obstacle. Due to insufficient funding for management and institutional growth, project evaluations found that IRD activities performed in an unsatisfactory and unsustainable manner (USAID, 2005).

In the modern era, all societies strive to improve the quality and quantity of life for their citizens, as evidenced by the accomplishment of comprehensive development, which is the goal that all people worldwide are rushing to achieve. Development policies place the human being at the center of the development process and the forefront as the primary participant and beneficiary. To achieve greater levels of development, these people and their governments are putting many advancements into practice in their daily lives, such as keeping up with developments in science in all their branches through research projects that are undertaken in accordance with local regulations (Yahya *et al.*, 2017).

The Egypt's long-term strategic plan to accomplish sustainable development principles and objectives in all economic, social, and environmental spheres was reflected in the government's "Egypt Vision 2030" national agenda, which was unveiled in February 2016. By the end of 2016, Egypt had approved a set of economic reform, gradually removed fuel and power subsidies, and allowed the local currency to be used freely (Eisa, 2022).

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Decent Life Initiative, launched by President Abdel Fattah El-Sisi on January 2, 2019, aims to provide a decent life for the most vulnerable groups nationwide over 2019 (Hayah Karima, 2022). It further contributes to enhancing the quality of daily public services provided to citizens, with an eye to inhabitants of rural areas; the initiative also provides health care, medical services, surgeries, and prosthetic devices to these groups. Moreover, it aims to develop Egypt's poorest villages, according to the poverty map, provides job opportunities and supports orphan girls to get married (Decent Life Initiative, 2024).

By developing 4,584 villages, including more than 30000 sub-villages (Naga/Kafir/Ezba) scattered throughout 175 districts in 20 governorates that account for 58% of the Republic's total population, the initiative's strategic goal is to swiftly intervene and improve the lives of individuals living in rural Egypt. This will be accomplished with a cost of 800 billion Egyptian pounds by utilizing a range of direct and indirect interventions that prioritize sustainability while focusing on all aspects of life (Human Development Report, 2021) as follows:

1. Enhancing quality of life and investing in people (social protection and care, adequate housing, community awareness, and the rehabilitation of individuals with special needs).
2. Raising the standard of urban services and infrastructure (gas, electricity, post, drinking water, sewage, and road paving).
3. Raising the standard of services related to human development (sports, culture, health, and education).
4. Employment and economic growth (loans for small initiatives, financial inclusion, industrial complexes, training and rehabilitation for occupational skills, and the development of agriculture and fisheries).

By determining the magnitude of various deprivations (in terms of health, education, and standard of life) at the individual level, multi-dimensional poverty evaluates the kind and severity of poverty. By examining indicators of health (nutrition, child mortality), education (child enrollment and years of schooling), and living standards (measure of assets such as a toilet and cooking fuel), it can be combined with micro data from household surveys to create a national measure of poverty that adheres to the standard UNDP definition (Alkire and Santos, 2010).

The Central Agency for Public Mobilization and Statistics released a poverty map database, which was used to divide the villages targeted by the initiative in accordance with relevant ministries and institutions. As a result, the initiative allocated 103 billion pounds to develop 277 villages where the poverty rate exceeds

70%, and coordination was made with 16 NGOs for implementation. The initiative's stages of work were divided into three phases to achieve its objectives (MPED, 2021; Hassan, 2022 and MLD, 2022) as below:

1. The first phase targets the most impoverished villages that require immediate assistance, with poverty rates of at least 70%. The villages in this phase are spread over 52 centers in 20 governorates, and the total amount of funding allocated to them is 260 billion pounds. The initiative's first phase focused on developing the most impoverished villages, involving 375 rural communities and 4.5 million people to carry out 2180 projects, of which 600 have been finished and 1580 are in the process of being carried out.
2. The second phase targets villages with poverty rates between 50% and 70%. These are impoverished communities that require assistance, but not as much as the first category. The project's second phase aims to develop 4209 villages including 30900 sub-villages. Fifty million people will gain from the initiative.
3. The third phase targets the villages with less than 50% poverty rate.

The Report of the Presidency of the Council of Ministers (2022) mentioned that the main partners of the initiative are the Ministry of Local Development, the Ministry of Planning and Economic Development, the Ministry of Social Solidarity, the Ministry of Housing, Utilities and Urban Complexes, the Engineering Authority of the Armed Forces, and the Micro, Small and Medium Enterprises Development Authority. While the development partners are: the Ministry of Health and Housing, the Ministry of Agriculture and Land Reclamation, the Ministry of Youth and Sports, the Ministry of Finance, the Ministry of Manpower, the Ministry of Education and Vocational Education, the Ministry of Water Resources and Irrigation, and the Decent Life Foundation, in addition to many NGOs, to name a few (Orman Association, Good Makers, Misr El-Kheir Foundation, Coptic Evangelical Organization, and Together Against Hunger etc.).

Assiut is one of the governorates where this effort is being carried out. Assessing the relationships among these organizations is crucial for understanding their interactions, collaborations, and overall effectiveness in contributing to the goals of the Decent Life Initiative. An inventive method of examining these kinds of relationships is by using graph-theoretic methods. Graph theory is an important tool for studying complex systems like rural development organizations because it offers a

mathematical framework for expressing and evaluating networks of interconnected entities (Temel *et al.*, 2002 & 2003 and Diab, 2012 & 2015).

Graph theory in discrete mathematics and systems analysis in engineering are two areas of study that are combined in the graph theoretical method. The rationale is that graph theory provides practical methods and ideas for quantitatively evaluating a system's attributes. A collection of institutions or agents working toward a shared objective make up the system. It has a number of qualities. Its initial objective must be to identify the kinds of organizations or agents that should be a part of the system. Only interactions relevant to the predefined aim should be captured. Secondly, a single unit of measure should be used to express all the system's interactions. Third, an agent's power over both it and other people need to be bounded (Temel *et al.*, 2002).

Objectives:

This research aims to: 1) list the organizations or agents working within the decent life initiative in Assiut governorate, and 2) assess the linkages between such organizations using Graph-Theoretic Technique.

Previous studies:

1. Mahran (2022) "Contributions of the Decent Life Initiative to improving the lives of the most needy families in the Egyptian countryside".

The current study aims to determine a main goal, which is to determine the contributions of the Decent Life Initiative in improving the quality of life for the neediest families in the Egyptian countryside. The study relied on the use of a social survey approach with a sample of (375) individuals who benefited from the Decent Life Initiative in the village of Umm Douma in the Tama Center in Sohag Governorate. As well as officials in the local unit in the village of Umm Douma and the city of Batma, and officials in the Sohag Governorate office.

The most important results:

- The results of the study demonstrated that there are no significant statistically significant differences between them. Responses of beneficiaries and officials regarding their determination of the level of improving the quality of life economically, health-wise, and educationally as one of the indicators of the contributions of the Decent Life Initiative in improving the objective dimension of the quality of life of the neediest families in the Egyptian countryside.
- The results of the study demonstrated that there are significant, statistically significant differences at the level of significance (0.05) between the responses of beneficiaries and officials about their determination

of the contributions of the Decent Life Initiative in improving the quality of life for the neediest families in the Egyptian countryside, in favor of the beneficiaries' responses.

2. Embaby (2021) "The reality of community partnership between governmental and private institutions to upgrade the level of services provided to legal citizens in the villages in need, within the framework of implementing the Decent Life Initiative".

The research aimed to: Defining a description of the reality of the partnership between governmental and private institutions in improving the level of services provided to citizens within the framework of implementing the Decent Life Initiative.

Identifying the most important services provided to citizens considering the Decent Life Initiative., Identifying the most important supporting factors and the path to achieving a community partnership between governmental and private institutions to raise the level of services provided to citizens within the framework of implementing the Decent Life Initiative. The study relied on a comprehensive social survey approach for all employees and members of the boards of directors of governmental and private institutions, the field of study. The questionnaire was applied to all employees and members of the boards of directors of governmental institutions (represented by Social Solidarity in Qena Governorate) and civil institutions (represented by the Local Community Development Association in Bandar Qena).

The most important results:

- The most important factors driving and supporting the achievement of a community partnership are the presence of a reliable database on citizens benefiting from the Decent Life Initiative and the focus on enhancing the capabilities of human resources through training.
 - Partnership means assuming national responsibility for both governmental and private institutions to provide services to citizens, whether social or economic.
3. Radwan and Ramadan (2021) "Effectiveness of Haya Karema Initiative in Kafr Shebeen Village, Qalyubia Governorate".

Aim search with a picture basic to set degree effectiveness initiative life generous in a village Blasphemy Shebeen governorate Qalyubia. And it has Run this search on a sample, it consists of 380 respondents from village Blasphemy Shebeen. It was completed their choice randomly.

The most important results:

- The highest percentage of respondents fall in the high and medium level knowledge category.
 - Among the most important negatives of the initiative from the viewpoint of the respondents are the initiative's weakness bridges in the village, the initiative's failure to connect gas lines to the village, the weakness of health and environmental awareness services, the weakness of establishing and developing nurseries services, and the weakness of youth and sports services.
4. Sultan and Ahmed (2019) "The role of civil society organizations in rural development in Assiut Governorate".

The research aims to identify the role of the Community Development Society in all fields and to identify the problems and challenges it faces from the point of view of its members and beneficiaries. Among them, as well as the proposals through which they can play their role. To achieve these goals, active community development associations in the governorate were identified through the Social Solidarity Directorate in Assiut.

The most important results:

- Associations provide multiple services in many fields, including the educational field, the environmental field, the fields of rural women and youth, and the field of Health care, attention to the population problem, sanitation, rationalization of consumption, as well as providing many social and cultural services. They also reported that there are many obstacles that hinder the work of these associations.
 - The existence of some of the services provided by these associations, including the services provided for rural youth and rural women, as well as sanitation, but there is a lack of some activities for some of the services provided by the associations, including education and health and attention to the population problem and the environmental and rationalization of consumption.
5. Yahya *et al.* (2017) "The Role of NGOs in the Social and Economic Capacity of Rural Women in Assiut Governorate" current research deals with the importance of the role played by women in society in general and the rural community in particular. It shows that the role of rural women must be strengthened by providing them with capabilities that enable them to participate in their community development through community non-governmental organizations, being closest to the members of the community and knowing their needs and problem.

The most important results:

- Turns out that's more than half the number the respondents received training in -crafts, and that approximately from half number. The female respondents received help on knowledge projects the diuretic for income, and more from half number of female respondents who took loans.
- Regarding the role of organizations eligibility in development capacity social for women rural: turns out that's more from three fifths number the subjects received care for women the breadwinner, and that more than half of the female respondents answered yes to providing care for divorced women and widows.

Methodology:

This research adopted the graph-theoretic Technique to assess the set of linkages between rural organizations within the Decent Life Initiative in the villages of Mesara and Sao, Dayrout District in Assiut Governorate.

Data was collected using key informants' meetings with three key persons from each village to determine the list of organizations working within the Decent Life Initiative. Then 16 Focus Group Discussions (FGDs) were conducted to collect data from the nominated organization during the period from November to December 2023.

Interview with the key informants persons resulted on listing of 16 organizations working within the Decent life Initiative in the study's area namely: Haya Karima Foundation (D), Heath Unit (H), Local unit (L), School (S), Youth center (Y), Community development association (C), Orman Association (O), Resala charity Organization (R), Misr El Kheir Foundation (M), Raie Misr Organization (A), Egyptian cure Bank (E), Taqwa Association (T), Rahma Association (U), Abna-Mesara Association (B), Legitimacy Assembly (G), and Orphan Sponsorship Association (P).

To assess linkages among the organization, a question on how strengths of linkages that the organization has with the rest of other organizations within Decent Life Initiative. FGD of 5 board members for each organization, so the total number of the study sample reached 80 respondents. Who decide that their organizations have linkages with other organizations, were asked to provide their opinions on the strength of these linkages. The answers to the questions are all expressed in scales based on none, weak, medium, and strong linkages.

Graph-Theoretic Technique is an approach to investigating social structures using networks, is widely used in social network analysis (SNA) to

analyze and visualize relationships between individuals or entities in a social network. Applications of SNA include community detection, centrality analysis, influence propagation, and recommendation systems. Microsoft Excel was used for data analysis and presentation.

RESULTS AND DISCUSSIONS

1. List the organizations or agents working within the decent life initiative in Assiut governorate.

The organizations working within the decent life initiative in Assiut governorate could be summarized as follows:

1. Haya Karima Foundation (D): is a development institution established in 2019 that works within a participatory framework to support the achievement of social justice and the development of the local economy, which is considered one of the most important priorities of the Egyptian government. The Haya Karima Foundation, which represents one of the civil arms of the state, works within the framework of the state's plan to achieve sustainable development, it is adopting an integrated initiative represented in a model of economic and social empowerment for the neediest groups, with the aim of drying up the sources of poverty.
2. Heath Unit (H): It is one of the governmental organizations, which provides medical and health services in the village and is affiliated with the Ministry of Health and Population.
3. Local unit (L): It is one of the governmental organizations, and the local unit in the administrative division in Egypt is the responsible body at the level of cities (or neighborhoods) and centers.
4. Schools (S): One of the governmental organizations affiliated to the Ministry of Education, which provides educational services to students in the three educational stages.
5. Youth center (Y): It is a private educational youth body of public benefit, with an independent legal personality that contributes to the development of young people and youth by investing their free time in practicing various cultural, social and sports activities and seeks to acquire skills that ensure responsibility within the framework of the law and the general policy of the country.
6. Community development association (C): It is a non-governmental non-profit organization, one of the forms of NGOs working in the field of humanitarian services and aims to provide services to the population of society to meet their living needs and works to improve the standard of life in terms of social, cultural, economic, and health.
7. Orman Association (O): An Egyptian non-governmental organization, established in 1993, that aims to serve all needy segments of Egyptian society without any religious or political discrimination. The association relies only on in-kind and cash donations from Egyptians. Among the activities of the association are orphanages, guest houses for oncology patients, the ongoing charity project, humanitarian aid, contributing to national campaigns and the project of a foundation for each village, and there is Shifa Orman Hospital for cancer treatment in Luxor, it is a large medical edifice aimed at serving the governorates of Upper Egypt, and eliminating cancer. The hospital serves 6 governorates in Upper Egypt.
8. Resala charity Organization (R): It is a charitable association that carries out many activities in Egypt founded in 1999 as a student movement at the Faculty of Engineering, Cairo University and then registered as a charity on May 29, 2000. It has many branches that are spread throughout the Republic and represented in more than 67 branches, from its activities to help poor families, free remedial classes, aid convoys, medical convoys, used clothes exhibitions, care for the deaf and hard of hearing, services for the blind, and literacy.
9. Misr El Kheir Foundation (M): is a non-profit development institution established in 2007 with the objective of developing the Egyptian individual in a comprehensive manner. Six key areas have been selected for human development namely: Health, Education, Scientific Research, Social Solidarity, Aspects of Life and Integrated.
10. Raie Misr Organization (A): is a Non-Profit organization that began its developmental activities in 1995 with a group of volunteers, including doctors, judges, businessmen, and professionals. Raie Misr Foundation was officially established in 2012 and its registration was amended to number 774 for the year 2016 by the Ministry of Social Solidarity, its goal is to provide services to vulnerable communities in Egypt.
11. Egyptian cure Bank (E): is a non-governmental organization with a slogan "Together. to save a life" The organization's primary goal is to provide medical treatment for those who cannot afford to pay for their treatment. its Mission is Providing a high-quality Health Care System for those who cannot afford to pay from the Egyptian Society – free of charge.

12. Taqwa Association (T): It is a civil charitable association that was declared No. 731 in 2006, based in the village of Sao Dayrout Center, one of its most important activities is sponsoring orphans, providing material and in-kind assistance to the poor, preparing brides, and providing treatment for patients who are unable to do so.
13. Rahma Association (U): It is a civil charitable association that was declared No. 1126 in 2012, based in the village of Bani Masara, Dayrout Center, whose most important activities are sponsoring orphans, extending water connections, building houses for the incapable, providing financial and in-kind assistance to the poor and helping to equip brides for the incapable.
14. Abna-Mesara Association (B): It is a charitable civil association that was declared No. 1282 in 2013, based in the village of Bani Masara, Dayrout Center, directing its activities to the neediest groups, the most important of these activities are sponsoring orphans, extending water connections, and making roofs, building houses for the incapable, providing financial and in-kind assistance to the poor and helping to prepare brides for the incapable.
15. Legitimacy Assembly (G): It is a charitable civil association that was declared No. 857 in 2006, based in the village of Bani Masara, Dayrout Center, directing its activities to the poor, orphans, people with needs, divorced women and patients, the most important of these activities is sponsoring orphans, providing financial and in-kind assistance to the poor and helping to equip brides for the incapable, making roofs for homes, and extending water connections for drinking.
16. Orphan Sponsorship Association (P): It is a civil charitable association that was declared No. 621 in 2004, based in the village of Sao, the center of Dayrout, one of its most important activities is to sponsor orphans, alleviate the suffering of poor families, provide material and in-kind assistance to them, equip brides, provide treatment for patients who are unable to do so, and help women breadwinners.

2. Assess the linkages between such organizations using Graph-Theoretic Technique

The graph-theoretical technique is used to assess linkages among the organizations working within the Decent Life Initiative in Assiut Governorate as follows:

2.1. The optimal matrix of linkages among rural organizations working within the Decent Life Initiative in Assiut Governorate:

The optimal matrix of linkages among rural organizations working within the Decent Life Initiative in Assiut Governorate consists of 16 components. The matrix maps all binary (or one-to-one) linkages between the components. The components are placed in the diagonal cells, and following clock-wise rotation; linkages among them are placed in off-diagonal cells of the Matrix 1.

- Rural organizations are illustrated along the main diagonal of the matrix, and non-country cells represent the bilateral links between the group of organizations, where cell DH (first row and second column) in the matrix refers to the bilateral link between Haya Karima Foundation (D) and the health units, where Haya Karima Foundation is the source of influence. HD cell (second row and first column) refers to the bilateral link between the two organizations' institution, but health units are the source of influence. This applies to all cells where the special row indicates The component indicates that it is the source of the effect in the rest of the two components, while the column of the component indicates that it is affected by the rest of the components.

2.2. Interaction matrix

Based on the respondents' assessment of the strength of the links between rural organizations (strong s, medium m, weak w, and no n), the matrix expressing the strength of the links between the rural organizations under study was drawn, as shown in matrix 2, and it is clear from the matrix of links that the number of possible links cancels about 240 links between organizations and each other, while there are 173 existing associations ranging in strength from weak to strong (40 weak links, 52 medium bonds, and 81 strong associations), and the matrix indicates the absence of about 67 associations between the organizations under study (as shown in Matrix 2).

2.3. Density of the matrix of links between rural organizations under study

The density of the matrix refers to the ratio of the actual links to the potential bonds within the matrix and is calculated from the equation $d = \frac{a}{n(n-1)}$. Where d symbolizes the density of the row, a refers to the number of actual links within the matrix (173 associations), n indicates the number of components of the matrix (16 organizations), and the density of the matrix = 0.72, which means that there are more than half of the links that are supposed to exist between organizations within the Decent Life Initiative in Assiut Governorate.

2.4. Auditing the Matrix of Links between Rural Organizations within the Decent Life Initiative in Assiut Governorate

Link matrix auditing is used to quantitatively measure the strength of links, by converting the

previous link matrix into the audited form (Matrix 3), where symbol (0) indicates the absence of a relationship, symbol (1) indicates the existence of a weak relationship, symbol (2) indicates the existence of an intermediate relationship, and symbol (3) indicates the existence of a strong relationship.

D	DH	DL	DS	DY	DC	DO	DR	DM	DA	DE	DT	DU	DB	DG	DP
HD	H	HL	HS	HS	HY	HA	HO	HR	HM	HT	HF	HU	HG	HV	HZ
LD	LH	L	LS	LY	LC	LO	LR	LM	LA	LE	LT	LU	LB	LG	LP
SD	SH	SL	S	SY	SC	SO	SR	SM	SA	SE	ST	SU	SB	SG	SP
YD	YH	YL	YS	Y	YC	YO	YR	YM	YA	YE	YT	YU	YB	YG	YP
CD	CH	CL	CS	YC	C	CO	CR	CM	CA	CE	CT	CU	CB	CG	CP
OD	OH	OL	OS	OY	OC	O	OR	OM	OA	OE	OT	OU	OB	OG	OP
RD	RH	RL	RS	RY	RC	RO	R	RM	RA	RE	RT	RU	RB	RG	RP
MD	MH	ML	MS	MY	MC	MO	MR	M	MA	ME	MT	MU	MB	MG	MP
AD	AH	AL	AS	AY	AC	AO	AR	AM	A	AE	AT	AU	AB	AG	AP
ED	EH	EL	ES	EY	EC	EO	ER	EM	EA	E	ET	EU	EB	EG	EP
TD	TH	TL	TS	TY	TC	TO	TR	TM	TA	TE	T	TU	TB	TG	TP
UD	UH	UL	US	UY	UC	UO	UR	UM	UA	UE	UT	U	UB	UG	UP
BD	BH	BL	BS	BY	BC	BO	BR	BM	BA	BE	BT	BU	B	BG	BP
GD	GH	GL	GS	GY	GC	GO	GR	GM	GA	GE	GT	GU	GB	G	GP
PD	PH	PL	PS	PY	PC	PO	PR	PM	PA	PE	PT	PU	PB	PG	P

Matrix 1. Optimal matrix of linkages between rural organizations within the Decent Life Initiative

Source: Results of FGDs

D	s	s	s	m	m	s	M	s	m	w	n	n	w	n	n
S	H	s	n	m	m	m	W	s	m	s	w	w	m	n	n
s	m	L	w	m	m	m	M	s	w	n	n	n	w	n	n
s	n	m	S	w	w	m	W	s	w	n	w	w	w	w	w
m	n	w	w	Y	m	m	M	m	w	n	w	n	w	n	n
m	m	s	w	w	C	s	W	s	m	n	n	n	n	n	n
s	s	s	s	s	s	O	S	s	s	s	s	w	s	w	w
m	m	m	m	m	m	s	R	s	m	s	n	n	w	n	n
s	s	s	s	m	m	s	S	M	s	s	s	m	s	s	s
m	n	n	n	m	m	s	M	s	A	w	n	n	m	w	w
s	m	n	n	n	m	m	W	m	w	E	n	n	n	n	n
m	w	s	s	m	s	s	W	s	n	w	T	n	w	n	n
s	m	m	s	s	s	n	M	s	m	n	n	U	n	n	n
s	s	s	s	s	s	s	M	s	n	n	n	w	B	n	n
s	s	s	s	s	s	n	S	s	n	n	w	n	n	G	n
s	s	m	s	s	s	s	N	s	s	s	m	n	n	n	P

Matrix 2. Matrix of links between rural organizations within the Decent Life Initiative in Assiut Governorate

Source: Results of FGDs

D	3	3	3	2	2	3	2	3	2	1	0	0	1	0	0
3	H	3	0	2	2	2	1	3	2	3	1	1	2	0	0
3	2	L	1	2	2	2	2	3	1	0	0	0	1	0	0
3	0	2	S	1	1	2	1	3	1	0	1	1	1	1	1
2	0	1	1	Y	2	2	2	2	1	0	1	0	1	0	0
2	2	3	1	1	C	3	1	3	2	0	0	0	0	0	0
3	3	3	3	3	3	O	3	3	3	3	3	1	3	1	1
2	2	2	2	2	2	3	R	3	2	3	0	0	1	0	0
3	3	3	3	2	2	3	3	M	3	3	3	2	3	3	3
2	0	0	0	2	2	3	2	3	A	1	0	0	2	1	1
3	2	0	0	0	2	2	1	2	1	E	0	0	0	0	0
2	1	3	3	2	3	3	1	3	0	1	T	0	1	0	0
3	2	2	3	3	3	0	2	3	2	0	0	U	0	0	0
3	3	3	3	3	3	3	2	3	0	0	0	1	B	0	0
3	3	3	3	3	3	0	3	3	0	0	1	0	0	G	0
3	3	2	3	3	3	3	0	3	3	3	2	0	0	0	P

Matrix 3. Auditing the Matrix of Links between Rural Organizations within the Decent Life Initiative in Assiut Governorate

Source: Results of FGDs

Figure (1) also shows the strength of the links between rural organizations within the Decent Life Initiative in Assiut Governorate, where white cells express the absence of a relationship and gray squares indicate a weak relationship, while striated cells indicate a medium-strength relationship, and black squares indicate a strong relationship between the organizations

under study. This format can contribute to the selection of pathways of linkages that can be used when interacting between organizations, whether direct or indirect, depending on the strength required of the association.

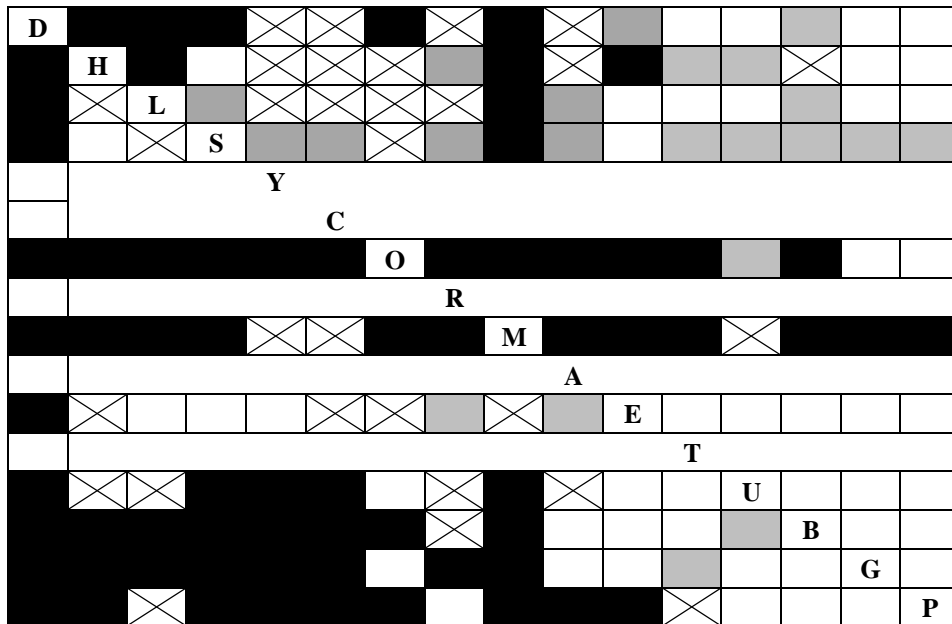


Figure 1. Auditing the Matrix of Links between Rural Organizations within the Decent Life Initiative in Assiut Governorate

Source: Drown from Matrix 3.

2.5. Modification of the matrix of inter-organizational linkages

During the modification of the matrix, the strength of the bonds between the components is converted into the effect of those components on each other, through the strength of the bond by the degree of impact by multiplying each value that expresses the strength of the bond (strong = 3, medium = 2, weak = 1, none = 0) by its corresponding weight (strong 1x, medium x 0.66, weak x 0.33, no x 0). Matrix No. 4 illustrates the results of the matrix modification Links between rural organizations within the Decent life Initiative in Assiut Governorate.

2.6. The cause and effect of the modified matrix of rural organizations within the Decent Life Initiative in Assiut Governorate.

Effect building refers to building links and relationships for the Cause of each rural organization and its influence within the Decent Life initiative, and the Cause values of each organization are obtained through its row sum, and the Effect values through its column sum as shown in the modified matrix (Matrix 4).

The results in Table (1) and Figure (2) show that Misr El-Kheir Foundation is the most balanced organization, where its impact and impact values converged (39.99-41.64) respectively, and the results showed that the most influential organizations are Misr

El-Kheir Foundation, and Orman Association in the rest of the organizations (39.96, 36.99 degrees, respectively), while Misr El-Kheir Foundation, Haya Karima Foundation, and Orman Association are the most affected by the rest of the organizations (41.64 degrees, 36.6 degrees a degree, 30.6 degrees each respectively).

The components Orphan Sponsorship Association (P), Abna-Masara Association (B), Legitimacy Assembly (G), AL-Rahma Association (U), and Al-Taqwa Association (T) are the dominant components, their effect on other components is much greater than others' influence on it. It could be concluded that it has considerable control over the system (or it is the key source of influence). That could be attributed to its mandatory services as local-based entities. As well as it considered non-governmental organizations responsible for social and human development on the.

On the contrary, the components of Decent life Initiative (D), The rural local unit (L), Community development association (C), Schools (S), and Heath Unit (H) are subordinate; they found to be the sink of influence since they are influenced by others more than they influences them. This finding is not surprising, because these components as service receivers are the final target of all components within the system.

D	3	3	3	1.32	1.32	3	1.32	3	1.32	0.33	0	0	0.33	0	0
3	H	3	0	1.32	1.32	1.32	0.33	3	1.32	3	0.33	0.33	1.32	0	0
3	1.32	L	0.33	1.32	1.32	1.32	1.32	3	0.33	0	0	0	0.33	0	0
3	0	1.32	S	0.33	0.33	1.32	0.33	3	0.33	0	0.33	0.33	0.33	0.33	0.33
1.32	0	0.33	0.33	Y	1.32	1.32	1.32	1.32	0.33	0	0.33	0	0.33	0	0
1.32	1.32	3	0.33	0.33	C	3	0.33	3	1.32	0	0	0	0	0	0
3	3	3	3	3	3	O	3	3	3	3	0.33	3	0.33	0.33	0.33
1.32	1.32	1.32	1.32	1.32	1.32	3	R	3	1.32	3	0	0	0.33	0	0
3	3	3	3	1.32	1.32	3	3	M	3	3	3	1.32	3	3	3
1.32	0	0	0	1.32	1.32	3	1.32	3	A	0.33	0	0	1.32	0.33	0.33
3	1.32	0	0	0	1.32	1.32	0.33	1.32	0.33	E	0	0	0	0	0
1.32	0.33	3	3	1.32	3	3	0.33	3	0	0.33	T	0	0.33	0	0
3	1.32	1.32	3	3	3	0	1.32	3	1.32	0	0	U	0	0	0
3	3	3	3	3	3	3	1.32	3	0	0	0	0.33	B	0	0
3	3	3	3	3	3	0	3	3	0	0	0.33	0	0	G	0
3	3	1.32	3	3	3	3	0	3	3	3	1.32	0	0	0	P

Matrix 4. Modifying the Matrix of Links between Rural Organizations within the Decent Life Initiative in Assiut Governorate

Source: Calculated from Matrix 3

Interestingly, Orman Association (O) and Misr El-Kheir Foundation (M) are highly interactive with the rest of the components and is followed by Resala charity Organization (R). The work nature for the

components O, M and R as large-scale NGOs requires this high interaction with all system's components to be conducted in the field activities as well as providing their charity services.

Table 1. Cause and Effect Values of the Modified Matrix of Rural Organizations within the Decent Life Initiative in Assiut Governorate

No.	Organizations	Cause	Effect
1.	Haya Karima Foundation (D)	20.94	36.6
2.	Heath Unit (H)	19.59	24.93
3.	The rural local unit (L)	13.59	26.61
4.	Schools (S)	11.61	26.31
5.	Youth center (Y)	8.25	24.9
6.	Community development association (C)	13.95	28.89
7.	Orman Association (O)	36.99	30.6
8.	Resala charity Organization (R)	18.57	18.57
9.	Misr El- kheir Foundation (M)	39.96	41.64
10.	Raie Misr Organization (A)	13.59	16.92
11.	Egyptian cure Bank (E)	8.94	15.99
12.	Al- Taqwa Association (T)	18.96	8.64
13.	AL-Rahma Association (U)	20.28	2.64
14.	Abna-Masara Association (B)	25.65	10.62
15.	Legitimacy Assembly (G)	24.33	3.99
16.	Orphan Sponsorship Association (P)	29.64	3.99

Source: Calculated from Matrix 4

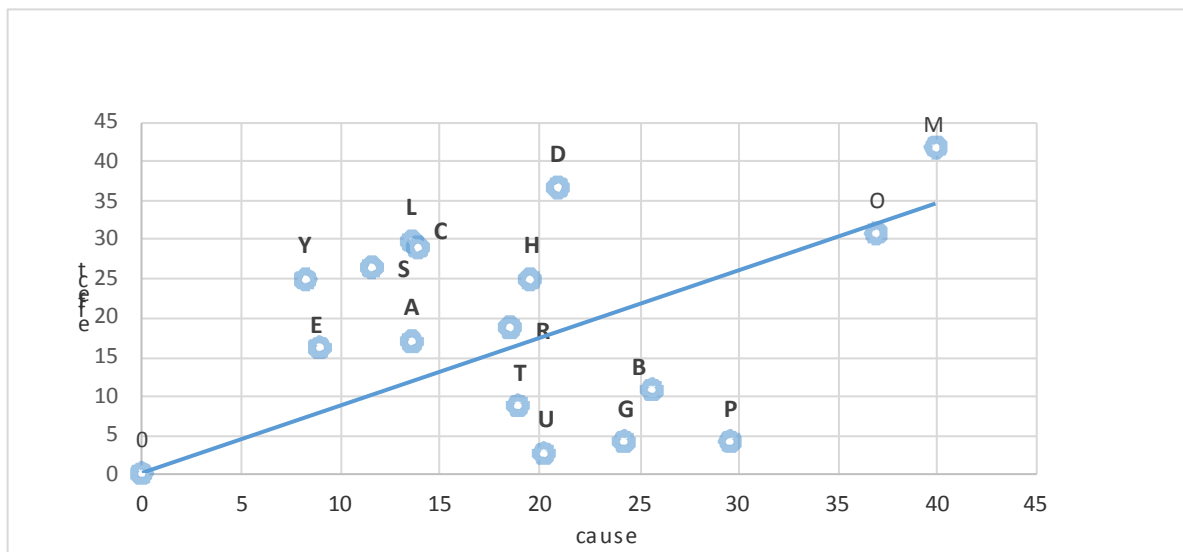


Figure 2. The Cause and Effect of the Modified Matrix Links between Rural Organizations within the Decent Life Initiative in Assiut Governorate

Source: Drawn from Table 2.

CONCLUSION AND RECOMMENDATIONS

The current research adopts knowledge of the links and relations between rural organizations within the Decent Life Initiative in Assiut Governorate, due to the importance of the role played by organizations within the Decent Life initiative, and the scarcity of study in this field.

It is clear from the evaluation of the links between the rural organizations under study that the density of the system rose to 0.72, i.e. the presence of more than half of the links that are supposed to exist, which means the existence of strong relationships and links between rural organizations within the Decent Life Initiative in Assiut Governorate, as evidenced by the emergence of 173 actual associations between organizations out of a total of 240 associations that are supposed to exist. It was also shown from the construction of influence and influence between organizations that Misr El-Kheir Foundation (M) is the most balanced organization among organizations, and that each of Misr El Kheir Foundation (M) and Orman Association (O) are the most influential among organizations, while Misr El Kheir Foundation (M) and Haya Karima Foundation (D) are the most affected by other organizations.

Considering the findings of the research, it can be recommended in general the need to build a database between rural organizations within the Decent Life initiative, to strengthen ties and relations between governmental and civil organizations within the initiative.

In addition to the concerted efforts made between rural organizations within the Decent Life initiative, especially between small NGOs and each other, such as (Al-Taqwa Association, Al-Rahma Association, Abna-Masara Association, Orphan Sponsorship Association), as the ties between them are weak.

The results showed that the completion of building relationships between rural organizations within the Decent Life initiative requires building 67 absent relationships and strengthening existing relationships between the weak and the middle.

The results can also inform policymakers and decision makers in identifying the shortest way to link rural organizations to achieve greater coherence among rural organizations within the initiative.

The results showed that Haya Karima Foundation is one of the most affected organizations, as the Decent Life Initiative is a presidential initiative supported by the state and therefore governmental and civil organizations seek to combine efforts between them to achieve a decent life for the neediest families.

It was also found that the rural organizations most in need of reform within the initiative, namely the Community Development Association, Egyptian cure Bank, and school, are the least influential among the organizations, as well as the Legitimacy Assembly, Al-Rahma Association, and the Orphan Sponsorship Association because they are the most affected in terms of building links.

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المخلص العربي

تقييم العلاقات بين المنظمات الريفية العاملة ضمن مبادرة حياة كريمة بمحافظة أسيوط باستخدام أسلوب الرسم النظري

رحاب قاسم عامر، محمد السعيد البسيوني، مازن بركات، هند مختار دياب

حيث أن تأثيرهم على المكونات الأخرى أكبر بكثير من تأثير الآخرين عليها، وبالتالي يمكن أن نستنتج أن لديها سيطرة كبيرة على النظام. وعلى العكس من ذلك فإن المكونات مؤسسة حياة كريمة (D)، الوحدة المحلية الريفية (L)، جمعية تنمية المجتمع (C)، والمدارس (S)، والوحدة الصحية (H) تابعة: حيث وجد أنهم يتأثرون بالآخرين أكثر من تأثيرهم عليهم، وهذه النتيجة ليست مفاجئة لأن هذه المكونات كمستقبلات للخدمة هي الهدف النهائي لجميع المكونات داخل النظام. ومن المثير للاهتمام أن جمعية الأورمان (O)، ومؤسسة مصر الخير (M) تتفاعل بشكل كبير مع بقية المكونات، وتتبعها جمعية رسالة الخيرية (R). أن طبيعة المكونات كمنظمات غير حكومية كبيرة الحجم تتطلب هذا التفاعل العالي مع كافة مكونات النظام للقيام بالأنشطة الميدانية، وتقديم خدماتها الخيرية.

الكلمات المفتاحية: المنظمات الريفية، مبادرة حياة كريمة، أسلوب الرسم النظري، تقييم الروابط، محافظة أسيوط.

يهدف هذا البحث إلى (1) حصر المنظمات أو الوكلاء العاملين ضمن مبادرة حياة كريمة بمحافظة أسيوط و (2) تقييم الروابط بين هذه المنظمات باستخدام أسلوب الرسم النظري. (حيث تم جمع البيانات من قريتي مسارة وساو التابعتين لمركز ديروط محافظة أسيوط) بالاجتماعات مع ثلاثة أشخاص رئيسيين من كل قرية، لتحديد قائمة المنظمات العاملة ضمن مبادرة حياة كريمة. ثم تم إجراء 16 حلقة نقاشية بؤرية جماعية لجمع البيانات من المنظمة المرشحة خلال الفترة من نوفمبر إلى ديسمبر 2023. واستخدم أسلوب الرسم النظري واستخدام برنامج Microsoft Excel لتحليل وعرض النتائج. وأوضحت نتائج البحث فيما يتعلق بتقييم الروابط داخل النظام وجود 173 رابطة قائمة من جملة الروابط المفترض وجودها وعددها (240) رابطة وغياب (67) رابطة، وتُشير النتائج أن كثافة الروابط بين المنظمات تصل إلى 0.72. كما تبين أن جمعية كفالة الأيتام (P)، وجمعية أبناء مسارة (B)، الجمعية الشرعية (G)، وجمعية الرحمة (U)، وجمعية التقوي (T) هي المكونات المُهمّة،