Struggles for Being Successful: Role of Family and Social Construct as Important Pillars

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Abstract: *The paper examines the construct of luck and strong social network in the innovation process within societies. Whereas philosophy has a rich diversity of co-evolutionary work in progress to understand and integrate luck and technology generation in different spheres of social setting. The first part of this paper claims the imbedded knowledge systems that subsist within rural spaces of India. Which comes in the public domain after being resistant to the existing problem. Such knowledge corresponds to the development of agriculture technology at grassroot level, that shapes social view and affects daily living and facts. Therefore, explain the arrival of new capital technology impact on farmers in India for their income generation to innovations subjected to luck (Howitt, Violante, & Aghion, 2020)which depends on the context. It provides a fresh understanding of merit usefulness on the grounds of accomplishment and possibility of acknowledging those who have been fortunate in their concerned field of expertise. The second part of this paper discusses that at certain interval it is not mere luck that makes a person successful but the functioning Matthews effect (strong social network).*
Keywords: *Success, Luck, Serendipity, Strong Social Network, Matthews effect.*

Introduction

The present study seeks to broaden the scope of discussions and to establish a dialog between the fields of agriculture education and sociology of science, in particular (Andrade & Vilela, 2013) the “strong program " proposed by David Bloor. Bloor's argues that the development and progress of science cannot be due to its inherent determinants. Thus, strong program does not believe that science is an independent field of intellectual activities, but is socially defined (Bloor, 1991). There remains a strong tie between the use of agricultural instruments its cognitive interpretation and iterations of such interpretations in agricultural land. Knowledge autonomy in the prevailing agricultural crises in India has a distinct story having been influenced by social, political and economic factors (Kumar 2019).

Mertonian culture sees science as a discrete theoretical and administrative field with its own identifiable social and cognitive facets. The

use of certain practices leads to the production of knowledge in contrast to other domains of sociological studies to reflect on the social context and external elements (Merton R. , 1968). These studies have progressed in different directions where different new fields emerge to professionalize science. As internal determinants progressed due to extension of science in Indian agricultural practices (Shinn, 1999).

Thomas Kuhn's early works can be accounted as catalyst, that breaks the idea of science itself which separate and entitled the disinterests and autonomy in scientific fields. Thereafter he points out stressing on every mechanism that exists has correlation with science-making and truth-making machinery connected in every era/period. Such correlations have contributed subsequently in researches regarding the sociology of science. These attempts conditioned social scientists with an affinity to explore the social aspects of customary agricultural practices that have continued since ages(Kumar 2022).

When it comes to ancient practices among tribal a recent change seen is, the concept of objective and subjective nature of agricultural equipment to be used in farms was not stressed upon in monthly discussions meetings headed by the government officials. Traditionally, in contrast to subjectivity Objectivity, is considered to be a social process. It would be characterized as the property of the truth of knowledge would increase or strengthen to the degree that the social interests of information-gatherers and users would become more universal, widespread and abstract (Restivo, 1998). In this sense, as long as local tribal farmers are socialized and familiarized with their rules, language and themes, their indigenous knowledge becomes objective. The principle of symmetry in the sociology of sciences analyses constraints in the agricultural land from a different perspective. Such arguments cannot be looked at as key but should more focus on how such dialogue can become or most effective in the existing conditions. As logic merely cannot explain the age-old customary practices practically implemented in the agricultural land as invalid, but it does explain the correct reasoning behind such practices.

Luck as factor in Success and Failure in Random Trials

The overwhelming influence of meritocratic theory having its base on western cultures is embedded in the primary idea of achievement, if not primarily, to individual qualities such as ability, competence, smartness, persistence or risk-taking. Moreover, we acknowledge that a certain amount of luck plays its role in securing substantial material success. Therefore under estimating the importance of external forces in individual success stories will limit their stories to laboratory based innovation rather field based observational innovations in cultivation lands(Kumar 2018). It is

known that the personal talents and skills are distributed Gaussian among population, distribution of wealth is often considered as success in general. The differences exists in the form of average skill or intelligence and the scale of invariant distribution indicates the presence of hidden components that work behind the scenes.

There are endless examples that points out the need for a certain degree of skill to be successful in life. Among them there are examples which makes us believe that most talented people reach the highest heights in achievement, that is overtaken by average yet sensibly fortunate individuals. There are certain scholar from diverse fields had discussed and made people believe in connection between luck and skill. There are number of books under the credit of risk analyst Nassim N. Taleb, economist Robert H. Frank and market strategist Michael Mauboussin which argues that luck plays an important role in the innovation process (Taleb N. , 2001), (Taleb N. , 2007), (Mauboussin, 2012), (Frank, 2016). When we look into the socio economic background of Indian farmers from every parts of the country we can find that chance occurrence has a greater role to play in the life of farmers and their expectations. However, it does not mean that performance is independent of talent and effort because, in the highly competitive world, the individual will have to be in the right place at the right time.

Satisfaction becomes significant because the position of successful people is always and almost underestimated. The probable reason can be randomness always occur unconsciously. The sociologist and network science founder Duncan J. Watts argued upon narrative fallacy and hindsight bias are particularly high because people observe successful results and interpret them as a necessary outcome of hard labour and skill, although the result is satisfactory because of complex and steps followed in a particular definite interval. Otherwise, the growth trajectory would not have been the same as it is now (Watts, 2011).

The achievements gained by average skills have sharply made people think about the meritocratic model that offers people deemed greatest in their profession more incentives, honours, recognition and money (Fortin & Curr, 2013), (Jacob & Lefgren, 2011). If one looks at the achievements in any particular areas the deceptive judgements modifies the cause and effect of those who are talented (O'Boyle & Aguinis, 2012), (Denrell & Liu, 2012). The findings in the paper which are based on empirical evidences allies with naïve meritocratic which presumes that only reason for achievement are inherent disparities in ability, knowledge, intellect, and commitments. Whereas, luck still has an important role to play in such processes (Pluchino, Rapisarda, & Garofalo, The Peter principle revisited: A

computational study, 2010), (Pluchino, Garofalo, Rapisarda, & Spagano, 2011), (Pluchino, Rapisarda, & Garofalo, 2011), (Biondo A. , Pluchino, Rapisarda, & Helbin, Reducing financial avalanches by random investments, 2013), (Biondo A. , Pluchino, Rapisarda, & Helbing, 2013), (Biondo, Pluchino, & Rapisarda). The interpretative arguments say that it is a meritocratic method are used to award honours based on individual outcomes, valued as personal wealth or achievements.

Serendipity, Innovation and successful Farmers Struggles

Throughout literature, serendipity is commonly used to historical evidences that scientists frequently discover unintended and optimistic results through an accident when searching for something else (Merton & Barber , 2004), (Murayama, 2015). There's a long list of some interesting and lucky stories rendered only by chance starting from Alexander Fleming's penicillin to Marie Curie's radioactivity, from radiological cosmic background from the radio scientists Arno Penzias and Robert Woodrow Wilson through to Andre Geim&KostjaNovoselov's graphene. Serendipity can take many forms therefore it becomes difficult to define and measure. As a result academic researches has so far focused largely on the philosophical concept of serendipity in science.

In march 2000 Government of India and the Department of Science and Technology aided to establish the National Innovation Foundation. The National Innovation Foundation continuously worked to improve scientific and traditional knowledge awareness at the grassroot level. The thrust was given to promote India by extending policies and institutional space for local technological entrepreneurs into an innovative and technology oriented community. National Innovation Foundation encourages, facilitates to improve collective inventions of locals communities across all areas of technology. It encourages the unidentified grassroot innovator and excellent mainstream knowledge holder with their inventions to be given due attention, considerations and compensation.

National Innovation Foundation has a database of more than 310000 not-original/ not-distinct (tribal knowhow) technological ideas. This database is collected from across India covering almost 608 districts of the country. The foundations have many stories of grassroots innovator and has honoured 992 of them in its various National Biennial Grassroot Technology Award functions. Beside this National Innovation Foundation has filed applications against 71 plant variety produced by poor farmers in Preservations of Plant Varieties and Farmers Right Authority, among them nine were registered successfully. National Innovation Foundation looks for frugally leveraging local resources to create more viable alternatives. The abundance of information and its ability as an instigator of inventions

challenge for the communities which treat poor as solely the buyer of cheap goods.

Case study one of a 49 year old ambitious farmer has attempted to create improved seeds for peasants to promote self-sufficiency. He lives at Tandia Village of Varanasi, where he lives with his parents, children and their children. The farmer had 3.5 acre of land for cultivation, he was supported by his father and his eldest brother during cultivation of land (NIF, 2020). They had discussions regarding crop production and the menial irrigation facilities they had for their farms. He was lucky to find an agricultural fare where he meets with scientific experts and other mainstream farmers to hold himself up-to-date in the agriculture. He continuously visited such agricultural fairs and fortunately meet with former Professor at Banaras Hindu University and was also a former Vice-Chancellor at G.B Pant University of Agriculture and Technology. Professor listened to the farmer's problem and encouraged him to come up with better varieties and facilitated him in many senses.

After consulting scientists he came up with a variety of improved high yielding varieties of many crops such as weed, paddy, mustard, pigeon pea and interestingly they were resistant to major diseases such as plagues having good flavour and taste. He was nominated for the 5th National Grassroots Innovation Award in the year 2009 and is a role model in its neighbouring villages.

Case study 2 is an inspiring story of a very brave farmer of Gujarat who resisted to inquire about the reason responsible for crop failure in his farm. Groundnut cultivation is the major source of income and livelihood generation for him and his family. In the year 2004 he sowed GG-20 variety of legume. The area was infected with a disease in groundnut locally named Sukado (wilt), which decreases the production of soil nuts. His entire crop was infected by stem rot illness-causing wilt and crop was completely fail. While moving in his farm he found very few plants that survived from this disease. He thought for keeping those survivor plants and planted them separately to other small pieces of land, meanwhile, he took some expert advice from scientists of Gujarat Agriculture University and repeatedly planted those seeds for years. Soon after he gave such seeds to different farmer living in Amreli, Rajkot, and other regions of the Saurashtra region in the successive seasons and took feedback from the farmers who cultivated those seeds. He asked them to use a composition that was formulated by him which constituted Neem, Kidamari, Tulsi and Akda. After taking feedback the farmer came up with a variety that has resistance to wilt and rust disease providing much more yield potential.

The peasant from Amreli, Gujarat is a recipient of National award by SRISTI during the 5th National Grassroot Innovation Awards. He has also

received “Sthanik Samasyano Ukali Taymaj Havaamaanni Jaankari” award by the Gujarat government and SRISTI in the year 2006.

Scientific Progress and Career Longevity in Realm of Matthews Effect

The caste in Indian rural population plays an important role whereas class and caste is proving to be dominant in urban spaces thus making us familiar with the popular saying that the rich get richer while poor get poorer. These saying greatly simplifies the truth and provide valuable knowledge in relation to the functioning of the social environment. Throughout the research Matheus effect is found to be necessary to study comparative benefits in the broad spectrum of social organization/institutions (Rigney, 2010). It discusses the several essential aspects of research and the advancement leading to dissemination of technology to achieve more advantages. It points out the disparities in the reward system in the social sphere, having influenced both science and economic institutions.

It is very important to investigate economic and political sphere interlinkages to understand the nature of power that tends to beget more power (Rigney, 2010). Such instances provides a closure picture on possible guideline for further analysis of the political consequences of Matthew. Moreover, politics cannot be truly isolated from economy centric advantages as both are tightly entangled (Rigney, 2010). These advantages appears to bring benefits and drawbacks not only in the economic but also in financial realms including the fields of perception and culture. (Rigney, 2010)There are studies relating to Matthews effect in the field of schooling and developmental psychology, where Merton acknowledged Matthews influence on the process of self-fulfilling predictions in the classroom. The present research explores Matthews literature impact on a broad variety of backgrounds and social environment. It is now time to stand back and pose some actual, more abstract questions. It is important to notice the consequences of Matthews that is deeply inherited in social life (Rigeny, 2010). There is a need to understand the societal construction that ourselves have created and its implementation is unjust or unethical and do they often yields social benefits. The model shows functioning of Matthews effect in Indian societies. In many literary works scholars have shown how luck plays its role in making people successful. However it cannot be denied that it is not only luck but Matthews effect which work as a black box in between luck, skill, serendipity and success.

This model can be studied through some classic studies done by Abha Sur, in the Dispersed radiance: .. Where she says that although there were very few researchers like Lalita Chandrasekhar, Anna Mani and Sunanda Bai working in the best laboratory established in India under C.V Raman’s faced gender based discrimination in many sense. Working in such laboratories shows their potential but the discrimination faced by them was

because they were not accepted as a being to work in a place which is produced as if those spaces were dominated by male scientists (Kumar N. , 2009). There are other study by Veena Poonacha where in a book chapter '.....Has Feminism passed them by? says that there have been systemic inequalities that have been poorly resolved by state.

The society is divided into elites as upper caste whereas beside them lies a huge portion of population as marginalised and backward class. It is very often that upper caste enjoys all type of privileges while people belonging to lower strata is deprived from opportunities. Caste in Indian spaces especially in rural and economic affairs is motivated to preserve its characteristics, way of life is to be imposed on various social setting of the society. There was a report by Mandal Commission where employees were categorized into different classes and representation of the bahujans (lower cast people) were very less. According to the report total representation of bahujans for class 1 jobs were 10.37% simultaneously class 2 jobs had 28.81%, class 3 as 48.8% and for class 4 were 31.26%.

Job opportunities are maximum in urban spaces as the skilled and professionals gather work or study to such state of art facilities located in urban spaces. It is (BCC, 1980)very sad to state that the 55th National Sample Survey organization report displays the skewed picture of the representation from bahujans. According to the report the total share of ST, SC, Muslim, OBC, Christians were 2.6%, 12.9%, 17%, 24.2%, 2.8% working or studying in such urban spaces. A study carried out by Akash Rawat (Rawat, 2015) regarding faculties positions filled in one of the elite institution of India and this study represented that how cast plays an important role in job selection as most of these elite institutions are headed by an upper caste people. The study concludes that at beginning i.e. Assistant professor percentage of bahujan were 48.25% and consistently witnessed the decrease in filling positions such as associate professor and professor which was 22.08% and 4.84% (Deshpandey & Yadav, 2006).

It can be noted that starting from Buddhism, Jainism etc which was the result of continuous resistance from caste system (varna system). Still there remains social and economic inequalities, under representation of bahujans lets the power to be on the hands of upper caste people. These people categorised as bahujans lives in rural spaces and does not have space, environment, awareness and opportunities to be a part of the existing system. Therefore, the rural space is also an important factor that prevent people from getting job opportunities and have a close social network. As Matthews effect functions consistently as a black box where the powerful or the person having strong social network gets hold of maximum opportunities. Thus, the famous writing in the Gospel of St. Matthew famous phrase "for to all those who have, more will be given" tells the whole

story about the progress achieved by any individual in social context (Kumar 2022).

Conclusion:

The model shows the importance of lucky occurrences in deciding the ultimate level of personal achievement, which seems to be misunderstood often. Because those who have achieved high performances are incorrectly deemed a measure of skill and talent receive incentive and capital, the result is even more negative disincentive which causes the most talented to be excluded from opportunities. The findings of the present study illustrates the pitfalls of the model that is often labelled as naïve meritocracy which grants the most deserving individuals honour and incentives, since it underestimates the role of randomness in positive determinants. Matthew effect creates a different scenario all together discussed in the present study to address more effective strategies to counter-balance the volatile position of chance and provide the most skilled with more incentives and capital. Although Matthew effect is like a puzzle yet permeating across strong social network and effects patterns of growth of socio-cultural networks. As in every case studies in the paper every case had worked hard to make strong social network to improve their skill which further led to innovate certain varieties of crop tolerant to different stress. On the other handbahujans living in rural spaces lacks almost every opportunity to get hold of this strong social network and thus lacks their representations in educational institutes and corporate jobs. Therefore it is not only luck that combines with skill and serendipity that makes people successful but there is a strong social network as well (Matthews effect). A goal that ought to be the main aim of a truly meritocratic strategy. Such approaches have also proved to be most effective for the community because they tend to increase the diversity of ideas and viewpoints in science and thus promote innovations**.**

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