

## ACHIEVING SUSTAINABLE COMMUNITY DEVELOPMENT THROUGH INFORMATION ANALYSIS IN THE DIGITAL AGE

UDEGBULEM OGECHUKWU CHRYSANTUS

E-Mail: [ogechukwu\\_udegbulem@uniport.edu.ng](mailto:ogechukwu_udegbulem@uniport.edu.ng)

GSM: 081072621374

UGWU ANGELA NKECHI

E-Mail: [angela.ugwu@uniport.edu.ng](mailto:angela.ugwu@uniport.edu.ng)

Department of Adult and Non-Formal Education  
University of Port Harcourt

### Abstract

*This study focused on achieving sustainable community development through information analysis in the digital age. Information analysis refers to an act of scrutinizing, modelling and transmuting raw information into actionable knowledge in support of the decision-making process. The goals and objectives of community development activities in recent times despite technological potentials were obstructed as a result of the absence or dearth of proper information analysis. The importance of information analysis, constraints militating against information analysis, and steps adopted in analyzing information for the promotion of community development activities were discussed in this study. The study suggested among others that development practitioners at various levels of government should adequately partner with responsible and relevant community-based organizations (CBOs) for reliable information that will facilitate community development programmes and projects; and that sustainable data management systems for community development projects and programmes should be developed and implemented effectively.*

**Keywords:** Sustainability, Sustainable Community, Sustainable Community Development, Information Analysis, Digital Age

**DOI:** <https://doie.org/10.50390/NCAEJ.2026766487>

### Introduction

The key to understanding and accessing the global village in this digital age is information. Relevant information unlocks the human senses to existing opportunities and means of exploring the opportunities for achieving sustainable community development activities. Information gathering gives data that helps to understand the strengths, weaknesses opportunities and threats in a community. Community development process requires information in carrying out need identification and prioritization, decision-making, resource mobilization, participation, implementation, monitoring, and evaluation. For each of these tasks, a different type of information is needed. To ascertain the most relevant information, comprehending the following is essential: what is information? Why do we need information? What are the different types of information available? Where do we look for information? ([www.gcu.UK/library](http://www.gcu.UK/library)). This study focused on the importance of getting information within a geographical setting and analysing the information in a way that will enable inhabitants of the community and external agencies to understand their environment and work towards achieving sustainable community development.

### Information

Information derived from the Latin verb “informare” signifies giving form to the mind, discipline, instruction, and teaching. In layman's terms, information alludes to an item of

intelligence, a fact or circumstance of which one is told (Madden, 2000). Information is recognised as data made valuable and accessible, an integral component of decision-making (Jain, 2023). The concept of information is multifaceted, encompassing various perspectives. Information is a selection from a set of possibilities (Orthuber, 2020). The National Institute of Standards and Technology (NIST) defines information as any communication such as facts, data, or opinion in any form or medium, including graphic, textual, cartographic, numerical, audiovisual or narrative (Sheldon, 2024). Bateson's definition emphasises information as a difference that creates a difference (Hjorland, 2023). Information is objective and veridical (Mingers & Standing, 2017). For information to be information it has to be true (Mingers, 2013).

Generally, the conception of information is meticulously linked to philosophies of constraint, communication, control, form, data, knowledge, instruction, mental stimulus, pattern, meaning, perception, and representation (Paul & Chatterjee, 2015). Information is conferred as a representation of knowledge, data in the environment, a part of the communication process, and a resource or commodity (McCreadie and Rice as cited in Madden, 2000). The view of Madden directly explained that knowledge and ideas essential for the achievement of sustainable community development is a commodity that resides within our environment and has to be digested effectively by community members and external agencies for the successful execution of sustainable community development projects/programmes. In this digital age, information is classified on the basis of source, form, level, nature, use, frequency, time and type (Arora, 2018). Information sources are broadly categorized into human information (HI), institution information (II), and documentary information (DI) (Chatterjee, 2017). HI source are the experts and researchers in various fields, including technological gatekeepers, information consultants or brokers. II source are the different institutions and organizations working in various fields; while the DI source refers to a record of a body of information created on a paper manually, mechanically or digitally. Information type varies from conceptual to empirical, procedural, policy, descriptive/directive, and stimulatory (Sheldon, 2024; Ashikuzzaman, 2024). The physiognomies of information were recognized as relevance, comprehensibility, timeliness, and completeness. However, they upheld that not an iota of these is significant if the presumed information is untrue (Mingers & Standing, 2017). Therefore, information is a factual knowledge about a particular subject, issue, event, or process and can be obtained from different sources in the community.

## **Analysis**

Stanford Encyclopedia Philosophy (2024) defines analysis as a process of identifying or working back to what is more important. Information analysis originated from ancient civilizations' (Egypt, Mesopotamia, Greece, Rome) manual methods to Renaissance empirical observation, 20th-century computing, and modern artificial intelligence and machine learning techniques (Remesh, & Gaba, 2023). It is often used in several fields, including industry, education, scientific research, finance, business, marketing, healthcare, cybersecurity and government, physics and astronomy, ecology, and cultural heritage (Remesh, & Gaba, 2023; Zhao, Lian, Zhang, Song, & Yao, 2023; Demichev & Kryukov, 2024, Dictionary of Ecology, 2024; Almiyalhura, 2024). Information analysis alludes to systematic procedures of collecting, organizing, analyzing, and assessing data to gain valuable insights, make wise and correct decisions, and transform information into useful intelligence that inspires action and development (Remesh, & Gaba, 2023). Appropriate information analysis will result in efficient, effective, and sustainable community

development projects/programmes. The outcome of the analysis is to recognise performance gaps that need to be jettisoned, with a concentration on those that can be accomplished (Kucharcikova, 2014). Succinctly, the significance of information analysis for community development projects/programmes are improved efficiency, quality, communication, prediction, and decision-making (Almiyalhura, 2024). Quantitative and qualitative information is crucial to building awareness and gathering support for community issues (Nagy, 2018). Since the community is made up of different individuals or groups living within a geographic area and sharing things in common, it becomes germane that community development processes require accurate and relevant information to address the unique needs of each community.

The methods of gathering information for engaging the community and getting feedback include interviews; surveys/questionnaires; focus groups; community forums/listening sessions; and walking surveys; existing data review; and observation (MN Public Health Corps 2022). The significance of information analysis is a means of valuing the expected gain from reducing uncertainty through some form of data collection exercise (Wilson, 2015). Therefore, information analysis in community development is a step-by-step process of breaking down ideas, opinions, knowledge, statements, facts, and figures generated by the community members and external bodies to eradicate all barriers against effective needs identification, planning, resource mobilization, citizen participation, implementation of actions, monitoring/supervision of events and evaluation of projects and programmes. This implies that information is so important, powerful, and highly significant for the successful actualization and accomplishment of any community development activities.

### **Sustainable Community Development**

The concept of community development connotes several definitions to different authorities and countries of the world. Its practices among individuals, communities, governments, and non-governmental organisations are similar. The term “community development” is as old as man but gained universal recognition in the year 1945 through the Cambridge Summer Conference. Community development is broad and can be seen as a participatory process, a practice, a social movement, an occupation or profession, and an academic discipline (Banks, Shevellar, & Narayanan, 2023). Community development can be defined as working with communities to build resilience through collaborative action, shared capacity building, and the development of strong relationships built on mutual trust and respect (Tasmania Fire Service, 2020). Community development works with communities who are disenfranchised, marginalized, and faced with broad social issues resulting from unjust policies and planning at global, national, state, and local levels (Goel, 2014). United Nations in Hanachor (2013) gave an acceptable general definition of community development as:

a process by which efforts of the people themselves are united with those of governmental authorities to improve the economic, social, and cultural conditions of communities to integrate those communities into the life of the nation and enable them to contribute fully to national progress. (p.184).

The above definition shows that communities should see community development as what they do for themselves (self-help). Therefore, their participation in the process is sacrosanct. The process can be initiated by the community itself or other agencies, what is important is that the benefitting community is involved in the process. In any way community

development is approached, Frank and Smith in (Ugwu and Aruma, 2020) affirmed that it is a process that will eventually make community members responsible for their own development, strengthen their capacity, empower them, reduce ignorance and poverty and help them achieve social, economic, cultural and environmental goals. The above elements or indices of development are what make community development sustainable. In the context of this study, sustainable community development is defined as development initiative which articulates on meeting the needs of present generation without compromising the ability of future generations to meet their own needs through information analyses (Ugwu and Aruma, 2021). Sustainability here means that the outcome of the development process lasts long and stands the test of time and outlives the initiators.

In most communities, people lack adequate information on how to welcome change agents and community development agencies that want to help them transform their communities. Most times, the community members task and provide conditions that will warrant the development agencies to depart and abandon their work. However, studies have demonstrated that community members are repeatedly underrepresented in two key aspects: data analysis and co-authorship (Khudadad, Peterson, Ritondo, & Giles, 2023; Israel, Eng, Schulz, & Parker, 2005). Most projects or programmes carried out by development agencies intending to build man and develop his community fail to materialize because of inadequate information analysis about the projects or programmes and the communities they wanted to develop. Research has shown how communities share and seek information, with fewer studies on how they use, need, and evaluate information (Tang, Mehra, Du, & Zhao, 2021). The investigation demonstrated that effective information sharing and collaboration (information behaviors) that lead to impact happen within partnerships between community, change agents, and governmental and non-governmental organisations (Cattlin, & Given, 2024).

### **Importance of Information Analysis in Community Development**

Information analysis enables both the community members and external bodies to have clear and detailed answers to the following questions.

Who did the project?

What was the situation of the community before the commencement of these development initiatives?

Were the community members in support of the community development projects or programmes?

How and what did the community or external bodies contribute to the growth of the community development projects or programmes?

What were the constraints to the successful execution of community development projects or programmes? and

What is the present situation of the community?

What are the sustainability plans?

Knowledge of the above makes it easier for community development practitioners and external agencies to understand the community and for communities to improve their lifestyle for the promotion of social welfare and standard of living.

Constraints to Information Analysis for the Promotion of Community Development

In both rural and urban regions, access to information is affected by several obstructions, such as low level of literacy, lack of proper information services, infrastructure, technical know-how, and lack of suitable information policy and governance directed to the communities (Mansoor & Kamba, 2010). Constraints to information analysis in community development include the following:

**Conflict:** Communal clashes and disagreements from two opposing groups or individuals in the community, affect the generation and digestion of information within the community. This created tension and worries over the successful actualization or accomplishment of community development activities

**Leadership Tussle:** Power tussles among community members and opinion leaders, chiefs, and councils of elders drastically affect the passage of appropriate information for the promotion of community development

**Communication Barriers:** Communication becomes effective only when the receiver can decode the message or information sent by the sender and adequately gives feedback. The use of ambiguous words and wrong channels of communication leads to misunderstanding and misinterpretation of the information passed across.

**Low participation or inactive involvement** of community members in previous community development activities affects the generation of information and analysis for the promotion of community development.

**Inferiority Complex:** Marginalisation, oppression, dehumanisation, discrimination, gender disparities, sex stereotypes, and ethnic sentiments among members of the community affect information analysis in community development.

**Ignorance:** If the change agents and external agencies are uninformed or uneducated about the cultural norms and values, customs, community structures, and settings, information analysis becomes so difficult and continuously affects community development activities.

### **Steps Adopted in Analysing Information for Sustainable Community Development**

There is a need to ask ourselves these questions before devising steps that will enable us to analyze information for the promotion of community development. These include: Where do we start? What do we need? Who do we meet? How can we meet them? When are we starting? These are the questions we need to consider or concentrate on during the process of analyzing information. The following steps are involved:

**Community inventory:** This provides us with a detailed list of all the information available in the community. Community inventory alludes to a careful review of the community, clarifying necessary information, data, and needs of the community that would be useful to community development agents to realize development intervention efficaciously (Ugwuzor, 2017). Ugwuzor, categorised community inventory into four areas: inventory of the community history, the institutions that serve the community, the human and material resources, and lastly, community needs and problems. There is a popular saying “the past is the key to understanding the present”. Clear information on the history of the community, the institutions that existed and exist in the community, the available resources within the community, and careful identification of community needs and problems will guarantee a good start. Transition United States (2013) stated processes to follow when conducting community inventory and they include the following:

Identify the groups that will conduct the inventory as well as present the findings. This could be done by assigning roles and tasks to different individuals

Discuss what you want the end product to be  
Discuss and decide on a research plan, indicating the scope of the research, how the research data will be categorized, and the timeframe for it  
Conduct the research  
Review the research results  
Develop conclusions from the research  
Develop a research report and  
Follow-up the results.

## **Planning**

According to Salami, Alabi, and Okemankinde cited in Nzegebullem and Onyeagbako (2016:284) planning is “the process of obtaining and analyzing statistics and systematically using them to make projections for future development in particular estimates of human, physical, and financial resources needed to achieve proposed development”. Planning involves what is to be done, when, where, how, and by whom it is to be done (Sarker, 2019), and it bridges the gap from where we are to where we want to go. Ontario Agency for Health Protection and Promotion (2015) advocated six steps for planning community development activities as well as analyzing useful information that will enable development experts and community members to surmount barriers. They include the following:

Manage the planning process: this is performed by developing a plan to manage stakeholders' (private individuals, government, and non-governmental agencies) participation, allotting timeframe, allocating human and non-human resources, determining techniques for gathering data, interpreting the data, and making decisions.

Conduct a situational assessment: this is done by learning more about the population interests, trends, and issues (needs, wants and assets of the community) that may affect the implementation

Identify goals, populations of interest, and outcomes of objectives

Identify strategies, activities, outputs, process objectives, and resources

Develop indicators: This implies using the developed indices to ascertain the overall performance and outcomes of the techniques and strategies employed at the initial stage

Review the programmes plan: this is done by identifying gaps, ensuring adequate resources, and ensuring consistency with the situational assessment techniques.

## **Need Identification and Assessment**

Needs identification is the process of understanding, considering, and stating the desires and requirements of the community members without lacking confidence. Imperatively, needs identification involves a general outlook of both priority and pressing needs of the community with more attention and earnestness given to the urgent needs. Once the community has identified its needs, the change agents or external bodies assess the needs according to the order of urgency. Centers for Disease Control and Prevention (CDC) (2013:6-7) conceived community needs assessment as that which affords community leaders with a photograph of local policy, system, and environmental change strategies presently in place and aids in identifying areas of enhancement. They further categorised the primary outcome of community needs assessment into three: policy change, system change, and environmental change. The policy change contains laws, regulations, rules, protocols, and procedures designed to guide or influence behaviour. System change includes the change that

affects all community components including the social norms of an organization and institution while environmental change relates to the physical, social, or economic factors designed to influence people's practices and behaviours. Needs assessment at the community level adopted various tools including community meetings; surveys; interviews; focus group discussions; asset inventory and community mapping. The essence of needs assessment is to help, judge, and evaluate the content of information retrieved from the community members to enable external bodies to dictate, select, and tackle the most important needs and problems of the various communities.

### **Decision Making:**

At this stage, optimal judgment is made depending on the outcome of needs identification and assessment performed by the community members and development agencies. Muegge (1997) observed that community decision-making has some basic beliefs and values, which are as follows:

Every community has strengths, problems, and concerns

Individuals inside each community have the skills to solve their problems and achieve their own goals

Decision-making must suit the area where the challenge exists

Individuals affected at each stage of the process must actively participate in the decision-making

Communities need to identify their own needs, set priorities, plan for the future, and take responsibility for their future.

Habib, Madajewicz, and Tompsett (2023) maintained that decision-making increases the impact of community development projects and programmes. Similarly, Bell and Reed (2022) Participatory decision-making increases the transparency, accountability, equity and efficiency with which public administration serves the least privileged in community development activities. Muegge nine steps in community decision-making include: examine the situation; arrive at goals; identify key problems; determine priorities; identify and analyze alternative solutions; select a course of action; develop an action plan; implement the plan; and evaluate the outcome

### **Mobilization of Resources**

Resources are biotic and abiotic materials obtainable in our environment which mollifies the needs of the people. Also, resources could be human and material in nature. Seltzer (2014) conceived resource mobilization as all activities involved in securing new and additional resources for an organization, making better use of them and maximizing existing resource. In community development, mobilization of resources is seen as a process of bringing stakeholders together, raise people's awareness, assist in the delivery of resources and services, facilitate and strengthen community participation for sustainability and self-reliance (World Health Organisation, 2010). Global Communities Partners for Good (2015) outline five steps of up-and-coming community engagement and mobilization to include the following:

- i. Begin with a diaphanous community selection process and share upshots: Draw community priorities and recognize community leaders through community assessments

- ii. Hold an introductory meeting with community leaders and solicit their support to mobilize community participation
- iii. Hold community assembly meeting to designate local representation to synchronize programme activities
- iv. Allow communities to prioritize and select quick impact projects to solidify support and galvanize local participation.

### **Participation of all members**

Community participation according to Burns, Haywood, Taylor, Wilde and Wilson (2004) concerns the engagement of individuals and communities in the decision about things that affect their lives. Costumado & Chemane, (2024) measured community participation a significant approach for making local-level development projects accountable, citizen-centric, and sustainable. Community participation drive partnerships between the formal and informal structures in promoting sustainable community development activities (Ojielo, Etiaba, & Onwujekwe, 2024). Analyzing information relevant to the development of the community requires the active participation of individuals and groups interested in the welfare of the community. Findings of Ara, Seddiky, Basit, & Khanam (2024) identified lack of knowledge and information as deficiency of community participation. Community participation will go a long way to motivate the people, enable them to pick an interest and assist the external agencies with appropriate information for the successful execution of the development project or programmes.

### **Implementation**

At this level, the whole ideas, concepts and thoughts generated above are put into reality for a positive result. Damshroder and Hagedorn in Durlak (2013) sees implementation as “efforts designed to get evidence-based programmes or practices of known dimensions into use via effective change strategies”. Quality implementation of development projects/programmes rests on the teamwork of all relevant and responsible stakeholders starting from the local practitioners, project/programme developers, local administrators, policymakers and funders of the projects/programmes. American Institute for Research (2015) opined that successful implementation of development projects/programmes depend on the following factors:

A strong and convincing vision for the work  
Measurable goals  
Identified roles and obligations and assigned them to an implementation team  
Advance monitoring and accountability  
Course correction, and;  
Sustainability.

Similarly, Mungai (2013) citing Green and Kreuter divulged the keys to quality implementation as sensitivity to individual’s needs, experience, suppleness in the face of varying circumstances, a sense of hilarity; and keeping an eye on long-term goals.

### **Conclusion**

This paper has been able to establish that appropriate information is the fountainhead of community development projects or programmes, in any community. Community

development adopts various steps in conducting its activities and at every stage, information becomes paramount. The paper therefore concludes that there is need for information analysis in community development process to enable both the community members and external bodies comprehend the existing problems, forecast future problems and properly device adequate methods and approaches needed for the promotion of sustainable community development.

### **Suggestions:**

Based on the conclusion, the following suggestions were made:

1. Development practitioners at various levels of government should adequately partner with responsible and relevant community-based organizations (CBOs) for reliable information that will facilitate community development programmes and projects.
2. Information on past and present community development activities conducted by development practitioners should be documented and submitted to the Community Development Commission (CDC) offices at the various Local Government Areas (LGAs) for future reference and purpose.
3. Adult education experts as change agents, and representatives of the community should be fully involved and engaged in the information gathering and analysis for the promotion of community development projects and programmes.
4. Sustainable data management systems for community development projects and programmes should be developed and implemented effectively.
5. The use of emerging technologies to enhance information analysis for community development should be encourage among development practitioners.

### **References**

- Almiyalhura, A. L. (2024). What is information analysis and its importance to your project? <https://alalmiyalhura.com/articles/what-is-information-analysis-and-its-importance-to-your-project>
- American Institutes for Research. (2015). The equitable access implementation playbook: Implementation planning tools. Center on Great Teacher and Leaders. <https://www.air.org>
- Ara, E., Seddiky, M.A., Basit, A. & Khanam, R. (2024). Enhancing Community Participation in Local Development Projects: The Bangladesh Context. *European Scientific Journal, ESJ*, **20** (19): 84. <https://doi.org/10.19044/esj.2024.v20n19p84>
- Arora, R. (2018). Information sources: concept, and needs for information. In information sources, systems and services. INFLIBNET Centre. <https://ebooks.inflibnet.ac.in/lisp4/chapter/chapter-1/>
- Ashikuzzaman, M. D. (2024). Information: types of information. Lisedunet work. <https://www.lisedunetwork.com/definition-and-types-of-information/>
- Banks, S., Shevellar, L., & Narayanan, P. (2023). Ethical issues in community development: setting the scene. *Community Development Journal*, **58** (1): 1–18. <https://doi.org/10.1093/cdj/bsac043>
- Burns, D., Haywood, F., Taylor, M., Wilde, P., & Wilson, M. (2004). Making community participation meaningful: A handbook for development and assessment. The Policy Press
- Cattlin, J., & Given, L. M. (2024). Information relations for social change: exploring the information behaviour of academics undertaking impact work. *Information Research*

- and International Electronic Journal*, **29** (2): 230–245.  
<https://doi.org/10.47989/ir292824>
- Chatterjee, A. (2017). Chapter B – information sources. In Chatterjee, A. (ed.), *element of information organization and dissemination*. Chandos Publishing.  
<https://doi.org/10.1016/B978-0-102025-800002-8>
- Center for Disease Control and Prevention. (2013). *Community need assessment*. Department of Health and Human Services
- Costumado, M. & Chemane, J. A. D. (2024). Stakeholder Engagement and Community Participation in Sustainable Development in Southern Africa. In N. Tshishonga & I. Tshabangu (Eds.), *Democratization of Africa and Its Impact on the Global Economy* (pp. 48-72). IGI Global.
- Demichev, A. & Kryukov, A. (2024). Using deep learning methods for IACT data analysis in gamma-ray astronomy: A review in astronomy and computing.  
<https://www.sciencedirect.com/topics/physics-and-astronomy/information-analysis>
- Durlak, J. (2013). The importance of quality implementation for research, practice, and policy. ASPE Research Brief. Office of Human Services Policy. U.S. Department of Health and Human Services
- Global Communities Partners for Good (2015). *Five steps of successful community engagement and mobilization*. Global communities.  
<https://www.globalcommunities.org>
- Goel, K. (2014). *Understanding Community and Community Development*. Researchgate.  
[https://www.researchgate.net/publication/the\\_n/273134736](https://www.researchgate.net/publication/the_n/273134736)
- Habib, M. A. Madajewicz, M., Tompsett, A. (2023). When does community participation indecision-making improve outcomes? evidence from a field experiment in Bangladesh. ADBI Working Paper Series, 1406. Asian Development Bank Institute.  
<https://doi.org/10.56506/FEQW6636>
- Hanachor, M.E. (2013). *Community development: Principles and approaches for effective community development practices in Nigeria*. In B.A. Eheazu, C.N. Barikor, & I.S. Nzeneri (Eds.), *Readings in adult and non-formal education*. Port Harcourt: University of Port Harcourt Press.
- Hjorland, B. (2023). *Information. Knowledge Organization*, **50** (1): 47-78.
- Israel, B. A., Eng, E., Schulz, A. J., & Parker, E. A. (2005). Introduction to methods in community-based participatory research for health. In B. A. Israel, E. Eng, A. J. Schulz, & E. A. Parker (Eds.), *Methods in community-based participatory research for health* (pp. 3–26). Jossey Jain, S. (2023). What is data vs what is information? Bloomfire. <https://bloomfire.com/blog/data-vs-information/>.
- Khudadad, Peterson, Ritondo, & Giles, (2023) *Community members’ participation in data analysis and co-authorship*. <https://doi.org/10.4324/9781003430339-15>
- Kucharcikova, A. (2014). The importance of identification and analysis of educational needs for investment in human capital the importance of identification and analysis of educational needs for investment in human capital. *Communiations*  
<https://doi.org/10.26552/com.C.2014.3.86-92>
- Madden, A. D. (2000). A definition of information. *Aslib Proceedings*, **52** (9): 343-349
- Mansoor, Y. & Kamba, M. A. (2010). Information acceptance and ICT resistance: Promoting the role of information in rural community development. *Library Philosophy and Practice* (e-journal), University of Nebraska - Lincoln Year 2010; 1-6.
- Mingers, J. (2013). Prefiguring Floridi’s theory of semiotic information. *Triple C: Communication, Capitalism and Critique*, 11:388-401
-

- Mingers, J. & Standing, C. (2017). What is information? Toward a theory of information as objective and veridical. *Journal of Information Technology*, **33** (2): 85-104. <https://doi.org/10.1057/s41265-017-0038-6>
- MN Public Health Corps (2022). Information Gathering Methods for Engaging the Community and Gathering Feedback. Health state. <https://www.health.state.mn.us>
- Muegge, J. (1997). Effective community decision making. Omafra. <http://www.omafra.gov.on.ca/english/nfporgs/93-043.htm>
- Mungai, G. A. (2013). Factors influencing implementation of non-formal basic education curriculum at the non-formal education centres in Nairobi, Mombasa and Kisumu cities, Kenya. PhD thesis submitted to the University of Nairobi.
- Nzegbulem, P.S.C & Onyeagbako, S.O. (2016). Planning and management of education innovations for effective secondary school productivity in Nigeria. In S.O. Oluwuo & J. D. Asodike (Eds.), *Managing schools for productivity: Emerging perspectives*. Pearl Publishers International LTD.
- Ojielo, N. C., Etiaba, E., & Onwujekwe, O. (2024). To what extent do community members participate in planning, implementing health programs within their communities and what are the benefits of their participation in Nigeria? *International Journal of Community Medicine & Public Health*, **11** (7): <https://doi.org/10.18203/2394-6040.ijcmph20241804>
- Ontario Agency for Health Protection and Promotion. (2015). *At a glance: the six steps for planning a health promotion program*. Toronto, ON: Queen's Printer for Ontario
- Orthuber, W. (2020). Information is a selection – a review of basics shows substantial potential for improvement of digital information representation. *International Journal of environmental Research & Public Health*, **17** (8): 2975. <https://doi.org/10.3390/ijerph17082975>
- Paul, P. K. & Chatterjee, D. (2015). Quantum information science and a possible domain for future information school. *Encyclopedia of Information Science and Technology*, Third Edition. Doi: 10.4018/978-1-4666-5888-2.ch251
- Remesh, A. & Gaba, S. (2023). Information analysis: Definition, history, types, and usage. Strike money. <https://www.strike.money/technical-analysis/informational-analysis>
- Sarker, A. (2019). Planning function of management. Researchgate. <https://www.researchgate.net/publication/371834256>
- Stanford Encyclopedia Philosophy (2024) Analysis.
- Seltzer, J.B. (2014). What is resource mobilization and why is it so important? Healthcomm capacity. <https://healthcommcapacity.org/author/judithseltzer/>
- Sheldon, R. (2024). Definition: information. Techtarget. <https://www.techtarget.com/searchdatamanagement/definition/information>
- Tasmania Fire Service. (2020). *Community Development Framework: TFS Community Development & Education Unit*. Retrieved from [www.fire.tas.gov.au](http://www.fire.tas.gov.au)
- Transition United States. (2013). How to conduct community inventory? Transitionus. <https://www.transitionus.org/how-conduct-community-inventory>
- Ugwu, A.N. & Aruma, E.O. (2020). Social development strategies for the promotion of community development in Nigeria. *Journal of Education & Practice*. USA: *International Institute of Science, Technology and Education (IISTE)*, **11** (11): 46-51.
- Ugwu, A.N. & Aruma, E.O. (2021). Interventions of corporate social responsibility of oil companies in promoting sustainable community development in host communities in Niger Delta, Nigeria. *Archives of Business Research*, **9** (3): 208-216.
- Ugwuzor, S.O. (2016). *Community development: A pragmatic approach*. Yola, Adamawa State: Godswill Business Venture.

- Wilson, E. C.F. (2015). A practical guide to value of information analysis. *Pharmaco Economics*, **33**: 105-121. <https://doi.org/10.1007/s40273-014-0219-x>
- World Health Organisation (2010). *Community mobilization*. Geneva, Switzerland: WHO Press. NCBI. <https://www.ncbi.nlm.nih.gov>

Zhao, Y. C., Lian, J., Zhang, Y., Song, S., & Yao, X. (2023). Value co-creation in cultural heritage information practices: Literature review and future agenda: An Annual Review of Information Science and Technology (ARIST). *Journal of the Association for Information Science and Technology*, 75(3):298-323. <https://doi.org/10.1002/asi.24862>