

THE THEORY OF SOCIAL CLUSTERING AND THE REORGANIZATION OF HUMAN SOCIETY

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Abstract:-

Human society is characterized by the existence of social groups that interact on a day to day basis. Initial attempts have been made to understand how society members relate. This inquiry brought forth concepts and theories such as socialization, functionalism, anomy and deviance. As societies evolve, questions start to emerge as to whether they are sustainable in nature or not. One would want to know, for instance, whether the talked about content, structural and functional dynamism of these societies are breeding integration or loosening up of their social fabric. It would also be interesting to know what either integration or disintegration mean for any societies in terms of potential gains and losses, and what causes them. It is in this regard that the paper suggests that social clustering (geographical such as villages or functional such as worker's unions), or simply put as social integration, can help societies address their challenges. According to this paper, such issues surrounding cluster functions include emerging trends of environmental degradation, competition over resources, human migration, and increasing defiance among new generations to traditional cultural practices and roles that have all along kept traditional clusters together. The core argument presented in this paper is that in the context of a more modernizing and fast integrating world, individuals and families should embrace the idea of working together with others in social clusters as opposed to working in isolation so as to benefit from economies of scale, protect the environment and guarantee their safety and security. These aspects were initially seen to make business sense; however, trends indicate that they should gain more currency in sociological and environmental spheres as well considering the global demographic and environmental degradation trends, and it is only fair that they gain the acknowledgement they deserve. The paper is motivated greatly motivated by the researcher's own observation of social dynamics in Kenya.

Key concepts:- *Social, clustering, development, security, agricultural productivity, environmental protection.*

UNDERSTANDING THE CONCEPT OF CLUSTERS

The concept of clusters originated in the world of business. Alfred Marshall (1890:9-10), in his book *Principles of Economics*, talked of clusters as concentrations (or conglomerations) of industries in particular localities (in industrial districts). Such concentration of industries or businesses brings with itself, several other advantages that are associated with economies of scale and team work. Among these benefits are, less competition, easy access to supplies, enhanced security, low cost of services such as transport and security as organizations pool resources together and cooperate in intelligence gathering and sharing (Kuah, 2002; Andersen and Opsal, 2010; Sirkin 2012). Other benefits of clustering are expansion of infrastructure networks, technology and knowledge transfers, thick labor market, as well as natural advantages, resulting from more government support as well as other interventions Andersen and Opsal, 2010; Sirkin 2012. Generally, cluster theory covers what those in the business world refer to as economies of agglomeration (Porter, 1998; Wolman and Hincapie 2010, Chatterji *et al* 2013). The role of clusters in promoting both profit and economic growth has been widely acknowledged including by the World Bank which has listed its key achievements and opportunities for the future (World Bank, 2009).

For a long time, the theory has only been used by those in the business world, particularly gaining prominence in the field from 1990 following renewed interest in the topic and publishing of books and articles on it beginning with the work of Porter in the 1980s and the 1990s (Kuah, 2002). However, it has since gained currency in other field both as a theory and in practical application. Such includes the adoption of the concept of data clustering in information management and statistics where clustering has been adopted as an approach for categorizing data sets (Pariklis, 2002; Wanner, 2004; Lior and Maimon, 2005). Clustering is also gaining prominence in the field of biology where biological clustering is being explored as a model for asthma treatment (AAAAI, 2014), and in categorizing of disease symptoms (Miaskowski and Aouizerat 2007).

Although there is much talk in sociological circles about the adoption of clustering into sociological thoughts and models alongside functionalism and structuralism, not much has been written on sociological clustering. There is therefore need to co-opt this theory into sociological thinking considering how much gain can be made by societies if they were to adopt the idea of seeing each other as potential partners on the path towards gratifying all the needs of their members. Just like expanding an initially small business is expected to spread costs and increase profits, locating several households (or social units) in one place also reduces social costs for all the individuals, from a universal point of view, and hence improves returns on investment; whether social, economic or environmental as will be explained in latter. The question therefore becomes, how can this noble principle be applied to societies and to what positive end? Answering these questions requires an examination of the structure of human society itself.

The nature of human societies

Generally, the human society is divided into small units that are either deeply geographically or socially constructed and structured (Chapais, 2009). In clustering, one would agree, geography is more important (Jonas 2006:6-8). The groups consist of individual humans and work together either in a structured or non-structured way (Mondal, 2015). Whereas some have established institutions and order, some don't though they acknowledge there being a group with roles, and that they belong in the group. Members acknowledge their geographical or social ties that attach them to a shared destiny of a sort (Sheen and Kurzban 2006). In effect, it is expected, just like is the case with businesses, that society members can benefit from integration, and that social clusters arising from the process can share similar benefits and risks from their ties, and that the benefits should be identified and tapped just as the risks should be known and managed.

To illustrate this, one would want to look at the funeral rites among the Luo community in Kenya, as happens elsewhere globally where community members are expected to raise resources to be used in performing the rites. These resources range from buying the coffin, arranging for transport for the body, contributing foodstuff to be cooked during funeral feasts, digging the grave and laying the body to rest, among other things (Shiino, 1997; Odak, 2010; Asante *et al*, 2013). These efforts illustrate the role of cluster membership in reducing the costs and burdens associated with dealing with challenges by community members.

In a more modern context, people in one estate for example, share the same fate when it comes to estate security. They share similar security fears of not knowing when thieves may visit, and which house will be robbed. They are in effect more likely to pull together and organize for estate security, the achievements or failure of which will affect all the involved parties. This makes it important and possible to emphasize, even to a cosmopolitan population, the need for unity and striving to know the neighborhood as is emphasized by Nyumba Kumi Initiative in Kenyan (Nyapara and Sakataka 2015). Under such circumstances, even the post private individuals within a geographical location will embrace the call to partner with others as it is in their own interest. Similar conditions can be considered with the ongoing pressure that human population explosion is having on the environment and its ability to supply resources for our generations; both current and future. The environment cannot cope with the rate at which it is being apportioned and manipulated for individual benefits. Though a resident may not appreciate the need to have neighbors, they should be informed of the significance of good neighborliness. And knowing this alone can result in cooperation among them, and further the emergence and growth of social clusters, a concept that is already very familiar in many nations, only that it has different names.

Porter (1998), says that clusters are “*geo-geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions in particular fields that compete but also cooperate*”. In a sociological sense too, social groups can be seen to compete but also cooperate towards achieving equilibrium

conditions necessary for their survival. Social groups such as members of a village or a residential estate are expected to have intra and inter group fights, but they also cooperate to sort out individual or communal problems, or celebrate achievements (individual or group) within their groups. A case in point would be a look at churches, which compete for members, but that also come together to protect the integrity of Christendom by punishing errant shepherds and members of the flock, as well as come together to fight for representative governance, human rights and respect for the rule of law as part of the civil society. Churches, and shepherds have been known to stand together and condemn any forces within society that work against their beliefs and interest, or the interests of their subscribers (Lestari, 2016; Hagen, 2018). Churches do this in cooperation with each other and other religious as well as non-religious organizations where, at some point, conflicting beliefs may have to be shelved for the sake of achieving a mutual goal with an obvious foe.

In rural areas, communities can fight over grazing lands, water points, political dominance, brides and bride price, family originated conflicts and hunting grounds (Omura, 1994; Muhabie 2015:17). However, there is always times when these groups shed off their differences to fight a common enemy and secure mutual interest. This happens more on occasions when competition is deemed to be more catastrophic than cooperation; in which case they have to join a marriage (read as teamwork) for convenience and security. As an example, though the Pokot, Turkana and the Marakwet communities of Kenya fight each other from time to time as a result of cattle rustling (Huhu 2012:1-11), during attacks on their cattle by wild animals or another tribe, the brave fighters of these communities will still come together and form a united army to defend their territory, families and property from external aggression. Communities also act in the same way when fighting a disease attack on their animals or community members, during funerals, and when they have common celebrations or rites to participate in. They are bound together, in most cases, by a bond that cannot easily be broken. And these bonds grow with longer durations of neighborliness and familiarity.

One would for sure not want to be enemies with the same neighbor that helped carry their sick spouse or child to the ambulance and helped them keep vigil at the hospital as the loved one was getting treatment. But that does not as well mean that that sense of good neighborliness will last for a lifetime. Clusters are seen to expand and shrink with the changing social relations among members. Still, other factors that can determine the sizes of these clusters will include living conditions within them that can attract or chase away members and the impact of globalization that can change members' world view and make them consider their cluster to be insignificant making them to move away.

Utility of social clustering in a globalizing world

Cluster arrangements become necessary in a fast modernizing world in which people are becoming less social and with very limited connections. This is more so considering that modern day relationships are very virtual as opposed to real; majorly being based on the social media, or in pubs, dance clubs, churches and weddings. It hence becomes very hard to get help during needy times. In upmarket estates of Nairobi for instance, as is the emerging trend globally, tenants do not want to know or be known by their neighbors opting to have the highest level of privacy possible, and any attempt to cross the fence and know the neighbor better is considered as stalking, and monitored using CCTV cameras, reported to authorities and punished. They live in denial of their intrinsic human need for social and other types of support during times of crisis (Nyapara and Sakataka 2015. Over emphasis on individual privacy also poses a challenge to community policing. It becomes very hard to monitor what such private individuals do in their private space which poses a security challenge in a world riddled with cases of terror attacks (NCSTRT, 2016; NCSTRT, 2016).

Organizing societies into functioning clusters in the fast disintegrating world will help members fight for their rights and privileges; including at the workplace. For example, between the months of February and August 2017, the Donholm area of Nairobi did not have constant water supplied by the county government. In effect, the cost of living became very high. At the beginning, families had to spend around four dollars on water on daily basis. Both the tenants and the landlords in this area did not have a united front and so, appeals by individuals to the government to restore water supply fell on deaf ears. At the end of May 2017 however, the landlords and their caretakers noticed that people were not paying rent anymore and instead opting to vacate. More of their apartments were being left vacant and new tenants were not coming to replace the vacating ones. The financial impact of this on landlord who mostly build these apartments on mortgages was massive. In effect, the landlords and caretakers pulled themselves together, formed a WhatsApp group, mobilized more members, organized demonstrations in Nairobi and after only two days, some water supply was restored in Donholm Estate. This illustrates how clustering social units or groups together can be advantageous to members. Clusters give members a voice in society in the sense that whereas one can underrate the power of an individual, none can disregard the power of a mass. If implemented, the idea of social clustering can result in faster urbanization and relieving land for agricultural use. Scattered populations in villages should pull together into semi urban sett-ups so as to allocate land for exclusive farming. This reduces the effect of land subdivision on agricultural productivity and in effect guarantees increased incomes. Further, it will be possible to build houses in these areas that can accommodate as many people as possible; most probably, storey buildings, and those that can serve for long. And whereas one would consider this crazy, the human population is growing at a crazier pace that means very soon, land will not be available for economic use. Clustering is important for farming communities.

Further, concentrating human settlement in one place also allows for the establishment of social institutions in areas with adequate human population and hence make states and localities governable. These resources will be utilized to the maximum, users will access them easily, setting them up will be cheap and hence, it will be cost effective both for governments and user populations. The arrangement becomes realistic considering that it is expensive to provide basic amenities of water, electricity supply, roads, schools and hospitals to scattered populations than it is to do the same in areas with higher population concentrations. Just like businesses benefit from economies of scale when they work in

clusters, communities can also benefit in the sense that governments will have fewer facilities to build and manage, and can hence dedicate resources towards making these facilities work better and offer quality services.

Clustering people together will ensure that individual members of society get more returns from their work by serving a bigger client base (Kingsbury and Scanzoni 1993:195-214). Seen in this sense, clusters will ensure that people reap higher returns from their specialized roles and in so doing, gain higher profits, recognition as well as gratification from doing their work and playing their roles. Members of such consolidated societies will have an array of service providers (seen as role players) who provide the same services or varieties to choose from. They hence benefit by getting variety, higher quality and lowered costs of accessing these services. This assumes that such roles are played within a competitive environment where there is no asphyxiating of supply so as to increase prices and raise profits (Wolman and Hincapie 2010: 7-36, Porter 2009).

A traditional look at clustering would consider how communities lived in clans. These clans consisted of members who shared the same ancestry, lived in the same villages and shared common practices (such as rites of passage and economic activities). The village members would share the responsibilities of guarding their territory from external aggression, communally providing for their children and wives, inculcating their culture into young ones and disciplining offenders. However, such traditional clusters are being rapidly eroded by the impacts of modernization and human migration where for one, community members, upon acquiring modern education, abandon their cultures, move to urban centres to seek employment, and from thereon frown upon the 'archaic' ways of their ancestors. Traditional clusters were also very simplistic. Here, people lived together based on family origins. There is however need for a new form of meaningful, well thought out and well-structured clusters that serve predetermined social and economic roles for members.

The current trends of modernization and rapid population growth means that there is high demand for land. Foreigners move in and settle into initially united villages, erode their identity and with time, and with the coming of more 'foreigners', such communities become diluted. The initial clusters disappear, the sense of unity that existed gets eroded, and such societies lose their feeling of social control. Everyman becomes for himself and every dispute that arises is settled by government agents; whether courts or the police, which, looked at critically, translate to communities giving over their lives to the government to run instead of the other way around. Such eroding sense of social cohesion and consensus erode social continuity and in a great way, is a source of lawlessness and instability in modern societies. Social bonds (whether clannist in nature or deliberately created) facilitate community policing and lowers the rates of deviance in any society. Therefore, functioning social clusters can be seen as social forces that can be used to control deviance (read anomy), and restore discipline in population concentrations.

Environmental links to social clustering

That human beings depend on environmental sanity for their survival is no question. It is widely documented that every extreme weather conditions produce massive human casualties resulting in great humanitarian crises. Still, one would want to argue, as highlighted earlier, that human activities are the leading cause of environmental pollution. Human activities have been blamed for degrading the environment in every way possible. In the air, noise pollution from industries and planes have been blamed for making ecosystems unlivable for both humans and other living things. The air is also being polluted through the addition of other chemical matter from factories and homesteads that make the air more acidic, eat into the ozone layer and contribute to the global warming menace. Other forms of human induced pollution affect land and water masses with plastic pollution being the leading today.

When the environment gets polluted, its inhabitability triggers human migration out of the affected area. This can result in the disintegration of initially stable human groups (clusters). A study of gully erosion in Kisumu West Constituency in Kenya for example established that when gullies develop, they cause physical barriers that in effect affect communication and general human interactions. This alters social bonds among the affected community members. In the same way, areas that seem green, with adequate rainfall, sufficient supply of clean water, fresh air and that supports different species of wildlife are seen to be attractive for human habitation. They encourage human settlement and in effect, encourage the development of new social clusters. It hence means that protecting the environment will facilitate human settlement and development of concerned areas whereas degrading the environment will result into emigration and destruction of social groupings. This is because human existence is dependent on food production which further depends purely on land productivity and ecosystem health.

Increasing human population and further subdivision of land reduces its productivity, reduces returns on investment and hence discourages farming (Rakhshanda *et al*, 2016; Lawry *et al*, 2017; Cotula, 2007; Economic Commission for Africa, 2004). The alternative is to concentrate populations into settlements (estates) so as to leave land for farming (which can also be seen as clustering of land for common use whether as farmland or as residential land). This brings a sense of collective responsibility over land use. There comes a sense of shared benefits, shared watchman-ship and shared returns from proper land use management which will make it easy to effect land use regulations and punish those who misuse land. That is unlike to be the case when people use land individually, land which in most cases, they do not own and hence don't care about what happen to in the next ten years (Cotula, 2007, Economic Commission for Africa, 2004). By extension, cluster farming will control overdependence on chemical-based agriculture which is majorly blamed on shrinking land sizes, reduce the production and consumption of GMO food, and hence result in healthier food being put on the table; and higher quality of other agricultural products. It will bring back some naturalness to the products derived from agriculture. This will in addition be as a result of shared technologies, knowledge and experiences in farming. Best practices will become accessible faster to initially remotely located farmers.

On another note, it should be considered, in the age of polythene use, that the more widespread human population is in a geographical sense, the more widespread will be the environmental pollution by plastics. Studies show that humans pollute using plastics more as they move from one place to another because plastics are the preferred carrier today. That is why more plastic materials are being discovered in the oceans and along long transit roads that are used by long distance travelers. Which means that concentrating human populations into smaller geographical spaces will by extent limit how widely plastic littering will spread per area. This in effect means that waste collection and management will be less costly. It is even easier to educate members of the public and monitor their littering activities within a smaller town than in a wide sparsely populated village. Clustering can in this sense be used to control human induced population and manage the cost of waste management.

Negative impacts of clusters

Though social clustering can have many benefits as already seen, it is also expected to have a number of negative impacts. For one, it can result into social isolation of clusters from external groups as is the case in business. This limits chances for new learning. Its other negative impacts would include the emergence of new vices due to erosion of manners, conflicts resulting from competition for limited resources such as land, easy spread of crop related diseases that can destroy an entire harvest of an area, emergence of public health challenges characteristic of urban set ups (Levine and Kurzban 2006, Persson, Sabanovic and Wester 2007).

Conclusion

With there being an alarming rate of population increase, governments are already having a challenge of controlling human behavior, providing essential services to scattered populations and managing the massive environmental impacts that population explosion is causing. There is very high demand for land and natural resources which is resulting in conflicts, environmental pollution and vulnerability to disasters. This paper has presented an argument that views social clustering as the way forward to freeing up land, resolving community concerns, instilling government control, protecting the environment and guaranteeing high returns for individual and community investments by expanding demand for goods and services produced.

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