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Ownership and Outcomes – The Case of Lakes and Wetlands in India

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Abstract

Scholars, over the centuries, have argued over the varied sources of legitimacy of property – God, nature, human nature and work ethic, the monarchy, the State, civil society, informal communal norms, laws created by society. Scholars have referred to these sources of legitimacy to justify their ideological stances on the relative merits of private, public or common property. In each case, other scholars have taken contrarian, well-argued positions to refute the stance adopted by their ideological opponents. I try to relate these theoretical arguments to empirical studies on lakes and wetlands in India. I use case studies on lakes in Bangalore and in Hyderabad to study the changing fortunes of lakes which were initially administered under common property regimes and were then nationalized, to understand why and how the characteristics of these lakes changed post nationalization. I draw upon Ostrom's (2009) SES framework to conclude that, irrespective of the ideological stances, the change in the underlying variables such 'the importance of the lakes to users', 'norms/social capital', 'collective-choice rules' and 'knowledge of the SES' too could have contributed to the present dismal condition of the lakes.

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Introduction

What is property? Why is property important? How is property different from non-property? How do these questions about property affect humans? For centuries, different thinkers from different schools of thought have tried to expound their own interpretations to these vexing questions; and the only clear answer that we have today is that there are no simple answers to these questions; probably, there never will be.

The ancient Manusmriti, or the “law of all social classes” of the ancient Hindus, which can be dated back to around the second century BCE, contains innumerable references to different kinds of property, but no attempt is made to define the term “property”. However, by the time the Institutes of Justinian were codified around the sixth century AD, the Romans had classified property into four categories - Res privatae or private property (“belonging to individuals”), Res publicae or public property (“belonging to the state”), Res communes or common property (“common to all”) and Res nullius or non-property (“which has no owner”).

In recent years, battle lines have hardened – the debate over the nature of ownership has become increasingly skewed – ideological games are being played over what kind of ownership is the “best” – the tendency has been to subscribe to simplistic generalizations – some scholars have advocated that all property should be privatized; on the other hand, a few scholars have been strong votaries of “public” forms of ownership. However, scholars like Cole and Ostrom (2011) observe that “(t)he wealth of empirical information on real- existing property systems, ..., belies naïve and simplistic theories of property rights that reduce all resource- conservation problems to either too little private-individual ownership or too little

public ownership”. Further, Ostrom (1999) cites that “national governmental agencies are frequently unsuccessful in their efforts to design effective and uniform sets of rules to regulate important common-pool resources across a broad domain”.

In this paper, I try to summarize this debate between public, private and common property. I look at how different scholars have tried to define and characterize property. I summarize the arguments made for and against different kinds of property. I then try to relate these theoretical arguments to empirical studies on lakes and wetlands in India. I probe deeper into Ostrom (1999)’s observation that governments of developing countries have not been successful in preserving and protecting such common pool resources which were nationalized by them. I use case studies on lakes in Bangalore and in Hyderabad to study the changing fortunes of lakes which were initially administered under common property regimes and were then nationalized, to understand why and how the characteristics of these lakes changed post nationalization. I use Ostrom’s (2009) SES framework to conclude the paper.

Defining Property

Property as defined in the Merriam-Webster Dictionary could refer to eight different phenomenon – the *trait* of an object which differentiates it from other objects, the *effect* an object has on other objects, a *standard*, an *attribute* common to a group of objects, *ownership*, *right*, a legal *title* or a *contract*. For the purposes of this paper, we will limit our scope to property as ownership. We will differentiate between public, private and common property resources, based on ownership – if an individual or private entity owns the property, it is private property, if it is owned by the State, it is public property, and if it is jointly owned by a group of individuals, it is common property. Open access property arises when there is

no clarity on the nature of ownership of the property. We will also refer to public private partnerships (PPP) – for the purpose of this paper, we will use the definition provided by the draft National PPP Policy of 2011 of the Government of India¹.

Public, Private and Common Property

In the 5th century BC, Plato in his ‘Republic’ advocated complete State ownership of property based on the premise that “(t)he state is to be so compact a unity that” in order to maintain unity, individual autonomy would need to be subjugated to the overall wellbeing of the State (Hobhouse in Gore et al 1913). Aristotle, on the other hand, was strongly critical of Plato’s ideas on property. According to him, “property is an instrument of personality” (Hobhouse in Gore et al 1913) and he therefore, argued for individual ownership of property with the presumption that “the communal principle ...is a mere pious aspiration” (Hobhouse in Gore et al 1913).

Moving 2000 years ahead into more contemporary times, Hobbes argued that property has been handed down to humans by God for productive use when he said “(f)or the matter of this nutriment, ... God hath freely laid them before us ... on the labour and industry of men” (Hobbes 1660). However, according to him, all property belonged to the monarchy – “(t)he distribution of the materials of this nourishment ... belonged in all kinds of Commonwealth to the sovereign power” (Hobbes 1660). His conception of property was legal in nature i.e.

¹ – “Public Private Partnership means an arrangement between a government / statutory entity / government owned entity on one side and a private sector entity on the other, for the provision of public assets and/or public services, through investments being made and/or management being undertaken by the private sector entity, for a specified period of time, where there is well defined allocation of risk between the private sector and the public entity and the private entity receives performance linked payments that conform (or are benchmarked) to specified and pre-determined performance standards, measurable by the public entity or its representative.”

ownership has its origins from the laws of the land – “(t)ake away the civil law, and no man knows what is his own, and what another man's.” (Hobbes 1660).

Around the same time, Locke in his “Second Treatise of Government” proposed that while property has been given to man by God “in common”, it becomes private property owned by a particular individual when that individual “removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and joined to it something that is his own” (Locke 1689). He argued that it is God’s desire that humans possess private possessions – “So that God, by commanding to subdue, gave authority so far to appropriate: and the condition of human life, which requires labour and materials to work on, necessarily introduces private possessions” (Locke 1689).

In the 18th century and the 19th century, the debate over the nature of property revolved around scholars like Blackstone, Rousseau, Hume and Bentham. Blackstone is generally quoted for his advocacy of private property – ““that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe” (Blackstone 1766). However, his stand on property was more nuanced; he took the position that, while historically, property had been held “in common” by humans, with increasing human population, as scarcity of land increased, common property had to converted to private ownership. Thus, Blackstone argued that private property had its origins with the rise of civil society.

Rousseau tried to reconcile the differences between public, private and common property. He posited that while man has a right to private property (“(e)very man has naturally a right to everything he needs”), “the right which each individual has to his own estate is always subordinate to the right which the community has over all”. However, “the State, in relation to its members, is master of all their goods by the social contract” (Rousseau

1762). Thus, Rousseau held that the source of private property is based on social contracts among individuals, the larger community of individuals and the State.

Hume, like Hobbes, appears to have advocated a legalistic conception of property – “(o)ur property is nothing but those goods, whose constant possession is establish’d by the laws of society; that is, by the laws of justice” (Hume 1888). Unlike Locke, he appears to have been against a naturalistic conception of property – “those impressions, which give rise to this sense of justice, are not natural to the mind of man, but arise from artifice and human conventions” (Hume 1888). According to him, these laws of society are supposed to arise from “a convention enter’d into by all the members of the society” (Hume 1888). The “convention” referred to by Hume, appears to be similar to the “social contract” referred to by Rousseau. However, it appears that according to Hume, the foundation of a stable society also depends on the effective governance of private property – “the convention for the distinction of property, and for the stability of possession, is of all circumstances the most necessary to the establishment of human society”.

Bentham² too appears to have decided that property derives significance from legal constructs – “(p)roperty and law are born and must die together. Before the laws, there was no property; take away the laws, all property ceases” (Bentham 1843). However, according to him, the emergence of property had its origin from the ‘natural’ desire within primitive humans to respect each other’s property – “the slightest agreement among these savages reciprocally to respect each other's booty: this is the introduction, of a principle, to which you can only give the name of law” (Bentham 1843).

Moving on to more recent times, Coase in his “The Problem of Social Cost” (1960) argues that transaction costs and information asymmetries created due to complications in the

² Bentham uses the word “nonsense” 15 times in his ‘Anarchical Fallacies’ (1843)

interpretations of legal doctrines, can make it difficult for welfare maximizing allocation of property. In other words, when property disputes arise between individuals, if the legal system is complicated, then the disputants may use more easily enforceable informal norms inherent in society to resolve their disputes. Ellickson (1986) writes that in such cases, “most residents resolve trespass disputes by applying lower-level norms that are consistent with an overarching norm of cooperation among neighbors”. Thus, Ellickson (1986) draws upon Coase’s work to argue that compared to State defined laws, costs are minimal under “communally” defined rules.

Demsetz (1967) on the other hand, argues that the costs of settling disputes are minimal under “private ownership” – “the resulting private ownership of land will internalize many of the external costs associated with communal ownership ... creates incentives to utilize resources more efficiently”.

Similarly, Merrill and Smith (2001) accuse Coase and post-Coasean economists of playing into the hands of the State which has resulted in “activist state intervention in regulating and redistributing property”. Epstein (2011) too accuses such scholars of encouraging “creeping statism”.

However, Ellickson (1993) argues for a more nuanced study of property, by urging readers to look beyond normative debates (about socially desirable goals like efficiency and distribution) over the relative merits of different kinds of property – “(b)oth Blackstonian colonialists and Marxist revolutionaries have designed land institutions from afar ... (t)hat a particular land regime is efficient for a group is not, of course, conclusive evidence that it is normatively desirable from a larger standpoint ... (a) land institution that has evolved over time is far more subtle than the mind of any single individual.” Similarly, Cole and Ostrom (2011) observe that “(t)he wealth of empirical information on

real- existing property systems, ..., belies naïve and simplistic theories of property rights that reduce all resource- conservation problems to either too little private-individual ownership or too little public ownership”.

Summarizing

Scholars, over the centuries, have argued over the varied sources of legitimacy of property – God, nature, human nature and work ethic, the monarchy, the State, civil society, informal communal norms, laws created by society. Scholars have referred to these sources of legitimacy to justify their ideological stances on the relative merits of private, public or common property. In each case, other scholars have taken contrarian, well-argued positions to refute the stance adopted by their ideological opponents. However, in recent years, a few scholars have concluded that there are no absolute right or wrongs in any of the mutually-opposing stances; they have therefore tried to reconcile the differences in these stances; they have observed that under certain contexts, property held in common could be relatively beneficial for society, where-as in certain cases holding property under *public trusteeship* or under private ownership serves larger societal goals.

The State as Public Trustee – The Public Trust Doctrine

The Public trust doctrine is a legal principle that resources are held in “trust” by the State on behalf of the “public” for the maximization of societal welfare. The basic assumption behind this premise is that the State knows what is best for the public and is best placed to maximize benefits.

Ciriacy-Wantrup and Bishop (1975) enunciate the advantages of using the Public trust doctrine for natural resource policy purposes. They argue that the application of the doctrine is in “broader public interests”; they argue that environmental protection costs are lower, and that environmental quality problems can be handled more effectively for resources held under the Public trust doctrine vis-à-vis resources held as public property.

Rose (1986), on the other hand, uses historical examples of the application of the doctrine with regard to roadways and waterways to question the efficacy of the various claims made by the votaries of the application of the Public trust doctrine to solve society’s problems – “A particularly striking aspect of this historical pattern is the resonance that public trust doctrine has in our law, despite frailties in its original authority. It is equally striking that “public trust” doctrines in waterways, like the doctrines easing public acquisition of roadways, flourished alongside the popularization of classical economic theory - a theory that generally rejected the notion that the general public could own and manage property”.

The Case of the Lakes in Bangalore, India

Agara Lake

The details of this case as used in this paper are based on the study conducted by DSouza and Nagendra (2010).

The origins of the Agara Lake located in the city of Bangalore, India can be traced back to the eight century AD, and it has traditionally been considered as a “community managed” lake. In the 1990s, the Bangalore Development Authority (BDA), a State agency, “fenced the lake”, “created a walk way around the water body” and also developed a “park in

the northern part of the lake”. The administrative control of the lake was then transferred to Bangalore Lake Development Authority (LDA), a para-statal body. In 2007, the lake was “leased to a private firm, Biota Natura Systems” by the LDA under a PPP model “to create an amusement park around the lake”. In protest, civil society groups of the city filed Public Interest Litigations (PIL). This led the LDA in 2009 to cancel its agreement with Biota Natura Systems. The firm then filed a case against LDA which was still pending in the courts by the time DSouza and Nagendra (2010) conducted their study.

As a result, “there is a complete lack of any maintenance in the lake, which is now largely overgrown with weeds”. DSouza and Nagendra (2010) observe that between 1970 and 2009, the landscape in and around the lake has changed. Using GIS maps, they demonstrate that the size of the lake has fallen considerably in the same period. Before, the BDA “fenced the lake” the land around the lake had primarily been used for agricultural purposes. By 2009, almost the entire wetland around the lake had been lost to “an impermeable, impassable concreted mix of road and settlement”.

Akshayanagar Lake

The details of this case as used in this paper are based on the report prepared by the residents of the Akshayanagar residential layout and will henceforth be referred to as the ALDTF³ report, as there is no clarity on when this report was originally created.

This lake is located within the premises of the Akshayanagar residential layout in Bangalore, India. The ALDTF report states that the lake was taken over by the State Forest

³ ALDTF stands for the Akshayanagar Lake Development Task Force

Department in the year 2000. Over time, the Bangalore Lake Development Authority (LDA), a parastatal body, too got involved.

It appears that in the first few years after the takeover, under the leadership of public spirited individuals, lake conditions improved – “The years 2000-2002 were the golden period in the history of the lake”. However, in consequent years, conditions deteriorated again – “As of today, Akshayanagar Lake is in need of a major rejuvenation ... (it) may very well become a health hazard ... Storage capacity got reduced over the years ...

The weir was damaged and so the water level has gone down ... The capacity is also reduced. The natural rainwater channels are either blocked or diverted away from the lake due to housing construction. There is lot of weed and about 60% water area is covered with weeds. The sewerage management was poor and some sewerage flowed into the lake”.

Rajapalaya Lake

The details of this case as used in this paper are based on the study conducted by Sundaresan (2011).

Till the year 1963, the Rajapalaya Lake in Bangalore, India appears to have been used primarily for irrigation of the surrounding agricultural lands. According to Sundaresan (2011), “(t)raditionally, certain groups from the community had the role of managing and maintaining the lakes at any particular locality, with accompanying rights, privileges and duties.”. In 1963, the land around the lake was taken over by the Bangalore Development Authority (BDA)⁴. The State thus laid claim to the lake, which was further supported by a

⁴ Formerly, the City Improvement Trust Board (CITB). The CITB was renamed as BDA after the BDA Act of 1976 (Sundaresan 2011).

ruling of the Supreme Court of India (the highest judicial forum in India) in 2010. Sundaresan (2011) documents how the BDA, with the objective of converting the lake into land for housing layouts, in active collusion with other State organizations like the planning department, the Bangalore Water Supply and Sewerage Board etc., performed actions which led to the deterioration in the conditions of the lake and the surrounding wetlands. Sundaresan (2011) accuses the State of taking over common land under the garb of “public interest” with the eventual aim of handing them over to private entities – “The political, technocratic and administrative ensemble of the planning system seems to be interested in converting public land into private property. Planning’s “public interest”, if understood as the interests of the public authority, seem to lie in converting ecological commons into private property”.

Over the years the lake conditions appear to have deteriorated significantly. The inlets and the drainage canals of the lake have been blocked; waste water and sewerage from neighbouring housing complexes have been dumped into the lake, and it is infested with mosquitos.

The Case of the Lakes in Hyderabad, India

The details of this case as used in this paper are based on the study conducted by Ramachandraiah and Prasad (2004).

They explain how most of the lakes in Hyderabad (which were traditionally managed by the local community) were “taken over by the State” after 1947 and were later transferred to “private individuals who were, in many instances, not part of the local community”. Even in the face of active citizen support for lake maintenance and rejuvenation, in the presence of

active judicial activism, and in the presence of environmentally favourable legal statutes (the provisions of the Andhra Pradesh Water, Land and Trees Act of 2002 etc.), over the years, the condition of lakes in the city has deteriorated rapidly.

For instance, the size of the Hussainsagar lake appears to have reduced by more than 40 percent from 550 hectares to 349 hectares between 1977 and 2002., in addition to being severely polluted; the catchment areas of the Osmansagar and the Himayatsagar lakes appear to have reduced by 80 percent and 70 percent respectively in the same time period; the size of the Nandi Muslaiguda cherevu (lake) appears to have reduced by 33 percent from 15 acres to 10 acres in the same time period. Similarly, the size of the Errakunta lake appears to have reduced from 26 acres to 2 acres in the same time period.

Lakes and Property Theory

Ostrom (1999) observes that governments of developing countries have not been successful in preserving and protecting such common pool resources which were nationalized by them. A study of lakes in the cities of Bangalore and Hyderabad in India appear to confirm Ostrom's (1999) observation. In both cities, we find that lakes and wetlands have traditionally been managed by the associated community. Traditionally, under the management of these communities, the lakes appear to have survived and also met the needs of the communities. In the 60 years since India's independence from colonial rule, most of these lakes have been taken over by various state organizations or parastatal entities. In most cases, the takeover has been said to be in "public interest". However, over time, the conditions in these lakes have invariably deteriorated. The communities traditionally associated with these lakes have been alienated. In a few cases, the lakes have been handed

over to private entities. However, the condition of the lakes under private entities too has not been significantly better.

The cases of lakes in the cities of Bangalore and Hyderabad needs to be considered in view of the ideological debates about property, historically, amongst Plato, Aristotle, Hobbes, Locke, Blackstone, Rousseau, Hume and Bentham and amongst Coase, Demsetz, Merrill, Smith and Epstein, in more recent times.

Irrespective of the claims about the sources of legitimacy of property (God, nature, human nature and work ethic, the monarchy, the State, civil society, informal communal norms, laws created by society), irrespective of the relatives benefits of public, private or common property and irrespective of the relative pros and cons of the “public trust doctrine” as conceived by Ciriacy-Wantrup, Bishop and Rose, the cases of the lakes, in the cities of Bangalore and Hyderabad studied in this paper, appear to indicate that the condition of the lakes appears to have been better, before they were taken over the State.

The question therefore arises, as to why these lakes failed after State intervention. To answer this question I use the SES framework proposed by Ostrom (2009) with the objective of analysing how “interactions among a variety of factors affect outcomes” in complex settings involving human-environment interactions (Ostrom and Cox 2010). The framework identifies a series of multi-level variables “to use in the design of data collection instruments, the conduct of fieldwork, and the analysis of findings about the sustain-ability of complex SESs” (Ostrom 2009). Ostrom (2009) identifies ten variables which are associated with successful collective action outcomes - *size of resource system, productivity of system, predictability of system dynamics, resource unit mobility, number of users, leadership, norms/social capital, knowledge of the SES, importance of resource to users and collective-choice rules.*

In the cases of the lakes in Bangalore and Hyderabad in India studied in this paper, *'the importance of the lakes to users'* appears to have drastically changed after state intervention in the lakes. Traditional users were alienated from the lakes, because the usage pattern of the lakes changed after nationalization. Agriculture or irrigation was not possible. Some of the lakes were systematically destroyed. The new members of the housing communities were no longer dependent on the lake for livelihood and survival. *'Norms/social capital'* too changed as the community associated with the lakes changed. The community could no longer formulate their own *'collective-choice rules'* for the management of the lakes, as the laws of the land took precedence. Because of the intrinsic connection between traditional users and the lakes systems, traditional users were more knowledgeable about the lake, compared to the new urban dwellers. Thus, the variable *'knowledge of the SES'* too assumes significance.

Conclusion

DSouza and Nagendra (2010), Sundaresan (2011) and Ramachandraiah and Prasad (2004) observe that there appears to be a corrupt nexus between private sector entities, politicians and bureaucrats in the country, which have misused the government machinery for private gains without any concern for “public interest”. Without disputing their findings, it is important to note that the change in the underlying variables such as *'the importance of the lakes to users'*, *'norms/social capital'*, *'collective-choice rules'* and *'knowledge of the SES'* too could have contributed to the present dismal condition of the lakes.

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