

Theory and Social Research Methods: A Study of Public Policy in Flood Disasters' Mitigation in Illushi Community in Edo State

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Abstract

Theory is central to the research process. It is the lens for viewing problems; and the way to fashion out solutions. Theory determines the research hypothesis, research design, and generalization. A theory enhances the scientific content of research and the search for solution to social problem. A theory is a mental map of reality. Applying theories to social research began with the behavioural revolution which emphasized empirical studies such as Public Policy in Flood Disasters' Mitigation in Illushi Community of Edo State. In 2012 and 2018, disastrous floods were witnessed in Illushi. The qualitative research method was used. The main objectives of this study are to find out: the role of theory on social research methods featuring Public Policy and Mitigation of Flood Disasters in Illushi; the impact of theory on formulation of hypothesis; and Enhancement of capacity to predict outcomes and make generalization. The Theoretical Framework is anchored on System Theory; and Structural-Functional Theory. Findings reveal that government aid to mitigate the hardships on flood victims in the study area was insufficient; theory enhances the scientific content of research; theory promotes the formulation of hypothesis; and theory promotes the prediction and generalization of the research. This study makes the following recommendations: There should be an overhaul of the Public Policy on Mitigation of Flood Disasters; and Theory and scientific empirical data should be fully incorporated into Social Research Methods.

Keywords: Theory, Public Policy, Social Research, Mitigation, Flood Disasters

Introduction

Theories refer to a set of ideas that help to explain why something happens. They can also refer to principles on which a particular subject is based. Theories are thus simplifications and abstractions of the real world for discovering facts which enhance our understanding.

There are debates on the status of general theory in social research. Some views the descriptive study as an exact science hence emulates objectivity as well as conceptual and methodological rigor of science. Others posit that because of the unpredictability of man's actions and behaviour, predictions in political science cannot be absolutely certain. Political researches are based on empirical facts while that on normative are based on values. Jackson and Jackson (2000, p.31) argue that political scientists should stop basing generalizations on casual observation. Instead, they insist, that research should be explicit about the rules employed to describe and analyse politics. They argued further that studies of political research must employ a general theory of the polity; and predict a wide range of outcomes. This, according to them, would allow scholars to obtain scientific-law-like generalizations. Almond and Genco (1977) on the other hand, maintain that politics is not totally predictable since human behaviour is involved.

They argued that there cannot be a direct cause-and-effect relationship among the variables. By extension, some scientists are saying that a grand over-arching theory is impossible in

social science research. Behaviouralism by David Easton and others sought movement from philosophy to scientific methods. Behaviouralism which appeared on the scene in late 40s in political researches became a revolution; due to the deficiencies of the traditional approach which had little analytical strength. Leeds (1981, p.2) criticized the “old institutionalism” for its poor predictive nature; while preoccupied with the structures of government. Relatedly, empirical statements are valid statements because they are verifiable; and they state facts that are observed through rigorous scientific methods (experimentation and statistical control procedures). Normative philosophy or propositions are anchored on ideology, theoretical malnutrition, name-attribution, prescription (“what ought to be”), values, norms and human reasoning. It is thus indeterminate in nature. Human behaviour is unpredictable hence vulnerable to change (Dye and Zeigler 1970). Another argument against social science research being fully scientific is that the social researcher is not value-free as the true scientist. Because people are moral beings, the social scientist cannot divulge values from his work on research.

More importantly, the key to building precise theories is to develop and test hypotheses. Hypotheses are tentative suppositions that are formulated to be tested. When they are fully tested and replicated in many places over a long period of time, they can become confirmed theory. Theories can be graded as Limited theory, Middle level theory and General level theory (Saliu, 2019, p.48). Experimentation is a main thrust of empiricism and scientific research such as Public Policy on Mitigation of Flood Disasters in Illushi. A theory is a set of interrelated constructs (concepts) and propositions that present a systematic view of phenomena (Obasi, 1999, p.38). A theory is formulated to have three objectives: (1) sets out the connections or linkages among a group of variables; (2) represents a systematic view of phenomena described by variables; and (3) explains and predicts phenomena across space and time. A theory is thus a scientific generalization of a research finding that aid the prediction of a research phenomenon (Ibaba, 2004, p.26).

Theory is therefore related to research; as it is the central element of research. Theory runs through a research, while research can lead to the building of new theory. Scientific methods and scientific tools that are employed in social science research make these scientific researches distinct from mere normative or descriptive studies. To achieve scientific status, behaviouralism prescribes a closer affiliation with theories and methods. According to Dahl (1961), understanding of political science through involvement of theories, empirical proofs and scientific methods are acceptable according to the assumption of modern empirical science. Public policy, on the other hand, entails making laws for the overall interest of the citizens to solve social problems. The word “Public” originated from the Latin word “Publicus” meaning masses or people; while Policy is the course of action or system of administration (Mbieli, 2010, p.46).

Public policy is thus an authoritative decisional output of a political government to solve a social problem such as mitigation of the hardships suffered by flood victims in Illushi, Anegbette, Osomegbe and Udaba communities in Edo State. Floods, as defined by the European Union Flood Directives (2007) means “covering of land not normally covered by water”. According to the Director-General of National Emergency Management Agency (NEMA), Nigeria lost N2.29 trillion to the 2012 floods in Nigeria, described as the worst incidents in the history of Nigeria (Nwodim, 2016, p.54). The role of government in the implementation of public policies for mitigating climate-related disasters such as flooding cannot be over-estimated. The Government Ministries, Agencies and Parastatals involved in the environmental policy formulation and execution in Nigeria include Federal Ministry of

Environment, National Emergency Management Agency (NEMA), State Emergency Management Agency (SEMA), Ministry of Special Duties (at the state level), Ecological Funds Office and Local Governments. The Red Cross equally assist the government operatives. According to Adebayo (2014, p.447), “Nigeria will continue to labour under the pains of flood disaster unless there is a radical approach to avert the disaster”. To meet the challenges of flooding, there is need for government to promote sound flood policies to mitigate climate-induced negative impacts.

Flowing from the above, Adebayo (2014, p.459) stated that the Federal Government of Nigeria released N17.6 billion as a bailout for flood victims in Nigeria following the year 2012 flood disaster. The money was taken from the Ecological Funds Office established through Decree 36 of 1984. The Fund was modified by Allocation on Revenue, Federation Account Order of 8th July, 2002. Although flood victims in Illushi received government aid, the absence of insurance for flood victims made the mitigation efforts of government less effective. According to Michener (1998), the United States of America in 1973, enacted the Federal Flood Disaster Protection Act (1973) to provide federally subsidized insurance for property owners in identified flood – hazard areas. The Act is meant to provide succor to flood victims. He stated that in the 1997 USA flooding, 43 of California’s 58 counties were declared disaster areas. He went further to state that 16,000 residences were destroyed, and with \$1.6 billion in damage to private and public properties. He concluded that insured losses in Washington were estimated at \$125 million. Relatedly, the Federal Government of Nigeria repealed the Federal Environmental Protection Agency Act and enacted the National Environmental Standards and Regulations Enforcement Agency (Act 2007). The act is charged with the responsibility of protecting the environment, including mitigation of negative effects of flood hazards.

Finally, flooding is a growing menace in Illushi community in Esan South East Local Government Area of Edo State. Similarly, the people of Udaba, Anegbette, and Osomegbe communities of Edo State in Nigeria have experienced two bouts of severe flooding resulting in severe loss of crops and source of income (Imonikhe, et al, 2020). Incidents of flooding, according to Nwodim (2016), have become frequent in Nigeria as in 2012 alone, about 23 states were affected by flood which increased to 32. In this flood disaster, many houses were submerged in Illushi. Another flood disaster was again recorded in Nigeria in 2018. According to the National Emergency Management Authority (NEMA), a total of 11,977 beneficiaries received emergency shelter items, which enabled them to meet their immediate needs. These donations came from governments, private organizations and Red Cross. The Edo Government having identified areas prone to flooding warned residents, as a matter of urgency, to move upland to avoid being overtaken by menacing flood. Floods that came forced people away from their houses, many died, and properties worth millions of naira were destroyed in Illushi, Anegbette, Osomegbe and Udaba communities in Edo State. No fewer than 20,000 households in Illushi and environs were affected and thousands of hectares of farmlands were washed off (IFRC, Situation Report, December 27, 2012).

Methodology

The qualitative research method was employed in data collection and analysis. Secondary data were sourced from books, journals, magazines, newspapers, archival materials, published research papers and theses.

Theoretical Framework

This study is anchored on two theories in midst of several other theories. These two theories are: (i) System theory; and (ii) Structural – Functional theory. These are further explained below:

(i) System Theory

The system theory was enunciated by David Easton, who believed that different people in different units or levels play complementary roles to form a system. Different units and their associated functions merge together to form a political system as a whole body. In addition, system approach or model is also called system analysis whereby an organization is viewed as a system with interrelated parts performing different functions which contribute to the whole structure. It was developed in the 50s to eliminate the deficiencies of the classical model. The system theory is prominent in the works of M.P. Follet, Chester Bernard, Herbert Simon and Philip Selznick. Flowing from these various writings, the system is seen as a unified whole having a number of inter-dependent parts or subsystems but with identifiable boundaries. The System theory explains how public administrative activities are coordinated within a system, together with the subsystems that interact.

Furthermore, the System theory views the administrative system as integration of formal organizations, roles and individuals who are political actors. There are inter-linkages among the various parts. There is thus an interaction between an administrative system and its external environment. Public administration is intended to facilitate positive outcomes of these interactions; link people and government; and execute public laws. The execution of public laws (such as the public policy on mitigating the harsh effects of flood disasters in Illushi and environs) requires that the core-elements of the System theory which are inputs (problems presented by the people to government such as flooding), processes, output (government policies) and feedbacks (such as public policy on flooding adopted and implemented by government), are harnessed in a manner that promote functionality, cooperation and collaboration. Government and people who form a system, are expected to collaborate to create a stable system for the formulation and execution of public policies on social problem (Lamidi, 2015), such a flooding in Illushi and environs. The activities of the subsystems affect the entire people and government. A good social order and regulation ensure smooth formulation and implementation of public policies by government.

(ii) Structural-Functional Theory

Functionalism stresses the collaborative operation of government and the people to establish a stable society. The conception of society as a system is extracted from the biological interconnections and functions of the body. Although the eye, ear, hands and legs are different parts of the body (a system), they function well together to make the whole body sound. Therefore, in a political system, there are government organs who perform different functions to make the society run well. There are the executive, judiciary and legislative arms of government. They constitute the output segment of the society that churn out policies to satisfy the demands of the people. Such policies are Public Policies on Mitigation of Flood Disasters in Edo State. The Public Policy on Mitigation of the hardships suffered by the flood victims in Illushi and environs in Edo State is an example of this. Government organs are thus, structures that function to ensure the smooth delivery of services to the public. Such services include government aid and succour to flood victims to strengthen their resilience and survival.

Literature Review

This Literature Review is done along the following themes:

- (a) Meaning, Importance and Application of Theory.
- (b) Flooding and its Socio-Economic Impacts.

(a) Meaning, Importance and Application of Theory

According to Kerlinger (1973), a “theory is an interrelated set of concept definitions and propositions that presents a systematic view of phenomenon”. Bailey (1982) sees theory as a framework involving demonstrated hypothesis containing the facts of a unified system purporting to explain a natural phenomenon. A theory therefore permits us to predict what happens to a given phenomenon. A theory is therefore an attempt on part of a social scientist to order many facts into a meaningful pattern to synthesize the existing knowledge (Atole, 2012, p.35). A theory therefore, consists of facts unified into a whole that provides a solution or explanation of what happens in the real world.

Similarly, Saliu, (2019, p.48) stated the importance of theories as follows:

- i) The application of theories makes a research to be professional.
- ii) The whole essence of theorizing is to multiply our knowledge stock.
- iii) A theory explains a phenomenon more intensely and shed more light on what is being investigated.
- iv) The extension of theories into research works makes them more structured and planned.
- v) Theories enhance our capacity to predict social situations.
- vi) Theories in scientific studies point the way forward and help us to prescribe solutions to problems.
- vii) Theories help in describing and finding solutions.
- viii) Theories help us to share knowledge globally.

In all, research and theory go hand-in-hand; as theory stimulates research, research leads to the generation of new theories. Research theory should be able to predict the outcome of the relationship between Public policy (Independent variable) and Mitigation of Flood Disasters (Dependent variable) in Illushi. On application of theory to real life situations, Saliu (2019, p.60) gave examples with Marxian and Dependency theories. He posited that Dependency theory (International Relations) advocates for heaping all blames for Third World underdevelopment on external environment (Capitalist Western Countries); hence calls for de-linking with the Western Imperialist Countries. The Marxian theory, according to him, will not be appropriate here, as it deals with class struggle between proletariat and bourgeoisie which will require a revolution or violent change.

(b) Flooding and Socio-economic impacts of flooding

Flood is defined as an overflow of water that submergences usually dry land; occurring when a body of water moves over an area of land which is not usually submerged. In a similar vein, Owasoyo (2013) sees flood as water overflowing into land that is usually dry as a result of heavy rainfall. Agbonkhese, et al (2014), on the other hand, stated that flood is the inundation of an area through a temporary rise in the level of stream, river, lake or sea. In addition, Elenwo (2015) explained that flood is a body of water which rises to overflow land; while Nkwunonwo (2016, p.22) opined that flood is water overtopping its natural and manmade defenses and overflowing places not typically submerged. Finally, flood is a disastrous overflow of water from a river, lake or other bodies of water due to excessive rainfall or other inputs of water.

Furthermore, causes of floods are many, and some are caused by natural factors, while others are by human inputs. According to Adebayo (2014), flooding may be caused by climate change as a warmer climate lead to heavy rains and rise in river level. He equally opined that human activities such as bush burning, felling of trees, gas flaring, etc. have direct effects, and over time, progressively result into climate change. In all, he believes that lack of adequate environmental policy by government is the chief cause of flooding. In addition, B-Air (2018) itemized eight causes of flood as follows: Heavy rains, overflowing rivers, broken dams, storm surges, hurricanes and tsunamis, channel topography, lack of vegetation, melting snow and ice and blocked urban drainage. In all, other causes of flooding not fully explained by the Literature Review above are increase in population and demand for housing that put unbearable pressure on land resources, encroachment on river banks, blocked drainage networks, and poor development of real estates in highly sensitive riverine areas without adherence to town planning regulations thereby causing either flash flooding or overbank flooding.

Discussion of Issues in Focus

The following findings emerge from this study:

(1) Public Policy and Mitigation of Flood Disasters in Illushi and Environs

NEMA, SEMA, Ministry of Environment, Ministry of Special Duties, Ecological Funds Office, the Edo State Government and Esan South-East Local Government combined forces to donate relief materials to the flood victims in Illushi. They were assisted by the Red Cross and other Non-Governmental Organizations (NAN, 2018).

(2) Socio-economic Impact of Flood Disasters on Residents of Illushi and Environs

Climate change-induced flooding disasters caused so much socio-economic losses to the people of Illushi community. The 2018 floods brought untold hardships to the local residents. Many houses were washed away as well as thousands of farmlands. Many people became homeless as over 20,000 households were affected. Some persons even died (Vanguard News, 2018).

(3) Impact of Theory on Formulation of Hypothesis

This study reveals that the school of thought a researcher belongs to guide the formulation of the research hypothesis (Agara, 2013). The theory influences the hypothesis, while the hypothesis inturn, dictates the research design (Qualitative and Quantitative Methods). The research design inherently determines the nature of data collection and analysis. The theory is central to all of the above. The theory determines the nature and direction of the social research starting with choice of a social problem, and followed by formulation of the hypothesis.

Relatedly, it is the null hypothesis that is actually tested. As earlier stated, a hypothesis is a testable proposition in social research that can produce generalizations based on the rules of probability. Test of hypothesis enables the social researcher to establish probabilistic relationship between two variables.

(4) Research Design (Data Collection and Analysis)

This research is based on the descriptive (qualitative) research design. This affected the data collection and analysis. The basic data for the study were collected from secondary sources. The secondary source includes books journals, magazines, newspaper and archival materials. The data were analysed.

(5) Theory, Prediction and Generalization

This study found out that researchers are meant to produce results or findings. These findings lead to predictions and generalizations. Through findings, recommendations are made to solve the existing problems (Agara, 2019).

In addition, knowledge needs to be shared by scholars locally and globally, to boost the stock of knowledge. This can only come after good predictions are made concerning the relationship between two or more variables. This study featured the independent variable (Government assistance to flood victims at Illushi); and Dependent variable (mitigation of hardships on flood victims in Illushi). This study found out that government aid to flood victims in the study area was insufficient. More importantly, in the process of making recommendations or implementing them, new problems might arise which may lead to further research. Research is thus cyclical as research leads to theory and theory leads to new research. Researches are also replicable. Generalizations thus help to build theories which may be limited theory, middle level theory or general theory.

Finally, this study has produced predictions that can lead to generalizations. Such predictions include the fact that government's response to sufferings of flood victims in Edo State is poor. This can further be developed into generalization and theory. Theory is thus the basis of social research methods as seen in this case of Public Policy on Mitigation of Flood Disasters in Illushi in Edo State.

Conclusion and Recommendations

This study examines the Role of Theory in Social Research Methods. Theory is central to social science research. It is an indispensable tool in social research that is tilted toward science; which is also quantitative. The study shows that theory influences the formulation of hypothesis, research design (data collection and analysis) and prediction as well as generalization. This qualitative study examines public policy and mitigation of flooding disasters in Illushi, Anegbette, Osomegbe and Udaba communities of Edo State. Flood wreaked havoc in Illushi and environs in 2012 and 2018. Socio-economic losses were high in Illushi but government efforts to mitigate the hardships on the flood victims were poor. The study relied on the System theory and Structural-Functional theory.

The study found out that government aid has not fully reduced the hardships suffered by flood victims in Illushi community and environs. There is thus a gap in public policy. Other findings include the positive impacts of theory on formulation of hypothesis; research design (data collection and analysis); and generalization. There was also poor preparation on part of government and the local residents, although the residents made some efforts to combat the flood disasters. There was thus a gap between public policy formulation and execution. Recommendations are given below to provide solutions to attendant problems.

This study recommends the following measures, among others, to solve the identified problems:

1. Theory should be well applied to all quantitative and scientific social research methods.
2. Theory should be rigorously applied to formulation of hypothesis, research design (data collection and analysis) and generalization in social science researches.
3. Government should ensure that relevant flood information is available to all citizens in Illushi and environs. There should be early preparation on the part of the government and the citizens in flood-prone areas to control flood menace in the study area. There should be a good cooperation between residents and government.

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