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WATER POLITICS : QUESTIONS OF YESTERDAY, TODAY PERSPECTIVES.

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Da definire

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TESI DI DOTTORATO

WATER POLITICS

QUESTIONS OF YESTERDAY

TODAY PERSPECTIVES

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*A mio padre, a mia madre,
a tutti coloro
che hanno preso parte
alla mia formazione,
e a Lei, Maria.*

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Primo Capitolo

Chapter 1 - Water, Regulation and Democracy

This thesis aims to be a cultural thesis, paying tribute to the Culture of Rules on the issue of Water, in a country, and in a period, where the social meaning of it seems to be apparently faded, or missing.

THE QUESTION OF THE CHAPTER

Which cultural conditions do allow for a more sustainable and democratic approach to water and which regulatory conditions are noted having been established by societies and economies in order to set a democratic 'pattern of rules' that paves the way for a sustainable water policy ?

CONTENT OF THIS CHAPTER

This chapter provides an oversight of the regulatory discourse created in the recent decades around the highly debated issue of water management and water privatisation, within a context of a globalized society.

In the Premise the global water issue is overseen from a general perspective. The aim is to draw a broad picture which may help private and public actors to reflect on the consequences that may affect a country with its political economy in case of distortions of democratic dynamics in the management of its water and environmental resources . An overlook on the theory of Sustainability is given.

In the second part, the glance of Environmental History offers a journey through two different cultural environments in different historical times and geographic areas, that are the Progressive era in Us and the Struggle for Water in Lake District. The attempt is to analyse which Cultural characteristics allowed, in both cases, for the raise of water and environmental consciousness and consequent Regulatory reforms in both countries. Attention is paid on the Cultural Environment that allowed for the reform, or judgment, taking place. It is illustrated the story of how the cultural and political process did start and in which cultural conditions favoured the establishment on new rules. The two major stories of reference, are respectively: the story of the Progressive Movements in early XX century US and the story of a Social struggle which happened in Britain during the 80s, and the victorious battle of common people to protect their natural heritage against the unrelenting requests of the industry on the environment, in a pattern of consumption characterized by and increasing pressure on water resources. The Community fought and won.

Aim of this Chapter is helping the reader in drawing out from each of these true stories - each with its own regulatory legacy - lessons and hints for his own reflection and action in the present time as these are stories of hope and may well be fancied to be applied to environmental and water policy making of any country, in any time.

The language of the chapter is maintained intentionally bi-linguistic, as a special dedication to readers of different cultural pattern.

Premessa, per il Lettore italiano.

Alla luce della caratteristica di potenza *indefinita* nella pluralità di tematiche che il tema dell'acqua può sollevare *in sé* per la sua infinita *poliedricità* di sfaccettature e di possibili approcci offerti allo studio di specialisti di ogni genere e disciplina - e, questo proprio per la sua caratteristica di elemento *pluri-valente*, *onnipresente* e *multilegante* dei diversi aspetti della realtà del vivere umano - partendo dalla sua realtà biologica e fisica, dalla sua afferenza contemporanea e mai contrapposta alla sfera *naturale* come a quella *spirituale*, oppure all'ambito organizzativo e industriale dell'organizzazione di una società tanto quanto agli aspetti comunitari e più ricreativi della sua economia, dalla sua pertinenza tanto alla politica organizzativa di uno stato quanto alla sua struttura economica, alla sua politica industriale, o a quella sociale, l'acqua catalizza e raccoglie in sé una tale *poliedricità* di proiezioni, immagini ed aspettative che sarebbe oltremodo ingenuo il pretendere di esprimerli *tutti* in un'unica trattazione, affermando o illudendosi di perseguire esaustività sull'argomento. Per questo motivo, la scelta del tema della seguente trattazione poggia su un argomento, che, per scelta e per sua natura, condensa in sé una tale densità e numero di problematiche caratterizzanti il profilo di una società e di una economia moderna - afferenti tra l'altro ad una pluralità di sotto-tematiche *multi-disciplinari* – da dimostrare nel proprio stesso '*consistere*' quella *pluralità* di mondi cui una entità come *l'Acqua* può appartenere (nel senso, inglese, di '*pertain*'), che vengono messi in luce ove affrontati dallo

¹ *Frontiera* intensa nel senso di Marchis : 'un territorio di confine culturale tra discipline diverse'

² *Vilfredo Pareto*, [ingegnere](#), [economista](#) e [sociologo italiano](#) dell'800. Ha teorizzato l'*ottimo* paretiano, cioè il massimo di efficienza allocativa di una risorsa, date certe condizioni non mutabili al contorno dell'organizzazione della produzione.

scienziato con rigore e con la *dovuta* ampiezza e poliedricità di sguardo, ove possibile, e con la necessaria cura e precisione di approccio tipici dell'applicazione di un metodo *scientifico* di fondo, ancorché riferito ad un ' territorio di frontiera¹ ', al quale la *water politics* può dirsi di appartenere.

Di fronte ad una tale *pluralità* di temi, che affrontano l'*acqua* partendo da una molteplicità di direzioni e sfaccettature, questa Tesi rivolge la propria originaria curiosità sull'indagine dei modi e delle tecniche di *Regolazione* di quei fenomeni e dei processi che si sono osservati accadere intorno, a causa o in seguito alle decisioni prese dai governi, allorquando sono state intraprese svolte storiche di innescare meccanismi di *privatizzazione dell'acqua* (cioè del *servizio di fornitura idrica*) seguendo quelle logiche che, in base ai dettami della moderna economia neoclassica, porterebbero , almeno in teoria, all'inseguimento di una 'efficienza' ottimale dei sistemi, secondo la il concetto di ottimo paretiano², ma che , di fatto si sono risolti, in molti casi generando la miseria sociale e perturbazione nelle economie che li hanno imprenditorialmente introdotti. Una tematica , questa, che sin degli anni giovanili ha sempre solleticato in modo serio la mia curiosità di studente, e, benchè fossi così ancora poco attrezzata (*unequipped*) a fronteggiare con competenza un argomento così complesso, sin dagli inizi , mediante tentativi forse ancora un po' goffi ed impropri - tipici dei giovani esemplari di ogni *specie*, scientifica e naturale - l' ho abbracciato, nella misura in cui mi è stato reso pervio l' accesso al conoscere, con giovanile entusiasmo e totale passione cercando di *comprenderne*, per quanto possibile, l'interezza della problematica, nella maniera più ampia cui fosse permesso di accedervi ad un semplice studente di dottorato.

Ne è risultato un lavoro ampio e articolato di ricerca , di cui questa tesi riesce ad essere appena ventilata immagine, ma *segno* concreto, bozza visibile, di forma scritta, che vuole restituire propositiva immagine di un possibile approccio scientifico di sintesi ad una problematica tanto accesa e oltremodo dibattuta come quella del corretto approccio metodologico ad una risorsa

tanto preziosa e strategica la cui conoscenza, amministrazione e gestione, e l'apprezzamento del cui valore sono meritevoli della pacatezza di una riflessione scientifica il più possibile *pura* dei troppi *tecnicismi* linguistici che, sovente, allontanano il lettore 'non-specialista' dalla comprensione delle cose anziché spianargli la strada verso nuovi e più evoluti orizzonti di conoscenza.

Piccola nota Recente della Storia della Regolazione dell'Acqua in Italia (e non solo).

Tra i molti esempi di casi in cui necessita una regolazione specifica, nella gestione settore dell'acqua, è il caso della Privatizzazione dell'acqua.

La *privatizzazione dell'acqua* rappresenta in sé un tema che ha catalizzato gli interessi di un pubblico molto vasto, per la sua complessità e ampiezza di implicazioni, ed in Italia, come ovunque nel resto del mondo, è stato al centro del dibattito politico e scientifico in occasione e a causa di alterne vicende, non ultima l'indizione di vari *Referendum ad Iniziativa popolare* che hanno visto le società civili, tra cui quella italiana, mobilitarsi nelle forme di una sensibilizzazione trasversale in un ampio ed organizzato *movimento civile* su questo tema. Questi movimenti ovunque sono occorsi hanno saputo operare dal basso un'azione di sensibilizzazione capillare e di sostegno tra tutte le fasce della popolazione civile sollevando il dibattito e il confronto sul tema dell'acqua e dei servizi idrici, e risvegliando nei cittadini una consapevolezza profonda del valore e dell'importanza della gestione di una risorsa così strategica nell'ambito della politica pubblica.

Where Regulation is Needed. The case of Water Privatization

“ *Privatization*, in the water sector involves transferring some or all of the assets or operations of public water systems into private hands. There are numerous ways to privatize water, such as the transfer of the responsibility to *operate* a water delivery or treatment system, a more complete transfer of system *ownership and operation* responsibilities, or even the *sale* of publicly owned *water rights* to private companies ”.

(from Gleick)

Since 1990, *water privatisation* - that means turning over part of the entirety of the assets of water management from a public system to a private company - spread widely worldwide. Although for many privatization is seen as *necessary* step towards the improvement of the efficiency in water management systems, as well as a quick way to raise funds for infrastructural expansions, for states cronicallly lacking funds, as many colleagues within the water sector (Gleick, Hall, Johnstone & oth.) the writer shares the belief that privatisation requires strong oversight through regulation of the entire process, for public interest to be adequately upholden.

Prices, Commerce, Ownerships and Transfers: Water as an 'Economic good'.

Commodification

” is the process of converting a good or service formerly subject to many non-market social rules into one that is primarily subject to market rules
“

(from Gleick & oth)

In the last decades, the idea of water as an *'economic good'* has become a widespread reality, transferring into practise the concreteness of what such a definition involves in several places around the world. International development agencies that used to work with governments to improve water services started, in the latest decade, to promote privatization efforts (Gleick , Hall & oth). Private companies have been invited to take over the management, operation and, sometimes, the *ownership* of public water systems. A system of prices for customers have been set, for a system which used to provide citizens water for free, and sustained through the general tax system. The commerce of bottled water developed exponentially. Even the idea

of *transfer* of fresh water from water rich regions to water scarce regions, or even across borders, has become extremely popular and started to be implemented everywhere.

Globalization , Privatization and Failure of major objectives for Privatizing.

Globalization

“ *Globalization* is defined as the process of integrating and opening markets across national borders. The entire process of globalization is highly controversial, raising great concern about national sovereignty, corporate responsibility, equity for the world’s poorest people, and the protection of the environment. The controversy extends to proposals to encourage large-scale trading of freshwater across borders. Indeed, among the most controversial water issues today are questions about how to implement – indeed, *whether* to implement – international water trading and sales.”

(from Gleick & oth)

Inevitably, the trend toward *globalization* and *privatisation* of fresh water cannot be stopped, and sometimes the presence of a private partner can help communities that are totally lacking a basic water and sanitation infrastructures to receive the *possibility of access* to these basic services. This should be done with caution, and following rules that will be described onward in the chapter. In the case of a country with a strong regulatory structure, letting private companies take responsibility for *some* aspects of water provision, or management, can help. Nevertheless there is little doubt that the reckless rush toward private markets has *failed* to address some of the most important issues and concerns about water.

(*Per il Lettore italiano..*)

Uno studio dei *fattori* che determinano le condizioni storiche attraverso cui gli stati pervengono a scelte politiche di privatizzazione dei propri beni, o alle condizioni che possono condizionarne lo sfociare verso esiti più o meno favorevoli per il comune cittadino, non può esimersi dall'osservazione delle dinamiche economiche, sociali e politiche attraverso cui gli stati e le società *pervengono* ad ottenere il controllo su questi nuovi sistemi i quali, sino a poco prima, si trovavano ad essere sotto la più ampia tutela derivante dall'esercizio del diritto di un regime di proprietà pubblica.

Inoltre, il problema di *sorvegliare*, da parte delle società civili questi complessi processi globali che implicano una improvvisa, e talvolta sconsiderata, vendita a privati di servizi pubblici essenziali (come l'acqua, il telefono o l'elettricità), fino a quel momento posseduti e operati perseguendo la finalità del *bene pubblico*, è stato dimostrato essere un problema in comune a tutte le società dei paesi del mondo più diversi, in tutte le più recenti decadi.

In particolare, nello specifico rispetto della tutela degli interessi dei singoli cittadini, e delle economie nel loro complesso - tanto nei paesi industrializzati come in quelli in via di sviluppo - l'economia odierna presenta in sé, nella propria struttura, una serie di *fattori esacerbanti* che aggravano, *per se*, gli aspetti di complessità e inafferrabilità che caratterizzano le dinamiche di privatizzazione. Un primo determinante fattore è la natura ad *alta intensità di capitale* (*capital-intensive*) di questo tipo di industrie, le cui decisioni di investimento vengono ormai fortemente influenzate dall'andamento del mercato in un'economia mondiale dove ormai non sussistono più limiti e barriere legate alla presenza degli stati che si oppongono al flusso dei capitali tra paesi. Questo è molto evidente nelle industrie manifatturiere e in quelle tipiche nella filiera alimentare, ad elevato consumo di acqua, dove le industrie e le corporations già *routinariamente* muovono le loro operazioni attraverso i confini nazionali, spesso spinte dalla mera logica di sfuggire il maggior costo economico di produzione che viene loro imposto dalle nazioni industrializzate nell'applicazione di legislazioni a più elevati standard ambientali e sociali. La ricerca del *minimo carico regolatorio* come criterio in base al quale orientare la

scelta della localizzazione degli impianti, si registra in verità anche per le *corporations* dell'acqua, dell'energia e delle telecomunicazioni, 'internazionalizzate' negli anni recenti, quando queste decidono di investire il loro capitali in nuovi territori.

Il *Regno scatenato* dei Capitali d'investimento

- Internazionalizzazione dei servizi idrici (Bakker ha raccontato estensivamente questo fenomeno, ed i suoi esiti)

La questione sollevata dalla presenza di un *regno* ormai 'scatenato', senza più alcuna restrizione, dato dai flussi di capitali di investimento, in particolare per quanto riguarda i servizi di pubblica utilità, è almeno antica quanto l'industria medesima. Di fronte a fenomeni di *fluidità* operativa-finanziaria che attraggono le scelte di investimento su situazioni *abbastanza efficienti*, di per sé, più prossime e facili a creare ulteriori margini di utili, rimangono aperte tutte le situazioni difficili, poco attrattive per la politica finanziaria d'impresa, delle quali è costellata la geografia delle utilities nel mondo. Sono migliaia le imprese di gestione dell'acqua che versano in condizioni pessime, o per cattiva gestione, o per malaffare, o più semplicemente per mancanza di fondi per operare i dovuti ammodernamenti. La domanda, di fronte al divario, ad una disparità sempre più marcata tra imprese 'efficienti' ed imprese 'colabrodo' – sulle quali, ovviamente nessun investitore privato si prenderebbe il rischio di mettere il proprio denaro – è su come colmarlo. Per il ricercatore generalista, o anche per il semplice cittadino, che vorrebbe vedere affrontata con un poco di serietà un argomento tanto spinoso e complesso, la domanda allora può venire riformulata nelle sue due componenti: la questione dell'*attendibilità* (*Reliability*), *fidatezza* e *sicurezza* (*Security*) del servizio in generale di fornitura idrica (water supply) e la questione della *affidabilità* (*trustability*) da parte di un privato nella fornitura dei servizi medesimi alle frange più povere

della popolazione, siano queste in zone urbane, peri-urbane o rurali. La prima domanda affronta il *come* possa una società che voglia dirsi moderna, efficiente e democratica, *mettersi in condizioni* di funzionare efficacemente, mantenendo la *sicurezza* del proprio approvvigionamento idrico, e dello smaltimento dei propri liquami - servizio essenziale per la *sicurezza sanitaria* di un paese – affidata ad un regime *dipendente* da meccanismi di mercato, e soggetta pertanto a cicli economici e a fenomeni di *scarsità del bene*, quali capitano in tutti i mercati, il che determina che la domanda spesso *non incontra* l'offerta, e lascia - come è già stato alcune volte registrato accadere - la domanda di servizio inevasa, nelle zone più povere. La seconda questione è relativa alla distribuzione e all'accessibilità del servizio idrico per tutte le tipologie di cittadini. Tale servizio per sua natura legato all'esistenza infrastrutture di rete e di conduzione – per le quali si sono prodotte nella storia ingegni appartenenti alle più diverse civiltà (dai... fino ai romani) – un patrimonio ingegneristico, per ogni società la cui costruzione, manutenzione e cura, deve essere oggetto di *scelte* d'investimento e manutenzione deliberate, pianificate e opportunamente controllate. Ma che cosa accade *se* i soldi per effettuare questi investimenti nel settore pubblico non ci sono ? In che modo è possibile garantire l'affidabilità del servizio alla fasce più deboli della popolazione o spingere il mercato a farsi carico di investimenti nelle zone più povere e rurali ?

Questi sono i temi che la comunità scientifica da molti anni affronta e, di fronte ai quali risulta sempre difficile, se non impossibile, trovare una soluzione, o un'immediata risposta. Quello che a noi resta a fare è *osservare* la situazione con occhio disincantato analizzandone i contorni, traendo lezione dai fatti avvenuti e possibilmente evitando di compiere la ripetizione di errori già altrove commessi allorché ci si è affidati ad un'eccessiva confidenza nell'applicazione di (pur interessanti) teorie e leggi economiche, piuttosto che non ad una *conoscenza* e ad un'analisi pratica delle concrete situazioni *sul campo*.

- A questo punto si passerà all'uso della lingua *inglese* come *tributo* a tanti anni di appassionata ricerca e alla comunità scientifica di riferimento che tratta di *water politics*.

Scientific Contributions to understand Water privatisation

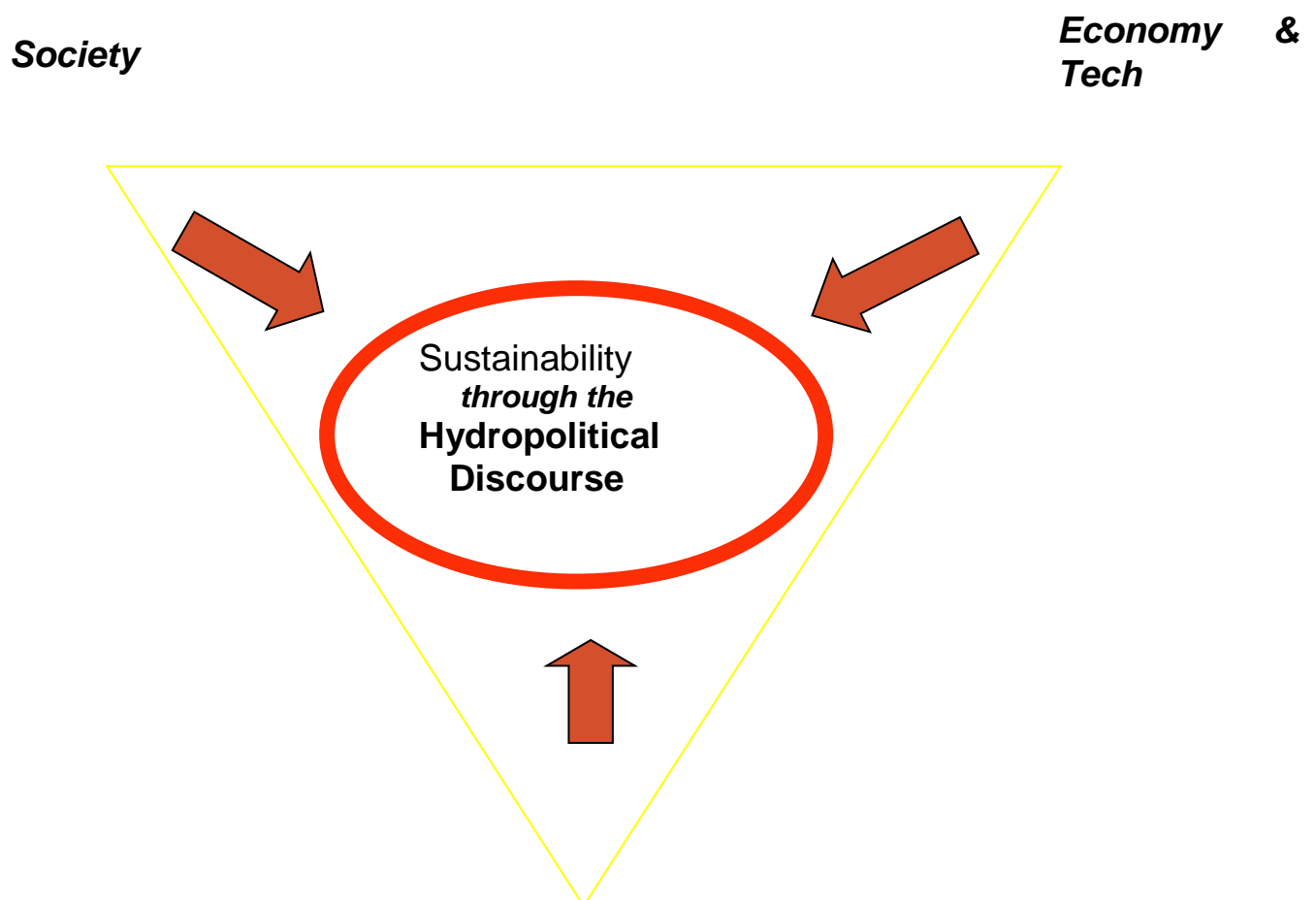
Along time various works have been addressed by scientists to help the understanding and to oversight the water privatisation processes and several methodologies, based on case studies, have been developed to contribute to the give width and depth to the knowledge on this highly debated topic. Among these there are *classification* systems (Bakker, et al 2003), case-studies reported analysis (Castro, 2004, Loftus, Budds, Ruiters, Hall), country case studies (Budds, Ruiters, Loftus et al.), *regional* and *comparative* studies (Hall, Barraque 2003), *sociological analysis* of the *consequences* of privatisation (Dalton 2004, Dawson), country studies on the *privatisation of the water rights* (Budds, & oth).

The Pacific Institute Principles

Other researchers have helped the discussion around water privatisation developing some media for 'setting standards', or guidelines to help orientate the policy makers and the administrators in charge of policy implementation when facing the issue of public-private agreements. Among these there are " The Pacific Institute *Principles* ", as described by the *Financial Times*, in its Global Water Report. These principles have been drawn on the study of a range of privatisation cases and draw useful guidance for public administrators in the design of future public-private agreements.

Sustainability, Democracy and Regulation in the Hydropolitical Discourse

Regulation is the outcome of a *democratic society*, where all the social parts are equally acknowledged the possibility to express their interests and views, as well as the view of the *environment*, that usually has no voice, by itself, if not represented by specific advocates. Allan's diagram well identifies *sustainability* as a result of the interests expressed and negotiated by the main socio-economic actors, which are the economy, pulled by technology advances, the society and the environment, as showed in his famous scheme :



Environment

Allan (2002)

Allan's Sustainability and *Hydropolitical Discourse*

“ Sustainability is achieved
when outcomes which are *socially*,
economically and *environmentally* sustainable
are successfully contended ”.

According to Allan's revisitation of the Bruntland³ Commission's concept, as applied to water issues, *sustainability* can only be achieved when the balance is reached among different, often diverging interests and pursued through the development of a proper *hydropolitical* discourse, at all levels of governance global, national , regional and local level.

While governing water resources - whether they may be seen either as *freely flowing* through the environment or as ‘ goods ‘ capitalistically managed through the market and delivered to paying consumers - whatever the vision of the reader and his approach to water resources may be - an accurate and transparent *hydropolitical* process for rule-setting should be accurately designed in order to realistically *capture* the needs and the constraints of a set socio, environmental and economic system.

3. The first Report on *sustainable development* published by a specific Commission set by the UN, the *World Commission on Environment and Development (WCED)* also known as the *Brundtland Commission. Our common future*. Oxford: Oxford University Press, 1987 p. 43.

The Effects of Different Systems of Regulation

When, towards the end of the 90s , lot of privatisation decisions took place in many countries the United Nation was monitoring the process of privatisation worldwide, with its effects on societies and populations, a number of studies were commissioned to evaluate its effects and were led comparatively in different parts of the world. It was found that the prices of utility services were extremely *variable*, and not necessarily connected to the economic development of each country. Rather, Several cases throughout the world were taken into consideration across the different sectors of water, energy and gas and the findings were that not necessarily the prices reflected the level of advancement and the economic capacity of the country, rather in countries economically and technologically more advanced the price of the utilities, for registered consumers showed to be *lower* than in countries with developing economies, and among the latter a great difference between Europe and the United States. In the United Kingdom, consumers were found to pay in the late 1990s nearly 3 times (300 per cent) more for water than American consumers, 68 per cent more for electricity, 40 per cent more for natural gas. And in comparison to the European standards, United Kingdom prices were considered low, and still are. So the issue emerging was around *which process* could led certain countries to develop a balanced system in establishing

their utility prices respecting the need of consumers and, on the contrary, *which causes* brought some other countries to miss or unbalance the governance of their utility system to such an extent that they registered a serious gap between the prices of utility good and the real possibility and availability to pay among average citizens. Through compared analysis of a number of cases, patterns of converging or diverging paths started to emerge in different economies and societies. An analysis and comparison of these *effects* and *causes* has been the object of this study.

PATTERNS OF SIMILARITY

POPULAR MOVEMENTS for People's Control over utilities

In the societies of both developed and the developing world *a common feature* emerged in correlation to the events which preceded or followed water privatisation decisions. Such a recurring *event* consists in the presence of a broad, rooted, interconnected movement of masses (of citizens) that, in different countries and different times, took serious motivated and coordinated stance around the political cycles of decisions that pertained their water utility (or other utility) ownership and governance, when their governments were imminent to facing such decisions. The monopoly of utilities over essential goods, has always been recognised to be very dangerous and , in particular with water, where the dependence of the user from *the one* supplier - whoever actor, public or private, it may be in charge to realise the connectivity to the network, either for drinking water purpose and for sewerage discharge - well acquires this situation the definition of *natural monopoly*. This creates reasonable worries in every society as the spread of diseases and the health security so heavily depends on the quality - and quantity - of the water supplies and of the sewerage that reach the each households.

The Rise of Antitrust Regulation and Conservation Laws in US

Many authors agree that in regulating public utilities supplying goods like water, electricity and gas, the regulatory process works best if regulators endorse to a deep extent into a fully democratic process. The United States traditionally, demonstrate to have one of the most well-established systems in regulatory democracy as regards utility regulation, which is rooted on the traditions inherited by the *New Deal* of President Franklin D. Roosevelt, and has been fostered by a broad popular movement of citizens for people's control over the privately-owned utility monopolies, in years marked by the culture of *the Progressive Movement*.



The Progressive Movement was concerned about a variety of issues, including monopolies cornering the markets.

The PROGRESSIVE MOVEMENT

At the beginning of the XXth century many Americans felt the need to change the relationship between government and society and address the growing social and political problems. Like the Populists before them, *Progressives* believed that unregulated capitalism and the urban boom required stronger government supervision and intervention. Specifically, Progressives wanted to regain control of the government from special interests like the railroads and trusts, while further protecting the rights of organized labor, women, blacks, and consumers in general. The ***Progressive Movement*** was a social, political & economic reform movement in the America of the early 1900's based on the idea that government could be a tool for helping society to overcome its inequalities and other major social and economical diseases of time. Supporters of the movement were found in both major political parties, of the time Democrats and Republicans. The recent experiences of other, still existing, alternative parties like the *Populists*, during the 1890s, had shown how hard it is to succeed outside of the two major existing parties. Therefore, proponents of the Progressive Movement tended to work within the major existing parties, building on the society through fostering political change and social improvement. The members of the *progressive movement* advanced a whole host of issues, always working across existing parties, with the goal of expanding democracy, strengthening social justice and limiting the power of big business against people. Drawing from the experiences of the past decades, in the new raising 20th Century, many businesses were becoming 'big' business. The rapidly expanding economy made the United States a huge marketplace with many *potential consumers* and businesses, as they grew bigger, began to try and monopolize that market. They aimed to control prices and profits, and attempted to limit or eliminate competition. The Progressives claimed the *unfairness* of some corrupted practices of newly raising big business and sought to break up their monopolies of "trusts."

A first major stake that progressive reformers took was to establish conditions for a *more democratic* form of government. In fact, before the turn of the century, members of the U.S. Senate used to be elected not by citizens but by the *politicians* in each state legislature. In many states they pushed and obtained to give people more power in order to achieve a more democratic government. With this objective many reforms took place, starting from obtaining *direct primaries*. Other major reforms were forged in order to allow citizen groups to initiate new laws themselves - this called the *Initiative* — and to review the actions of legislatures — or *referendum*. The "*Initiative and Referendum*" systems allowed citizens to circulate petitions, and to put issues and proposals on the ballot. In many states, the progressive reformers also promoted systems to allow for the *Recall* of elected officials. In the senators chambers, the *direct election* of senators by voters was a major electoral achievement initiated by the progressive reformers.

A new culture of Risk and Compensation

The progressive reformers also devised, during the early 1900th century, a new system of *compensations* for work injuries, establishing a *new regulatory culture* on the issue of *industrial risk*, so far so hardly perceived by the firm owners. Till then , both young and old workers were simply dismissed out in the street consequently to a work accident, if they became unable to do their jobs.

Populists and Progressives

During the same time, another party, the *populists* showed to have resonance and acceptance as an alternative to the *democrats* and the *republicans*. Although they shared a common interest in fighting the big ‘ trusts ‘ in the raising business, they differed from the *progressives* in many ways and to a number of extents. The *progressives* were more popular amongst the educated middle class of the east coast of the States, particularly in the cities, claiming issues more familiar to those living in urban areas. The *populists* were averagely less educated and more interested in issues regarding the rural America, particularly popular in the mid-west and the south of the States. In respect to the achievement of their goals, the *populists* rarely achieved their political objectives, while the *progressives* often succeeded in reaching those goals that the populist did not manage to conquer. Both *populist* and *progressives* were amongst the reform movements of the times sharing interest and common view on establishing anti-trust rules to the interest of the community, both fostered the introduction of a graduated income tax, and strongly advocated rules to be put in place for reach more controls over the banks and the finance fluxes, generated by the new wave of production.

Education and Government Responsibility as Governance tools :

Good Governance in the Progressive view

The Progressives strongly believed that an *efficient* Government could *protect* the public interest restoring order into the society. They maintained high-level expectations into government’s effectiveness of intervention and outreach amongst all fringes of the society, especially among the poorest ones. According to the *Progressives’s* vision Government is an *agency of human*

welfare, in charge to establish those infrastructures that allow better conditions for human development.

The Founders' Vision of Government: Culture of *Stateman* and Responsibilities of *elector Citizens*.

In the US, capital of *freedom*, as we know it today, the *Progressive Era* can be considered the first attempt to promote a stricter regulation of liberalistic practises in modern times. This was grounded in the values and visions asserted by the political culture in the previous historical period, where the *founders* of the US nation gave their imprint on the US *stateman* and citizenship mentality through many of their their historical speeches. During the founding period the general expectation on a *stateman* , as well as the expectation posed on the average *elector citizen*, stressed the necessity of values as *wisdom*, common sense and *virtue*, for both *statemen* and *electing citizens* responsibility as basic conditions for a free state. In his famous speech, President James Madison (1751-1836) attests:

“ To suppose *liberty* or happiness *without* any *virtue* in the people, is a chimerical idea. (..). If there is *no virtue* among us, *no form* of government can render us secure. If there be sufficient virtue and intelligence in the community, it will be exercised in the selection of the (government) men.”

James Madison
former U.S. President

Efficiency and the rise of technocrat-bureaucratic Governance

As a natural evolution from the approach of the founders to state management and the regulation of politics, with the advent of *progressive* thinkers and their faith in progress, American images of politician shifted towards the roots of what we now define, a *technocratic* vision, which started to regards at politics as a *too complex affair* to be coped with only on the basis on the founders' *common* sense. :

While according to Madison :

‘ *Laws* should be made not by experts, but by a body of elected officials, with roots in local communities who should have *most wisdom* to discern, and *most virtue* to pursue, the common good of the society”

James Madison
U.S. President, 1751-1836

According to the *progressive movement* thought only government agencies staffed by *experts* informed by the most advanced modern science could manage tasks previously handled within the private sphere, which now the government had to deal with (West) .

A new concept of *freedom: creating* institutions for *creating* individuals

The Progressives regarded the *founders'* scheme as defective because it took a too benign a view of nature, as they thought that the individual was ready-made *by nature*. As Dewey

remarked, ‘ the state has the responsibility for creating institutions under which individuals can effectively realize the potentialities that are theirs. For the Progressives, freedom is redefined as the fulfilment of human capacities, which becomes the primary task of the state. A West and Shambra (2007) remark *creating individuals* - via creating institutions that would allow for it - was the new prominent goal for Government, in comparison to the previous goal of *protecting* individuals against the violence of the others, in the former era. This meant that the progressives were starting to realise that freedom from violence didn’t equate *freedom from necessity* of freedom from poverty, the new evils of the emerging neo-industrializing society. sums up the difference between the Founders' and the Progressives' conception of what government is for.

Therefore the political thought shifted towards the root of a more *technocratic* vision of the requirements for politicians and state administratives. The experts , of the Government agencies started to be hired amongst those educated in the top universities, preferably in the social sciences, reputed to be the ones with the capability of governing

The believe was that:

‘ Government needed to be led by those who see where history is going, and who understand the ever-evolving idea of human dignity ‘. (West 2007)

In practise , following Thomas West, interpretation :

‘The *Progressives* wanted the people's will to be *more efficiently translated* into government policy. Local politicians would be replaced by *neutral* city managers presiding over technically trained staffs.

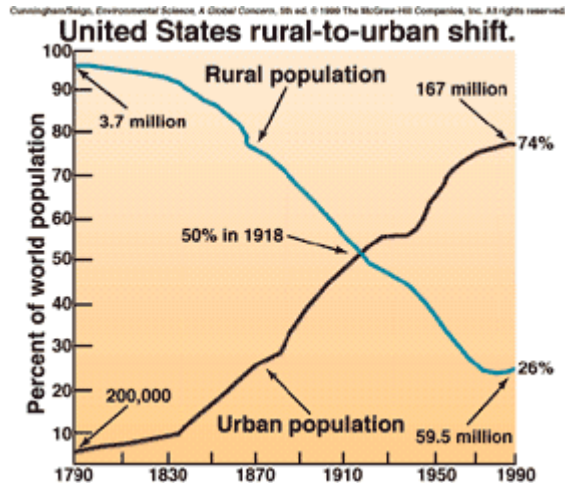
‘ Politics in the sense of *favoritism* and self-interest would disappear and be replaced by the universal rule of *enlightened bureaucracy*.’

America in the Early 1900s.

The progressives wanted to establish policy reforms to better distribute welfare among the fringes of society, strengthening social justice, eradicating poverty, tackling many problems of the factory workers, affording the issue of child labour, cleaning up dirty cities, fostering the right to vote for women and affording the problem of racial segregation on the south of the country. Some of them reputed alcohol to be at the root of many social diseases and wanted to put around it's use prohibitionists limitations.

Population explosion and Wild Urbanization

An issue that raises similarities between modern times and the America of the early 1900s. Similarly to many mega-cities of today, where population is fastly growing, with severe implications fin water provision of water for poor of in the urban and peri-urban areas, in America as well a wild urbanization process took place the cities of the East coast in the end of the 19th century. In the decades between 1880 and 1920 about 27 million people migrated into the U.S., predominantly from Eastern & Southern Europe, filling cities and suburbia with their hopes as well as social diseases. Many rural Americans, too , regarded the cities as sources of increased opportunities : cities offered entertainment, shopping, electricity and plumbing (the *new technologies*) and anonymity. Nevertheless, cities infrastructures were very ill-equipped to deal with such a population explosion. As a



result, the living conditions in many parts of the large cities were revolting : working conditions were appalling, the exploitation of women and child labour developed and crime, violence, gambling and prostitution became rampant.

Business trusts and political machines.

One of the emerging issue for the country was the problem of the *corruption* in business, and politics with their consequent monopolies- to an extent that the term *political machines* was coined to indicate the widespread corruption and collusions in business and in politics. In business, the *progressive movement* agenda played to make more accountable the big ‘trusts’, that were resulting in establishing consortiums with the aim to eliminate competition and provoking the failure of the small entrepreneurs to the exclusive apanage of a small oligarchy of big owners. On the political side, the heads of many districts and cities , regularly accepted bribes from special interests for favours, to the obvious detriment of the tax payer, making municipal politics out of the hands of the civic minded Americans.

The Progressive’s Recipe

Tackling *Societal Change* through developing *Democratic Resilience* via *Education* and *Optimism*

The American society in Early XXth century shows characteristics that assimilates it to the society of our modern times, being subject to a rapid *growth* and *change*. During the decades between 1880s and the 1920 the US population increased by 27 million people, a share mainly composed by migrants coming from Europe in search of a new life. The discourse analysis on the debate around *Education*, that took place during the progressive era offers us useful elements which can be interestingly outdrawn for the major problem of XXIst century, being the ideas so well developed during the *Progressive Era* perfectly eligible to apply nowadays. This is particularly true with particular reference to tackle the issue of *change and resilience* in modern societies. None of the aforementioned reforms would have ever been devised out of the auspices of withstanding a more developed society (a concept that now we would define *resilient*) through the mean of education to allow a greater proportions of individuals to lead their life with dignity and therefore to better contribute to the public sphere. Among their most prominent thinkers of the progressive movement there was *John Dewey*.

John Dewey – The basic intuition of Social Capital



'We need more humility in our moments of success rather than in our defeats.'

[John Dewey - Human Nature and Conduct]

A philosopher, psychologist and educational reformer *John Dewey* deeply endorsed *education* as a crucial mean to fostering people living and working conditions. Dewey asserted that complete *democracy* was to be obtained not just by extending voting rights but also by ensuring that there exists a fully formed public opinion, accomplished by effective communication among citizens, experts, and politicians, with the latter being accountable for the policies they adopt Dewey thought that for achieving a strong *democratic society*, each individual in the society should be put, via the mean of education, in condition to contribute to the unceasing *democratic dialogue* through allowing the development of the following features, which would have allowed the society to develop ability to keep up with the constant :

- *literacy*
- *acquiring cultural and social skills, that feed the interest into public life*
- *an independent thinking, fundamental requisite of a democracy*
- *propensity to share knowledge with others*

Dewey tackled a wide variety of issues like *growth*, and other issues in society, that we now may refer to as *social capital* * [* *Term forged by...*] .

“From a social standpoint, dependence denotes a power rather than a weakness; it involves interdependence. There is always a danger that increased personal independence will decrease the *social capacity* of an individual. In making him more self-reliant, it may make him more self-sufficient; it may lead to aloofness and indifference. It often makes an individual so insensitive in his relations to others as to develop an illusion of being really able to stand and act alone — an unnamed form of insanity which is responsible for a large part of the remedial suffering of the world (..)”

[The conditions of Growth]

Dewey succinctly defines *growth* as ‘ the enhancement of a living experience ‘ which should prepare the individual for later experiences, of a deeper and more expansive quality, Thanks to the exercise of *critical thought* and *reflective action*

Dewey’s Concept of Public and faith in Technology

Dewey exhibits his strong faith in the potential of human intelligence to solve the public's problems, describing all the powerful forces at work that eclipse citizens, preventing it from *articulating* its needs, and making *public deliberation difficult*- Among these the special interests of powerful corporate capital, general selfishness of individuals, and the unpredictabilities of public communication

“ What is *the public*? If there is a public, what are the obstacles in the way of its recognizing and articulating itself? Is the public *a myth*? Or does it come into being only in periods of marked social transition when crucial alternative issues stand out, such as that between throwing one’s lot in with the conservation of established institutions or with forwarding new tendencies ? “

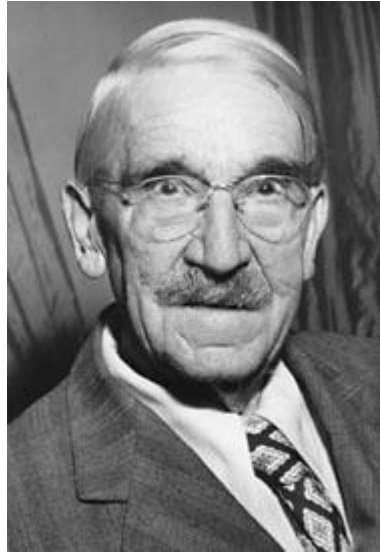
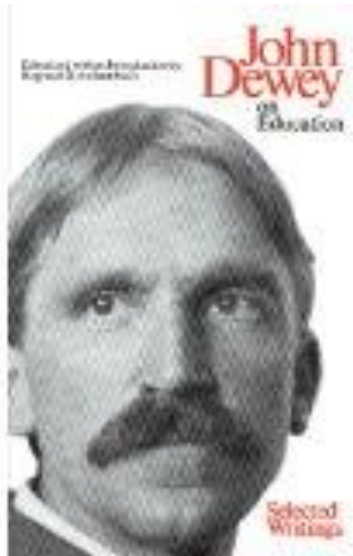
In “ *The Public and Its Problems* ” John Dewey deeply *questioned* , providing definitions of concepts like *public*, *State*, and *Government*

“The external mark of the organization of a public or of a *State* is the existence of *officials*. “

“*Governement* is not the *State*, for that *includes the public* as well as the *rulers* charged with special duties and powers. The public, however, is organized in and through those *officers* who act in behalf of its interests.”

“ The *State* is the organization of the public effected through officials for the protection of the interests shared by its members.. “

Opposing to others’s view, who believed that ‘ *the public* had *little capacity* to be a rational participant in democracy and was essentially *non-existent* ’ Dewey held a more optimistic view of the public and its potential. With communication and education , he hoped public would find itself and become a cohesive group, *regaining a sense of self*.



Without such communication the public will remain shadowy and formless. Dewey also blamed the *distractions* of modern society, pointing out that even in the past, the public has had *other* concerns than Political concerns. However, Dewey does have hopes that society *can someday use* its *technology* to improve communication and *thus* improve public interest in politics.

Society and “Great Community”

Dewey thought that the *local community* is where democracy must happen so that people can become active and express issues of public concern. In this way, until the Society is converted into a “*Great Community*”, the Public will remain in eclipse.

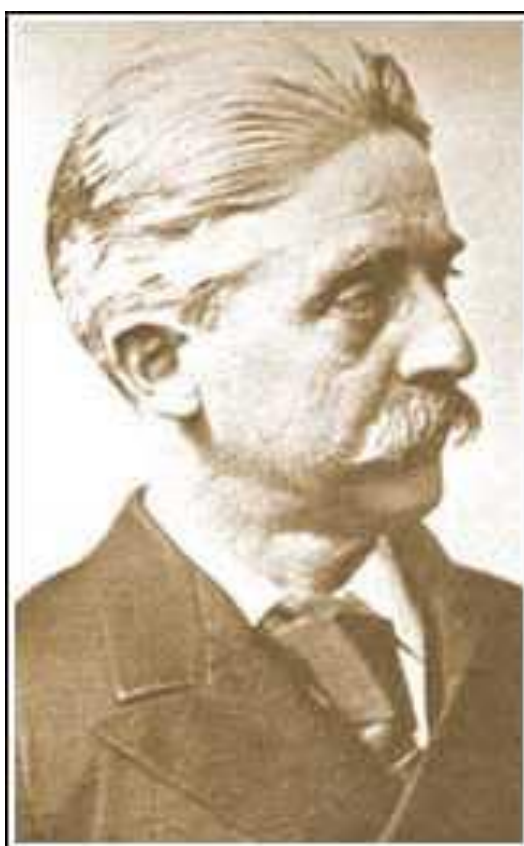
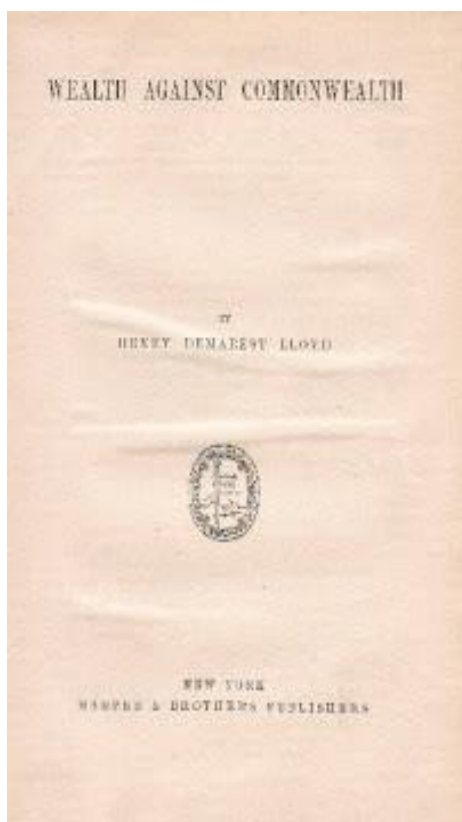
The rise of Investigative Journalism and it's cultural influence on the Regulatory Reforms

‘Liberty produces wealth and wealth destroys liberty’

[Henry Demarest Lloyds]

Henry Demarest Lloyd & the ‘Muckrackers’.

Forerunning the cultural wave of the following decades, a group of journalists, pioneers of the investigative journalism, also named by Roosevelt ‘ *muckrackers* ’, as Jacob A. Riis, and Henry Demarest Lloyd, Upton Sinclair, Ida M. Tarbell and many others started the first public investigations on the late 19th-century industrial monopolies, openly denouncing through their articles, pictures and novels the evils of the American society that had fallen, caused by the uneven business practices in play at the time. In 1894 the book, *Wealth against Commonwealth*, came out as the first masterpiece of investigative journalism, standing against the big economic trusts. Its author, Henry Demarest Lloyd denounced the very questionable business practices of some major US trusts, like the railroad companies and the Standard Oil Company, arguing that the extreme *wealth* generated by few private monopolies was indeed against the interest of the *commonwealth* of the people.



Henry Demarest Lloyd (1847- 1903) and his book, *Wealth against Commonwealth*, which won raised the public interest on monopolies. Lloyd's book was inspirational to an entire generation of young investigative journalists.

He argued and stressed that through the monopoly, the *trusts* were able to control all means of their business in order to profit themselves only, rather than the *common interest*. One example: business owners were legally allowed to reduce production and increase prices in order to sustain a high demand for their product.

On the consequences of following the myth of *self-interest* in business, as consolidated and diffusive practise along time, Demarest Lloyd wrote :

“History is condensed in the catchwords of the people. In the phrases of *individual self-interest* which have been the shibboleths of the main activities of our last hundred years were prophesied: the filling up of the Mississippi by the forest-destroying, self-seeking lumber companies of the North (...). Where the *self-interest* of the individual is allowed to be *the rule* both of social and personal action, the level of all is forced down to that of the lowest. Business *excuses* itself for the things it does — cuts in wages, exactions in hours, tricks of competition (...).’ It is pleaded as an *excuse* by those (common carriers), who desire to obey the (Interstate Commerce) law, says Senator Cullom, that *self-preservation* drives them to violate it because *other carriers* persist in doing so “

On *monopoly* and *corruption* as extreme consequences of *self interest* touching all the spheres of life, as in contrast with the common interest:

“Business motivated by the self-interest of the individual runs into monopoly *at every point it touches* the social life-land monopoly, transportation monopoly, trade monopoly, political monopoly in all its forms, from contraction of the currency to corruption in office.”

On the established hidden collusion of *big business* with *politics* and other powers:

“We now have Captains of Industry, with a few aids, rearranging *from office-chairs* this or that industry, (..) setting, hundreds of properties, large and small, in a score of communities, to flying through invisible ways into their hands; *sitting calm* through all the hubbub raised in *courts, legislatures, and public places*, and by *dictating letters and whispering words* remaining the *master magicians* of the scene(..);

On the acknowledged persuading *power* of the methods adopted by big business :

“.. *defying*, though private citizens, *all the forces and authorities* by the mere mastery of compelling brain, without putting hand to anything... ‘

and on the unavoidable *cultural impact*, resulting from their *uneven* business practises, when opposed by citizen’s protests :

“.. against the protest of a whole civilization, *making themselves*, their *methods and principles*, its *emblematic* figures...”

Ida M. Tarbell’s writings on raising Trusts

"There is no man more dangerous, in a position of power, than he who refuses to accept as a working truth that all a man does should make for rightness and soundness, that even the fixing of a tariff rate must be moral."

[Ida Tarbell, investigative journalists]

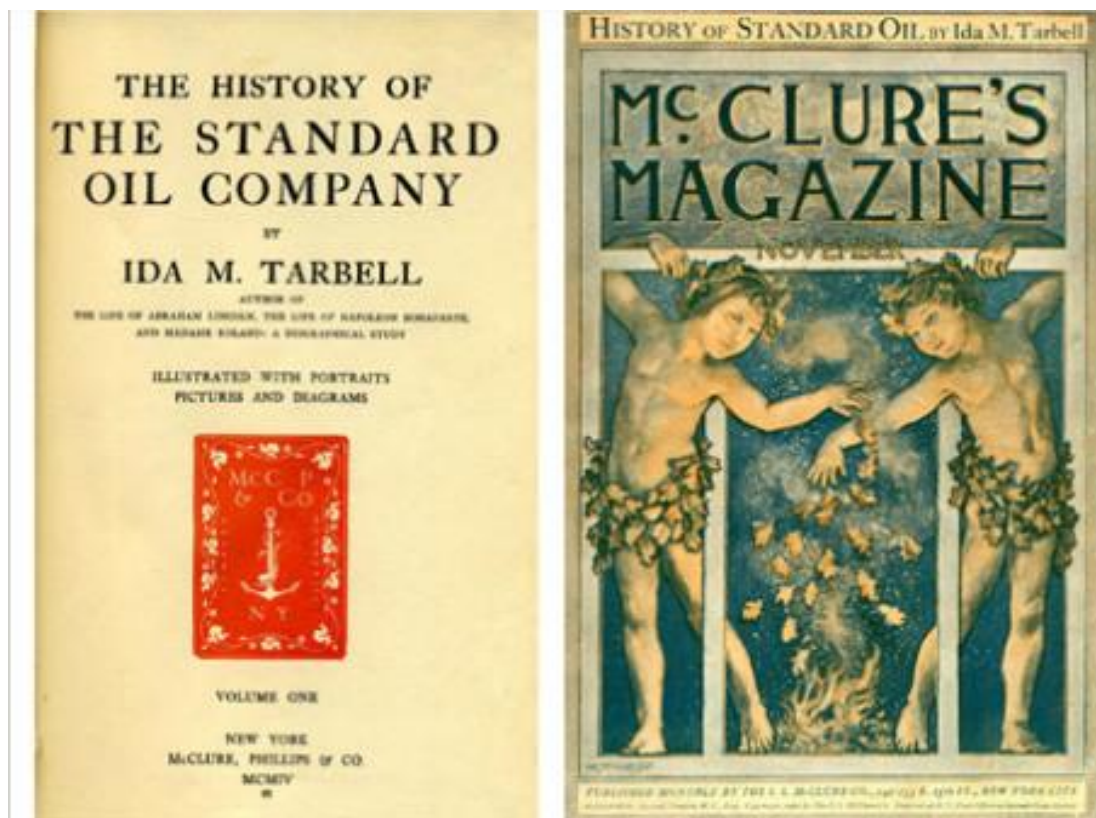
Henry Demarest Lloyd writings and documents, together with additional wide search and analysis, through interviews and personal discussions with the officers of the *Standard Oil*, formed the basis of a more focused work published, few years later, by Ida Tarbell. Ida Tarbell was born in Pennsylvania in 1857 , educated in US and France, she became a prominent investigative journalist . She documented the birth of the Oil Industry in itself, the way in which Rockefeller raised his trust, forcing small entrepreneurs to join his purposal or to sell to him, the way he laid the foundation of his trust, establishing secret alliances and private rules in his favour with railroad and shipping companies, to the detriment of his smaller competitors. Through a series of denouncing articles published on *McClure's Magazine* between 1902 and 1904, Ida Tarbell widely exposed on the ruthless tactics adopted by the Standard Oil Company to crush competition, focusing the public eye on the bad conduct of trust corporations. The series were lately gathered in a book, *The History of Standard Oil Company* , published in 1904, which *Preface* clearly attests the reasons why *Standard Oil* was chosen:

“ In order that their readers might have a clear and succinct notion of the processes by which a particular industry passes *from the control of the many* to that of *the few*, they (the editors of McClure's) decided to publish a detailed narrative of the history of the growth of a particular trust. The Standard Oil Trust was chosen for obvious reasons. It was the first in the field, and it has furnished the methods, the charter, and the traditions for its followers. It is the most perfectly developed trust in existence; that is, *it satisfies* most nearly the trust ideal of *entire control of the commodity* in which it deals. (..) ”

[Ida Tarbell – *Preface of The History of Standard Oil Company*]

Ida M. Tarbell articles against Rockefeller's Standard Oil Company.

In 1870, John D. Rockefeller established the South Improvement Company (later named *Standard Oil*). His scheme lately documented and disclosed by Ida Tarbell was of buying, entering into partnership, or destroying the numerous smaller companies that were dangerous to his business, integrating the oil industry activities all over the US under *his* umbrella enterprise with the aim to *lessen* the mushrooming competition from the small companies, which was reducing oil prices to his detriment. Ida Tarbell spotlighted in her writings that Standard Oil was using *illegal* methods to reach its aims. Her reports led to many legal cases that continued all the way to the Supreme Court of the United States. Ida Tarbell's revelations culminated into a book published in 1904, called *The History of the Standard Oil Company*, listed as one of the *top* work in the American XXth century journalisms. The articles also helped to define a growing trend to investigation, exposé, and crusading in liberal journals of the day, a technique that in 1906 President Theodore Roosevelt would label as '*muckraking*'.



Ida M. Tarbell articles, as long as the work of Henry Demarest Lloyds's and companions probably contributed, to the shaping of President Theodore Roosevelt's background culture in the field of *trust – busting* reforms. In 1891 she took her savings and went to Paris, where she enrolled in the Sorbonne and supported herself by writing articles for American magazines.



Ida M. Tarbell , in 1904 , and the front cover of *Mc Lure's* (1901 issue)

She discovered, during her job that that she was interested in stories that were too long for the paper to print. On a series of 19 episodes, published on *McClure's* between 1902 and 1904, Ida Tarbell wrote a detailed exposé of Rockefeller's *unethical tactics*, sympathetically portraying the plight of Pennsylvania's independent oil workers. For Mc Lures' Ida Tarbell also wrote series of stories about the life of the French Emperor Napoleon, in 1894, and that became an immediate success, and later, a

series about the life of American President Abraham Lincoln, based on her and research on documents by talking with people who had known him. This established her skill as research-based journalist. The report series about the Standard Oil Company gained Miss Tarbell her greatest notoriety.

In the series Miss Tarbell carefully acknowledged Rockefeller's brilliance and the flawlessness of the business structure he had created. She did not condemn capitalism itself, but "the open disregard of decent ethical business practices by capitalists." In her reports showed that Standard Oil used illegal methods to make other companies lose business.

McClure's Magazine

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THE RISE OF THE STANDARD OIL COMPANY

BY IDA M. TARBELL

Author of "The Life of Lincoln"

Miss Tarbell described the trusts' abilities in *McClure*, in July of 1903 "The History of the Standard Oil Company" with both analytical and dramatic skills :

"Now, it takes time to secure and to keep that which the public has decided it is not for the general good that you have. It takes time and

caution to perfect anything which must be concealed. It takes time to crush men who are pursuing legitimate trade. But one of Mr. Rockefeller's most impressive characteristics is *patience*. There never was a more patient man, or one who could dare more while he waited. ... He was like a general who, besieging a city surrounded by fortified hills, views from a balloon the whole great field, and sees how, this point taken, that must fall; this hill reached, that fort is commanded. And *nothing was too small*: the corner grocery in Browntown, the humble refining still on Oil Creek, the shortest private pipe line. Nothing, for little things grow."

A method adopted by these companies for example, was to sell oil in one area of the country for much less than the oil was worth; this caused smaller companies in that area to fail, as they could not sell their oil for that lower a price and still make a profit. After a company failed, Standard Oil would then increase the price of its oil, having won the monopoly on that area.



Standard Oil refinery N.1 in Cleveland, Ohio, 1889.

"I never had an animus against their *size* and *wealth*, never objected to their corporate form. I was willing that they should combine and grow as big and rich as they could, *but*

*only by legitimate means. But they had never played fair,
and that ruined their greatness for me."*

[I. Tarbell – *All In the Days' Work*, 1939]

Precisely when writing about Standard Oil, she wrote: "*They had never played fair, and that ruined their greatness for me.*" For almost two years, she looked through volumes of public records, including court testimony, state and federal reports and newspaper coverage. From these, she gathered a big amount of information on Rockefeller's ascent and on the methods used by Standard Oil. The breadth of her research was remarkable, and very impressive was her ability to translate Rockefeller's complicated business games into an accessible narrative understandable by the average reader.

Tarbell analysis showed and documented how Standard Oil obtained information from the railroads about the sale and shipments its competitors made and then ensured that the shipments did not reach their destinations.

Legal Consequences : The *Anti Trust* Decision of the Supreme Court, 1911.

Ida Tarbell's investigations into Standard Oil were partly responsible for later legal action by the federal government against the company. The case began in 1906. In 1911, the Supreme Court of the United States ruled against Standard Oil because of its illegal dealings. The decision was a

major one. It forced the huge company *to separate into thirty-six different companies*. John D. Rockefeller never had to appear in court himself.

Following the investigative work diffused by the muchrackers' journalists articles – which helped greatly to form the public opinion of the time - in 1911 the US Supreme Court ordered the Standard Oil Company, *to split* into several independent companies with *separate boards of management*. This *anti-trust regulation* against a company that controlled 90% of oil production in the USA became a groundbreaking example of victory of the civil society's and free information interest against private corporations.



GROUP OF CLEVELAND OIL MEN TAKEN JULY 1, 1869

The majority of the refiners in this group sold to the Standard Oil Company in 1871. None of the members of the firm of Rockefeller, Andrews & Flagler is present. Figures of particular interest are M. B. Clark (first row, third from right), of the firm of Clark & Rockefeller, Commission Merchants; John Alexander (first row, sixth to the right), whose testimony on the effect of the South Improvement Company in Cleveland is quoted in this article; S. V. Harkness (first row, fourth from left), member of original Standard Oil Company of 1870; Frank Rockefeller (second row, eighth from the left), brother of John D. Rockefeller.



In 2002 the US Postal Service issued a set of “Four Women in Journalism” stamps, including one for Ida Tarbell, as shown.

Jacob Riis : *Photographic reporter* .

"Long ago it was said that 'one half of the world does not know how the other half lives.'

[Jacob Riis]

According to historian Robert Bremner, the *progressive reformers'* problem was ‘ to rouse the public from its lethargy, make consciences uneasy, and stir genial good will into enthusiasm for social betterment. Their first step was to lay bare the responsibility of the community for needless suffering.’ While according to the critics of charities poverty was ‘ the result of individual or moral weakness’, therefore not to be helped through charitable donations, Gilded Age reformers, like Jacob Riis believed that poverty was the result of *environmental* conditions, thus, reform efforts could help.



"I am a believer in organized, systematic charity upon the evidence of my senses"

[Jacob Riis]

On social issues, *Jacob A. Riis* a police photographer, exposed in his book published in 1890, under the title *How the Other Half Lives*, the dirt, the disease, the vice, and the misery among the rat-infested slums of New York, turning to be equivalently influential on Roosevelt's forthcoming health and social reforming policies.

Through his photojournalistic activity, working as a police reporter, Jacob Riis documented the horrible conditions of the slums in which New York lower classes lived. He showed the details about the immigrant neighborhoods of New York City's slums through the use of flashlight powder which allowed him to reach the dark interiors of neglected tenement housing, realising images of extreme poverty that shocked the New York middle and upper classes.

Riis believed that moral citizens, regardless of their economic status, should be given a chance to improve their lives. Like Riis himself, given that chance, many could rise out of poverty and into

the ranks of the middle class. The book proposed solutions to New York City's tenement problems, including engravings of many of Riis's photographs, which enabled readers to better understand the problems that plagued the city. The book became very popular, selling 11 editions in less than 5 years.

Riis chose to work with middle-class and upper-class philanthropists to bring about reform. He believed that private wealth could help transform the slums into better places to live.



Jacob Riis , baby poor

Beaumont Newhall, in his *History of photography*, comments, as regards Jacob Riis :

“ ... his dazzling light discloses with merciless details those sordid interiors, but enlightens almost with tenderness the faces of those doomed to live in it. He always sympathised with people, regardless he was taking pictures of the *street arabs* (street boys) stealing from a wagon, or the inhabitants of Bandit's Roost, who stared scornfully at the machine from doors, windows, balconies. These images are important not only as

source of information but also for their emotional strength. They are *interpretations* and *witness* at the same time. Although not referred to today, their quality will last as long as man will be concerned in his brothers. “



Jacob Riis, 1889. Five cents lodging, Bayard Street.

Riis Social Reformer

Riis's work raised the attention Theodore Roosevelt, at the time President of the New York Board of Police Commissioners from 1895 to 1897, and this friendship might have brought to Roosevelt some decisive insight within the country's slums.

Riis , as well as the other *progressive reformers* contended that poverty was the product of imperfect social and economic systems, and that *it could be reduced* through *increased government regulation* of the economy.



The Other Half

Jacob Riis, 1888, A plank for bed.

Riis wrote *How the Other Half Lives* to call attention to the living conditions of more than half of New York City's residents. He described the cheap construction of the tenements, the high rents, and the absentee landlords. He lamented the city's ineffectual laws and urged private enterprise to provide funding to remodel existing tenements or build new tenements.

Riis argued for better housing, adequate lighting and *sanitation*, and the construction of city parks and playgrounds. Publishing his photographic book : ‘ *How the Other Half Lives* ‘ , in 1890 , Riis

believed that charitable citizens would help the poor when they saw or themselves how "*the other half*" lived. Riis and his progressive companions initiated the idea that suitable political reforms, sponsored by government, can eradicate poverty – started to promote the idea of *modern social reforms*, in the way that still exists nowadays.

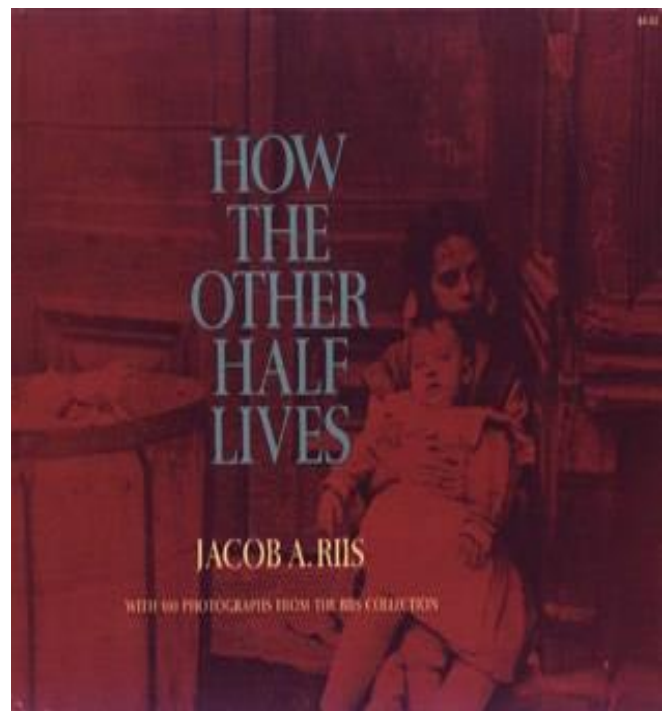


Jacob Riis , Women lodging room, 1892.

He often de-emphasized the individual in favour of the *total setting*. Accordingly, he photographed many of his subjects at a distance to show them in their squalid surroundings.



Jacob Riis , Slums.

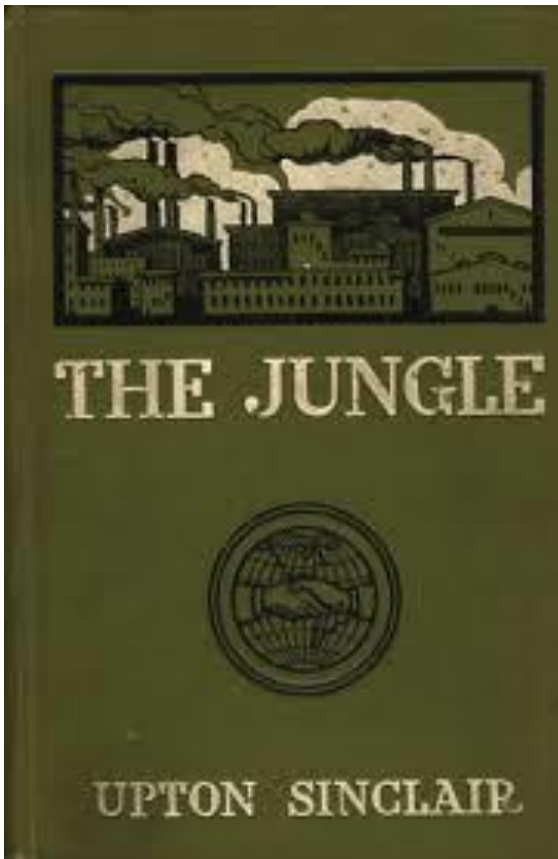


Jacob Riis , and his volume 'How The Other Half Lives'.



Riis, Slum's children.

Upton Sinclair



*Upton Sinclair's novel, **The Jungle**, (1906), one of the assigned readings in the Business Ethics classes, nowadays, in the US.*

*Upton Sinclair, in his novel, **The Jungle** (1906), gave many graphic and detailed depictions of the unsanitary conditions in the packing plant of the meat industry sparking a reaction which eventually led to regulation of this sector as well . Under Theodore Roosevelt, the **Meat Inspection Act and Pure Food and Drug Act** was passed, in 1906.*

“ . . . And then there was the condemned meat industry, with its endless horrors. The people of Chicago saw the government inspectors in Packingtown, and they all took that to mean that they were protected from diseased meat; they did not understand that these hundred and sixty-three

inspectors had been appointed at the request of the packers, and that they were paid by the United States government to certify that all the diseased meat was kept in the state. They had no authority beyond that; for the inspection of meat to be sold in the city and state the whole force in Packingtown consisted of three henchmen of the local political machine! . . . “

[Upton Sinclair – *The Jungle*]

The Reforms in America during the Progressive Age

As C. C. Regiers, author of *'The era of the muckrackers'* describes in his characterization of the Progressive Age, *the achievements* of the investigative journalistic activity of Ida Tarbell and friends who gained a strong support from the public all over US and this, inevitably, was followed by consequent impact on the public policies in most of the sectors. The list of reforms accomplished between 1900 and 1915 is an impressive one. The convict and peonage systems were destroyed in some states; prison reforms were undertaken; a federal *pure food act* was passed in 1906; child labour laws were adopted by many states; a federal employers' liability act was passed in 1906, and a second one in 1908, which was amended in 1910; *forest reserves* were set aside; the *Newlands Act* of 1902 made reclamation of millions of acres of land possible; a policy of the conservation of natural resources was followed; eight-hour laws for women were passed in some states; race-track gambling was prohibited; twenty states passed mothers' pension acts between 1908 and 1913; twenty-five states had workmen's compensation laws in 1915; an *income tax*

amendment was added to the Constitution; the Standard Oil and the Tobacco companies were dissolved; even Niagara Falls was saved from the greed of corporations and Alaska was preserved from capitalists' interest; and better insurance laws and packing-house laws were placed on the statute books.

Theodore Roosevelt and the Regulatory reforms

In 1901, at 42 years , succeeding to William McKinley , Theodore Roosevelt became the youngest president of the United states. Roosevelt interpreted his presidency as a platform to publicize his views and gaining support transversally for his policies on reform in various issues.

The major areas where reforms took place, under Roosevelt presidency were in business regulation, both regarding regulating competition among firms and in the regulation of the owners-workers relations and regarding the environmental policy field.

Roosevelt and the Union Movement : *The Square Deal*

Soon after Roosevelt took office, some 150,000 Pennsylvania coal miners went on strike for higher wages, shorter hours, and recognition of their union. In an economy heavily relying on coal, as principal energy source, as winter neared, Roosevelt feared what might happen if the strike was not resolved, since Eastern cities depended upon Pennsylvania coal for heating. Roosevelt urged mine owners and the striking workers to accept arbitration. But although the workers accepted, the owners refused the arbitration. Winter drew closer and Roosevelt threatened to take over the mines if the owners didn't agree to arbitration marking the first time the federal government had intervened in a strike to protect the interests of the public. After a three-month investigation, the arbitrators decided to give the workers a shorter workday and higher pay although did not require the mining companies

to recognize the Union. Satisfied, Roosevelt pronounced the compromise a “*square deal*.” The *Square Deal* became Roosevelt’s 1904 campaign slogan and the framework for his entire presidency. His electoral promise was:

“ to see that *each is given a square deal*, because he is entitled to no more and should receive no less. ”

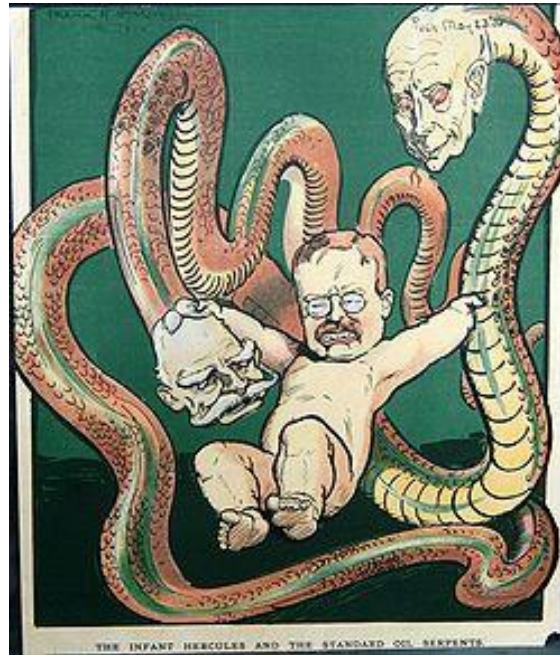
T. Roosevelt

The *Square Deal* became Roosevelt’s 1904 campaign slogan and the framework for his entire presidency.. Roosevelt’s broadened the use of executive power over the course of his presidency . His promise revealed his belief that the needs of workers, business, and consumers should be balanced, as well as limiting the power of trusts, promoting public health and safety, and improving working conditions. The popular president faced no opposition for the nomination in his party. In the general election Roosevelt easily defeated his Democratic opponent, Judge Alton Parker of New York.

The Regulation of Big Business : The Sherman Anti-trust Act, 1890

"Every person who shall monopolize, or attempt to *monopolize*, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed *guilty* of a *felony* [. . .]"

[from the *Sherman Antitrust Act*]



U.S. President [Theodore Roosevelt](#) depicted as the infant [Hercules](#) grappling with trusts

[1906, [Puck](#) magazine cartoon]

Roosevelt believed big business was essential to the nation's growth but also believed companies should behave responsibly. He spent a great deal of attention on regulating corporations, determined that they should serve the public interest. The first fact that stimulated Roosevelt's intervention was related to the railroads. In 1901, when three tycoons of railroads joined their railroad companies together, in order to eliminate competition, their company, the *Northern Securities Company*, ended up in dominating all the rail shipping market, from Chicago to the Northwest. The following year, Roosevelt exerted his executive power in defence of regulation through directing the U.S. attorney general in suing the company for violating the *Sherman Antitrust Act*, issued in 1890. The Court ruled that the monopoly did, in fact, violate the act and should have been dissolved. The *Sherman Act*, promoted by senator John Sherman, was passed by the Congress under President Harrison in 1890 and represents the *oldest* antitrust regulation in the United States. It was aimed to set limits to *monopolies* and *trusts* (or *cartels*) although for the most part, politicians were unwilling to refer to it

until Theodore Roosevelt's presidency (1901–1909). Quoting Senator Sherman – a republican from Ohio – the Act was aimed :

“ To *protect the consumers* by preventing arrangements designed, or which tend, to advance the cost of goods to the consumer “

[*Sen. John Sherman*]

Under Roosevelt the act started to be used widely to oppose the combination of entities that could potentially harm competition, such as monopolies or cartels, enhancing an anti-trust campaign pursuing trusts that sold inferior products , competed unfairly and corrupted public officials. According to its authors, the Sherman Act was not intended to impact market gains obtained by honest means, but tracking unfair competition.



Sen John Sherman,

The Author of the Sherman Antitrust Act

"... [a person] who merely by superior skill and intelligence...got the whole business because nobody could do it as well as he could was not a monopolist..(but was if) it involved something like the use of means which made it impossible for other persons to engage in fair competition."

[*Senator George Hoar*
Co-author of the *Sherman Act*]

At the time of its passage, the trust was synonymous of *monopolistic* practice, because the *trust* was a popular way for monopolists to hold their businesses, and a way for cartel participants to create agreements enforceable to their clients. The evil at which the Sherman Act was enacted towards, was the tendency to built *trusts* as ‘*combinations*’ of *businesses* and of *capital* organized and directed to control of the market by suppression of competition in the marketing of goods and services. This monopolistic tendency had become a matter of public concern. The goal of the *Act* was to prevent *restraints* of free competition in business and commercial transactions which tended to restrict production, to raise prices, or otherwise control the market to the detriment of purchasers and consumers of goods and services. All of these had come to be regarded as a special form of *public* harm.

Critiques to the Sherman Act: Government as source of Monopoly

Nevertheless much criticism arose along the XXth century against the limitations present in the Antitrust Law from Bork ⁶ (1978) Posner ⁵ (2011, 2010) and other scholars from the Chicago Law School. Some criticism is well exemplified by Di Lorenzo ⁴, asserts that the United

4 - According to Di Lorenzo: “Protectionists did not want prices paid by consumers to fall. But they also understood that to gain political support for high tariffs they would have to assure the public that industries would not combine to increase prices to politically prohibitive levels. Support for both an antitrust law and tariff hikes would maintain high prices while avoiding the more obvious bilking of consumers.*In : The Origins of Antitrust: Rethoric vs. Reality* - Cato handbook for Congress - retrieved on 10 March 2013.

States, in those years underwent a rapid transition from a predominant agrarian to an industrial society, and individuals and groups which were uncomfortable with rapid change were becoming ‘*increasingly adept*’ at using regulatory powers of the state. In this atmosphere the Sherman Act was passed ‘. Always according to Di Lorenzo the Sherman Act was simply a *diversion* of the interest of the general public from the true source of monopoly are the *Governments*. In the Sherman Act, Government made no provisions for attacking tariffs, or other barriers to competitive entry and ‘ evidence exists that a major political function of the Sherman Act was to serve as a ‘*smoke screen*’ , behind which politicians *could grant* tariff protections to their big business constituents, while assuring the public that ‘*something was being done*’ about the monopoly problem. The Sherman Act won legislators votes and campaign contributions from farmers and small businessmen who thought antitrusts regulation would protect them from their more efficient competitors. After the Sherman Act was passed, Sen Sherman sponsored a legislation known as ‘ Campaign Contribution Tariff Bill ‘ that, according to Di Lorenzo, sharply raised tariff rates of manufacturing products, for the profit of the US manufacturers’ interests. Big and small.

5 Richard Posner, jurist, economist and legal theorist of the Chicago Law School, helped shaping the antitrust policy changes in the 1970s, based on his idea that 1960s antitrust laws were in fact making prices higher for the consumer rather than lower - while he viewed lower prices as the essential end goal of any antitrust policy - expresses concern with the potential that antitrusts law could be applied to create inefficiency, rather than to avoid inefficiency. *Economic Analysis of Law*, 2010 & oth.

6 Robert H. Bork, judge, attorney general and legal scholar at Yale, in *The Antitrust Paradox* most cited book on antitrust. In his book he argued that consumers were often beneficiaries of corporate mergers, and that many then-current readings of the anti trusts laws were economically irrational and hurt consumers. Bork’s theory became heavily influential, causing a shift in the U.S. Supreme Court’s approach to antitrust laws since the 1970s . His theory became dominant thinking on the subject shaped US antitrust law r e-focusing the discipline on efficiency and articulating its goal as ‘ consumer welfare’. Bork’s book one of the most referred legal interpretation in courts until nowadays.

According to Di Lorenzo, ‘ there is little evidence that the legislative intent of the Sherman

Act was to protect consumers. Evidence indicates the intent was to protect *politically powerful* producers *groups* at the expense of consumers. Antitrust was the Government response to politically powerful farmers and small businessmen who were opposed to economic change and sought protectionist legislation ‘. Nevertheless Di Lorenzo reveals his ultra-liberalistic position when he lastly declares:

“ .. It is a world in which *actions designed to limit competition* are branded as *criminal* when branded by businessmen, yet praised as ‘ *enlightened* ‘ when initiated by the government. “



“Keeping in mind *Armstead v. California*, 1967, and *Conway v. Dade County*, 1972, the Court finds, by a vote of 7 to 2, that the price of \$1.79 for a pound of prunes is unfair and absurd.”

Environmental Movement in early XXth century America

Urban movements and Women Activists

Prof. Taylor, in her book "*The Environment and the People in American Cities, 1600s-1900s: Disorder, Inequality, and Social Change*" (2009, Duke University Press) traces the progression of several major thrusts in urban environmental activism, including the alleviation of poverty, public health, housing, parks, playgrounds, food safety and land use.

"While all-male expeditions and solitary males who retreat to the woods for months or years at a time are idealized in many environmental history accounts, the *urban activists* receive no such acclaim or glory" argued Prof. Taylor noting that *female*, working class and ethnic minorities were active in *environmental activism* and affairs. "In the city, the classes, races and genders interacted with each other to create a kind of environmentalism that was very fluid and dynamic."

In cities the Environmental Movement is perhaps the largest, the most long lived and complex social movement of the U.S. With over 6,500 national and 20,000 local environmental organizations, along with an estimated 20-30 million members, this movement is much wider than other modern social movements, such as the civil rights or the peace movements. To understand it, from a sociological point of view, requires an analysis of the different systems of *belief* or *discursive* frames that characterize the different communities that made up this movement, in the first part of XXth century. It is also the oldest, as the first local environmental organizations were founded before the Civil War and several still existing national environmental organizations, such as the *Sierra Club*, the *National Audubon Society*, and *American Forests*, were founded in the late 19th century. There are eleven major discursive frames that define the environmental movement in the U.S.

The current environmental movement is the result of the cumulative historical development of the different discursive communities over the past 150 years.

In the late nineteenth century, hundreds of American towns became congested, polluted industrial cities. The vast forests of the *Great lakes* were cut down. Millions of acres of grassland were transformed into farms *and* ranches. *In* response to these *profound changes* in the environment, *citizens* of many types *organized* to *stop pollution*, conserve natural resources, and preserve wild places and wild creatures (Rome, 2005)

“Their efforts led to many laws, institutions, and government agencies that still shape the American landscape.

The environmental reforms of the period also had far-reaching political, social, and cultural consequences.

For example, ***environmental activism*** was one of the principal ways women entered the public sphere in the years around 1900, and the energy of *women* in addressing environmental problems *strengthened the campaign for suffrage.*

Environmental Conservation Laws in early 1900s America

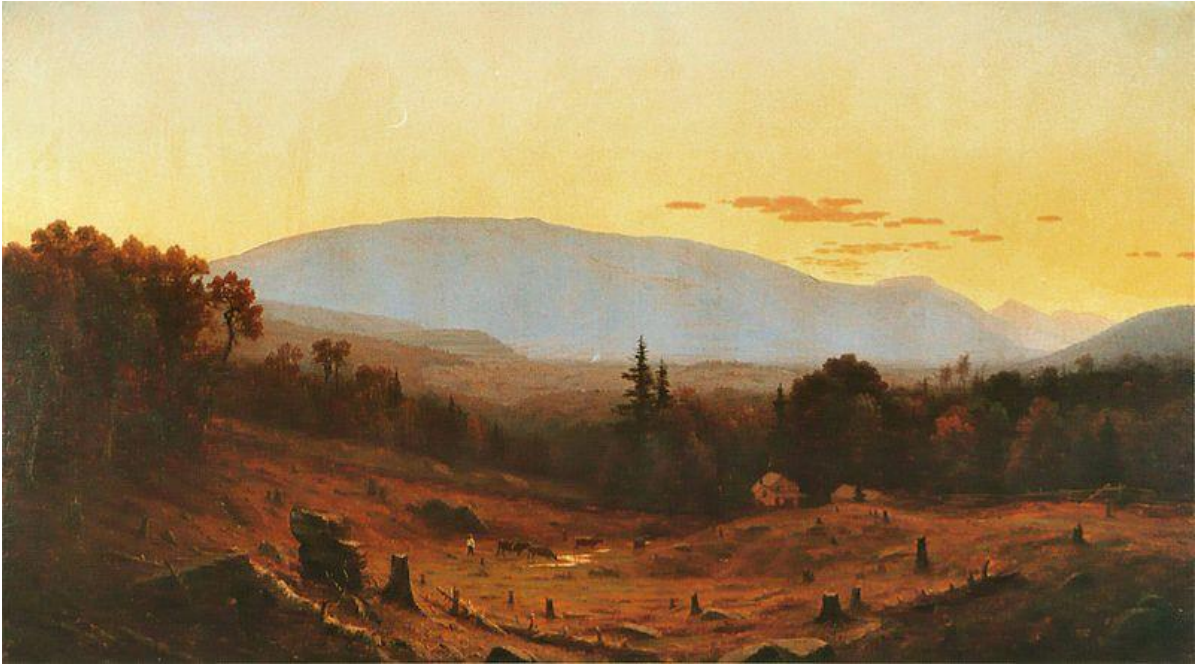
In the late 1800s natural resources were used at an alarming rate, and foresting, polluting, and overgrazing were common.

Roosevelt recognized that natural resources were *limited* and that part of the government’s tasks was to *regulate* the use of resources. Roosevelt’s view on the management of natural resources was mixed

: he believed that *conservation* should involve the *active management of public land* for a variety of uses, some of which preservationist, some other economical.

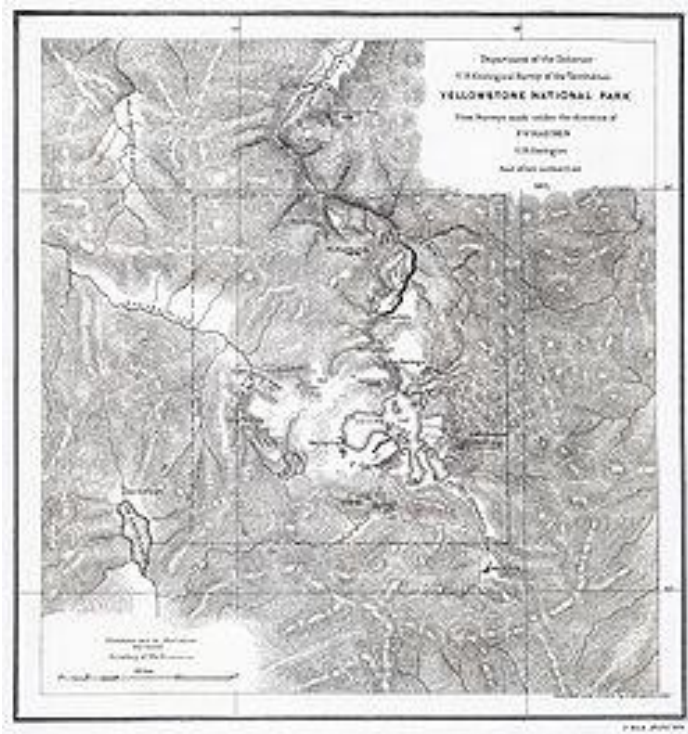
In this vision, Roosevelt was in disagreement with the naturalist *John Muir*, the enhancer of Yosemite National Park, who thought that the wilderness should have been preserved.

Preservationists *and* Conservationists: Discursive frames and
Wilderness in the American mind: Visual Recalls





A PRACTICAL FORESTER
(A subject that had attention all through Mr.
Roosevelt's Presidency.)
From the *Pioneer Press* (St. Paul)



Engraved according to Act of Congress, D. 1872, by J. D. Appleton & Co. in the Office of the Librarian of Congress at Washington.

Mirror Lake, Yosemite Valley

New York, D. Appleton & Co.



The Newlands Reclamation Act, 1902

The *Newlands Reclamation Act* of 1902, reflected Roosevelt's beliefs. The law allowed federal government to create *irrigation* projects to make dry lands productive. The projects would be funded from money raised by *selling off* public lands. During Roosevelt's presidency, 24 reclamation projects were launched.

The Case of Ennerdale Water and Wastwater: a Struggle for Water Protection in the Lake District.

Ennerdale Water

The history of Ennerdale Water is the history of a *struggle around water* which raised in Great Britain at the beginning of the 80s for the protection of the waters of Ennerdale Lake, in the heart of Lake District (Cumbria)¹. The issue was raised by a project, issued during the Spring of 1978 by the local Water Authority - the *North West Water Authority* - for a further abstraction of water from Ennerdale Lake to feed a local nuclear plant, the ***Windscale Nuclear Plant***, as well as to provide more water supply in general the district of West Cumbria. A legal process was set to go ahead to obtain the legal permission and the necessary statutory orders to allow the project to come to a realization. The view from the western shore of the lake is with no doubt one of the finest lake and mountain views in all England. At the time of the struggle, no building stood upon the lake shore and no public motor road reached beyond its entrance. It could only be explored on foot. Since the half of the XIXth century the lake has supplied water to the close village of Whitehaven and to the surrounding countryside, and the modest demands had, except in times of drought, made little impact on the scenery.

¹ The venue is famous for its wonderful scenery, that attract a wide public of ramblers from Uk and abroad. Even the former US President Bill Clinton proposed to his wife Hillary sitting on the banks of Ennerdale Water in 1973.



The Ennerdale Lake, Lake District.

The plan advanced by the Water Authority was *to raise* the level by four feet , which involved the construction of lengthy *embankments*, six to ten feet high, building a new large *weir*, and *re-shaping* the River Ehen where it flows out of the lake.

The scheme provided also for *a greater degree of drawdown in times of low rainfall* , with the consequence that *extensive areas of sterile mud and stones would, on such occasions, be exposed.*



Oppositions to the Project of water withdrawal from Ennersdale Lake.

The *Friends of the Lake District (FLD)* immediately took action against the proposal, objecting that the scheme would have a *damaging* effect on Ennersdale not only during the period of construction – when extensive earth moving operations and heavy machinery would have been in progress, but also *permanent damage*. An *artificial object* would have been imposed upon Ennersdale Water and its shores, that would be entirely alien to the wildness of

1 . The Countryside Commission ceased to exist in 1999 when it was merged with the *Rural Development Commission* to form the *Countryside Agency*. See the [National Parks and Access to the Countryside Act 1949 \(c. 97\)](#)"

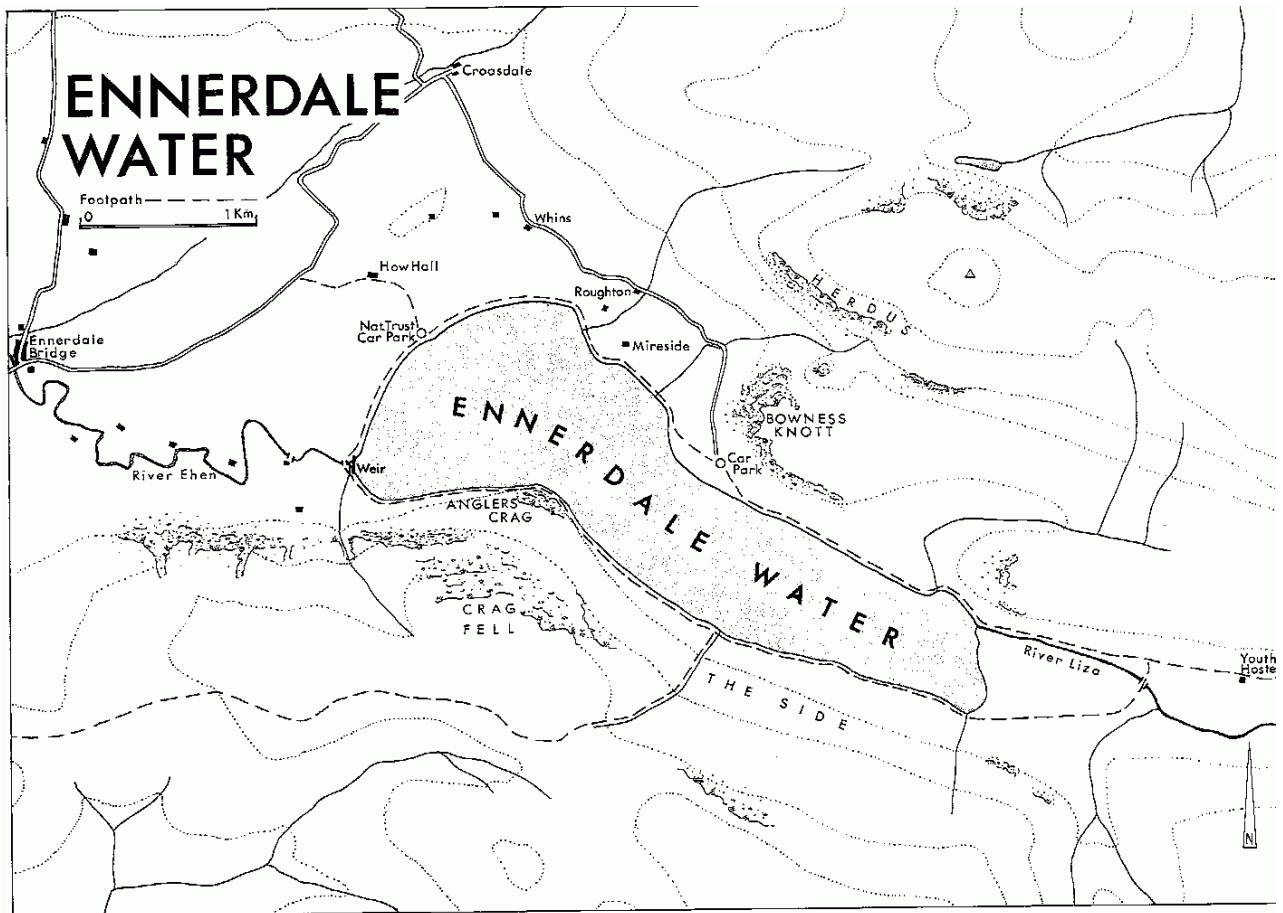
the Valley. Other organisations and bodies representing a wide variety of interests, like *Angling Associations*, *Farming Associations* and other organisations soon joined the Friends of the Lake.

Also the *Countryside Commission*¹, a *statutory body* established to co-ordinate government activity in relation to the National Parks and countryside as whole, expressed its *objection*.

On the other side of the planning authorities the *Lake District Special Planning Board*, although it pronounced formally its objection, had inside it, some members of the other major Planning Authority of the area, the *Cumbria County Council*, that had voted 55 to 9 in favour of the scheme fought internally to secure support to the Water Authority's project; therefore the *Lake District Special Planning Board* was divided within itself. So the two major planning authorities of the region were found to hold opposing views regarding the project.

The *National Trust*, the admirable body for the protection of natural and historical beauties of the country founded in XIX century by Octavia Hill (*), owned extensive lands about the lake and had at the time just acquired a farm nearby, called *Mireside*, a property that would have been heavily affected by the proposals, was strongly opposed to the Ennerdale plan. Furthermore, the Trusts' fundamental purpose of '*protecting the Natural Beauties permanently for the benefit of the nation*' called for its reliable objection in all the dispute.

Other public bodies that were against the scheme were : the *District Councils* for *West Cumbria*, *Allerdale* and *Copeland*, and on the same line were the *Country Landowners' Association* and the *National Farmers' Union*. In total 8 bodies, between associations and public bodies , pronounced their voice against the project.



The idea to unify and coordinate all the objections to the project among the Conservation and amenities bodies gave rise to a *Save Ennerdale Campaign Committee*, led by the *Friends of the Lake District*, which comprehended the *British Mountaineering Council*, the *Cumbria Trust for Nature Conservation*, the *National Trust*, the *Ramblers' Association*, the *Youth Hostels' Association* the *Countrywide Holidays Association*, *Egremont Anglers' Association*, and the *West Cumbria* branch of the *Friends of the Earth*. The unification of the groups allowed for a more efficient coordination in the request for funding.

The Procedural Fight

Despite the raising requests to stop the project, the *North West Water Authority* went ahead in requesting planning permissions to the competent authority in the national park, the *Lake District Special Planning Board*. The permit was refused, but the *Water Authority* went ahead and appealed, and , by early 1980, the procedure led to a public enquiry.

Alternative Proposal from the Opponents to the Ennerdale Scheme



The North eastern shore of Ennerdale Lake: farmland of Roughton and Mireside. The Water Authority Scheme entailed the flooding of 11.5 acres of Mireside's land.

From the beginning the argument brought by the opponents to the Ennerdale Scheme was that an *alternative* possible scheme could have been conducted, abstracting water from the river Derwent at

the Yearl Weir near Workington, which was a river with a huge catchment area nearby with a possibility to provide water without being much impacted on its water flow. The Water Authority had previously considered this scheme, but then abandoned it for the higher cost involved. In any case, the Committee of Conservation organisations declared that *a much lower impact* on the amenities associated with the Derwent scheme rather than the Ennerdale scheme should have been considered.

The Wastwater Project

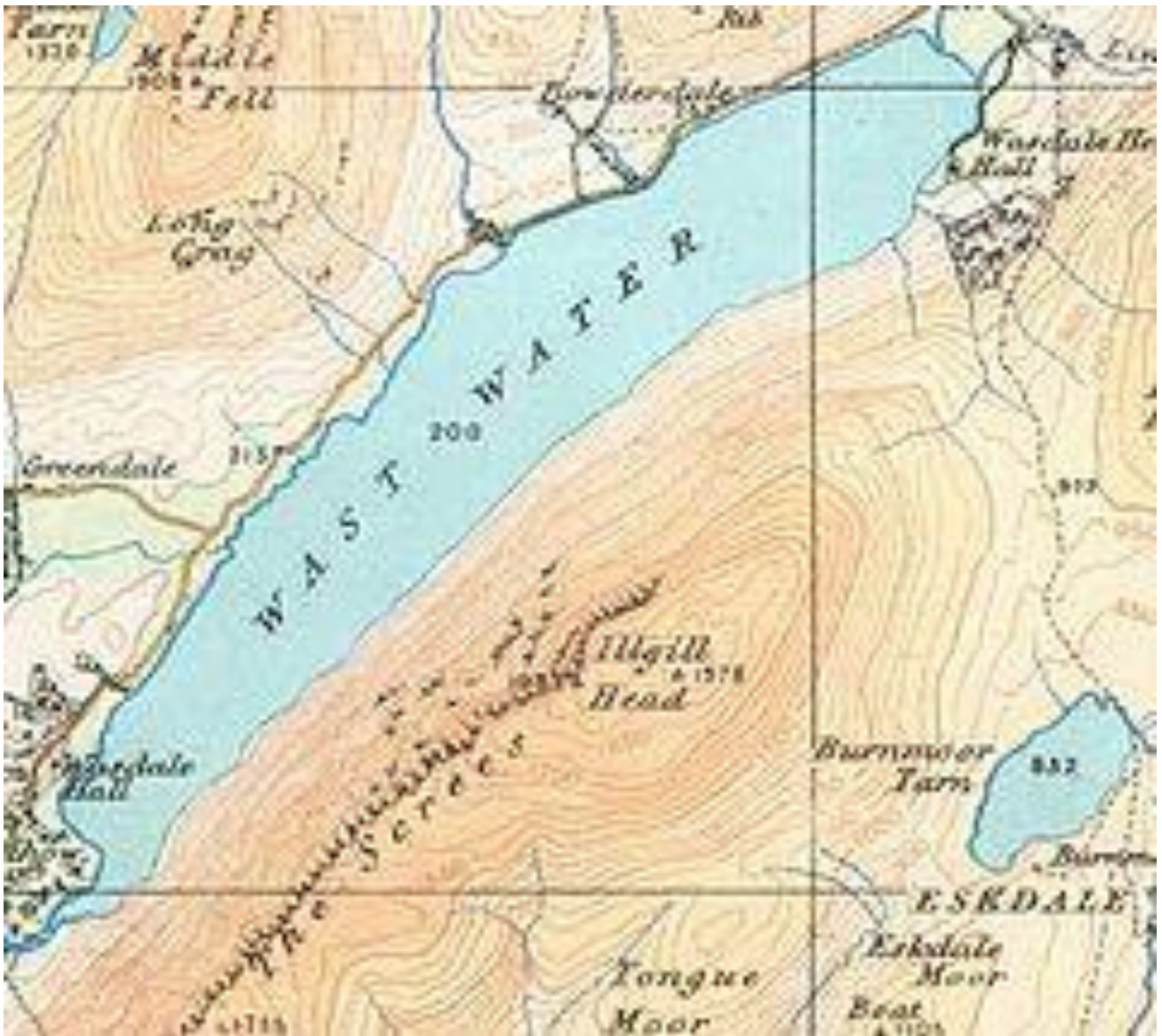
Almost contemporary to the proposal of the Ennerdale, another project to abstract water from another lake of the District was promoted by the company ***British Nuclear Fuels Ltd.*** in 1979, to afford their water requirements by taking an increased supply from the lake of *Wastwater*, the deepest lake in England, in the county of Cumbria, Lake District. The public application procedure to the Water Authority made the details of the company plans accessible to everybody and advertised to the common public, and their requirement of a new licence for further abstraction became generally known.

The Wastwater Scheme was intended to *triplicate* the actual withdrawal of water already granted to supply water to a factory on the *Windscale industrial site* under *emergency power* since the Second World War. During the 1950s, the factory was replaced by other two productive sites, the Calder Hall Power Station and the same amount of water was conceded to the new plants. At the moment there were no *weirs* (in *it.*: diga, briglia di ritenzione) or *sluices* (*it.* canali di defluizione artificiale) that impacted on the beauty of the lake, and the withdrawal was abstracted by pipeline near the outflow of the lake and the pumphouse made in stone and lightly ‘disguised’ as a barn looks standing lonely and quiet on the pebbly shore of a tranquil pool of water.



Wastwater and the Great Gable, Cumbria.

The new proposal was to abstract at least *three times* the previously agreed amount of water, and a greater use of Wastwater would have definitely been damaging that lovely and tranquil space. Very likely, a *weir* or a *dam* would have *strongly impacted* on the wild natural landscape, and *raising the average level* of the lake, the fluctuations of water usage would have leaved much of that scenery like *a area of arid mud and exposed desertic stones*.



Wastwater, Map of 1925.

Wastdale

Wastdale is the valley of the Wastwater, and etimologically gives the origins to the name of the lake. *Wastwater* comes from ‘Wastdale’ plus English ‘water’. *Wastdale*, in local dialect, has the meaning ‘valley of the water’. A large part of the main valley floor is occupied by Wastwater, which is the deepest lake in England, and it’s located in the western part of the Lake District National Park in Cumbria. The River *Irt* flows through the valley, out of Wastwater, to its estuary at Ravenglass. Was

dale is in the southwest of Lake District and is reached only by circuitous roads that edge round the hills from north to south.

Landscape Value

According to the Conservational Associations, and also following the large number of public that every year visits the Valley, Wasdale, among all the English landscapes, has one of the most spectacular. It is one of the most photographically reported and many artists find their inspiration for their paintings, as this thesis attempts to illustrate. Approaching the valley from Gosforth, on the A595, gives the traveller the great view of the *scree*, towering directly on the dark waters of the lake, while approaching it from Santon Bridge is very impressive too, opening up the valley head with its shapely mountains at the centre of which stands the cone of Great Gable. The lovers of the District claim the *Wasdale* to be one of the most spectacular of England, with its highest mountains, the *Scafell* and *Scafell Pike*, raising massively from the lake shore to the shadowed crags (*it. sommità, sporgenze rocciose*) about their summits. To visit Wasdale is ‘ to experience the power of the english landscape at its greatest² ‘ , with its constantly changing light and the varying clarity of its atmosphere ‘ bringing infinite variety to the *majesty* and the *wildness* of the scenery

² According to the way the *Friends of the Lake District* use to portray the Valley.



Wasdale and Wastewater from Great Gable, by Mick Knapton, 2010.

Symbolic and Spiritual Value

The environment of the valley that, was remaining *untouched* and in its beauty gives the solitary visitors that approach the valley on foot along the path running at the feet of the screes, the possibility to enjoy a meditative and solitary environment, *integrally* preserved, which can be found in very few places nowadays and where man's influence has made little or no impact where there is unique chance to experience the *symbolic* nature water and nature.



Wastwater Road, by Darren Pullman.

Recreational Value

Wasdale is also famous amongst rock climbers as ‘ the home ‘ of British rock climbing activities. It was here that, at the end of XIXth century mountaineering and rock-climbing were born. Hanging on the wall of Wastwater Hotel, at the head of the dale, there still are photographs of the men who explored the first routes on those crags. On the south-eastern side of the lake are very steep *screes*, below the summits of *Whin Rigg* and *Illgill Head*, while on the head of the valley is dominated by the *Great Gable* and the *Scafell Pike*, the highest peaks in England, which, along with Kirk Fell and Yewbarrow, surround the small community of Wasdale Head. *Wasdale* claims therefore a special place in the affection of the British people and there is no surprise if a scheme that may threaten Wasdale beauty have risen such a strong and emotional resistance.



Wastwater Scree



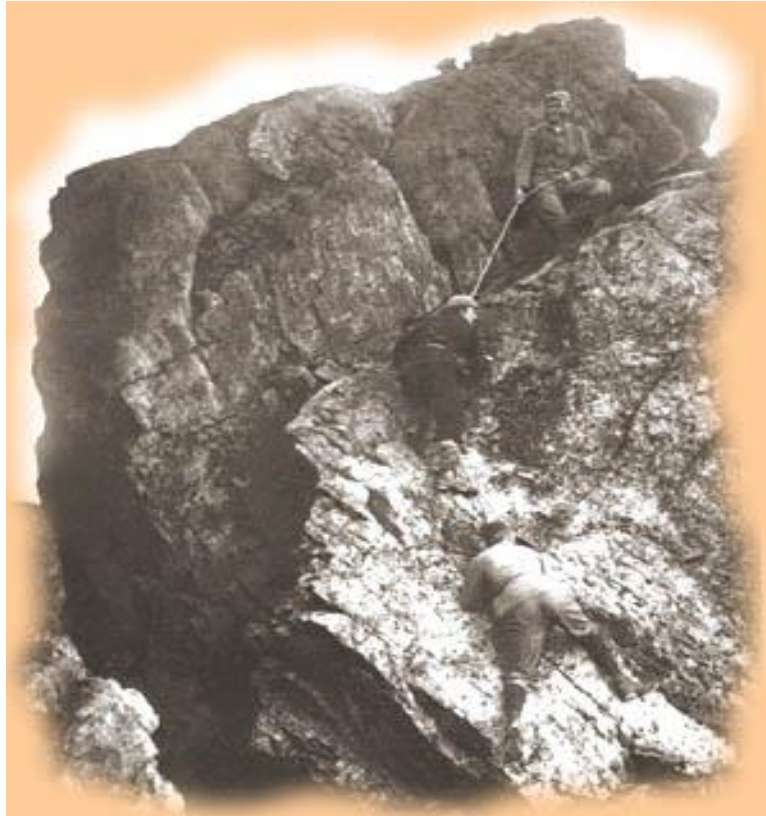
Wastwater, by Heaton Cooper



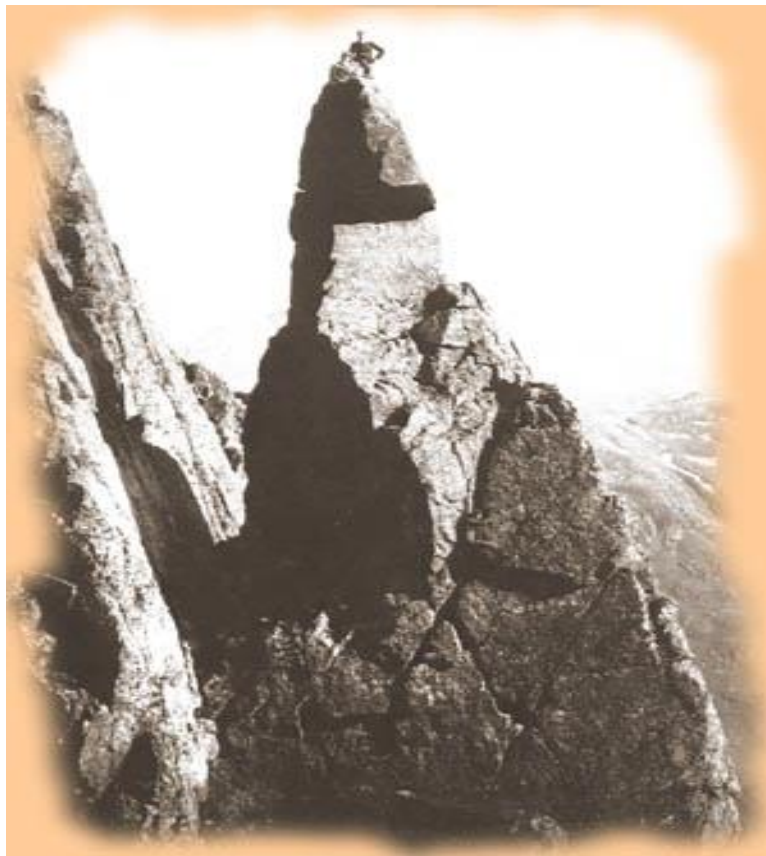
Wastwater, Autumn, Dusk



Wastwater, reflections of Scree Slopes in Wastwater



Scafell Pinnacle, 1890.



Napes Needle, Cliffs on the Face of the Great Gable, Haskett Smitt, 1886.

The Opposition to Wastwater Scheme

The oppositions to the Ennerdale Scheme were enforced when in 1979 people came to know about the plans to *triplicate* the withdrawals of water from the Wastwater basin, too. The *Wastwater Scheme*, proposed by the *British Nuclear Fuels*, was seen as an attack to the most spectacular and breath-taking English lake and raised a strong opposition among all those who cared for the future of the Lake District.

The proposal was to construct a *weir*, to *canalise* the river towards Lund bridge, to build *sluices* and a fishpass, as required by law and, similarly to the Ennerdale proposal an application was made in 1979 to get permission from the National Park authority, the *Lake District Special Planning Board*.

The Secretary of State Intervention

Due to the public relevance of the issue, the whole procedure regarding the application of British Nuclear Fuels Ltd. For a new licence to get a greater quantity of water was called in by the *Secretary of State for the Environment*, for his own decision. The Secretary of State decided that the applications were to be the subject of a *Public Inquiry*.

The Joint destiny of Ennerdale and Wastwater

At the moment of calculating West Cumbria 's water needs in the future, the *North West Water Authority* had made provision also for British Nuclear Fuels, from the Ennerdale Scheme. The proposal from British Nuclear Fuels to obtain their supply from Wastwater *weakened* the Water Authority's Ennerdale scheme justification. Therefore, the Water Authority was strongly opposed to the Wastwater Scheme, proposed by British Nuclear Fuels.

The British Nuclear Fuels' position

The British Nuclear Fuels contended position to stand for the use of Wastewater was that the *purity* of the Wastwater source was *essential* to their processes, differently from the Ennerdale source. Therefore, the two major players on the scene, the *Water Authority* and the *British Nuclear Fuels Ltd.* found themselves in conflict.

Newspaper's Publicity

The National daily papers gave great resonance to the issue, and published many articles on the two schemes. The headlines titled :

“ *WINDSCALE'S NEED IS THREAT TO WILD AND UNTAMED AREA* “

[Daily Telegraph - 5 november 1979]

From *The Daily Telegraph* of 5 November 1979 :

“ *FARMING FAMILIES READY TO DEFEND THEIR RUGGED VALLEY* “

“ ... The Naylor's of Wasdale Head are much the same as other farming families, in this rugged part of Cumbria. Twice a year their flock of 3,000 Herdwick sheep - descended from Viking stock – are rounded up on the high fells and driven to pastures in the Valley ... In a way that has changed little since the Norsemen() settled in this corner of the Lake District, they farm and raise their sheep and attend on the Sunday in the tiny St. Olaf's Chapel, built, it is said, by the first settlers...*

“ ... The family , Mr Scott Naylor, 52, and his wife Kathy and his grown up children. Like the Valley and its lake, the deep and mysterious Wastwater. The community a mile from the head of the lake, is no more than an isolated hamlet, reached by a ribbon of road barely wide enough for two vehicles to pass. Apart from the Naylor's, in their 17th century white washed farmhouse, there is little more than the ancient chapel, the Wastwater Inn, and several stone cottages. In the summer months the community bulges with visitors. They arrive in their thousands from all parts of the country and abroad to *climb* the steep slopes of the fells, raising to more than 2,000 feet, or simply to gaze in awe at what others have described as the Valley's savage beauty.... “

(*) **Norsemen**, name given to the Scandinavian *Vikings*, who raided and settled on the coasts of the European continent in the 9th and 10th cent. They are also referred to as Northmen or *Normans*.



Ennerdale, Historical picture.

The Daily Telegraph concluded :

“ .. But *remote* as they are, the Naylor, their neighbours and the villagers of Nether Wasdale at the other end of the lake can no longer remain *aloof from the mainstream of the Nuclear age...* “

“...They now fear that their *way of life* and the *beauty* of their surroundings is *under dire threath* “ .



The 'No – Nuke ' Campaign for the Ennerdale Lake.

Strengthening the Opposition : The National Trust intervention

Contemporary to these events the *National Trust* became the owners of *Wastwater*, acquiring in addition, *Wastwater Screes* and vast stretches of *Copeland Forest* including the peaks of *Seatallen* and *Buckbarrow* , west of *Wastwater*. In addition to this, the Trust already owned extensive lands and mountains around *Wasdale* and its interest in the area was great. The Trust declared itself *strongly against* any interference with the Lake. The position of the trust was determinant because much of the land, required for the proposed scheme, that belong to the *Trust* was held *inalienably*, that meant that, without the Trust's consent, both the *British Nuclear Fuels Ltd.* and the *Water Authority* would need to resort to *a special Parliamentary procedure* to acquire the land. This obstaculated bureaucratically the proceeding of the cases.

The Countryside Commission () and other Conservation Bodies*

The Countryside Commission declared soon its opposition to the Wastwater scheme . The other Conservation and amenities bodies, already joined in the *Committee* for the Save the Ennerdale Campaign, declared their opposition and availability to defend Wastwater too. The *Campaign Committee* gave great publicity to the destructive proposal , also promoting an extensive fundraising to bear the costs of the Public Inquiry.

Main Objections

Among the main *objections* posed by the Conservationists was the fact that *neither* the Water Authority, nor the British Nuclear Fuel Ltd. Had made *a proper study* on the *environmental impact* of their schemes, in support and justification of the claimed ‘ immediate necessity ‘ for the Ennerdale Water and Wastwater schemes. Only later on the British Nuclear Fuel Ltd engaged its own consultant to produce a Report on their Wastwater proposal, published in end 1979 with the title:

“ *WASTEWATER – AN ENVIRONMENTAL APPRAISAL* “.

(*) The *Countryside Commission* was a *statutory* body in England and Wales, later in England only. Its forerunner, the *National Parks Commission*, was established in 1949 by the National Parks and Access to the countryside Act 1949 to *coordinate* government activity in relation to the National Parks. The Countryside Commission ceased to exist in 1999 when it was merged with the *Rural Development Commission* to form the *Countryside Agency*. This, lately evolved into *Natural England*, a *non-departmental public body* of the UK government responsible for ensuring that England’s natural environment, including land, flora and fauna, its freshwater and marine environments, the geology and soils, are *protected* and *improved*. It also has a responsibility *to help people enjoy*, understand and *access* the natural environment. As a non-departmental public body is independent of government, although the *Secretary of State for Environment, Food & Rural Affairs* has now the legal power to issue guidance to *Natural England*. Its powers include defining Ancient Woodlands, awarding grants, designating Areas of Outstanding Natural Beauty and Sites of Special Scientific Interest, managing certain National Nature Reserves, overseeing access to open country and other recreation rights, and enforcing the associated regulations. It is also responsible for the administration of numerous *grant schemes* and frameworks that finance the *development* and *conservation of the natural environment*(..)

In resisting the proposals, the conservationist submitted as *alternative scheme* , the *River Derwent* Scheme, that they claimed to be capable of both satisfying West Cumbria's needs and supplying the Nuclear plants increased water requirements.

Newspaper's position

The daily and Sunday newspapers , meanwhile, continued to support the conservationist argument through stories and comments .

The Yorkshire Post, on 22 November 1979 :

“ BEAUTY AT RISK “

“ .. when the Post-War Labour Government created the National Parks, the intention was ‘ *to preserve and enhance their natural beauty and to promote their enjoyment by the public* ‘. That ideal has sometimes taken a battering in the face of *commercial pressures*, not least in the largest and most dramatic of the Parks, the Lake District, where a major road now cuts across the flanks of Skiddaw. Now the Lakes faces what may be *the strongest threat* so far, in the form of *proposals to abstract vastly more water* from both Wastwater and Ennerdale water. “

“ .. A photograph of the pyramid shaped Great Gable is featured on the front of the Booklet explaining the work of the *Lake District Special Planning Board* , the body endowed with powers *to control development* in the Park... The inference of this is that, here, *we have machinery* set up to prevent our unspoiled and much loved national heritage from being interfered with in a way which would alter its appearance . “

(...) for example Environmental Stewardship, Countryside Stewardship, Environmentally Sensitive Areas, and Access to Nature. *Natural England* is now also responsible for the delivery of some of Defra's Public Service Agreements (e.g. reversing the long-term decline in the number of farmland birds by 2020 and improving public access to the countryside). *Natural England* takes its Finance, Human Resources and Estates services from the *Defra Shared Services* organisation.

The Campaign

The representatives of the bodies composing the Campaign Committee first met on May 1978, at the Borrowdale Youth Hostel, where each body's attitude and grounds of objection were discussed. The grounds upon which opposition was based were carefully specified and detailed. It was insufficient '*to be against*' the proposal, without clearly defined reasons, and also there was the issue to define a more acceptable *alternative proposal*.

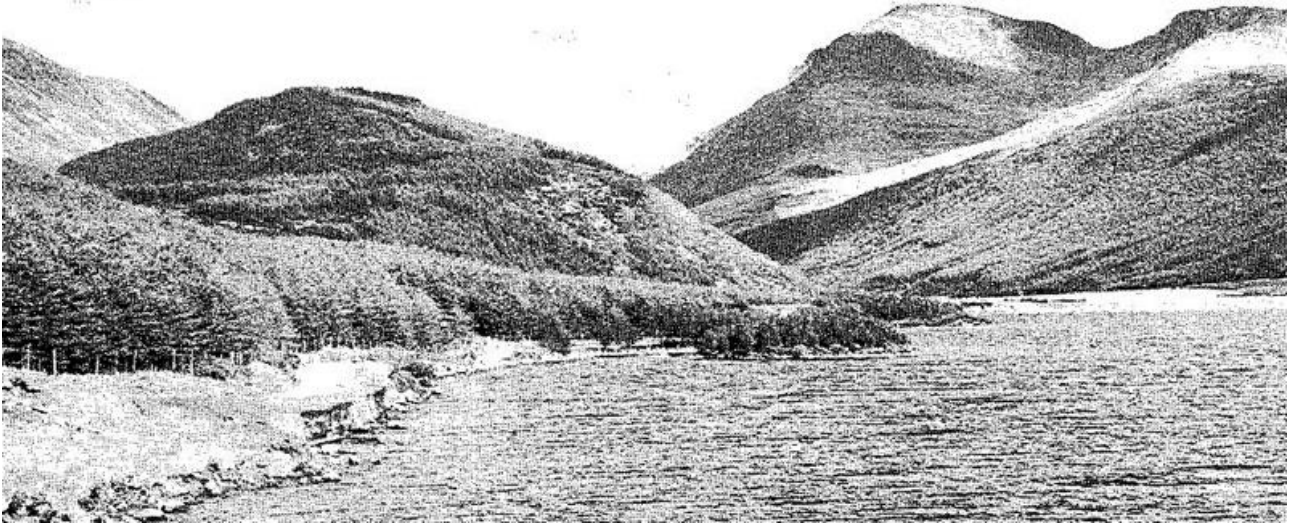
The *Committee* first tasks were *to gather public opposition* and to raise funds for legal representation during the Inquiry. They channelled their previous experience by publishing a two *leaflets* entitled :

“ *SAVE ENNERDALE* “ and “ *DEFEND WASTEWATER* “

[*Informative Leaflets of the Campaign Committee
on the Ennerdale and Wastwater Schemes*]

The *Leaflet* summarized the proposals, stated the ground of objection and raised funds, - through a detachable form (see picture) - to be sent directly to the Campaign's bank account. 30,000 *Leaflets* were printed and distributed by the Committee's constituent bodies. The *Leaflets* were included in the periodic literature ordinarily sent to the members, and this involved no additional postage costs, ensuring that it may have reached people more likely to be sympathetic with the cause.

SAVE ENNERDALE



The 'Save The Ennerdale' Leaflet, distributed by the Campaign Committee.

SAVE ENNERDALE

A Campaign to combat the proposal of the North West Water Authority to take more water from Ennerdale.

The scheme would mean:-

1. **Raising** the level of the lake by 4 feet.
2. **Constructing embankments** 6 to 10 feet high for considerable distances along the lake shore.
3. **Enlarging the weir** and reshaping the river Ehen at the outflow.
4. **Flooding** agricultural land.
5. **Drowning** of trees and woodland.
6. Providing for a greater degree of **draw-down** which will at times leave exposed large areas of mud and stones.
7. **Disturbance** of shore line vegetation and wild life of the lake.
8. **Jeopardising** the run of salmon and sea trout in the river Ehen by seriously reducing the frequency of spates.

A PLACE OF WILD BEAUTY.

Ennerdale is as wild and dramatic a valley as any in England; no building stands upon its shores, no motor road reaches beyond its entrance. Its beauty must be protected.

The Save the Ennerdale Campaign Committee.

SAVE ENNERDALE

The Campaign Committee is composed of representatives of the following bodies:

British Mountaineering Council
Cumbria Naturalists' Trust
Egremont Anglers' Association
Friends of the Earth (West Cumbria)
Friends of the Lake District
National Trust
Ramblers' Association
Youth Hostels Association.

At the time of going to print the following bodies and associations are also opposed to the Water Authority's scheme for Ennerdale:

Allerdale District Council.
Copeland District Council.
Council for National Parks.
Council for the Protection of Rural England.
Country Landowners' Association.
Countryside Commission.
Cumbria Countryside Conference.
Lake District Special Planning Board.
National Farmers' Union.

A press clipping from the Westmorland Gazette, indicating the Committee members

IN A NATIONAL PARK

Ennerdale is in the Lake District National Park. There is a statutory obligation to give it the highest degree of protection and this is a plain duty laid upon all of us.

AN ALTERNATIVE

There is a good alternative, the Derwent Scheme, which would take water from near the mouth of the river Derwent, at Workington. This scheme, at an additional cost of £2 million, would not only provide more water from a vastly greater catchment area but would save Ennerdale.

Funds are essential if we are to put up a worthy fight and be properly represented at a public inquiry.

Please Help by sending a donation.



Save Ennerdale Campaign
c/o National Westminster Bank
Stricklandgate
Kendal
Cumbria LA9 4PX

SAVE ENNERDALE

I enclose donation of £ for the Campaign

A/C No: 75960060

(If receipt required tick here.....)

Name.....

Address.....

.....

.....

.....



DEFEND WASTWATER

The 'DEFEND WASTWATER' Leaflet, 1978-79.

WASTWATER THREATENED

British Nuclear Fuels are seeking permission to increase abstraction from Wastwater from 4 million gallons daily to 11 million gallons daily. At present there is no artificial control of the lake. The new scheme would entail the building of a weir near the outlet of the lake to raise the water level. The increased abstraction would result in a wide variation in the level of the lake and at times of drawdown would expose unsightly areas of mud and stones.

Any control of the lake would open the way to further demands in the future as the huge Windscale complex grows.

England's most dramatic valley in England's premier National Park

Wasdale, with its deep lake, its shapely mountains, its huge screes, must remain unspoiled for the enjoyment and inspiration of the present and future generations.

If you wish to make representations about these proposals yourself you should write to:

*The Secretary
Department of Environment
2 Marsham Street
London SW1P 3EB
Quoting reference number WS/5527/764/13.*

The Campaign Committee is composed of representatives of the following bodies:

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Cumbria Naturalists' Trust
Egremont Anglers' Association
Friends of the Earth (West Cumbria)
Friends of the Lake District
National Trust
Ramblers' Association
The Fell and Rock Climbing Club
of the English Lake District
Youth Hostels Association

Further copies of this leaflet may be obtained from any of the above bodies or from the Staveley address overleaf.

August, 1979

The Farming Community in Ennerdale and Wasdale

The Farming Community was strongly and vociferously opposed, in both dales, to the projects for the *encroachment* on what they rightly regarded as *their territory*. In both valleys there was a strong leadership which rested on few individuals. In Ennerdale there was *a well known farmer*, Mr Bill

Rowling, Chairman of the Parish Council, closely connected with the *National Farmers' Union*, always ready to counter-argument with suitable phrases the Water Authority position. Another farmer, Mr Tom Jackson from Roughton, Ennerdale, represented the *Country Landowners' Association* and was strongly supported by his wife, Mrs. Jill Jackson, a strongly dedicated and energetic woman during the distribution of the Campaign *leaflets* and during the fundraising.



Mrs Kathy Naylor, who excelled in publicizing the cause.

In Wasdale, the Community , through the Parish Council, was led by the strong and forthright character of Mrs. Rosamund Templer , of Strands, that knew the Valley intimately from long time. Mrs. Kathy Naylor, wife of the farmer who farmed a flock of 3,000 Herdwick sheepes at the dale head, became the other outstanding figure in the Wasdale scene. She discovered an unknown ability to

mobilitate the press and attracting television and media's attention on Wasdale. Kathy Naylor, received letters from afar in encouragement to pursue the fight. Kathy was also very entrepreneurial and conceived a lot of ideas for raising funds and making known the point of view of Wasdale people. Mrs Templer and Mrs. Naylor established their own Committee, the *Wasdale Defence Committee* that dealt specifically with the *local issues*. The committee decided to take its own solicitor. The Wadale committee continued however to work in close cooperation with the *Campaign Committee*.

The March into the Parliament House.

On the 11 December 1979 she organised a *march through the streets of London*, aimed to lobby the Parliament on the issue. The group of demonstrators at the beginning was small and tranquil, but when it reached the Houses of Parliament, at St Stephen's entrance, there were the Television cameras awaiting for them and a crowd of further supporters. The group, substantially reinforced, went through the corridors of the Parliament, to meet the Members for Barrow.in-Furness, Whitehaven, and Workington to express them the opposition to the water proposal and to hear the sympathetic views of the Members of the Parliament. The beginning of the Public Inquiry was only a month away , and it needed to take its course before the Secretary of State could make his decision.

Publicity and Support from Common people

The two *Leaflets* were made available at the National Trusts Information Centers and supplied in quantity to any person or organisation who wanted to distribute them. The Campaign Committee

also decided to seek as much *publicity* as possible in the press and the media. Articles were published on ‘ *Country Life* ’ as well as in many national Sunday and daily newspapers and in the northern provincial press. Also the BBC and the ITV put out programmes on the issue. The funding contribution of the campaign came from all over the country; curiously the contributions varied , from £ 500 to £ 1 pound . An elderly gentleman gave £ 61 ‘ *one for every year he had visited Wasdale since 1917* ’. His rate of contribution was soon followed by many others. *Many ideas arose spontaneously from the love for these beautiful dales.* Cheques and letters of support *flowed in*, and funds gathered. By 1980, when the Inquiry was about to start, the collected funds for Ennerdale and Wastwater were above £10,000, enough to sustain the legal expenses. In the end the total sum raised by the Campaign was above £15,000, with further possibility, in case needed, promised by many contributors.



*Campaigners outside the Civic Hall, Whitehaven.
The group was supported by other counties campaigners, as East Anglia.*

Search for Juridical and for Landscape Experts Assistance

The Campaign Committee decided to take a *solicitor* (the firm Temple and Barch, of Kendal) to be represented during the Inquiry, and a *landscape architect* to examine closely the evidences brought by the Water Authority and the British Nuclear Fuel Ltd. And also to counter-examine the expert witnesses of the proponents of the schemes. A firm of landscape architects from Oxford (*Cobham Resource Consultants*) were engaged for this purpose.

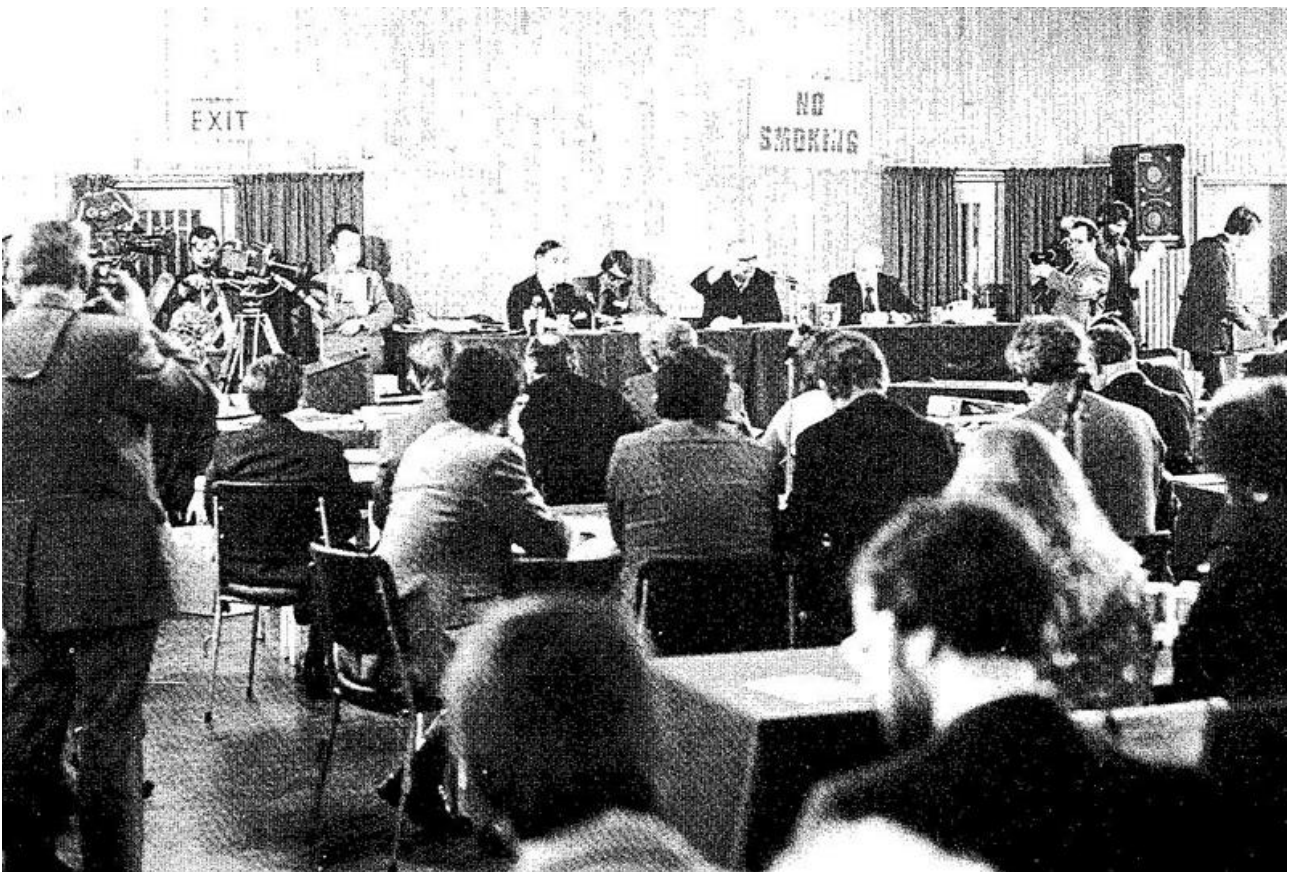
The Public Inquiry



The Inspector – Mr D.H. Komlosy , with is two Assessors, Mr J.L Milverton (left) and Mr P.H Garnett (right) .

The detailed description of the inquiry was reported by the *Friends of the Lake District*, after the Inquiry took place.

The Public Inquiry lasted three months and a half, starting on 15th January 1980 and ending on the 9th of May 1980. The words during the Inquiry were recorded in a daily transcript, a service produced by an American firm and copies of the transcript were provided daily to the main participants. The cost of the service was principally born by the British Nuclear Fuels Ltd. The Inquiry took place in the Civic Hall, in Whitehaven.



*The Opening morning of the Inquiry
Whitehaven Civic Hall, 15 January 1980.*

Setting of the Inquiry

On the north side there was the Water Authority's team, promoting the *Ennerdale Scheme* and objecting to the *Wastwater Scheme*. Facing them, were British Nuclear Fuels Ltd advocates, officials and advisers, promoting the *Wastwater Scheme* and objecting the *Ennerdale Scheme*. At other desks there were representatives of the Cumbria County Council, supporting the *Ennerdale Scheme* and opposing the *Wastwater Scheme*.

In the room there were rows of chairs for public use. Members of the public could come and go as they pleased. Sometimes parties of *students* or school children came in to listen, for an hour. Occasionally elderly people dozed comfortably in the back rows, while some witness went through his long and technical proof of evidence. The Inspector was always *anxious to ensure that the public could hear* everything said and to participate, if they wished so. The Inspector's clerk, sitting behind him, was in charge of keeping a summary of the proceeding and to produce a daily progress report. He also filed, and found when required, copies of the hundreds of documents, drawings and statements produced at the Inquiry.

Thematic Issues Emerged During the Inquiry

Impact on Ennerdale Landscape

On the *Ennerdale* case, the Water Authority witnesses dealt in great deal with *the ameliorative measures* which would have been taken *if the Ennerdale Scheme* had been permitted, and how the landscape would have been rehabilitated, illustrating their arguments with photographs, diagrams and drawings. The effect to be mitigated should have been the *variations in water levels*, both in *flooding* and in *drawn-down* of the level. Among the objectors the major landscape concern raised were about the *size* of the *embankment*, the construction of an *artificial shore-line* and the

extensive excavations proposed at Mireside and the Liza Delta, and the *effects of the works* on *farming* and generally the *impact* of the Scheme on Ennerdale Water and its surrounding.

Impact on Ennerdale Ecology

Another expert witness of the Water Authority proponent of the scheme, a consultant ecologist, argued that the proposal ‘ would have minimal influence on the flora of the Lake and its surrounding ‘. Nevertheless the opponents showed their worries, still.



*Ennerdale Water drawn-down in June 1978 , exposing wide expanses of stones and mud.
View from the path along the Western shore.*



Rim effect, caused by the changing water level in a similar reservoir

Wastewater Variant Schemes: Impacts and Objections

Regarding the Wastewater Scheme, 5 possible alternatives were illustrated, by the British Nuclear Fuels Ltd technical experts, starting from the 'simple drawdown', realised through the construction of *larger pipelines* set deeply into the lake near its outflow, passing to other schemes which involved the construction of *weirs* of different types to raise the lake level of various degrees. Two last schemes entailed, in addition, involved the *canalisation* of the out-flowing River Irt towards Lund Bridge. Opposing questions to these projects regarded:

1. the *extent and frequency* of *unsightly drawdowns*;
2. the *design* of the *weirs*;
3. the necessity for the construction of a *fish pass*;

and lastly, not less important:

4. and the British Nuclear Fuels Ltd. *future water plans.*



Ennerdale Water. Expanses of Stones, revealed by the operations of the pumps installed at the weir to maintain the flow in the River Ehen. The Water Authority new Scheme provided for lowering the level of the lake by further two feet, which would have exposed even greater expanses of stone and mud in this shallow area.

These aspect were pursued at lengths by advocates of the *Water Authority, Cumbria County Council, and the Lake District Special Planning Board*, who were united in opposing British Nuclear Fuels' plans for Wastwater.

Participation and Questions from the Public

Many times, questions from *local farmers* revealed to be very concrete, blunt and based on earthy common sense, as well as spiced with a rich humour. Furthermore, the Inspector showed his anxiety to ensure that *everyone wishing to question* an expert witness *should have the possibility* of doing so. Towards the end of one morning , he said :

“ ...I would like *to address* for a moment the *members of the public sitting at the back*. You might feel that you are sort of separated from this end of the room by a barrage of experts, but *I do want* to remind you *that I give an opportunity* at the end of each cross-examination *for questions to be asked*, and these are in fact most welcome. “

[Mr Komlosy, *Inspector of the Public Enquiry*
on Wastwater and Ennerdale Water Schemes , 1980]

Education of the Public within the Participatory Process

Private objectors, sometimes, mistook the participatory occasion as a chance to make statements of their own views. Sometimes such interventions were amusing and surprising. One afternoon, in late February, a white haired gentleman requested permission to question a witness. The man asked:

‘what the effect would be of tipping *a few lorry loads of rock across the bar*, at Wastwater ... (he seemed to have done this, at a smaller scale, in his young years...and was wondering whether ‘ dumping loads of stones some dark night’ would have rather solved the problem , preventing the Authority to spending a huge amount of money..) “.

[*The Objector*, from the Public]

The reaction of the Inspector to such *non-pertinent* newly raised issue, was refined and commendable. The Inspector reminded the objector that:

‘ his questions must be *related to the witness’ evidence* and that he must *not* develop *his own arguments*. There would be an opportunity to put his own views later in the Inquiry ‘

[*The Inspector*]

Which, in fact, he never did.

Different Expert’s Opinions

Many Experts were brought by all the parts involved, each one trying to expose his own particular technical rationale. The number of witnesses was high, each one producing charts , diagrams and photographs, or simply testifying with their expertise. British National Fuels Ltd introduced their witness limnologist , attesting that ‘ *no harm would have occurred to the ecology of the lake*’, while the Water Authority consultant ecologist argued that ‘ *the proposal would have a minimal influence on the flora of the lake* ‘.

The Water Authority then called two witnesses to express *critical view* on the Wastwater proposal: *Dr. Marshall, engineers of the River Division and Mr Kellsall, Regional Fishery Officer. They showed, with flow records and graphs, that: ‘ the behaviour and the characteristics of the lake at the present rate of abstraction were very close to those of a completely natural lake, however, in case of increased abstraction of 50 ml/d there would be greater draw-down in period of dry weather. There would have been exposed additional areas of the lake bed .The flow in the River Irt would also be significantly and detrimentally affected’ .*



The pupils of Ennerdale Bridge School, with the teacher John Cox, on the day April gave her evidence

The Public and Children Concerns

On Friday April 18th 1980, the advocate of the Friends of the Lake District called the youngest witness to appear at the Inquiry. Miss April Roberts, aged 11, and the senior pupil from *Ennerdale Bridge Primary School*. April read her evidence with confidence and in a clear voice. The evidence had been compiled by all the pupils of the little village school, who were sitting at the back of the hall listening. The evidence contained diagrams and drawings, including one of the threatened plant *Elatine exandra*. April said that ‘ *they regarded Ennerdale as their lake* ‘.The pupils of *Ennerdale Bridge Primary School* said :

“ We live by it, walk there, and play there “

The school children thought that the Scheme ‘ *would spoil the most beautiful and untouched of all the lakes*’ and they hoped that ‘ *the next generation* at Ennerdale School would be able to enjoy an unspoiled lake *as they had done*’. They were worried too, April said, about the ‘ *heavy construction traffic*’ which, using the narrow road for a period of two years, would be *dangerous for them* and everyone else who lived in Ennerdale. Among the school children at the back sat Janice Vickers, aged 8, of Mireside Farm, whose father gave, the next day, evidence for the *National Farmers’ Union*.

Resonance in the Press and the Media

The local press came to photograph April and her school mates and Radio Carlisle recorded and broadcast some of the children comments. Mr. Lockhart-Mummery, Junior Counsel for the Water Authority, congratulated April on her submission and asked her a few questions. Mr Komlosy, the Inspector, thanked her in a kind and grand-fatherly voice wishing that ‘ she might be able to show him some of the *plants* which have been referred to when he made his site inspection’ . April’s mother, at the back glowed with pride ‘ It was an experience which April will remember all her life’ she said.

Land Loss and the Disturbance to General Farming Activities

Other witnesses followed in those days, all stressing the loss that would have occurred *personally* or upon the *environment*. David Vickers, farmer of Mireside Farm, spoke representing the *National Farmers’ Union*, issuing the question of *loss of land to agriculture* and the *general disturbance to farming activities* caused by such works.

The Farmers’s view



Mrs Julie Vickers feeding her goats at Mirehouse. The raised water level would have flooded this field.

According to the Farmers :

“ I am no expert , but I am extremely worried that *the effect* of the temporary and permanent *land losses* will prove *much greater*. All the land to be taken comes out of my in-by, my *vital grassland*. “

[Mr D. Vickers, farmer]

David Vickers' s witness on Land Loss



David Vickers, the farmer at Mirehouse, the man who stood to lose most.

Mr. Vickers Said :

“ Although the Agricultural witness for the Water Authority felt that the Ennerdale scheme ‘ would have a *negligible* effect on the long-term farming in the area ‘

I fear the worst...

Other witnesses have explained the importance of the in-bye land. On a hill-farms *it is important*. I need it for the *ewes* at lambing time in late April to the end of May. I then need it *for grazing the suckler cows*, and *for the growing of my hay crop* for the winter fodder...

Grass is indeed my only crop...”.

A Growing Regard for the Environment

The last day, in the closing speech in the 2nd of May a number the representative for the Friends of the Lake District and the *Campaign Committee*, Mr. R. Broady, reminded the Inspector of the *strength* of the *public opinion against* the Ennerdale and the Wastwater proposal, as evidenced by the large number of people, in the various bodies which he was representing and also by the many thousands of pounds raised to defend the two lakes. Mr. Broady evidenced that *there was a Responsibility on the Water Authority* to find *the least damaging scheme* possible. Unfortunately, till then the Water Authority main concern had become the question of the *costs* and they had chosen the *cheapest* scheme.

The proceedings were closed by the speech of Mr C. Vane, representative of the *Wasdale Defence Committee*, by Mr. A. Wheland of the *National Trust* and by Mr Hordern, of the *Lake District Special Planning Board*. The points made in front of the Inspector were

1. The *importance of prioritising the Protection of the Landscape of the National Park*, as the Protection of the Lake district was a matter of national importance.;
2. *Not to allow to Short-term financial solutions* to override *the Long Term* interest of the two dales and their Communities;
3. The *Growing national Regard for the Environment* could not be ignored;
4. The strong recommendation, from the Trust, was to adopt the '*Derwent alternative*'.

Only Mr. M. Rich, representative of the *Cumbria County Council* stood alone *in favour* of the Water Authority Ennerdale Scheme, ' a scheme which did not have any grave environmental consequences ' - in the County Council view. However, Mr. Rich reiterated the County Council opposition to the Wastwater proposals.

The Recognized Value of Lake District as ' Work of Art '

According to Mr . Hordern , of the *value of Wastwater and Ennerdale Water* was important as much as any other valuable ‘ *work of art*’ or ‘ *piece of architecture*’ in the country.

“ That *value is intrinsic*. It does not depend upon the number of people who see it, or upon their appreciation of it. It is *to be protected*, preserved *for what it is* and it can be harmed by careless handling, just as a great picture or statue may be. “

[Mr Hordern, on behalf of the *Lake District Special Planning Board*]



Wastwater, in autumn.



Ennerdale Water, Lake District, painting.

And concludes :

“.. If these proposals were allowed it would be inevitable be seen that *even* in some of the wildest and most beautiful parts of England’s premier National Parks, and even when a reasonable alternative is available, yet in practice *the intangible values* are *set aside* or given a second place. That would be a grave blow. “

[Mr Hordern, on behalf of the *Lake District Special Planning Board*]

Internalising or Not The Cost of Water ?

The *Environmental Journalist* Tony Aldous, in *The Countryman* said :

“... The absurd position appeared to have been reached that the North West Water Authority accepted that there were less damaging ways of providing water to the Nuclear industry on the coast, but felt unable to screw the extra costs out of its customers. Yet, that *extra cost is peanuts* in the national nuclear power budget. It is hoped that the Inspector, and the Minister, will *tell* the Water Authority and British Nuclear Fuels that *if they want the extra water they will have to pay the full cost of providing it in the way that least damages the Lake District National Park.* “



Ennerdale Lake

The Final Decision

On the afternoon of the 22nd December the decision was made : on the recommendations of the Inquiry Inspector, both the schemes had been rejected by the Secretary of State. Ennerdale and Wastwater were save.

The Guardian headline on 23rd December stated :

“ *HESELTINE DECISION DELIGHTS THE LAKE DISTRICT*

“ Lovers of the Lake District were *cock-a-hoop* last night at the decision of Mr. Michael Heseltine, the *Environment Secretary of State*, to **ban** planned developments at Ennerdale and Wastwater “



Ennerdale

The *Planning Board* said it was :

“ ... *Specially pleased* that the Secretary of State for the Environment has shown such concern and care for the National Park and regards it as a confirmation of the importance of these areas to the Nation. .. “

“ ...The planning board *would be pleased* to work with the North West Water Authority and British Nuclear Fuels Ltd. on *alternative ways* of making water available for the needs of the industry in West Cumbria. This is the best Christmas present the Lake District National Park Authority could have had. “



Ennerdale, Painting

The *North West Water Authority* and *British Nuclear Fuels Limited* were of course *less happy*.

The Inspector Findings

“ ..As in the case of Ennerdale, Wastwater is in a particularly sensitive area within the National Park and in my view must also be considered as a special case. The virtues of Wastwater, its unique quality, the fact that it is regarded by many as the most impressive of the lakes has been expressed by a number of objectors to the scheme. I agree with them and accept in principle that this lake *should not be further exploited* . “

The Inspector was impressed by the argument that, in its present state, at the present rate of abstraction, Wastwater still behaved as a *natural lake*, it was in a state of *equilibrium* that would be upset by any further abstraction. The inspector did not accept the British Nuclear Fuels' argument that ‘ *their future demands, beyond 1990s, should not be a cause of concern now, if their present wishes were acceded to* ’ .

The Inspector also drew attention to the position of the *National Trust*, and its *inalienable ownership* of the land required to put in place the schemes. In view of the possible delays entailed in Parliamentary procedure to secure inalienable land it was ‘desirable’ that *a solution* should be found *outside* the National Park, on land which was not owned inalienably by the *National Trust*. However the Inspector did not submit this as a reason for refusal. His grounds were entirely *environmental*.

The Final Concessions to the Applicants

The only concession made to the applicant authorities was a *temporary consent for increased abstraction* of 11 MI / d from Wastwater (50% increase of the present rate of abstraction) pending the provision of a satisfactory supply from another source.

The Associations involved, despite the victory, kept on maintaining close watch on the terms of the ‘ temporary licence’ issued by the Water Authority.

GLOSSARY

“*Discursive frames*” : A discursive frame is the set of cultural viewpoints that informs the practices of a community of social movement organizations. This discursive frame defines the goals and purposes of the organization, and provides guidance for the actions of the organisation. It provides the *cultural* view-point, from which the organization acts.

Discourse Analysis : the *belief* systems that define the various components of a social Movement. It was purposed by the anthropologist Mary Douglas.

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Chapter 2

Modes of Regulation for Water and Electricity

The View of the Economist : The American versus Others Regulatory models.

ABSTRACT

When we speak of Regulation, most often, the technical mind slips towards the elaborate explanations of those regulatory theories that across the XX century so well depicted the games and counter-moves that most powerful actors on a country's economic scene tent to put in place in order to acquire for themselves privileged position and competitive advantage for their business. The first part of the chapter affords the issue of the Regulation of Water and Electricity utilities through the glance of the Economic History in the Public Management of Water and Electricity utilities in America, during the XIX and XX centuries and, more recently, in UK. The attempt is to illustrate how these two Regulatory models are structured and to explain, through different stories, how they confirmed to be among the two most replicated models of economic regulation of utilities in the world, and in most of the developing countries nowadays. The central part of the chapter illustrates the history and the institutional design of some major Regulatory Agencies in the US, good examples for a democratic approach to Regulation, that the writer assumes could be purposed as a 'comparative suggestion' for the design and development of a 'proper' system of Regulation in Italy, where the same is still far to be perfect. Although it may not be seen as the only model, being Italy home of a different tradition of public management, a knowledge of what 'can be possible' – with the shown effective results – elsewhere may always be of inspiration for the Italian legislator, the public administrator or simply for the common citizen wanting to broaden his knowledge on what happened, and is happening, somewhere else, and/or in other historical times, as regards some Democratic means for Regulation in private (or public) Water utility systems. The final part goes through some possible Alternative Solutions for the involvement of Citizen in the Regulation of Water Utilities, studying Cases which are already experimented Developing countries. The lessons learn from the illustrated cases in India and Philippines, are worthy to be applicable in any context worldwide.

The History of Regulatory Policy in Water and Electricity in XIX and XX century America

Both American continents share an history of the water and electricity industry that since the nineteenth century very well brings about examples regarding that *private* versus *public* debate that clearly still takes place nowadays and it's history represent a good lens of comparison for our century.

Taking a look backward into the *past century dynamics* can help us to recover an overview of some

major happenings that affected the regulatory disputes in water and electricity sector from a regulatory policy point a view, showing the many interconnections and similarities, in infrastructure management and regulation aspects, between electricity and water sector, as well as the direct impact on water use deriving from the *production of energy*, or the *regulatory transpositions* that happened between these two sectors.

A Historic Overview of the electricity regulatory policy in America

As many researches published by a number of American scholars¹ show, the history of electricity industry in North and South America at the end of nineteenth century reveals common factors but also a certain range of variety of patterns. One is that a *common technology* was applied in a variety of places, but often showing very *different* results, due to the different socio-political conditions in different parts of America. In Latin America, many of the larger utilities, and some in Canada, result to be foreign owned, but we find also some cases of domestically owned firms (one major in Latin America and many in Canada), while in the U.S. most of the electricity utilities at the end of the XIXth and throughout the XXTh century were domestically owned. In some countries Regulation was a responsibility of *municipal* or *provincial authority*, while in others it was a responsibility of the national government to regulate the sector.

Trends of Private Ownership in Electricity Companies in XXth century America

Substantially, many infrastructure companies survived in *private* hands, in the United States for a hundred years or more, while most of them became eventually nationalized in Latin America and Canada. Nevertheless, in Latin America, three exceptions of privately owned electricity companies survived, while, in Canada, three provinces allowed a private electricity company to survive throughout the XX century².

Early 1900s : A wave of Nationalizations

Most of the nationalizations, especially those based in Latin America, happened within the frame of less stable governments and often of civil war conditions, although it is difficult to prove a correlation between these factors. In four provinces of Canada – as the researches show³ – a first wave of the process of *nationalization* started taking place in 1906 and 1919, followed by a second one after the World War II I in other four provinces. The history of many private electricity companies is well documented by a number of scholars⁴.

Factors for Expropriation and Nationalization of Private Companies.

It seems rather difficult to ascertain why some companies survived, and why others didn't, but we can try to identify some of the factors that may have played some role. According to some authors⁵ private utilities are more likely to survive when expropriation costs are high, both from a political or a financial point of view, and, always according the same authors, this is tightly linked to a variety of elements, like the *ownership* of the utilities *by foreign companies*, whether the firm is regulated by a *national* or *municipal* authority, the extent to which the *firm's stock* are *held by a wide number* of stockholders and the presence of specific *legal constraints*.

History

The first electricity companies started in US and Canada in the 1880s and in Latin American countries in 1890s. They started generating power for large industrial or mining firms, and for the public lighting replacing gas and kerosene. Almost *all* the original electric companies were *privately owned*, financed by private local investors. They usually obtained *concessions* from the municipal government for an extended period of 20 to 50 years, with the concession, when needed, from national or provincial government to obtain the *water rights* to build hydroelectric plants. The industry consolidated between the last decade of the nineteenth century up to the 1930s. At the end of this period, most cities had only one electricity supplier, and often, merge across industries.

Corruption and the mistrust of Local Politics.

In early 1900s, many states experienced a gradual transition becoming *regulators* of utilities in various industrial sectors. Usually, this transition was characterized *by a strong debate* about *charges*, brought about by the *Progressive reformers* and even by *utilities* themselves, a debate that the cities weren't able, *incompetent* or *too much* affected by *corruption*, to manage themselves. Samuel Insull⁶ head of Chicago's largest electricity company, was one of the organizers of this coalition. In 1898 Insull during his presidential address, surprised the delegates of the National Electric Light Association meeting proposing *the acknowledgement by the industry* that electricity was a natural monopoly and therefore it should *adopt a regulation* of electric rates done by *the state*. Insull's proposal was not adopted immediately, but later in the reforms brought about by President Roosevelt, of 1907.

Insull's proposal originated by his experience with *municipal regulation* in Chicago

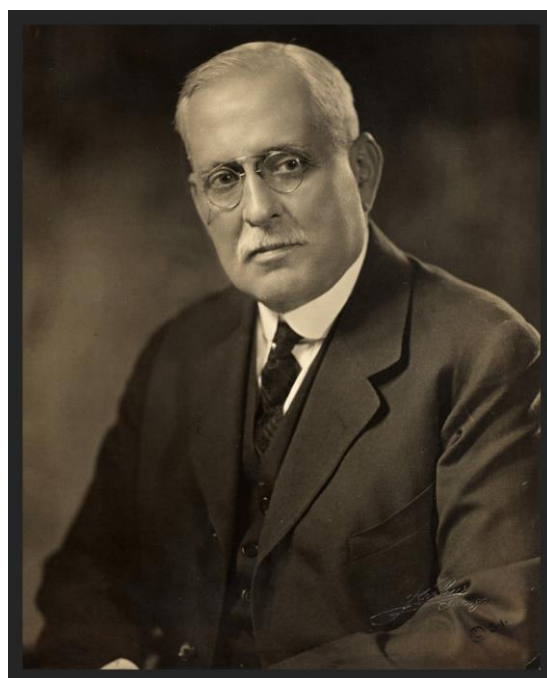
CHARACTERS

Samuel Insull : The man who enlightened America (issuing Electricity Bonds)

Samuel Insull

(1859 – 1938)

from Forrest Mc Donald , 1962.



Insull was able to weather the investigations and trials of the 1930s with a certain degree of public support because his background was, in many ways, a classic Horatio Alger story of a poor boy rising to wealth. Born and reared in England, Insull was one of eight children. His father was a temperance crusader of modest means, Young Insull briefly attended private school in Oxford with some of England's most privileged children. Teased and slighted by his upper-class school-mates, Insull embarked on a lifelong drive to earn respectability and wealth. In 1874 the Insull family moved to London, and Insull took work as an office boy. He quickly proved to be diligent and precise in his work habits, learning shorthand after hours and establishing a good reputation as a clerk. In 1879 he began work with the London branch of Thomas Edison's company. He was so successful at his job that in 1881 he immigrated to America to become Edison's personal secretary. He became an American citizen in 1896.

Utilities



Insull arrived just as Edison was about to introduce commercial electric lighting. Insull became Edison's financial manager, finding the money necessary to build the nation's first electricity-generating plants and electric lines. Insull managed to hunt up investors such as Henry Villard and J. P. Morgan to finance the projects. In 1889 he was one of the original directors of the Edison General Electric Company, organizing its manufacturing base and corporate and sales operations. A takeover of General Electric by eastern financiers such as Morgan left Insull powerless and bitter. In 1892 he relocated west, out of the circle of eastern financiers, becoming the president of the Chicago Edison Company. He went on to make Chicago Edison a model of the industry.

Monopolist

The early days of the electricity-generating industry were dominated by several problems Insull deftly resolved. One was competition from the gas industry, which at the turn of the century produced light as cheaply and effectively as did electricity. Another problem concerned the virtues of decentralized versus centralized power generation. Initially bankers and investors would only fund decentralized power generators, building by building, localizing power use. Centralized power required enormous sums of capital up front, and the returns were not certain: central plants, for example, continued operating during the day when usage was low, wasting electricity, whereas power plants located in individual buildings could tailor their electricity generation to specific uses. These factors combined to lead most observers to guess that electricity would be a luxury item, of limited use in the future, Insull's vision was far grander. He was among the first to postulate the idea of generating electricity for mass use (in fact coining the term *mass production*). First, however, he had to resolve the problems plaguing the electricity industry. He recruited bright engineering talent to help refine the production of electricity, introducing the world's first steam turbines to his plants in 1902. Second, he revolutionized utilities financing, introducing open-end mortgages and high-yield bonds to gain investor support. Third, he proved centralized generation profitable by powering electric railways, industry, and an ever-expanding base of consumers. His objective was to supply consumers at the lowest possible price, expanding electric service to millions of homes and broadening the base of his returns. In order to do this, of course, Chicago Edison had to be the exclusive electricity generator for the Chicago area. He made Edison a powerful monopoly, gobbling up competitors, especially during the economic depression of 1893 to 1897. By 1905 annual electricity production for Chicago Edison doubled for the seventh time in thirteen years; by 1907 the company was sixty times larger than it was when Insull took the helm. Chicago Edison was the nation's leading electricity-generating company.

Success

Insull's success in Chicago laid the foundation for his national ambitions. In 1912 he formed the Middle West Utilities Company, a holding company designed to facilitate electrification of the Midwest. It began acquiring local generating companies and electric traction systems, expanding their operations to wider groups of consumers. World War I advanced Insull's efforts. He was head of the Illinois Council of National Defense, a state agency formed to coordinate propaganda and regulate the economy. The federal Council of National Defense spent \$2 million to improve electrification of vital industries, moneys naturally benefiting Insull and other utilities magnates in the long run. During the war Chicago Edison (now named Commonwealth Edison) increased its sales fivefold. Insull's participation in the war effort also transformed his business in two other ways. First, his experience as a war propagandist familiarized him with modern advertising techniques, and after the war he formed the Illinois Public Utility Information Committee and other public relations firms to promote the public reputation of the utilities industries. Second, his experience on war-bond drives convinced him to restructure public investment in his utilities. Insull began selling cheap corporate bonds to his electricity customers. By 1930 more than one million people had invested in the Insull companies.

Financial supporter in World War I

At the time the US entered World War I, Insull was named head of the Illinois Defense Council by President Woodrow Wilson ; his efforts sold over a million dollars of War Bonds

Patron of Arts

On May 22, 1899,¹Samuel Insull married a "tiny, exquisitely beautiful and clever" Broadway ingénue actress whose stage name was (Alis) Gladys Wallis, whose real name was Margaret Anna Bird, who had been on stage since the childhood. At the time of their marriage, Insull was 41 and Gladys was 24. Husband and wife were patrons of the Arts Insull was instrumental in the building of *Chicago's Civic Opera House*

Humanitarian and Charity Supporter

Samuel Insull was also known for his charitable works in other areas; donating large sums of money to local *hospitals* and then calling on others with similar resources to do the same. He donated freely to African-American charities in Chicago, asking the wealthy to follow his example.



Glady Wallis Insull and Samuel Insull.

See also the VIDEO:

http://www.youtube.com/watch?feature=player_embedded&v=Q_Uqx-XLWNU

Power

Insull's innovative financial and operational strategies made the 1920s the heyday of his success. Three Insull companies—Commonwealth Edison; Peoples Gas, Light and Coke; and Public Service of Northern Illinois—each earned more than \$175 million annually. Middle West and several hundred subsidiaries were worth \$1.2 billion. All totaled, Insull companies were worth nearly \$3 billion, had more than one million stockholders, served four million customers, and produced as much electricity and gas as any entire nation on earth other than the United States. Insull's personal fortune was \$150 million in 1929. His prestige and power in the United States were matched only by other industrialists of the caliber of Henry Ford or J. P. Morgan. Yet he was about to suffer a devastating series of attacks that would make him one of the most vilified individuals in the nation. “



Crash

For Insull several different problems combined with the stock-market crash of 1929 to destroy his fortune and fame. The first was a series of scandals in the utilities business that badly tarnished the reputation of power generation. In 1927 and 1928 congressional committees revealed widespread influence peddling by utilities companies in the Pennsylvania and Illinois elections of 1926. Public sympathy for the utilities business was further undermined by disputes over the proposed Boulder Dam and the federally owned Muscle Shoals plant in Alabama. Politicians hostile to the utilities began speaking of a "power trust," rhetoric bound to impact a monopolist such as Insull. What really destroyed Insull, however, was an attempt to protect Commonwealth Edison from a stock buyout by Cyrus S. Eaton, a Cleveland financial raider. To protect his shares Insull formed the Insull Utility Investments Company and Corporation Securities Company of Chicago, pyramiding his utilities holdings and investment holdings. He refinanced Middle West Utilities, splitting its stock, eliminating its debt, and placing future dividends on a stock, rather than a cash, basis. These moves protected Insull's control of his stock but did not help with shares Eaton had already purchased, as the stock boom of 1929 continually raised the value of Eaton's shares of Commonwealth Edison. Following the crash, with prices declining, Insull bought out Eaton, borrowing money from a variety of sources, including his former enemies in New York. Confident that the Depression would turn out to be brief, Insull was sure he could repay the debt. He was, of course, wrong. As prices in Insull securities continued to fall, the New York bankers turned bearish, driving the stock to lower levels and eliminating their worth as loan collateral. Insull Utility Investments and Corporation Securities were bankrupt; New York took control of Commonwealth, Middle West, and Insull's remaining holdings; Insull resigned from the chairmanships of more than seventy of his companies that were defeated. He had lost everything.

Scapegoat

What happened next was sensational and occupied the press for months. In defeat Insull became a public scapegoat for the impersonal economic forces that had brought on the Depression. He was a ready candidate for the task, as the public stockholders of Insull's companies—ordinary people such as farmers, teamsters, and schoolteachers—had lost their investments when Insull lost his companies. His financial maneuverings of 1930 and 1931 were complex, multifaceted, amoral, and quite possibly illegal; the taint of scandals of the 1920s burdened Insull. John Swanson, state's attorney for Cook County in Chicago, maximized the political potential of this burden during the elections of 1932: on 4 October he secured from a grand jury indictments against Insull for embezzlement, larceny, and mail fraud.

Insull controlled an empire of \$500 million with only \$27 million in equity. Due to the highly leveraged structure of Insull's holdings, he is sometimes wrongly

credited with the invention of the *holding company*. His holding company collapsed during the Great Depression wiping out the life savings of 600,000 shareholders. This led to the enactment of Public Utility Holding Act

Trial

Getting Insull to face trial was more difficult. After the loss of his power empire, Insull had gone to Europe to rest and recuperate. In 1933 the government moved to force his return for the criminal indictments, chasing him from Paris to Italy to Greece. Greece had no extradition treaties with the United States, but political pressure from the Roosevelt administration prevailed: Insull was returned to the United States in May 1934. On 2 October 1934, at age seventy-four, Insull went on trial in Chicago. The gist of the fifty-page, twenty-five-count indictment was that Insull had engaged in a "simple conspiracy to swindle, cheat and defraud the public." The affair was hardly simple, and the details of Insull's finances bored the jury. But Insull's testimony was riveting, and it was wired to papers around the country. Rather than focus on the details of the indictment, Insull's attorney deftly led the old man to recount his rise from poverty to wealth. In the end the trial was about contrasting stereotypes: Insull the unscrupulous magnate versus Insull the poor boy made good. Insull was *acquitted* of all charges. He spent the remainder of his life in exile, retired on the pensions from his former companies. He died in Paris on 16 July 1938.

By 1932, *the eight largest* utility holding companies controlled 73 % of the investor-owned electric industry. (*) Their complex, highly leveraged, and corporate structures were very difficult for individual states to regulate.

American Regulatory Agencies in Water and Energy

First Anti –Trust Laws in Early XXth century America

The Public Utility Holding Company Act (PUHCA)

The PUHC Act was one of a number of *trust- busting* and *securities regulation* initiatives that were enacted in response to the Wall Street Crash of 1929 and ensuing *Great Depression* including the collapse of Insull’ s Public Utility holding companies.

The Securities and Exchange Commission and the Federal Power Commission

The *Public Utility Holding Company Act* required the *Securities and Exchange Commission (SEC)* approval before a *holding company* may engage in a *non-utility business* and that such businesses is kept separate from the utility's regulated business.



Logo of the Security and Exchange Federal Commission, 1934,

And the Federal Power Commission, 1930, based in Washington

The *SEC* was established by President F. D. Roosevelt in 1934 as an *independent*, quasi – judicial Regulatory Agency, during the *Great Depression* that followed the Crash of 1929. The main reason for the creation of the *SEC* was to *regulate the stock market* and prevent *corporate abuses* relating to the offering and sale of securities and *corporate reporting*. The *SEC* was given the power to license

and regulate stock exchanges, the companies whose securities traded on them, and the brokers and dealers who conducted the trading.

Holding companies were required to register with the *SEC*, which would then conduct *administrative proceedings* to limit each holding company to ownership of a single integrated electric system (with certain exceptions) through the divestiture of the securities of other public utility and unrelated companies. The PUHCA also authorized the *SEC* to flatten the corporate structure of utilities to remove unnecessary corporate layers. Individual operating utility companies could centralize certain business operations into central Service Companies, but All *Service Companies* would be subject to the *SEC* and to the *Federal Power Commission* Regulation. When a *State Utility Commission* regulated a utility located in a particular state, the rate payers of that state would pay *only the share of any common service expenses associated with that state's electric company* allocated to it under *SEC*-approved formulas. This would prevent a holding company from *double-recovery of its expenses* when it operates in more than one state. Because the *SEC* strictly enforced the divestiture provision of PUHCA in its proceedings and ordered divestiture of all corporate holdings except for a single integrated electric system, the affected holding companies filed voluntary divestiture plans. As a result, by 1948 holding companies had voluntarily divested themselves of assets worth approximately \$12 billion and the number of subsidiaries controlled by affected holding companies was reduced from 1,983 to 303.^(*)

An important PUHCA provision prohibited sales of goods or services *between holding company affiliates* at a profit. These rules prevented the utilities from increasing their cost-based regulated rates by artificially marking-up the prices paid by the utility operating companies above what the central purchasing affiliate paid.^(*)

Regulating Hydroelectric Projects : The Federal Power Commission

The *Federal Power Commission (FPC)* was an *independent Commission* created in 1930, composed of five members nominated by the President of the US and confirmed by the Senate. The *Federal Power Commission* was originally instituted in 1920 by the *Federal (Water) Power Act* whose original purpose was to coordinate more effectively the development of *hydroelectric* projects in the United States. The *Power Act* was fostered by John J Esch, a republican congressman. Until that time the regulation of hydroelectric power was in the hand of individual states(*), despite federal control of *navigable* waters and the necessary congressional approval to construct such facilities. The first federal legislation broadly dealing with hydroelectric development regarded its competition with *navigation usage*. (*) Until 1903, these congressional permits were given away on a '*first come first served*' perpetual basis and controlled by the individual states. This would lead to a long debate between *competing private and public development interests*, and culminate in the act's passage in 1920. The *Federal Power Commission* became *the federal licensing authority* for these plants. The *Federal Power Commission* was created to regulate the *interstate activities* of the electric power and natural gas industries, and *coordinated national hydroelectric power* activities.

The *Commission's* mandate was :

‘ To maintain *reasonable, non-discriminatory*

and *just rates to the consumer* ’

It was ensured that the state in which the dam was built would have been granted the 37.5% *of the income* derived from hydroelectric power leases. The *Federal Power Act* provided for the licensing by the *Federal Power Commission* of *hydroelectric* projects on the *land* or on *navigable water* owned by the federal government. The *Federal Power Commission* also regulated *interstate electric utilities* and the *natural gas* industry.

The Federal Regulatory Energy Commission



The Federal Energy Regulatory Commission, 1977

based in Washington

(*) with the passage of the *Rivers and Harbors Act of 1899* Congress made it *illegal to dam* navigable streams *without a license* (or permit) from them.

In 1977, the *Federal Power Commission* was replaced by the *Federal Energy Regulatory Commission (FERC)*. The *Federal Energy Regulatory Commission* has jurisdiction over *interstate electricity sales*, resale electric rates, *hydroelectric licensing*, *natural gas pricing*, and *oil pipeline rates*. The *Federal Energy Regulatory Commission* also reviews and authorizes liquefied natural gas (LNG) terminals, interstate natural gas pipelines and *non-federal hydropower projects*. In 1978, FERC was given additional responsibilities for harmonizing the regulation of wellhead gas sales in both the intrastate and *interstate markets*. The *Federal Energy Regulatory Commission* also administered a program to foster new *cogeneration* and small power production under the *Public Utilities Regulatory Policy Act of 1978*. On August 8, 2005, the *Energy Policy Act of 2005* issued by President Bush and passed by both houses of Congress, *repealed* PUHCA,

despite consumer, environmental, union and credit rating agencies objections . It was replaced by a much weaker set of laws called the ‘ *Public Utility Holding Company Act of 2005*’ which gave the *Federal Energy Regulatory Commission* a *limited role in allocating the costs* of multi-state electric utility *holding* companies to individual operating subsidiaries. The 2005 Act had many provisions which applied to *just electric* subsidiary to the exclusion of natural gas subsidiaries of Holding Companies. On December 8, 2005, the *Federal Energy Regulatory Commission recommended* that Congress *amend* the 2005 Act to give FERC *cost allocation authority* over *gas* subsidiaries, and *greater enforcement authority* over gas subsidiaries (*) but Congress did not act on FERC's request.

Hydropower Policy – The Promotion of Small-Hydropower projects

The Commission's main responsibilities on hydropower include: issuance of *licenses* for the *construction* of a new project; issuance of licenses for the *continuance* of an existing project (*re-licensing*); and *oversight* of all ongoing project operations, including *dam safety inspections* and *environmental monitoring*. The Commission regulates over 1600 non-federal hydropower projects at over 2500 dams, representing all together more than half of all the hydropower capacity (54 gigawatts) in the U.S. The *Federal Power Act* authorized the Commission, to issue licenses and exemptions for projects . Of such projects 71 % of the hydropower projects have an installed capacity of *5 megawatts* or less.

In the recent years the Commission’s declared policy is – in line with the policy of President Obama, to promote *small hydropower* generation . in a report of Jeff Wright, director of Energy Project in FERC , the Agency says that :

‘ having seen an *increased interest* in small hydropower projects, *responded* by facilitating *efficient review of project proposals*, adding new web-based resources, and *took* a number of *measures to help applicants* to understand and complete the licensing process for small hydropower *hotline* and *email address* to answer applicant questions, and *to educate* potential small hydropower developers through an outreach program. ‘

[Jeff Wright, *sub-Director in FERC*]

Aside of these commitments by the Agency, in 2012 a strong push towards empowerment of hydropower industry, through *simplification of green energy bureaucracy* has come by the US Government through the proposal of a new legislation, the *Hydropower Regulatory Efficiency Act*, thought to enable increased electricity production from *domestic sources* by removing roadblocks to new hydropower projects. This legislation has been conceived to ease the bureaucratic path for hydropower projects enabling more efficient permitting processes across the Nation by *easing the licensing* requirements for *small hydroelectric* projects.

The bill was introduced into the House of Congress on January 15, 2013, and it passed on February 13, 2013. The bill would change some of the regulations in the United States surrounding hydropower by making it easier for smaller hydropower stations to be created. According to the bill's proponents, current regulations are unwieldy and represent a significant hurdle to creating more hydropower plants. The new law would alter those regulations to make it easier for smaller plants to get approval quickly. Section 3 of the law *amends* the *Public Utility Regulatory Policies Act* of 1978 (*PURPA*) to increase from 5,000 to 10,000 kilowatts *the size of small hydropower projects* which the *Federal Energy Regulatory Commission* may *exempt* from its license requirements.^(*) The *Public Utility Regulatory Policies Act* Act was written by Diana De Gette and and Mrs. Mc Morris Rodgers.

The Shift to Private Provision for Water and other Regulated Utilities in late XXth century.

Contract versus Discretionary Regulation

*US Waste disposal : The Shift to Concession Contracts in US and Canada
(XIX to XX)*

In the XIX and early XX century many municipalities had contracted with private firms for solid waste collection and disposal services, but many converted from *private* to *municipal* provision, under the influence of the *Progressive* reformers seeking to reduce *corruption*(*).

In the 1970s, the use of *private contractors* for the disposal of solid waste rose rapidly, due to a new set of environmental regulations set by the US Government at federal level. At the time the municipally owned landfills and incinerators did not comply with the recent standards newly set by the Federal government. Modern landfills and incinerators would be larger in scale and much more technically sophisticated, and many cities could not afford the expenditure to build or manage them to fit the new standards. For this reasons many cities turned to private companies with high experience in building and operate these infrastructures for the industry.

Some of the new private facilities were built under *long-term contract* with a city , or a *group* of cities , others were ‘ *merchant plants* ‘, built for the spot market, and many used a combination of the spot and merchant approaches. Around six large firms emerged operating landfills and incinerators around the country , presumably because of their skill to spread specialized technical and managerial staff over a large number of facilities.

By late 1990s , approximately 58 % of the tons of solid waste collected from US cities was disposed of in *private facilities*. Similarly and in Canada the 59% of expenditures on solid waste from Canadian cities was spent on *private contractors*. (*). In solid waste the emergence of concession contracts is much more widespread as competition is higher . Most cities no longer dispose of their solid waste within the city limits , because of the constraints of *siting* new landfills and incinerators and, due to how the sector is structured, they can now choose among several regional facilities for disposal. Most city managers and facility operator sign long term, contract, to protect from short term-fluctuations of dumping fees. but there is also a fairly competitive *spot market* they can use if they need to.

US Water and Sewerage in Late 1980s

Concession contracts are far less common in water and sewage than in solid waste, because competition is weaker and is much more important a careful contract design.

In the late 80s a similar shift to private provision of Water and sewerage began , although it progressed much slower than in waste disposal. () Similarly to what happened for the solid waster, the push was due to stricter environmental standards for drinking water and for waste waster discharges . Cities found themselves in the double need to maintain existing systems and to build, and operate new plants for the drinking water and for the sewage treatment and many of them began to contract out this function to private contractors. The provenience of the contractors was various: some of them still belonged to the few large private utilities that survived the wave of municipal takeovers that took place in America during the late nineteenth and early twentieth centuries, other contractors were originally suppliers of chemicals, of equipment, or of other services, to the municipal water utilities.*

US Water and Sewerage in the 1990s

*During the nineties large private water firms from France and Britain also entered the US and Canadian market to compete for contracts. Nevertheless, in 1995, only 12% of the US citizens were served by privately owned water systems: Furthermore, many of these were operated by *Homeowners Associations* , rather than by investor-owned utilities. In 1995 a survey of the US Environmental Protection Agency showed that 93 % of the population*

was served by community water systems and the rest by systems like wells serving single household. Of the population served by community water systems, 13% were served by privately owned systems and only a half of these were investor owned. This suggests that, in 1995, roughly a 6% of the population was served by investor-owned companies. () A 1997 survey led by the city manager's association revealed that only 5.7% were employing private contractors to operate their municipal water distribution systems, 3.7% to operate water treatment plants and 6.2 % to operate wastewater collection and treatment. (*) In the same year, another survey found that 1200 communities contracted with private firms to operate and maintain their water systems but many of them were apparently small. (*)*

The Growth of Water privatisation in US during the 90s

In late 1990s, the prospects for water privatisation opened up again, when the federal government reduced two barriers it had created. One was a federal program to fund cities's improvements of their water and sewerage plants, rooted back in the previous decade. During the previous decade a city was required by the Federal government to pay back its public grant, used to fund the construction of a plant, if the plant was after it sold or leased to a private operator. In 1992, this rule slightly was changed and the cities were required, in case of sell, to repay only the under-preciated portion of the grant. The second barrier is rooted in the structure of municipal bonds income. In US the interest paid on municipal bond is tax free, and this makes it cheaper to finance municipal facilities with municipal bonds rather than with private debt.

Until 1997 a company operating a municipal facility, despite the contract lasted longer than 5 years, was considered as operating a private facility, and therefore could not be financed with tax-free municipal bonds. In 1997 the US Conference of Mayors obtained to

municipalities the possibility to extend to 20 years the length of contracts with private operators, for operating municipal facilities without losing the possibility to use municipal tax free bonds. This made the difference and had the clause that the facilities needed to be municipally owned to be eligible for tax-exemption, but they could be built, maintained and operated by private concessionaires under long – term contracts. By 2001 many cities had entered a new contract to built and maintain new water and sewerage plants or to operate and maintain existing systems. These changes contributed to a gradual increase in long-term contract with private firms. The average contract for operating a water treatment plant was for ten years, as to design, build and operate a new system it was for twenty years. () In the passage from public to private provision there seemed to be evident savings in either construction costs and operation and maintenance. A Seidentat, Nadol and Hakim report in 2000 registered saving in many cities from 15 to 25 percent in construction costs and 20 to 40 percent in operating and maintenance costs. The reports showed that the competition for the initial contract showed to be fierce, but, at the end, when the contract expired, it seemed that both parties were reasonably satisfied, as many contracts resulted to be extended through negotiation, rather than re-bidding.*

The Need for Proper Contract Design for Water and Sewerage

The cities that have turned *to private* solid waste disposal, water, or sewerage providers, in US and Canada, seemed to be satisfied, although their water contracts were not studied, at the times, nearly as intensively as other sectors contracts. Water and sewage, by contrast, are classic *natural monopolies* in that economics of scale are such that it is *uneconomical* to build *more* than *one* water distribution or *sewage collection system* in a community, and systems sited in other communities are not good substitutes. As a result cities and facility operators must *protect* themselves with a *proper design of the concession contracts*, because there is *no competitive spot market* to limit

opportunistic behaviour. In practise the greater *importance of drafting a workable contract* has made in time US cities *more cautious about water and sewerage privatisation.*

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Regulatory Design

The Need and Design of a proper Regulation for Utility Performance

Historically, the main questions arisen around *Regulatory agencies* have been *to which extent* the same agencies do *have the discretion* to set tariffs and service standards, and *how*, once established *will they use* their discretion.

In this chapter we want to analyse the path followed by different *concepts* of Regulation. In the first part of the chapter describes some main *cultural patterns* of approach to *regulation* such as the *Rate-of-Return Regulation* , firstly devised in the US – and then recently extensively spread in Asia and Latin America. Against it , the development, during the 1980s, of the *Price-cap* regulation in Britain. While looking at these different ‘ regulatory cultures ‘ the exercise has been addressed at the *regulatory agencies* and the other *actors* which established *ways* through which *societies* developed substantial *room* and *adequate interactive channels* of *communication* with their *operators* of *water* and other *regulated utilities*. Drawing examples from *US, India* and *Latin America* the latest part of the chapter uses different examples to explicitate these institutional , formal and more informal *settings*, how they could be, how they actually have been devised, drawing examples from different

institutional and regulatory patterns, with the aim to establish which *proper* democratic *conditions* for an interested dialogue among governments, utilities and citizens, can be proposed for establishment in the management of the water services.

Discretionary Regulation for Rate-Regulated Utilities

Cost of Service Regulation

Cost-of-Service regulation, is also known as *Rate-of-Return* regulation and is conceived through the way that *the price is set* by the regulator in order for the regulated firm to *cover its costs* of management, up to a *reasonable* level, and to include within the price a *fair rate-of-return* on its investments. With cost-of-service regulation, there is a direct link between the *costs* that an entity is expected to incur and its *expected revenue* as the rates are set to allow the company *to recover its expected costs*.

The *Cost-of-Service* regulatory mechanisms has been reputed, by the British, to show *few incentives* to the *efficiency*. In practise, a company that decided *to cut its costs* risked to see *its tariffs* to be cut *accordingly*. Therefore these inadequacies have been addressed through the development , in British regulators , of the *Price – cap* mechanism.

* All the big utilities, constituting *de facto* ' a *natural monopoly* must utilize *ratemaking* to set their rates, include *railroads*, natural *gas* distribution, *telecommunications*, and *electricity* generation and distribution. they have been legally mandated to go through the *ratemaking* process in order to determine the *allowable service charges* for their industry.

Utility Ratemaking

The formal regulatory process by which regulated industries set the prices - commonly known as "rates" - they will charge to consumers is known as *utility ratemaking**. In US *ratemaking*, typically is carried out through "rate cases" before a *Public Utility Commission*, which serves as one of the primary instruments of the government regulation of public utilities

The Business Vision on the Issue of Water Regulation

The Need and Design of a Public Accountability for utility performance

Rate-regulation (*) of utilities creates new patterns of operational and accounting situations. Although the rates are set to allow the 'regulated entity' to recover its expected costs, there could be a significant *time-lag* between incurrence of costs by the entity and their recovery through tariffs. Recovery of certain costs may be provided for by regulation *either before or after* the costs are incurred. Rate regulations are therefore enforceable and generate *legal rights and obligations* for the companies



'Rate – regulated entities Will Rise : we need special accounting for them'. Jitendra Agarwal, Deloitte, Haskins and Sells. The raise of a new Water-accountancy. The Hindu Business Line.

The COST–RECOVERY Principle

In a *Cost-of-Service (or Rate-of-Return) Regulation*, the *resource* is *the right* conferred by the regulator whereby the costs incurred by the entity result in future cash flows.

In such kind of regulation, incurrance of costs generates an *enforceable right* to *set rates* at a level that permits the regulated entity *to recover* those *costs*, plus a specified *return*, from an aggregate customer base.

For example, if the regulator has approved certain additions to be made by the entity in its assets base during the tariff period, which would be added to the asset base for tariff setting, the entity upon making such additions obtains the right to recover the costs and return as provided in the regulatory framework though the actual recovery through rates may take place in the future.

While adjustment of future rates is the mechanism the regulator uses to implement its regulation, the right in itself is a resource arising as a result of past events and from which future cash inflows are expected cash flows. In such cases, incurrance of costs creates an enforceable right to set rates at a level that permits the entity to recover those costs, plus a specified return, from an aggregate customer base. For example, if the regulator has approved certain additions to be made by the entity in its assets base during the tariff period, which would be added to the asset base for tariff setting, the entity upon making such additions obtains the right to recover the costs and return as provided in the regulatory framework though the actual recovery through rates may take place in the future. While adjustment of future rates is the mechanism the regulator uses to implement its regulation, the right in itself is a resource arising as a result of past events and from which future cash inflows are expected.

International Accounting Methods for Rate-Regulated Utilities.

The *Deloitte's* methodology for *Rate-Regulated Utilities* in India.



Among the methods which are being internationally developed for the accounting of Rate- Regulated Utilities, one is the methodology developed by Deloitte in India , which is an interesting *model* for both developed and developing countries.

Regulatory Asset / Liability

The methodology is commonly referred to as the ***Regulatory Asset/Liability*** assessment. This method takes into consideration the basic fact that, in each country the Government or State's Regulatory Agency has the responsibility to ensure uniform supply and fair pricing as major objectives, determining the price (*tariff*) that the utility will impose to consumers. The regulator determines the tariff on the basis of data obtained from the service providers and by applying its judgement on the appropriateness, reasonableness and accuracy of the data. The tariff can be challenged by the service provider, and by consumers through a ***redressal mechanism***. The revenue based on such tariffs may vary from the amount recovered from consumers due to cost variations and

other factors. *The differential* is recoverable/payable from/to consumers through adjustments in future tariff, and is referred to as '*the regulatory asset/ liability*'. As this could materially impact results for the period, accounting for regulatory assets/ liabilities has been the subject of debate at various international forums.

Application

Although the existing *Generally Accepted Accounting Principles (GAAPs)* in India do not have any specific pronouncements on 'regulatory asset/ liability', the *Institute of Chartered Accountants of India* recently issued a *guidance note on 'Accounting for Rate Regulated Activities'* (*). The guidance note dwells on the principles of *recognition* and *measurement of regulatory assets / liabilities*.

Recognition

The salient features for *recognition* of a regulatory asset is *the reliability of its measurement* and *the probability of future economic benefits flowing to the entity* as a result of the actual or expected *actions of the regulator* under the applicable framework.

Reliability of measurement is linked to the specific costs incurred, which can be recovered under the regulatory framework; hence, there should be no difficulty in reliably measuring the asset. As for probability of future economic benefits, a regulatory asset can be recognised only when the regulatory framework provides for recovery of the incurred costs and the entity has actually incurred them. The regulator can specify conditions for treatment of expenditures, which will determine the manner of ascertaining the regulatory asset.

For example, some expenses that are considered revenue expenditures may need to be considered as capital when determining tariff. The service provider should determine tariff based on the regulator's

requirements. The guidance note provides that the entity should recognise a regulatory asset with respect to such costs, as they can be recovered from consumers in future.

A regulatory liability should be recognised when an entity has a current obligation as a result of a past event; an outflow of resources embodying economic benefits may be needed to settle the obligation, for which a reliable estimate can be made. Broadly, if the costs incurred by the entity are lower than those initially considered for rate determination, the entity has to set up a liability for making a refund to consumers through lower tariffs.

Measurement

The amount recognised as asset/ liability should be *measured* at the end of the subsequent reporting period to ascertain the best estimate of the amount expected to be recovered/ refunded/ adjusted as future cash flows under the regulatory framework. The estimates, which cannot be discounted, are determined by the management on the basis of statutes or regulations providing for recovery of cost in rates, written formal approvals from the regulator, uniform regulatory guidance for treatment of various costs that is used in setting rates, opinion of independent experts on the recoverability of cost based on regulations and past practice, and any additional evidence provided by events after the balance-sheet date.

Rate regulation is not a recent phenomenon, but accounting for it has been governed by the general accounting principles and practices adopted for other commercial organisations. Rate-regulated entities will increase in future and there will be greater need for special considerations in accounting for them. The guidance note mentioned here is the first step in the formal recognition of the special considerations involved in accounting for such entities, and there is hope for improvisations.

Concerns on going Changes under recent reforms on Indian Accounting

‘ The larger concern, at present, is that under *both Ind-AS and IFRS, regulatory assets and liabilities cannot currently be recognised, which would lead to large losses – especially for those groups in India carrying significant regulatory assets.* ‘

(The Hindu, 2012)

Currently under Indian *Generally Accepted Accounting Principles (GAAP)*, companies subjected to rate regulation tend to already recognise an asset or liability based on recovery or refund of costs through future changes in customer *tariffs*. While *infrastructure assets* constructed are recognised as *fixed assets* under Indian *GAAP* and the revenue recognised over the course of the contract on an accruals basis, under *Ind-AS*, the fixed assets will become *intangible assets* or *financial assets* or a combination of both. Furthermore, *the timing of revenue of profit may be accelerated*, compared with the related cash flows. The *de-recognition of fixed assets* and apparent *mismatch* between *revenue* and *cash* will mean that *institutions* providing the project finance *will need to revisit how they assess* such projects. The financing KPIs *will need to move away from fixed assets and revenue, with a greater focus* on *cash generation*. Therefore, *Infrastructure groups should engage early with their financial bankers* to ensure that they clearly understand the impacts of these accounting changes.

Designing an Independent Authority

In the pursuit of the Public Interest: Independent Regulatory Agencies

Regulatory agencies are almost always created in the name of reaching the ‘*public interest*’. A number of economic theories are often used to explain *why* government regulation is established and *how* regulatory agencies behave, once they are created. One of the most common looks at the *agency* as a ‘*tool*’ to establish *the broad public interest* while regulating the performance of the industry. The concept of the ‘*public interest*’ assumes that *members* of society share *common objectives* that

need to be protected by the public regulator. In matter of water infrastructure such primary objectives of the aforementioned regulation ought to be *clearly politically identified* and pursued through a decision making *process* based on *democratic engagement* of *all* the involved parties at stake, which are *citizens, companies* and *institutions*. Averagely, the most commonly pursued goals show to be the promotion of *universal access to water (or general) utility service* and the promotion of *economic efficiency* of the regulated industry. Nevertheless, the pursued objectives *do not* always register to be pursued necessarily, if pursued, in the above mentioned order.

The Public Utility Commissions

During the first half of the twentieths century U.S. reformers devoted a great deal of effort in *designing* their regulatory institutions that would resist *corruption* and other practises which would *divert* the agency from its primary goal of protecting the public interest. In the United States, as well as in Canada (with the *Public Utility Boards*) *public regulatory bodies* were constituted at the beginning of the XXth century to pursuit the public interest towards the single firm interest.

At the time, regulation which was based on *municipal concession contracts* chose to be replaced by ***Public Utility Commissions***, at state level. The *Public Utility Commissions* were established after a debate that took place in the United States and Canada around *public ownership , municipal or state regulation* would best protect the public interest from private monopoly.



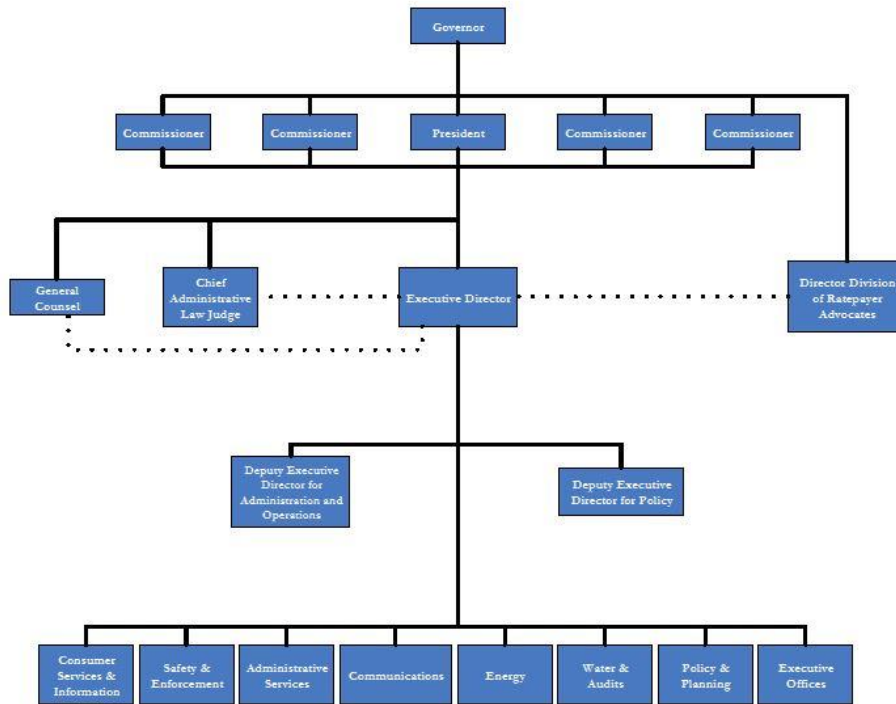
An Independent Regulatory Agency
The

Public Utility
Commission of
California

The *Public Utility Commissions* embodied the ‘ *public interest* ’ perspective. Shifting regulation from the *municipal* to the *state* level , the idea was create regulatory agencies sufficiently detached from the municipal more easily corruptible base, with enough resources to afford expert staff.

Structure of the PUC

The *PU Commissioners* are appointed to a fixed term, and are removable only for specific causes, so that they can make decisions that might be *unpopular* in the short term, without fearing political interference. This aimed to establish an *independent agency*.



Example of organizational chart of a *Public Utility Commission* (for the State of California).

Supporters of the ‘ *public interest* ’ theory

The belief in *public interest* was particularly strong in the 1950s , and became popular again toward the end of the twentieth century. Public Interest proponents put their faith in the *democratic process*, but they also seek to design *regulatory institutions* that will encourage the development of public interest. The state *PUCs* established in the first third of the XXth century are clear examples of *regulatory* institutions crafted to encourage the rational discovery of the *public interest*.

.. and Critics

Critics to the perspective of the role of regulatory agency as mean to pursue the public interest often argue that this is a mere *illusion*, as often, when *reality* comes to term, although there was commonality of goals when problems have been stated, the broad *consensus* generally *dissolves*, when it comes the time for the established goals, to be *translated into public policies*. To put it simply, for example, although we all may agree around the principle that ‘*some*’ *basic level of public service* should be guaranteed to everyone, we the disagree when defining ‘what exactly ‘ or ‘ *which amount* ‘ does constitutes such *basic level*.^{*} These critiques assert that, given the impossibility to make a completely informed rational decisions, even a large and expert staff cannot

^{*} An example of this is the *Phiri Water Case*, in South Africa where recently emerged the issue around the definition of the *Right of access to water*, on *what* can be considered ‘ *a minimum amount of water* ’ to be guaranteed to everyone. The case went up to the Supreme Court.

comprehend and analyze all the information needed in time. But to the proponents of the public interest this criticism seems exaggerated. Simply because there is uncertainty about the nature of public interest it doesn’t mean that it doesn’t exist. All citizens rely on infrastructure services, and this means that they have *a common interest* in seeing that infrastructure is provided *efficiently* and at a *reasonable cost*. While regarding the promotion of *universal access* to the service, although controversial, enjoys widespread support. In particular regarding *water services*, the public has *a general interest* that *everybody* is reached by efficient public pipes and sewerage systems *to protect the public health* from the spread of *diseases*

The British Water Regulation and the Design of Price-Cap

THE BRITISH CASE

In England and Wales, Public Water Supply and Sanitation has been characterized by *universal access* and generally *good* service quality. The salient feature of the sector in the United Kingdom, when compared to other developed countries, is the *full privatisation* of the service provision and the pioneering of an *Independent Economic Regulation* for the water sector, in Europe. Nevertheless data showed that there has been a *substantial increase* in real *tariffs* between 1989 and 2005, whilst independent assessments assert that *the cost* of water provision in the UK is higher than most other major countries in the EU*.

England Before Privatisation : Local Government Water Provision

Before 1973 the sector was highly fragmented. Water and sanitation services were provided by different authorities. Until the 1950s there existed *over a thousand* water undertakings, with administrative boundaries similar to those of *local government* boundaries. By early 1970s the number of these operators had been reduced to 198 through a gradual consolidation process aimed at achieving *economies of scale*. Out of the 198 water undertakings 64 were run by *individual local government authorities*, 101 by *joint boards* comprising several *local government authorities*, and 33 were statutory *privately owned* water companies, some of which dated back to the Victorian era. At

the same time there were over 1,300 sewerage and sewage disposal authorities, most of them run by *individual local government* authorities. Water resources management was entrusted to 29 *River authorities* created in 1965. Their responsibilities included *water conservation, land drainage, fisheries, control of river pollution* and, in some cases, *navigation*.

The Regional Water Authorities (RWAs)

Through the *Water Act*, in 1973 the government established 10 *Regional Water Authorities* in order to achieve even greater economies of scale, especially in sanitation. The reform was aimed to put in practice the principle of *Integrated River Basin Management (IWRM)* especially concerning the *planning of investments* in wastewater treatment. In practice the area covered by each of the Regional Water Authority typically contained more than one river basin, given the small size of many river basins in England and Wales.

Interestingly, the Regional Water Authorities were not only in charge of *water supply* and *sanitation*, but also of *water resources management*, thus opening the possibility of *conflicts of interests* since the same institution was in charge of *abstracting* water and *discharging* wastewater on the one hand, and *controlling* these same abstractions and discharges on the other hand. The *Water Act* left open the possibility to contract out water supply and sanitation services to local authorities. However, in practice this did not happen, and substantial assets were *transferred* from local governments to the new *Regional Water Authorities*. Since the transfer was internal to the *public sector*, *no compensation* was paid to local authorities. Local authorities also initially held a majority of the Board seats of the new organizations. The *private* statutory water companies, which provided water to 25% of the population, escaped reorganization and were left to operate as before.

Centralisation and First Attempts to Commercialize Water Service Providers

With the election of Margareth Thatcher, in 1979 the water and sanitation sector initially remained public, but the government attempted to make the enterprises operate more along commercial lines. As a result the *number of employees* in the sector *declined* from 61,000 in 1976 to 52,000 in 1985, real operating costs declined, *tariffs* were *increased* above the inflation rate and the share of self-financing of investments increased. However, government regulators also cut back on investments. While the industry became profitable, the rate of return on assets based on replacement cost values remained low at less than 2%. As part of the attempt to commercialize the service providers, the Water Act 1983 *reduced* the number of Board members of the water authorities. However, it also eliminated the local government representation on the Boards and made *all Board members* appointed by Ministers, thus further *centralizing* the sector.

The Privatisation of the Industry : from Authorities to Companies.

Plans for the privatisation of the water industry in England and Wales were first advanced by the Thatcher Government in 1984, but were abandoned after a public outcry against it. However, they were resurrected soon , and, in 1989, the ten unitary Regional Water Authorities (RWAs) in England and Wales were privatised. The **Water Act** in 1988 transformed the RWAs into private companies and *sold* them off. In 1989 the government *privatized* the ten public Regional Water Authorities through *divestiture* (sale of assets). The newly formed *Companies* became owners of the entire water system and properties of the former *RWAs*. Against the conflict of interest the Authorities' functions related to *water resources management* were *separated* and *retained* by the public sector. At the same time was created a new Economic Regulatory Agency OFWAT, on the model of Regulatory Agency set up in other sectors (such as telecommunications and energy). The Act gave the Companies exclusive 25-year concessions for sanitation and water supply, creating therefore *private*

monopolies. The Government took a number of steps to boost the profitability of these companies, *writing off the all the debts* of the water companies before privatisation, worth over *£5 billion*. In addition, they were given a ‘green dowry’ of £1.6 billion. The government also offered the companies for sale at a substantial discount, 22 per cent less than their market value⁽¹⁾. A *very generous pricing* regime was established, and the companies were given special exemption from paying taxes on profits⁽²⁾.

According to some commentators, even from the Tory news, the privatisation consequences had been depicted as

“ The greatest act of *licensed robbery* in the UK history.”

(*The Daily Mail* July 11th 1994)

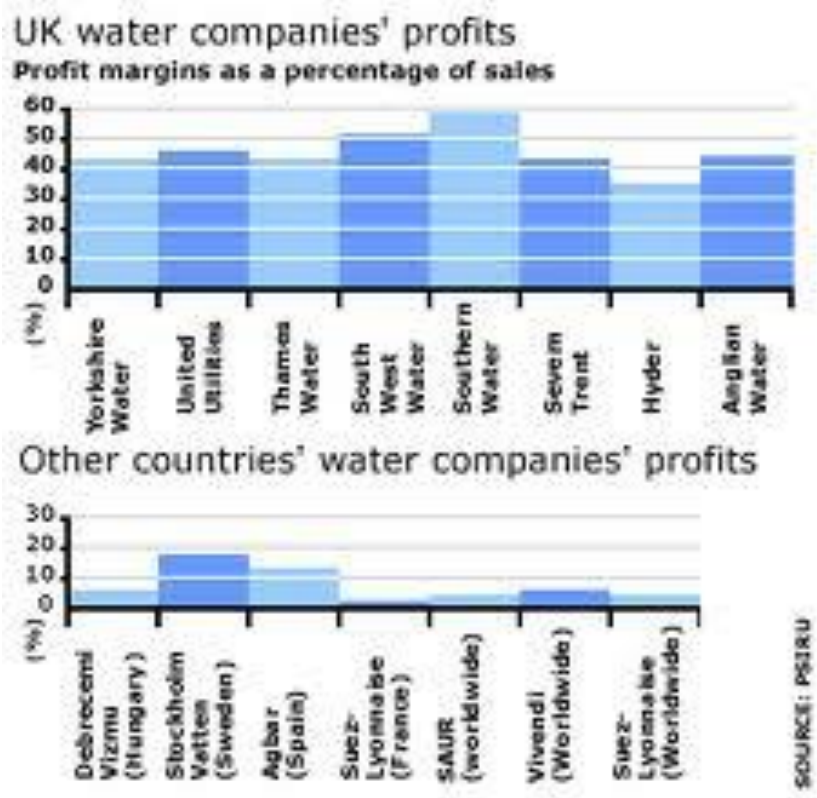
Consequences in the years following privatisation:

Price increases

The most noticeable impact of privatisation for the public has been the dramatic *increase in prices*. On average, prices rose by over *50 per cent* in the first 4 years. The first 9 years produced an *increase of 46 per cent* in real terms, adjusted for inflation. (3) Over the next five years, up to 2009, average water bills will rise by *18 per cent*.(4) Such sharp rises hit households hard with *one in five* being *in debt* to their water company. (5)

Very High Profit Margins

Pre-tax *profits* doubled in the first year of privatisation, and rose by 142 % in real terms over eight years (6). There has been a direct relationship between *higher profits* and *increasing water bills*. When the water bill is broken down into its components, operating profits, which have more than doubled since privatisation, account for almost the entire increase(7). Between 1990/91 and 1997/98 the pre-tax profits of the ten sewerage and water companies rose by 147 per cent with sewerage and water prices rising respectively by 42 and 36 per cent.(8)



The Average Profits margins for UK companies compared to those of other Countries

Profit margins in the UK, in are typically **three** or even **four** times as great as the margins of water companies, private and public, in France, Spain, Sweden, or Hungary (1999). [Data source: PSIRU – University of Greenwich]

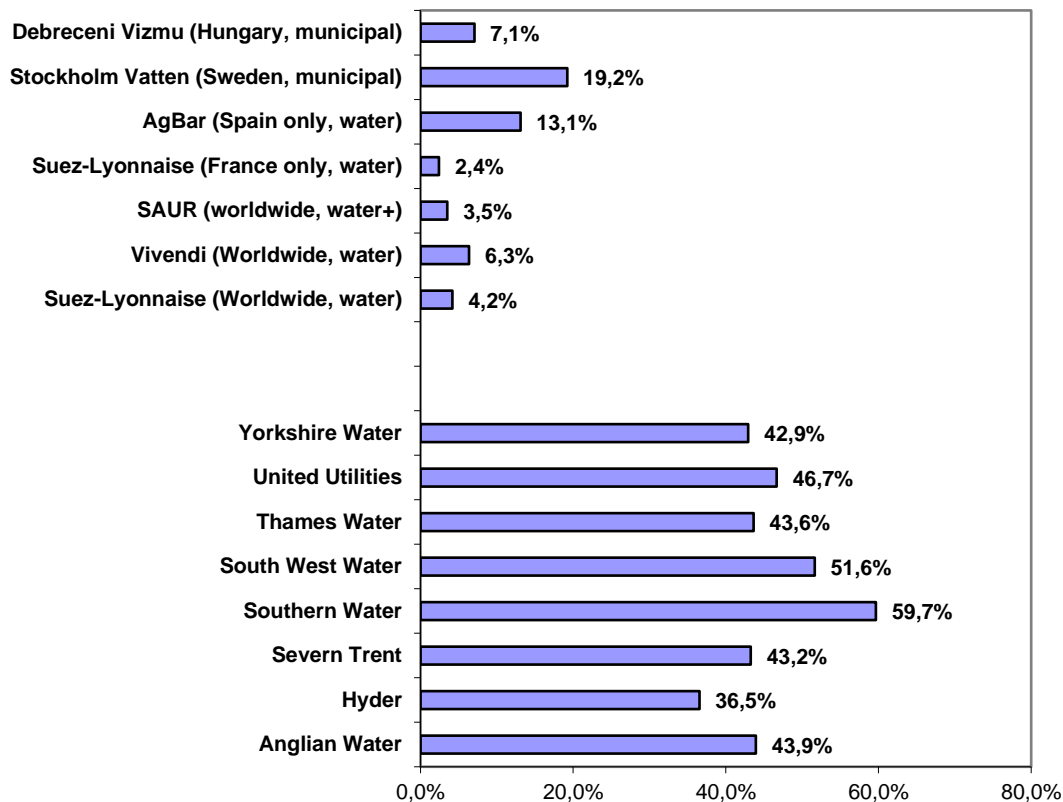
According to *Waterwatch*, in 1996 *customers* of the ten regional water and sewerage companies paid up to £ 93 each towards shareholder dividends. Of North West Water's average bill of £222, £93, or 42 %, went towards shareholders dividends. In the South West region, customers paid an average of £77, the 29% , towards dividends, and Severn Trent and Wessex Water customers paid £60, the 25% in their bills towards dividends. (9) Although a Conservative Government put this regime in place, the profiteering by the water companies has continued under New Labour. In October 2003, the *Commons Select Committee on Environment, Food and Rural Affairs* heard that

"Whilst operating profits and dividends (in the water industry) are down from the 1990s, *dividends* are still showing *growth* and the sector outperformed the Financial Times All Share Index by 58 per cent in the last two years."

[*The Belfast Telegraph*, August 2004]

In Britain *profit margins* are typically *three* or even *four times* as great as the margins of water companies in France, Spain, Sweden, or Hungary.

CHART 3: COMPARATIVE PROFIT MARGINS, WATER AND SEWERAGE COMPANIES, 1998



[Source: PSIRU – University of Greenwich]

Tricks on Planned Investments

One of the methods the water companies have used to increase prices and boost profits, in the British Regulatory system of *Price – Cap* has been to *exaggerate* the level of investment required to maintain their network. *Forecasts* for capital expenditure are consistently *higher* than *actual* expenditure, leaving a *capital surplus* that can be added to profits. Prior to privatisation the level of *capital investment* in the water industry had been accelerating, and rose to a *peak* in 1991-92. *The forecasts* for future investment by the water companies, which supposedly determined *prices*, were based on it continuing at the same rate. What actually happened was that *the level of capital investment levelled off* and even *fell*.⁽¹¹⁾ A number of companies deliberately *cut* their *investment programmes* and used

the savings to maintain or increase their profits. One example of this was *Southern Water* submitting plans for a series of sewage treatment plants that were not installed.(12) Another example was *Yorkshire Water* expecting to avoid £50m expenditure on sewage treatment because the Conservative Government promised to redefine coastal waters near the city of Hull as sea, where untreated sewage could be dumped, instead of estuary, where sewage would have to have been treated. (13)

International Expansion

One of the motives for water companies in accumulating capital was to enable them *to expand internationally* and into other sectors. They used the capital from the water industry *to secure the loans* that would finance *expansion*. However, most of these ventures have been *unsuccessful*, and left the water companies heavily indebted.

Multi-utilities and Concentration of Ownership

One of the ideological claims of privatisation is that it *produces competition*. However the water companies created in 1989 were private *monopolies*. Since then the water industry has become even more monopolised with an *increasing concentration of ownership*. Initially the *ten* water and sewage companies were protected from takeover for five years by the government's 'golden share'. However, the *fourteen smaller* 'water only' companies were the subject of takeovers straight away. All of them are *now* owned by multinationals, mainly the three French groups Vivendi, SAUR, and Suez-Lyonnaise. Half of the water and sewerage companies have also been purchased by *multinational* companies. *Two* are now owned by US companies, *one* by a French company, and one by a Scottish company. The largest, Thames Water, has been purchased by a German company

RWE. *All but one* of these takeovers has been *by energy companies* 'whishing to expand into water sectors. (14)

Executive Pay

Privatisation has also witnessed a *massive increase* in the *fees, salaries* and *bonuses* the *directors* of the water companies have awarded themselves. In a 7-year period the real value of the highest paid director's pay *increased by* between 50 % and 200 % in most of them.(15)

The Impact of privatisation

Therefore, if water privatisation has been a *bonanza* for business, in the view of some commentators (PSIRU, 1999) the corollary is that it has been a disaster for *users*, the *environment*, and those *employed* in the industry.

On employment

Job cuts and Erosion of Employer Rights

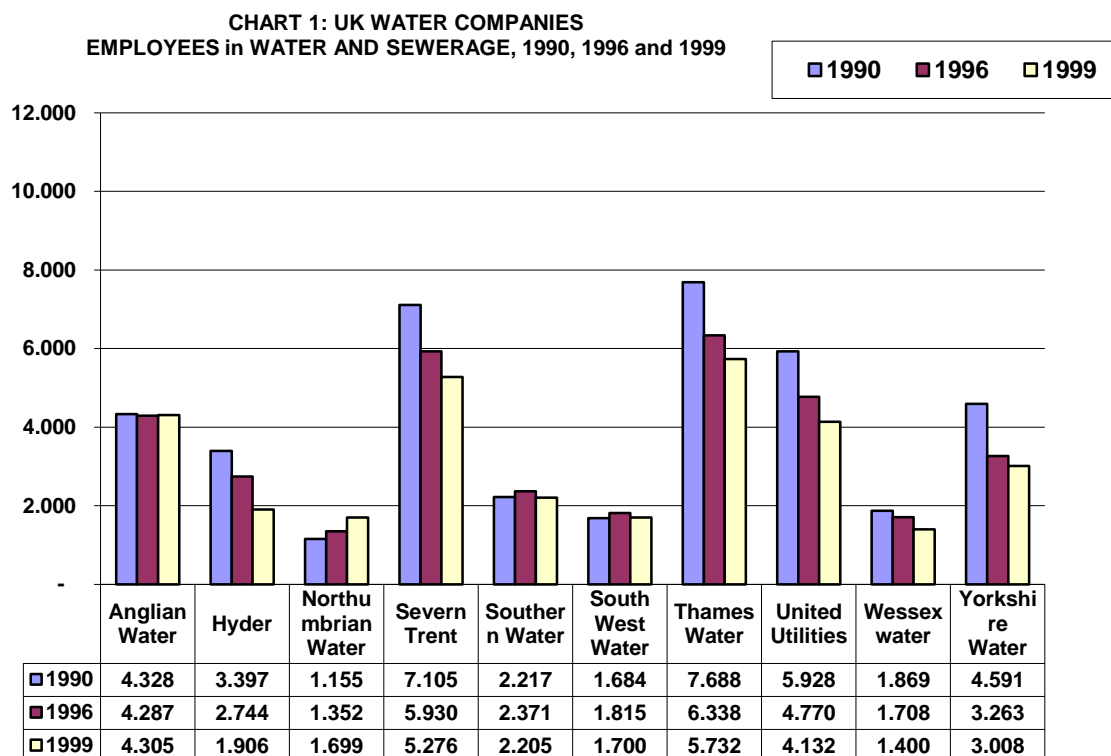
Since the privatisation of the water industry in England and Wales, The UK's regulatory regime has so far allowed the water and sewerage companies to treat their employees entirely according to commercial objectives of profit. Basically the people who felt the most immediate impact of the privatisation of water industry seem to have been *the workers*. They have seen their conditions steadily eroded through *redundancies* and *job cuts*. Since 1900, the workforce has fallen by 8,599 to 21.5 per cent²⁰ (PSIRU , 1999).

Table 1: Overall fall in employment, water and sewerage, 1990-1999

	1990	1996	1999	Change in percentage of employees 1990-1999	Percentage change, 1990-1999
Employees in water supply and sewerage, 10 regional companies	39,962	34,578	31,363	- 8,599	-21.5%

Source: PSIRU database, Company annual reports and accounts. University of Greenwich.

As well as losing jobs, water workers have also suffered by some companies *eroding* employee rights.



Source:

PSIRU database, Company annual reports and accounts. University of Greenwich

Even the *informations* on employees seem to have been lost. One consequence of the various takeovers has been the *loss of stock exchange annual reports*, which has been offset by the regulator requiring accounts still to be published of the water section of the companies – but these accounts do

not include any information about employees, *unlike the accounting requirements of the stock exchange* annual report.

Sub – Contracting

Work which was previously carried out by specialist water workers within a water company has been *sub-contracted* to employees of other companies, *on different employment conditions*, even where these subcontractors are subsidiaries of the same group. In a case reported by PSIRU, in 1999, that Thames Water, Southern Water and Yorkshire Water showed sub-contracting behaviours, due mainly to commercial reasons of *cost – cutting*, giving up the guarantee to have *properly trained* own technical staff in the maintenance of the infrastructure.

Mergers and Takeovers

Always on the theme of the employment, other substantial job cuts resulted from the commercial logic of mergers and takeovers. For instance, the Scottish Power's annual report, in 1997, showed that restructuring and disposals *following the takeover* of Southern water cut 624 jobs in the water operation, that means a reduction of 14% of employee. Such commercial logic was reinforced by the administrative demands of the regulator, who insisted on a significant level of reductions in operating costs as a condition for approving the mergers.

Disconnections and Public Health

According to other commentators privatisation also saw a sharp *rise* in the number of households being *disconnected*. The rate *tripled* in the first 5 years, with 18,636 households disconnected in

1994.(21) A consequence of this was a marked *deterioration in the health of the poorest households* and public health in general. In 1992 there was a rise in the number of cases of *dysentery* reported, in all major conurbations other than London.(22) A 1996 study by *Save the Children* found that on average low-income families were spending 4 per cent of their weekly budget on water. This study also detailed the health compromising measures families took to conserve water, and the correlation between water disconnections and rising dysentery rates.(23)

Deteriorating service ?

One of the claims of privatisation was that it would lead to more investment and improving services. Nevertheless, according to some commentators (25) *inadequate investments* has led to *worsening* conditions in water mains. Between 1993 and 1998 water mains categorised as being in “*poor condition*” increased from 9 per cent to 11 per cent. Apparently, as the same authors comment, the water companies, in order to boost profitability, kept investment at a minimum level. This, with the *reduction in staff numbers* led to the deterioration of services in many areas of the water industry

Consequences on Water quality

An indicator that seems to confirm the *failure* of the companies’ *in properly maintaining the network* is that there seem to have been no improvement in water quality. A report of the Drinking water Inspectorate (DWI) in 1998 concluded that there were ‘*weaknesses in companies’ performance and in the ability of the DWI to enforce standards* by taking action. On five key parameters: nitrate, iron, lead, PAH and other pesticides, *less than 80 per cent* of zones *complied*. The number of ‘serious incidents’ did not decline in the first six years of privatisation.(26) In March 1997 there was a serious outbreak of *cryptosporidiosis* in North London, during which people were poisoned.(27)

Environment and Pollution

The privatisation of the water industry had also a negative affect on the environment. In a list published by the Environment Agency in 1998, Water companies seemed to be responsible for 1 in 5 pollution incidents(30). In 1998 the subsidiaries of Vivendi, *Suez-Lyonnaise* and *Enron* were ranked as the second, third and fourth *worst polluters* in Britain. Offenders are classified *according to the fines* levied by the courts. However, these fines had been lenient, given the wealth of these companies. *Wessex Water*, Enron's UK water subsidiary, had to face an overall £36,500 fine in 1998 (it was fined only £5,000 with £500 costs for discharging *1m gallons of raw sewage* into a Dorset marina on August bank holiday..).

The Price – cap



The *Price Cap*, designed by regulatory agencies in Britain during the 1980s was conceived always with a strong faith in the pursuit of the *public interest* and became a widespread regulatory mechanism in many other countries as well, during the 1990s. *Price – cap* was designed as an alternative to the *cost-of-service* approach practised at the time by most of the regulatory agencies in the US. Also renown as *incentive regulation*, *Price – cap* had become the dominant form of *discretionary* regulation, by the end of the XXth century. It has been developed by the British when they started to privatise their utilities, in the 1980s, and it is rooted in similar *incentive schemes* dated back to the nineteenth century. *Price – cap* is also known to be the most common alternative to *concession contracts*, widely used also in developing countries, and it's especially used to regulate industries where it turned to be difficult to draft a complete contract. As Crew and Kliendorfer (*) report, the

United States have been slow in adopting *price-cap* regulation, and in their report they quote some poor variants of it.



ECONOMIC TECHNICALITIES

Price - cap Mechanism

Price-cap addresses the shortcomings of the rate-of-return regulation by conducting *Price Reviews* at fixed intervals (usually every 5 years) and by setting a *formula to cap* the annual *price increases* which the regulator allows between each reviews.

The typical set formula is :

RPI - X

where RPI is the *change in retail price* index

and X is the *expected rate of productivity improvement*,

in the industry

For an industry, having a *price-cap* which is fixed *for 5 years*, allows cutting costs, and therefore *increase its revenue* between reviews.

Price-cap as a Discretionary form of Regulation

Price cap is traditionally thought as a form of *discretionary* regulation, since the regulator has substantial freedom *to reset the initial price at each periodic review*. But can also be considered as a hybrid of the *discretionary* and of the *contractual* approaches to regulation. In this the contractual elements are central to develop *efficiency incentives*, in *Price – cap* structure.

Price – cap Regulators enjoy the ‘ protections ‘ and relative freedom from political pressure which typical of *discretionary regulation* – such as the fact of being appointed to their commitment for a fixed term.

Price-cap as Incentive for Efficiency

Price-cap is reputed to be a typical form of regulation aimed to leave space for *efficiency incentives* for regulated firms. The regulatory statute usually prohibits the regulator to change X between reviews; this is typical *incentive* for the firm. Furthermore, in the setting of the forthcoming price it is implicitly assumed that the regulator *does not* take into consideration the possibility to *recover* (or recover) past excess profits (or losses) , looking at the past profitability only as a metric to estimate

the next tariff level. In this mechanism, changing X between reviews would undermine the incentive purpose.

Strengths, Weakness and Claims over Price-Cap Regulation

Strength of Price-Cap

According to substantial number of scholars, in England the *price cap* mechanism has been judged a great *success*, primarily because of its stronger incentives to improve *efficiency*. These scholars converge in saying that it is difficult to determine how much of the productivity gains that has been achieved by British utilities in the last twenty years were due to *price-cap regulation* and how much were due to the British *privatisation* process. In any case, British utilities posted efficiency *gains* from 3 to 9 % per year through all the 1990s, and this is an impressive record by any standard.(a) *Water prices rose* but , according to these scholars, because of *environmental* improvements – on the other hand the *price increases* would have been *much larger* without the offsetting *gains* in *efficiency* (*). According to the majority of economists, it is also *unlikely* that the *cost savings* would have been as *great* if these industries had been privatized with conventional *cost-of-service* regulation.

The *incentives to improve efficiency* seem to have survived in time, despite the government's occasional renegotiating on the explicit and implicit commitments that are central to them.

Claims

A case for a claim, from the industry, surged when, in *March 1995*, Stephen C. Littlechild, the head of the Regulatory Authority, announced that the electricity price-caps for the period 1995-2000 would have been *lowered*. This was not illegal, since the *price-caps* were not scheduled to enter into effect until April 1. But Littlechild had already previously spoken about , in the previous August, of the "final" price caps that should be issued so the industry had room to argue that the authority had ‘ broken faith ‘.

The New Labour’s Regulatory policy

In May 1997 Tony Blair led the Labour Party to victory in a general election, after 18 years of Conservative Party rule. High utility earnings had been an important theme in the Labour campaign. In July 1997 the new government imposed ‘ a onetime ‘ tax of £ 5 billion on *utility profits* – in a setting where the industry share is of £1.8 billion. The ‘windfall’ *profits tax*, imposed by the incoming Labour government in 1997, was justified as ‘a one time’ event, provoked by the *extraordinary circumstances* surrounding privatization. But, according to the classical economists, this is the kind of *regulatory claw back* expected to undermine incentives to reduce costs.

The new government commissioned *a review of the system for regulating private utilities*, that ended up in proposals to stress the emphasis on *consultation, transparency* and protecting low-income consumers. A striking change was the proposal to gradually move from individual regulators to *Small Commissions* for each sector.

Quoting the study of the *Department of Trade and Industry* (DTI)

“ There are risks in concentrating *too much discretion on an individual* (agency)
... especially those of *unpredictable* and *unaccountable* decision making “(*) “

[Department of Trade and Industry - 1998]

In addition , regulators were to establish and to *publicise* their consultation procedures and to *explain their decisions in writing*, as it was already happening.

The Competition Act 1998

In the water regulation sector, however, few changes happened. The *Competition Act* of 1998, obligated the regulator not only to ‘ facilitate ‘, but also to ‘ promote ‘ *competition* . This fact stimulated Ofwat, the Water Regulator, to research further ways to encourage competition for customers of bulk water.

The Water Industry Act 1999

In the *Water Industry Act* of 1999, the government increased the protection for residential customers, requiring that the water-meter should have been *optional* and the *meter installation* be free. Meanwhile Ofwat developed *tariffs* to protect ‘ *vulnerable groups* ’ of *customers* that might face hardships from being charged by meter, and that companies *do not shut off* households who had not paid their water bill.

On going adjustments and trust

In addition, some water company officials argued privately that Ian Byatt, the first water industry regulator, *had been tough* in his 1999 review because he wanted to "get even" for 1994, so that the 1999 review amounted to something of a claw back too.

Nevertheless, most utility executives probably believe that events like Littlechild's 1995 reversal or the 1997 windfall profits tax prove to be relatively rare. And even if they now expect an occasional element of claw back in the periodic reviews, they probably don't expect *all the excess profits* to be taken so that the efficiency incentives are weakened but not eliminated.

Limitations of Cost-of-Service Regulation

Price cap has proved less successful in providing incentives for capital investment, although in this respect *cost-of-service* regulation has its drawbacks too. With *cost-of-service* regulation, the traditional concern is that the regulated firm might ***over-invest***. A regulator is likely to make a mistake on the side of *overestimating the return* the firm needs to earn on its invested capital, since a mistake in the other direction would leave the firm *unable* to raise money for new *investments*. But an overly generous return will give the firm incentives to 'gold plate' its investments, so as to expand the asset base on which the return applies. As a result, *cost-of-service* regulators often must review *the investments* the firm proposes to make sure that they are really needed.^(1,2)

Limitations of Price - Cap

With price-cap regulation, by contrast, the incentives are usually to ***under-invest***. One reason is that price cap does not encourage efficiency improvements that have *payback* periods longer than the

interval between price reviews. Indeed, firms are *unlikely* even to make improvements with short paybacks as the review date approaches, since by delaying until after the review they will capture the savings as profit longer. Firms will make improvements with long payback periods only if they are convinced that the regulators will recognize them as worthwhile investments and enter them into the regulated asset base to be recovered in future review prices.

A second reason for under-investment is that price-cap gives the firms incentives to cut back on investment programs agreed to with the regulators. The price-cap formula for the coming review period covers the regulator's assessment of investment needs as well as operating costs. But many types of infrastructure are so durable and resilient that under-investment does not result in a clear or immediate decline in the service quality or performance. In such cases, the firm will be tempted to cut back on the investment program and pocket the savings as profit.

Price-cap regulators are usually forced to monitor the firm's current investments to make sure that any under-spend is due to efficiencies in investment rather than to a dodging on commitments. Controversies over under-spend have been particularly intense in Britain's railways sector.

The *Investment* Issue: increasing efficiency and avoiding *Capture* in Price-Cap

In the water sector, it is hard to say whether the risk of *over-investing* is worse than the risk of *under-investing*. One might argue that *price-cap* is less attractive for developing countries, for example, since they often *need* substantial *investments*. But the importance of investment must be *balanced* against that of *increased operating efficiency* and of avoiding *capture*, which makes such generalizations difficult.

The Periodic Review procedure : Pros and Cons.

The *Price-cap* model also seems to have failed to reduce significantly, as hoped, the burden of regulatory proceedings. Although it is true that prices are reviewed only *once every five years* under price cap, whereas *reviews* are generally *more frequent* in cost-of-service regulation. Because the reviews are *less frequent*, however, the stakes for each review are higher. As a result, most British regulatory agencies follow procedures roughly similar to those used by Byatt in the 1994 and 1999 reviews. The reviews begin three years before the end of the current review period, finding often an industry in the mid of a review. The regulatory staff develops a series of *consultation documents* about the ‘ overall framework ‘and ‘ key issues ‘ in the review on which the *companies* and *consumer* groups usually *feel compelled to comment*, often with the aid of consultants. The companies submit business plans that explain their investment programs and their special circumstances, which the regulatory staff scrutinize and discuss with them. The result is reviews that are *process-intensive*, and perceived as ‘ intrusive’ from the industry – far from the simplified approach envisioned by Littlechild in 1983.

These procedures have evolved because setting price-caps has proved to be both harder and more important than originally perceived.

Much of the attention has focused on the problems of *forecasting* the *factor X* in *reasonably accurate* manner. Even in the British water industry, with its simplified number of companies, it is hard to standardize for differences across companies to make *accurate estimates* of *efficiency*. And these difficulties are not likely to decline with more sophisticated statistical techniques. Many scholars confirm that there will always be ‘ room for argument’ , as *a variety of cost models* - very different among them, but plausible - *can be estimated* from the available data. Estimating the frontier of *efficiency gains* is even harder, given the *uncertainties* about extrapolating from past trends and selecting comparator industries.

The *Factor X* is *not the only* ingredient needed to set price-caps, moreover, and there are comparable difficulties with the *cost of capital* and other elements.

Limitations of the Technical Analysis & the Five Year Period of Review

In short, the *technical analysis* is *seldom* sufficiently precise or *certain* to provide the agency with adequate political protection. The hope that efficiency incentives would make it less important to *set X* reasonably accurately has been disappointed, at least in part. The ‘central insight’ of price cap was that *excess profits* or *losses* were *tolerable*, and even *desirable in the short run* because they encouraged *innovation* and *price reductions in the long run*. But *five years* has proved to be a *long* time for the *public* to endure profits that they regard as *excessive*. And, according to many scholars, it could also prove to be a long time for the companies or their consumers to endure *low* returns to the point that the industry cannot attract capital. According to the same authors *shortening* the period between reviews

would reduce the political and economic damage from setting price caps that were *wrong*, but a shorter period would also reduce the strength and scope of the efficiency and investment incentives as well.

In sum, the *process-intensive* regulatory procedure is a compromise that seems to be essential to preserving the popular commitment to a *price cap*.

Asymmetry of Information , Consultation and Risk of Capture : The Economists View.



a)



b)

(a) Sir Ian Byatt, the UK Water Regulator between 1989 -2000
and (b) Steven Littlechild , designer of the Price-Cap Regulation
and UK Water Regulator after the year 2000.

One question raised by this compromise, is whether the evolving procedures will also subject price-cap regulation to greater risks of *capture*. Littlechild feared that the regulator might be captured by the companies, because the companies had more information than the regulator. An equally troubling possibility is that the *consultation - intensive* process adopted may ultimately make it *harder* for the regulator to *adapt quickly* to new challenges or changing circumstances.

Such a preference for the *status quo*, even at the expense of the long-term health of the industry, has characterized the telephone, railroad, airline, and other regulatory agencies in the United States at various points in their lives, particularly when beset by strong and conflicting pressures.

According to American scholars, Britain's water industry seems subject to similar risks, for example, given that the *companies*, *residential consumers*, *industrial consumers*, and *environmentalists* all have *distinct* concerns.

‘ *Factual investigations* ’, in the view of the most of the economists, narrow the scope for debate, but still leave plenty of room for *disagreement*.

Consultation

Consultation makes it easier for the varied interests to be heard and, it is hoped, strengthens their understanding and support for the regulatory system. But whether the processes will make it easier or harder for the regulator to make difficult choices – in the Economists’ view – has to be seen.

The need of factual Investigations and Consultation

In the end, the ‘burden’ of an *intrusive regulatory procedure* and the risk of *capture* seem unavoidable with discretionary regulation. Discretionary regulators can find some refuge in purely technical analysis but, as the Competition Commission pointed out, the technical analysis is seldom conclusive. In *Democracies*, discretionary regulation seems to require the ***extensive factual investigations*** and ***consultation*** as found in Britain and the United States. And – in the view of many economists - it is ostensibly better *to take the risk of capture with price-cap* than with cost-of-service regulation, especially where *efficiency incentives* are important.

*Alternatives
and Solutions*

Water narratives ...A tale for Two Views ?

Major Elements to be drawn for a lesson . . .

“ Private wins Public on Efficiency 1 to 0

If we assume Efficiency as predominant element

for a decision... “

On the basis of case studies on water companies in far east regions, Estache and Rossi developed a *benchmark methodology* applicable to Latin America for Regulators *when comparing the performance* of regulated industries. On the basis of a report by the Asian Development Bank published in 1997, they found *private* water operators, in a sample of Asian and Pacific Water companies to be *more efficient* than public operators. From an accounting perspective, this is due to the fact that *costs*, in concessionary companies, tend to be significantly *lower* than those in public companies.

...Should be the 'efficiency predicament' the only element to be taken into consideration..?

Mechanisms for Citizens Involvement in the Regulatory Process

Evidences from Developing Countries

Effectiveness of Redressal Processes in India

Faced with inadequate or poor quality infrastructure services, *citizens* of many developing cities often turn to different channels to make their *grievances* heard. These range from *complaints hotline* or an ombudsman, more *formal* routes provided by the local government or utility, to more *informal* avenues including elected representatives, neighbourhood associations, media, and, in some cases,

public protests. Recently, *development agencies* and *domestic governments* have been focusing attention on institutionalising *tools*, *legal channels*, and *public spaces* for *grievance redressal*, often as part of larger programs for *governance reform* of their utilities.

ACCOUNTABILITY

The case of the administrative and judiciary channels in Asia.

Through the years the *Asian Development Bank* through its “*Access to Justice*” program helped strengthening the *administrative* and *judiciary channels* for the poor to improve governance and reduce poverty. An increasing number of municipal governments and utilities, in developing cities throughout east Asia, are actually putting in place *formal grievance redressal mechanisms* that aim *to hold* government officials and public and private service providers *to account*. However, an analysis of these systems’ effectiveness - that is, whether service providers are responsive or not – reveals that it is still insufficient. Whether *such mechanisms* are *accessible* to the urban poor, and *how effective* they may be *versus* more informal and political channels - particularly for the *poor* and *marginalized* – to obtain *greater accountability* from public service utilities, especially in developing countries, is still under assessment.

Complaint Management Tools

The published experiences of the *Asian Development Bank* up to date with institutionalised or formal *complaint management tools* related to municipal services such as *drinking water*, street lights, garbage removal, and sanitation. ‘*Complaint management*’ involves the direct relaying of citizens’ grievances about an urban service to a utility or municipal agency and the *follow-up response* by the

individuals responsible. The ADB report shows *the risks* involved in formal complaint management systems such as *exclusion of certain groups*, or prioritisation of the complaints of certain groups *over others*.



Residents waiting for their turn at a community “mini” water tank in Bangalore, India.

Grievance Redressal Mechanisms

The *Asian Development Bank* reviewed the *rationale* underlying *grievance redressal* and the *reasons* for its recent emphasis in reform agendas across developing cities, providing *a range of* examples of various formal and informal *complaint* avenues and *their* relative *efficacy*, using also the example of case studies, providing *the design* for a *grievance redressal mechanisms* to obtain improved and more equitable urban service delivery.

Institutionalising Grievance Redressal Mechanisms

‘ It is widely recognized that efforts to reduce poverty should not simply involve improving material conditions, but also involve enhancing access to the judiciary, police, public administration systems, and institutions charged with ensuring justice. While service delivery is being decentralized globally by devolving responsibilities to local governments, little attention has been given to decentralizing access to and delivery of justice, and establishing effective *grievance redressal procedures* ‘ (ADB 2006).

Right to Information, Committees, Consumer Courts and Citizen Report Cards

In the case of *urban services*, there is growing consensus that *citizen engagement* can play a role in demanding *greater responsiveness, accountability, and transparency* from service providers through *watchdog Committees, Consumer Courts, Citizen Report Cards, right to information or freedom of information acts, public interest litigations, and other mechanisms* (WSP 2007).

Several arguments support formal mechanisms to redress complaints over urban resources:

1. First, monitoring by consumers or beneficiaries of an urban infrastructure project *helps* ensure that infrastructure projects *stay on track*, and *provide a check on environmental damage, project expenditures, and timelines*;
2. Second, important economic arguments - frequently invoked in the context of *reforms* - underlie *the need to ensure feedback to service providers* of infrastructure sectors exhibiting natural monopoly characteristics.

‘ Where multiple suppliers exist, *the volume of demand* is a clear metric of satisfaction, and customers can be relatively easily switch to another commodity or service provider if they are unsatisfied and if

other options exist. But often water, sanitation, electricity, and other network infrastructure services that exhibit natural monopolies (that means, a single supplier is *more viable* than several smaller suppliers) have very *few* substitutes. As such, it is important that *monopoly* suppliers are *effectively regulated* to ensure *universal coverage*. There is also an expectation at the point of use, *the citizen knows best* and can therefore provide the best “quality control” monitoring’ (Asian Development Bank,2002).

Cooperation as Co-Production

Thus, it is sometimes claimed that by ‘*tapping the synergies*’ that exist *between providers and citizens*, the latter can “co-produce” the services that are of consequence to them (Ostrom, 1996).

Use of Technology

The *direct interaction* with service providers *through the use of technology* is one approach to enhance customer leverage.

De Jure and de Facto : Relationships of Power .

Goetz and Jenkins, on the other hand, identify accountability fundamentally as *relationships of power*, and further suggest that there are often *differences* between *de facto* and *de jure* lines of accountability. That is :

“in the real world, there is very often a difference between whom one is accountable to according to law or accepted procedure, and whom one is accountable *to because of their practical power to impose a sanction* “

(Goetz and Jenkins, 2002).

Barriers to Efficacy of Grievance Redressal . Poor politics

Using this definition, the Asian Development Bank report shows that there are *barriers* to the *accessibility* and *efficacy* of formal systems of grievance redressal and the types of direct routes to accountability advocated by international development agencies, especially for the poor. For instance, the poor may *lack property rights* or the *capabilities* and *connections* to access formal systems. They may also be too *geographically isolated* or too *time-constrained* to be able to formally *register* and *follow-up* on their complaints.

Conversely, service providers may face *institutional, financial, and human resource barriers* that sabotage their *responsiveness*. In majority of cities in Asia, the poor depend on more *informal grievance redressal procedures*, involving *local politicians, street leaders, lower level bureaucrats, and neighbourhood associations*. To Benjamin (2004), these “*politics by stealth*”, that is the types of everyday negotiations that the poor engage in to improve access to urban services, is *significant*. According to Benjamin it is such processes that, ultimately, provide *voice* to the poor. These processes should therefore not be so easily dismissed as “*patronage*” or ‘vote bank’ politics as they so often are in development circles.

Efficacy and Channels of Grievance Redressal, in Asia

The Asian development Bank recently reviewed several current approaches to and channels for grievance redressal in urban Asian infrastructure services.

Common ways for Citizens to Complain About Urban Services, in Asia

The efficacy of e-grievance redressal depends on several factors, including :

1. Pre-existing accountability relationships, incentive structures, and regulatory oversight

Several utilities in Asian cities now dedicate a *telephone “hotline”* or *call center* for complaints regarding *service disruptions*. Sometimes

hotlines are used in conjunction with *helpdesks* where citizens can file complaints *in person*. More recently, utilities have launched *websites* through which users can report problems online. Known as ‘online complaint management’ or ‘e-grievance redressal’ the use of the Internet to connect citizens and the government, or citizens and service providers is becoming increasingly popular. It aligns with the *larger trend*, in development institutions, of *promoting the use of information and communication technologies for development*. As discussed below, the *efficacy* of e-grievance redressal depends on several factors, including *pre-existing* accountability relationships, *incentive structures*, and *regulatory oversight*. Although these telephone hotlines exist in theory, *in practice*, it is common to find them *out of order* or too backlogged with complaints to be effective. Similarly, those who do have access to the Internet *rarely have* confidence that their complaint will be registered and attended to *when filed through websites*- as is frequently the case in India. The regulatory framework that generally specifies the quality and type of grievance redressal procedure is known as a “*citizen’s charter*.” *Citizen’s charters* developed globally in the 1990s as a ‘*contract*’ that intended ‘to reengineer the relationship between the state and citizen into one that best resembled the relationship between a business and its customer’.

As Haque (2005) describes, the main components of such a charter (known variously as “service standards initiative,” “quality charter,” or “service charter”) include a *description of the standards that should be expected* from government, the performance *indicators* that can be used to assess service delivery, the *individuals responsible* for providing services, and the *mechanisms or procedures available to express customers’ grievances* or complaints.

While such compacts provide citizens with clearer expectations of the state, critics of citizen’s charters caution that - particularly in *highly exclusionary societies* such as India - *citizen charters do not cater to the needs of the poorest*. Moreover, it is telling that while the Government of India adopted ‘citizen charters’ in 1997 to increase transparency and accountability - in line with standard prescriptions of “good governance”- *it has also gradually reduced expenditure on public health and education* as a percent of gross domestic product, which was already very low (Haque 2005).

2. Use of Legal routes by Citizens, for more serious grievances.

Several governments have appointed an *ombudsman* to prosecute public officials and public corporations on behalf of citizens on a broad range of issues, including grievances related to the environment and public utilities. More frequently, ombudsmen pursue complaints about ***corruption and malpractice*** in government. In India, public interest litigations allow citizens to file cases on issues that affect the wider public. For instance in Delhi, this process led to ***new regulations*** on pollution and solid waste management (World Bank 2007). While the courts may be the most enforceable option to demand action from

service providers, *citizens rarely resort to them for day-to-day civic issues, given the resources and time required* to file cases.

Listed below, *Some typical avenues of formal grievance redressal procedures.*

Grievance Procedure

How it works

Public hearing - Issued by *Utility Agencies* : Usually held once a month in neighborhoods (e.g., *monthly water “courts”* held by the water board in Bangalore, India) in which the *public is invited to voice grievances* against the utility. Regulators, engineers, and divisional management staff generally attend. A drawback is that these may *not be so widely attended*, or may over-represent the interests of particular groups of residents.

Ombudsman - An ombudsman (often a government official) is *appointed to receive and investigate complaints* about public officials or services provided by public agencies. Electricity and water agencies frequently have ombudsmen.

Telephone hotlines

E-grievance systems - Complaints received by a telephone hotline

or through the Internet are relayed directly to the field engineers responsible.

Drawbacks are that the hotlines or web pages *may not be accessible to everyone*, or that *information* about a complaint does *not get transferred* appropriately.

Public Interest Litigation - Public interest litigations involve cases *introduced by the court* itself, not necessarily the aggrieved, related to issues of public interest. One advantage is that since victims may not have the necessary resources to file a case themselves, the court takes on this burden on their behalf.

Evidence on the effectiveness of public interest litigations in dealing with urban service issues *is limited*.

3. Informal and Non-institutional mechanisms

Aside from institutionalized mechanisms, citizens use a variety of *informal or non-institutionalized mechanisms* to complain, stake claims, and negotiate access to urban resources and services as mentioned above. Media plays an important role in raising public awareness about progress on and neglect of urban infrastructure. For example, newspapers frequently publish and highlight local and neighborhood civic issues in Bangalore, Mumbai, and Delhi. Print media often serves as an interlocutor between citizens and public officials, although it is not officially designated to do so by the government.

Neighborhood associations

Aside from *media*, several citizen-led and more localized approaches to grievance redressal exist in cities around the world, including *neighborhood groups*, such as *barangay* (neighborhood) *associations* in the Philippines and *resident welfare associations* (RWAs) in India. In some cases, formal processes allow citizens to interact with the government as with the *Bhagidhari* (“participation”) program in New Delhi, or with the Philippines Local Government Code of 1991 which mandates a role for the *barangay* government. Institutionalizing roles for *neighborhood associations*, however, runs the *risk* that *only certain* wealthier and better-connected *associations* will benefit, as is the case in Delhi because of the terms of participation (for instance unauthorized colonies cannot participate in Delhi’s *Bhagidhari* program).

In general, the main roles of *neighborhood associations* are to report public works problems that directly inconvenience residents, and, on occasion, to raise funds to finance these works. Because of the type of residential areas in which RWAs in India are usually established, this type of activism is generally associated with the middle and upper classes. In Bangalore, for instance, the citizens’ and volunteer group Janaagraha liaises with several RWAs to build awareness regarding ward-level grievances and encourage involvement in resolving them. Another organization in Bangalore, the *Citizens’ Voluntary Initiative for the City* (CIVIC) organizes monthly public grievance redressal forums in which representatives of major agencies such as the Bangalore water board, electricity utility, and the municipal corporation, are present to listen to the grievances of residents. Both Janaagraha and CIVIC liaise with many RWAs and are well known for their initiatives among their members. Over the past decade, Bangalore has witnessed several such examples of proactive citizen engagement in civic affairs (Heitzman 2004; Kamath 2006; Nair 2005; Paul 2002). But the extent to which such efforts have benefited the lower classes, especially those located on the periphery of the city, is negligible. In these areas, where civic amenities are often wholly inadequate or absent, some grievances, including those concerning land and tenure, ration cards, and voter identity cards, are often channelled through political entities such as elected representatives or organizations with political agendas. It is therefore important to note that multiple informal or citizen-initiated channels of negotiation and complaints exist in Bangalore and other cities, and that these are often dependent on social class, income, and geography.

As part of a state wide municipal reform program covering 57 cities, in 2005 the Department of Municipal Administration of the Government of Karnataka launched a *web-based* application for citizens to file grievances relating to a variety of municipal services known as the “**Public Grievance and Redressal (PGR)**” Module. For each of these cities, the **PGR** system is linked to a *municipal website* that provides services such as information on city finances, contact information for city officials and politicians, Geographic Information Systems (GIS) based property information, and applications for birth and death certificates. Notably, the web version of the **PGR** module is in both Kannada and English. The Urban Development Department, the Survey of India, and the *E-Governments Foundation* (a public interest organization) jointly implement these reforms and technology applications. The **PGR** system is intended to work in the following way: in every municipality, the urban local government has set up a helpdesk and *telephone helpline* to collect and respond to complaints in a centralized manner, and *appointed a non- government organization (NGO) to staff the helpdesk*. When residents have a problem such as disruption in water supply or blocked underground drainage, they have four options for reporting this grievance: by personally *visiting* the helpdesk, by *phoning* the helpdesk, by *submitting a letter* to the helpdesk, or by lodging a complaint through the city’s new *website*. Thus, while the system has a web interface, it is accessible to users through avenues *other than* the Internet.(*). The helpdesk then logs these complaints into a logbook, and relays them to frontline engineers who are supposed to resolve the problem within a stipulated time frame and report back the status of the problem. At the end of the day, the helpdesk staff is supposed to log all complaints in the **PGR** database (see figure). The system is thought to build accountability because it provides real-time information about the problems experienced by residents and also sets a time limit within which grievances must be resolved. **PGR** also provides reports and maps summarizing the number of complaints made in a particular category or in a particular ward for anyone who has access to the Internet to review.

Citizens can register complaints in several categories: those *related to engineering* (e.g., broken streetlights), those related to *health* (e.g., absence of garbage collection), and those related to various *administrative affairs*. The majority of complaints are filed in the first two categories, and within these, broken streetlights, leaking water pipes, blocked sanitary systems and storm water drains, and lack of garbage collection are the most frequent sources of complaints across the municipalities.

Findings of the Case : problems of Enforcement of contract

In reality, although the **Public Grievance Redressal** module was successful at *raising awareness* among citizens about the existence of the helpdesk, several challenges hinder its efficacy. These can be understood in terms of the *institutional* set up of municipalities. All

infrastructure works, from the digging of borewells, to the maintenance of streetlights, are *tendered out to local private contractors*. Because *tenders* are often *poorly drafted* and *enforcement of contracts is weak*, *contractors* often *do not honor their responsibilities*, leaving several burned-out borewell motor pumps or silted-up drains, among other problems. That is, - *regardless of how sophisticated the grievance redress system is*, citizens continue to suffer from inadequate quality of services because of ***weak contractual enforcement***. Moreover, as discussed above, the very poor often use more informal mechanisms to voice demands, such as through their *ward councilor*, by making group visits to the assistant

(*) Because of the low penetration rate of computers and the Internet in India, it is not surprising that more residents file complaints in person, by telephone, or in writing than through the Internet

executive engineer's office, through a local civic welfare association, or through field engineers on their inspection visits.

These *informal reports* do not usually get recorded in the ***Public Grievance Redressal*** system - raising questions about who the system caters to and how representative the data is. Another shortcoming of the PGR system is that NGOs and RWAs did not have access to nor demand the data to track the major problems in the area. In general, community-based organizations had very little involvement or awareness in reviewing the grievance redressal mechanism and providing feedback on its usefulness. Finally, elected officials also had little involvement in implementing the grievance redressal module and in monitoring the data. The lack of involvement of councilors has been recognized as a serious problem in Mumbai: "Given that elected representatives serve as important conduits for citizen grievances in their constituencies, particularly the urban poor who face barriers in accessing other formal channels, their nonsupport is likely to lead to less than optimal public acceptance and utilization levels [of online complaint management systems] (*World Bank 2007*)."

Conclusions

In Karnataka's, as seen, Grievance Redressal system is '*a promising first step*' to institutionalizing grievance redressal in municipalities. The benefits could be significant, particularly in that it could provide vital data for infrastructure problem identification, and a streamlined way to

handle complaints across neighborhoods. Currently however, some important limitations* need to be addressed if the system is to be scaled up across the state and country.

(*) Inconsistent municipal water supply is a serious grievance in several Karnataka municipalities, especially for the poor who do not have their own borewells, but such grievances are *not* reflected as priorities in the summary reports generated by the module, by person, by telephone, or in writing than through the Internet.

The Customer Management System in Manila

This second example, describes a different kind of system - an outsourced *call center set up* by the private water utility *Manila Water* to receive and process customer complaints related to water supply. Manila Water is one of two *private* concessionaires responsible for delivering water to Manila, and its primary jurisdiction is eastern Manila. The utility has two primary modes of delivering water to residential customers: through individual connections, and through third party bulk water sellers who buy water from Manila Water at industrial rates and then on-sell the water to households in communities. About 50% of customers are served through the mode, known as the ‘*Tubig Para Sa Barangay*’ or ‘*water for the community*’ program. This program was developed by the utility shortly after privatisation, in 1998, to reduce non-revenue water, while also meeting the coverage targets stipulated in the contract. The ‘*water for the community*’ program is targeted at poor customers and neighborhoods, as there are higher risks associated with serving the urban poor, for a company. In it the bulk seller, known as the *barangay association* or *peoples’ organization* (often a long-term and deeply embedded member of the community) is *financially responsible* for laying small-scale distribution infrastructure within a community and must then *set tariffs* to recover they set, however, are *not regulated* by the regulatory authority.

Complaint Procedure

For ordinary customers of Manila Water's , in case of *complaint*, such as a *billing discrepancy* or *leaky pipes*, they can call the call center's *number* (the 1627) which then transfers the complaint to field officers and designated territory business managers who must inform the complainant how long it will take to redress the problem. Once a complaint has been registered, the call center is supposed to *provide feedback* on the status of the complaint in 24 hours and indicate a time frame within which the complaint will be redressed. *Standards for resolving complaints are set by the utility*: priority complaints such as *no water*, *dirty water*, and *leaks* must be resolved *within 48 hours*, while all other complaints must be resolved within 5 days.

Vertical Accountability

The system also has built-in automatic escalation, a strategy used to build vertical accountability. If, after the stipulated time frame (48 hours or 5 days depending on the complaint), the complaint has not been resolved, it is transferred to a higher level of management. *The complaint keeps escalating every hour until it is resolved*. According to Manila Water, this has been one of the key factors in ensuring the timely redressal of complaints.

Access to the System

Although this system is available to individual customers, about 50% of Manila Water's customers—mostly the poor who receive water through TPSB—*do not have access to this complaint management system* because they are *not technically considered Manila Water's customers*, even though TPSB customers may face problems such as substandard pipes, leaks, and billing discrepancies. As in the Karnataka case the reason for this, , has to do with the particular institutional structure of water delivery in Manila. The flaw in this case is that *unlike the utility's primary customers*, who have recourse to the complaints system and the regulator, the customers who receive water through the *peoples' organization* are *not considered Manila Water's customers* and therefore *lack* the same

privileges. The reason for this flaw is that Manila Water is *not obligated* under its contract to attend to the complaints of customers that buy water services from the *barangay association*. Therefore, these customers must turn to their *peoples' organization* for redressal of their complaints. By some accounts, the *barangay associations* have found to be extremely savvy and responsive to customers (Chng 2007), while by others, POs are characterized as irresponsible and rent seeking (Tinga 2006). As Ferrer (2006) notes, because *peoples' organization* are *not* subject to regulation, there is always a risk that *individual interests* of *peoples' organization*' managers may prevail over the interests of the community. The underlying issue is that these customers do not enjoy the same recourse to formal grievance redress mechanisms as Manila Water's customers, *even though they are counted in the utility's overall coverage target*. This case study shows how *vital* it is to ensure that grievance redressal systems are *accessible* to both the poor and the well off, and that it is necessary to address *the weaknesses of the institutional structure* and the *pre-existing* accountability relationships to do this.

Structuring Complaint Management Systems.

Efficacy of the Informal Routes.

While institutionalized grievance redressal mechanisms have potential and are attractive to advocates of reforms because they create an image of 'private sector-like' professionalism, critical aspects related to institutional design, relationships of accountability, and regulatory oversight may hinder the efficacy of these systems- both in the ability of providers to be responsive and in accessibility for the poor. In municipal agencies that contract out particular services to private contractors and where contractual relationships are weak (as the case in Greater Bangalore), the formal complaint mechanism is not

effective. *What is effective are the informal routes and networks, including local leaders and elected representatives, who can better monitor contractors and ensure proper delivery of services. In private utilities (such as **Manila Water**) it is important that the grievance redressal mechanisms are available to all types of customers, including the poor.*

Recommendations

Therefore, here there are some important considerations to make, when structuring such mechanisms:

1. Make sure that Multiple routes for grievance redress exist.

In practise, formal, institutionalised grievance redress mechanisms are not likely to replace existing modes to deliver complaints such as civic organizations, elected representatives, or even the media. Data from computerized systems should therefore not be seen as conclusive. Moreover, civic agencies should not address complaints delivered through formal routes to the exclusion of other routes. Each channel - especially more informal ones - is likely to be effective for certain groups of people. It is therefore imperative to acknowledge these alternative routes and strengthen them.

2. Strengthening Accountability in the Contract

As the Karnataka case shows, the **accountability** of private contractors responsible for infrastructure upkeep is fairly *low*, suggesting that, for grievance redress to work, it is important that *such accountability* relationships are *strengthened through enforceable contracts* or other means. Another way that vertical accountability can be strengthened is through

automatic escalation of complaints to the next level in the administrative hierarchy. It is imperative also for banks, funders and practitioners *to be aware of these institutional and stakeholder relationships and understand them* before a project is implemented.

2. Regulatory and Contractual Design determines Accessibility.

As emerged in the Manila Water case, it is relatively *easy* for utilities *to neglect certain categories of consumers* and their grievances because of the *regulatory and institutional set up of the concessionaire and the design of the contract* between contractor and municipality, of company. The customers of the ‘*water for the community*’ program didn’t have access to Manila Water’s customer complaint management system because the *Peoples’ Organizations are not regulated* in this arrangement. To make accessible grievance redress systems to a broad cross section of citizens, such *institutional* factors should be improved.

3. Involvement of local representatives.

Without support *from locally elected representatives, to whom a significant proportion of grievances are directed, the sustainability and efficacy of these complaint management systems may not sort its results. Complaints routed informally through the channels of local representatives are an important means through on which the poor rely on making claims and negotiating their services needs.*

4. Sharing Data with NGOs and with Community Groups (to enable follow-up).

To make service providers more responsive, it is necessary *to put the grievance data in the public domain*, and to mandate that the data is made *available* to elected representatives, civic organizations, the media, and other *watchdog* entities.

CONCLUSIONS

In conclusion, in different cities and contexts different grievance redressal systems apply, therefore a grounded, *preliminary* analysis will reveal *which mechanism* is the best to structure grievance mechanisms in the various places, depending on the prevailing regulatory and institutional set up and on the relationships of accountability established.

In many cases, *elected representatives* and *neighborhood associations* are more effective at exerting pressure on municipal agencies and local contractors than institutionalised 'e-governance' tools or telephone 'hotlines'.

In any case, where institutionalised mechanisms exist, there is always a *risk* that they may *exclude* or may not be available to particular groups.

Therefore, in any water regulatory reforming agenda *precise accountability specifications*, taking into consideration the *multiple ways* in which citizens interact with the government and service providers, should hopefully be pursued, in the attempt to set the foundations of a proper democratic setting in water systems.

GLOSSARY

Regulated entity : a utility that is subject to *regulated* rate for its revenues, being under monopolistic conditions for its services.

Asset : is a resource controlled by the enterprise as a result of past events from which future economic benefits are expected to flow to the enterprise.

Regulatory Asset : is *an entity's right to recover* fixed or determinable amounts of money towards incurred costs as a result of the actual or expected actions of its regulator under the applicable regulatory framework.

Regulatory Liability is *an entity's obligation to refund* or adjust fixed or determinable amounts of money as a result of actual or expected action of its regulator under the applicable regulatory framework.

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Terzo Capitolo - Chapter 3

Political Ecology of Water: A Theoretical Pattern for a Modern Approach.

Environmental and Cultural Roots of Water Privatization

To be put in condition to engage with sound knowledge with the *environmental aspects* of water management, particularly those aspects regarding *water privatisation*, the approach purposed in this thesis is to step back and consider the wider cultural environment where privatisation mechanisms have been nurtured and cultivated throughout the last part of the century. Many authors, as Bakker depict *water privatisation*¹ as ‘*the product of an era* where a strong push towards *market liberalism* has taken place, an era in which *our responses* to the environmental crisis demonstrate to be increasingly *mediated* by the doctrine of market liberalism and neoliberalist theories’¹. Neoliberalist theories - especially in their respect to the environment has been extensively studied and at the center of the attention of many scholars as for example Harvey, by whom it has been defined as :

“a doctrine where *market exchange* becomes *an ethic* in itself , capable of acting as a guide for all human action “.

[*David Harvey, Distinguished Professor of Anthropology and Geography at the Graduate Center of the City University of New York - CUNY*]

Liberal Environmentalism : a new Cross – Cultural trend.

The reason why and the mechanism through which the cultural push towards *market liberalism* has been observed happening throughout the century have been at the centre of the studies of many authors. Among others, Harvey and Bernstein.³ The latter, devised the term ‘ *liberal environmentalism* ’ to describe the *compromise* that has been observed taking place, in the recent decades, among views that advocate ‘environmental protection ‘ with views that assume, as ground for their reflection, the maintenance, and the promotion of a ‘liberal economic order’. Bernstein defines this trend as a :

“A new ‘*compatibility*’ of *environmental concern* with *economic growth* and the basic tenets of *a market economy*, within *liberal international order* ’.

[*Steven Bernstein, University of Toronto*]

Bakker , uses the term *market environmentalism* adding that it ‘ emerged in response to serious environmental threats to *profitability* under capitalism ‘ and adding that ‘our responses to environmental crisis have *been increasingly mediated* by the doctrine of neoliberalism’. On this regard she points out that ‘the rise of *market-based regulatory mechanisms* and the *private sector participation* – as indicating elements of neoliberal process going on – are not unique to the water sector, but are a broad-based *trend* across resources and environmental services’. Therefore they are a clear a cross- cultural trend that encompass all the fringes of the economy and the present history.

'Markets during the recent years, have increasingly encroached in an unprecedented manner many aspects of the natural world, from genetic resources to atmospheric carbon, which were previously uncommodified.'

[K. Bakker - Director of Program of Water Governance, University of British Columbia]

According to Bakker, market environmentalism 'offers hopes of a *virtuous fusion* of economic growth, efficiency, and environmental conservation. Through establishing *private property rights*, employing *markets* as allocation mechanisms, and incorporating environmental externalities through *pricing*, proponents of the market environmentalism assert that environmental goods will be *more efficiently allocated*, if treated *as economic goods*, and, by that means, *at the same time* addressing concerns over environmental degradation and inefficient use of resources'.⁴

In this respect, the tradable artificial wetland, as demonstrated by Robertson⁴, is the archetype of *market environmentalism*, where *restoration ecology and economics* displace *hydraulic engineering* as dominant paradigms for intervention in hydrological landscapes⁵. The growth in consumption of *bottled water*, which is now a growing emerging market, or the emergence of always newly rising *water treatment technologies*, as a response to a widespread concerns regarding 'water security' or the 'degradation of water quality environment' well exemplify, according to Bakker, the liberal environmentalism compromise. It is like *the system*

shows *inability* to respond to the environmental crises, which are observable in terms of *resource depletion* and of *decrease in sink capacity* for our discharges, *out* of the frame of a capitalistic view.

According to Bakker and Barnstein – two scholars chosen among the many who dedicated reflections to these dynamics - our attempts to respond to the environmental crisis are deeply rooted into a wider ‘ *capitalist paradigm* ’ that claims ‘ *to turn threats into new opportunities* ’ for business and capital accumulation, enhancing substitution (f.i. bottled water), and the development of *new technologies* and private appropriation as solutions for the raising emergencies. Nevertheless, as other authors (O’Connor and Katz) already pointed out in the past, there is an ‘ *inherent contradiction* ’ in such capitalistic approach⁴, which *exhausts* the *environmental resources* that are fundamental for the fulfilment of the systems’ own functions – both when they are used as *source* of inputs (as a *commodity*) or when they are used as a *ultimate sink* for the systems’ output of waste and pollution disposal ⁵. This determines an *unavoidable involution*⁶ of the same capitalistic system. According to Bakker, this trend is not new, as , since the nineteenth-century, as some political economists show⁷ *the environment* has always been *captured* by capitalism, since the early time of the ‘ enclosure of the commons ‘ , which created both a proletarian workforce and a new ‘commodity’, the environment, from which profit could be extracted. The insights given from nineteenth-century political economists, like Marx – always according to Bakker – is that *capitalism* is ‘ *predicated on our metabolism of nature, which we ingest and transform* (continuously), *altering ourself in the process* ‘. This extremely powerful image that Marx and Bakker recall, describe the capitalistic cultural approach as a way ‘ *to feed* ‘ our *brains* and *imagery* well suiting to the way in which the modern society reorganizes itself in each aspect of its economy - from

science to technology - in line with the 'principles' of *commodification* and transformation of the natural world revealing *capitalism*, as the root reappearing in the new form of *liberal environmentalism*, which is now pervasive of all aspects of the natural environment, from resources to finance.⁸

THE CASE

Latest forms of Liberal Environmentalism in US - The *Good Derivatives*' of Richard Sandor.

Good Derivatives can be reputed as the most recent product of the liberal environmentalist thought, when applied to the finance and derivatives sector. It originated from the conceptions and the activism of Richard Sandor, a US contemporary businessman. Sandor, better known as the *father of Cap and Trade*, elaborated a *market-oriented* mechanism for trading *rights* of pollution in the financial market, an experiment which was heavily supported by President Obama, in his recent mandate. In this mechanism *the market* is used as a substitute for regulation in achieving environmental goals. Sandor, former chief economist of the Chicago Board of Trade, devised this mechanism promoting and brokering it at political level – managing to successfully convince congressmen and politicians as well as regulators, academics and students that "*derivatives*" may be a quicker and more effective tool, than

'the pachydermic bureaucratic machine', to solve issues of environmental pollution without altering the on going mechanism of finance and exchange market, rather, *using it*, and allowing investors *to bet* on fluctuating prices or interest rates and, eventually, reducing their risk if the price of a commodity skyrockets. Sandor

applied the *financial trading mechanisms* first to the issue of air *pollution* (to *sulfur dioxide*, the pollutant precursor of acid rain) creating markets to *buy* and *sell the right* for emission, and obtaining a strong reductions in SO₂ emissions overall US. His attempt is now to combat global warming applying financial trading to the emission of greenhouse gases. In his book Sandor⁹ argumentate that *market forces* will eventually prove that ‘ the market is the most effective and efficient way to cut the emission of greenhouse gases’ .

‘ The proper market can more efficiently and cheaply clean up the environment than regulations can. ‘

[*Richard Sandor*]

and therefore proving therefore to be an emerging and sophisticated figure within recent scenario of the *liberal environmentalism* ideas .

The Necessity of a ‘ leap ’ of knowledge: Swingedouw, Bakker, Smith, and the Political Ecology thinkers.

Swingedouw’s Socio-Nature and Water as a Hybrid.

Always following the *file rouge* marked by K. Bakker’s thoughts modern products of biotechnologies and techno-science, as genetic engineering, can be considered as ‘transgressive incarnations’ of the principles of liberal environmentalism and tackle the distinction between ‘ natural’ and ‘social’, one the fundamentals of modernity. In this sense, as many times recalled in various parts of this thesis, to

encompass the *complexity* of the *natural* and *human* dynamics in shaping the water environment, a new *leap of knowledge* is needed and invoked. Many scholars of political ecology, such as Bakker, Swingedouw, Latour, Jasanoff, Neil Smith and others afforded this issue of the *contemporary production* (or *co-production*) of *nature* and *society*, recognizing to *water* the characteristics of having a '*hybrid nature*' with the capacity to embody a multiplicity of socio-natural significances. Water, according to Swingedouw, is a *powerful metaphor* for the *socio-ecological* processes constituting human life, embodying a multiplicity of *tales* that represent the indivisibility of nature from society - so the definition of water as a '*hybrid*'. Swingedouw borrows his '*hybrid*' definition from Bruno Latour

According to Swingedouw, , through the water-history of a country many 'interrelated tales' are being narrated : stories of social groups and classes, of powerful socio-ecological processes that produce social spaces of *privileges* and *exclusion*, of *participation* and *marginality*, of *chemical*, *physical* and *biological reactions* and *transformations* of the *global hydrological cycle* and global warming, of the *capital*, machinations and strategies of dam builders, of urban land developers, of the *knowledges* of the engineers, of the passage from river to urban reservoir, of the *geo-political struggle* between regions and nations.

Swingedouw quotes Smith defining as '*production of nature*'⁹ the *context* in which the present political-ecological processes around *water* do take place.

According to Swingedouw '*Natural*' or '*ecological*' conditions and processes do not operate separately from *social processes*, and the existing socio-natural conditions are always the result of intricate *transformations* of pre-existing conditions which are themselves inherently '*natural* and *social*.' Swingedouw

often recalls Bruno Latour when referring to the modern environment of water landscape as

‘.. a ‘*hybrid*’ thing, part *natural* part *social* that embodies a *multiplicity of historical-geographical relations* and processes that are simultaneously and inseparably *natural* and *social*.’¹⁰

and quotes David Harvey (1996), when affirming that:

‘*There is nothing particularly **unnatural** about New York*’

[Harvey, 1996]

noting in particular that

‘*Cities, regions or any other socio-spatial processes or condition are a network of interwoven processes that are simultaneously **human, natural, material, cultural, mechanical** and **organic**.*’

[*Eric Swingedouw*, 1996]

All of these multiple characteristics recalls the clear need to dispose of a new leap of knowledge that may frame and encompass the wide variety of issues and visions related to water, , being water simultaneously, in Bakker’s words

‘ an *economic* input, an *aesthetic* reference, a *religious symbol*, a *public* service, a *private* good, a *cornerstone* of

public health, a biophysical *necessity* for humans and ecosystems, and, at least in part, a *commodity*'.

and the political ecology scholars show to have some of the best view to approach the entirety of the issues and therefore this thesis proposes – to adopt their scope as a main conceptual framework for the analysis.

Ecological Impacts of Water Privatization: The debate around the Role of Private sector involvement. Good Use of Water sector Reforms and Economic Critics to Water Neoliberalism.

Bakker embraces liberal environmentalism as a vision to enclose the complex dynamics taking place in nowadays environmental and water management. She notices that *privatisation* (and *neoliberalisation*) not necessarily has a negative impact on the environment, when it is addressed to find solutions to the deterioration of the environmental quality. Therefore *water sector reforms*, taking place under liberal environmentalism, according to Bakker may have *the potential to improve* environmental quality.

In particular, when *water* and *the environment* are given *voice* into the discursive framework of policy making, and when water is conceived as *part* of the environment - and not only *as a mere resource* to exploit – the environment may reasonably come 'to be *represented*' in the political discourse with its own legitimacy as well as that of the

economic and society interests. This means, in practise , that such concept needs to be *formally incorporated* into *enforceable* regulatory frameworks, by law.

In this respects, Bakker stresses that

‘ we must recognize the potential of *water sector reforms*, allied with liberal environmentalism, to *improve* environmental quality’.

At the same time as the author further develops, the condition for this role of the reforms to be properly exerted is satisfied when ‘*water and the environment are given voice* into the frame of a *discursive*¹¹ policy making’ - and also ‘when water is conceived as *part* of the environment, and not only *as a mere resource* to exploit’ . In that case the environment, may come to be represented in the political discourse with *its own legitimacy* as well as the legitimate rights of the economic processes and of the society interests. This means, in practise, in Bakker’s words ‘to *formally incorporate* such definition of environment into *enforceable* regulatory frameworks’, that represent it legitimately as a formal ‘water user’ , ‘ whose interests *are to be balanced – or even prioritized above – those of other users* ‘.

This concept has also been developed by Tony Allan , in his *theory of sustainability*.

The case of England and Wales – to which Bakker devoted a greater part of her early studies – is then used to exemplify how the process of *re-regulation* involved in any privatization reforms policy, can be used to address the needs of the environment. In the case of England, the bulk of policy of reforms - that started to be undertaken with Margaret Thatcher decision of restructuring the water management industry towards a privatised management system in 1989 - brought about, according to Bakker ‘impressive improvements’ in water quality as well as greater regulatory legitimacy for

the environment, although this also happened in response to emerging new EU legislative requirements.

As liberal environmentalists use to comment, when they argue in favour of the private sector involvement in addressing management and operational problems in water management, public operators often work out *inefficiently*. According to proponents of liberal environmentalism, the goal to be reached, is the *efficiency*, or in any case *a more efficient allocation* of the resources. On the other side, the opponents of the neoliberalist thought, that critic the applied consequences of market liberalism, argue that exactly *the market* - with the *commodification* process on resources that lays as a consequence of it - is *the cause* of the problem, and that many water sector reforms, in practise, conceal beneath them the attempt for an '*intensification of capitalist robbery* of the environment', that they claim having reached '*unprecedented levels*'. Such a critique occurred in most of the cases of water sector reforms recently occurred worldwide involving private sector, especially in developing countries water reforms experiments in Latin America^{12,13} , Pacific Asia¹⁴ , and in South Africa^{15,16,17} . For the opponents of neoliberal policies, *conservation* and *protection of the environment* should be the primary goal to be pursued. In opposition to the liber environmentalistic though, and in sustain of an alternative vision of development, a number of economic theoretical observations have been raised to counterbalance, from the economic perspective the mainstreams of neoliberal theories. The major points are that :

A. Many *evidences of market failures* are often generated in neoliberalistic policies, especially because – as regards the environment

B . market activities deal with resources that are usually *not properly accounted for* , generating externalities whose cost is entirely born by the environment;

C. the impossibility to find *substitutes*, especially when dealing with the limits of the exploitation of nature

D. lastly, the *high cost* of some new technologies which naturally recalls the intervention of the State and is not likely to be left to the private initiative alone.

Pricing : *Multiple Views on an Unavoidable burden.*

Whether we decide to follow the fully neoliberalistic vision, or we want to include in our reasoning the social and ecological concerns deriving from the recently arising of socio-environmental discourses, in any of these cases we have to come to term with the thorny issue of *pricing*.

According to the market liberalist thought, which is predominant nowadays, the *costs* of running water systems should be *entirely recovered*. This is asserted either with reference to the costs of operation and maintenance of the water-built system., already in place, that a company – *private* or *public* it may be - has been entrusted to manage, but also with reference to the cost of new investments which are needed to finance the extensions of the water infrastructures. This implies the acceptance of the *full cost recovery* principle, that is invoked by most of recent water sector reforms around the world, as well as by the Water framework Directive in Europe by the major international water institutions, like OECD¹⁸. *Pricing*, therefore, in the modern times, seems, an *unavoidable* mechanism and probably will be necessary to acknowledge it *somehow* to arrive to share a common vision upon the true value of that precious environmental resource which is water. Nevertheless a constructive *discussion* can be opened upon what we might think *reasonable* to be charged, on *how* this price should be distributed

among the various typologies of users, and *whether* including in our considerations those costs that have been *entirely borne so far* by the environment, if someone will ever manage *to explicit them* (an exercise that could be a very useful practise for those economists who would like to engage in the never concluded issue of valuing environmental goods).

On this regard, the *Water Framework Directive* , recommends , in its *Article 9*:

“ Member States shall take account of the principle of *recovery of the costs of water services*, including *environmental and resource costs*.... in accordance with the polluter pays principle ... having regard to the *social, environmental and economic effects of the recovery* as well as the geographic and climatic conditions of the region or regions affected “.

[EU Directive 2000 / 60 , Article 9]

Clearly, the Directive has been nurtured in liberal environmentalist principles and seems not to leave much room for different interpretation, although, its statement of acknowledgement of the ‘ *social* ’ and the ‘ *environmental* ’ costs gives us the permission to infer that, in the making of its fundamentals, a certain influence of theories and actors from the sociological and ecological arena has definitely reached the policy maker in Brussels.

Then, as depicted in other dynamics related to water, we can find at least three diverging visions around *pricing* referring to *the way that cost- recovery* should be put in place.

The *plain* neo-liberal view recalls the necessity to *fully* recover - through pricing - the entire cost of the ‘water business’, including *the investments* for further developing the infrastructural water network. This is currently the dominant vision among the coalitions between states and corporate powers which normally share a top-down vision and practice in their policy approaches. In opposition to this view, we find a ‘redistributive model’, normally supported by those who propose of the principle of *equitable redistribution* among the different socio-economic categories of water users within society. According to them, water *tariff* (a term which they prefer to the market-sound word of ‘water price’) should be calculated keeping in account of the different income of consumers, and leveraging the actual cost on the capacity of big consumers to pay more, and therefore balancing the cost to repay in order to cross-subsidize small-income consumers. Such mechanism, when applied, should be able to grant a ‘minimum amount’¹⁹ of *affordable water* to everyone.



Unfortunately, in the case of poor countries, where the largest amount of users lay in poverty, it is difficult to hypothesize that even a social-redistributive mechanism can totally recover the entire costs of infrastructure, and therefore, the role of the state, and moreover, of foreign aid agencies turns to be essential, for the development of water infrastructures in developing and under-developed countries.

Thirdly, to acknowledge the raising importance of ‘ ecologic thinking’ , for the environmentalist thought, the price should reflect the *cost to the environment* of all the phases of the water management process : from abstraction of groundwater, to the disposal of wastewater, all these environmental costs, as well as other - *unaccounted* so far - should be , according to the environmentalist vision, reasonably included into the tariff.

To be objective, the Water Framework Directive, in stressing the need for the States to openly address ‘ the *environmental* and *resource* costs’ clearly aligns its principles along the latter vision.

This may lead, inevitably, to the *countabilization* of higher costs for everyone. The obvious question is now *to which extent* the economy and society are likely to acknowledge and to willingly - and responsibly - decide to acknowledge and uptake the costs of it’s own impact on the environment ?

Basic Principles for the Characterization of Water Reforms under Market Environmentalism.

Water reforms, under market environmentalism, as Bakker remembers, show a pretty various typology of forms, which depend on and are readapted to the different cultural, socio-economic, and juridical conditions of different societies.

Nevertheless, we can recognize a number of common characteristics, or principles, to which they conform to and principles that, when present, allow to recognize liberal environmentalism in action. These principles or factual tendencies which are observed guiding the policy process are :

1. A certain prioritisation of *water conservation*, in response to *the increased stress* in water use, as a consequence of increased water demand from the economic activities;
2. A growing emphasis on *valuing* the environment, though mostly through *pricing* instruments, and a strong push towards incorporating *metering* techniques into policies of *efficiency*;
3. Environmental protection, *restoration*, *remediation* – collocated within a market of new '*ecosystem services*' - assume increasing importance and become *goals* of the new water management policies;
4. In adopting *pricing* instruments, the priority shifts from *access to water* and from *equity principles* towards principles of *economic efficiency*.
5. In some cases, *private property rights* and tradable *water markets* are established; alternatively, new government regulation apply *market-based* policies and mechanisms;
6. In any case, the *private sector* tends to play a more significant role, both in the *management* (operation) or in the *ownership* of the water infrastructure;

7. Last, but not least, a new *set of changes in governance* take place, where a stronger part is left to play to the market. The various combinations of it, are listed in the following part of the chapter.

Main Types of Reforms under Market Environmentalism

Through the analysis of several patterns of management, Bakker distinguishes into three categories of *means* and *processes* by which resource management is commonly reformed under neoliberal market environmentalism: reform of *Institutions* (laws, policies, rules, norms and customs) through which resources are governed; reform of *organisations* (that are the collective *social* entities that the government of resource use) and reforms of *governance* (the *process*, the *practises* by which organisations construct and administer the exploitation of the resources). If we fail to understand to which level a specific reform targets its aims , we risk to miss the point of our argument. These categories can also be useful in understanding at which level the failure of the water management happened , in various cases , and to avoid a certain ‘ *analytical sloppiness* ’ - as Bakker defines the source of misunderstanding - that ‘ diminishes our ability to correctly characterize and understand the trajectories of neoliberal projects of resource management reforms’ .

In practise, for Bakker, *reforms* can be undertaken in a plethora of ways, and these ways are not necessarily concomitant :

‘ one may *privatise* without deregulating, *deregulate* without marketizing, or *commercialise* without privatising ...’

[Bakker, 2004]

Having studied extensively the British case, Bakker uses it as an example in attesting that the *privatisation* of water supply industry in England and Wales in 1989 did *not* imply marketization, in the sense that it did not entail the introduction of a *market* in the water abstraction licences, at the time. Bakker continues arguing that it is essential to recognize to which aspects of resource management we refer, when we use terms as ‘ privatization’ and ‘ marketization’.

The utility of such a categorization lays in the helpfulness when approaching the analysis in the comparison of cases. It makes more sense and usefulness comparing reform cases that may be referred to similar categories , such as for example, comparing the introduction of *water markets* in Chile ¹¹ and Colorado¹⁴ or in Australia¹³ and California ¹² , rather than the introduction of *water rights for ‘ raw’ water* in environment in California and the *private sector participation* in water supply management in an urban environment. In the last case different process are involved, on different bases - *marketization* and *private sector participation* - which show little room for comparison, in a proper analytical frame.

Marketization

When *water withdrawal permits* are legally allowed to be *traded* between users, this produces a ‘ *water market* ‘ .

WATER MARKETS IN THE US

Water markets, in this way of describing them, are more common in the western United States where water is generally allocated through the principle of ‘ *prior appropriation*’

(*) . However, other authors point out that - whether or not there is legal recognition of the right to trade something - anything *with value* (such as a *permit to withdraw water*) *may be traded* on the ground of '*informal*' markets. For example, the State of Florida has no formally recognized a trading scheme for development rights that require approved water supplies, but it shows to have ' concurrency requirements' that can hinder development in areas with water

(*) The *prior appropriation* doctrine, in dealing with *water rights*, states that water rights are determined by *priority of beneficial* (productive) *use*. This means that *the first* person to *use* water or divert water for a beneficial (productive) use or purpose *can acquire* individual rights to the water that is the first person to use a quantity of water from a water source for a beneficial use has the right to continue to use that quantity of water for that purpose. Subsequent users from the same source can use the remaining water for their own beneficial purposes provided that they *do not impinge* on the rights of previous users. As the first individual user to withdraw water from a source for a beneficial use has the right to the same amount of water for perpetuity, as long as he/she continues to use the water for the same purpose. *Seniority* is protected under this method, as new users are only allowed to use the remaining water as long as it does not affect the previous users. After determining the capacity of the shared water source for a given year, the appropriators receive their full appropriation of water, in order of seniority based on the priority date, until the capacity of the source is exhausted. When water becomes *scarce*, junior appropriators may find themselves without any allotment of water. Water rights from prior appropriation are not connected to land ownership, and therefore are *transferable* between users. The *transferability* of the water rights has opened doors to *water markets* in some of the western States. *Beneficial* use is commonly defined as *agricultural, industrial or domestic use*. *Ecological purposes*, such as maintaining a natural body of water and the wildlife that depends on it was not historically held to be beneficial uses but *has recently been accepted* in some jurisdictions.

supply problems. Cynthia Barnett²¹ claims that developers in Southwest Florida have developed '*informal*' trading mechanisms to get around these restrictions. Similarly, farmers in Piedmont North Carolina have been known to '*informally*' trade water from streams that are running to other farmers whose sources are dried up, charging whatever price the two parties agree on.

Water Markets Do Work ?

The of Vision of Prof. Joseph Dellapenna

Yet others, as most notably Prof. Joseph Dellapenna²², disagree that true " *water markets*" exist, outside rare circumstances. In his articles, Dellapenna remarks that markets are introduced nowadays as ' *ideal institutions*' for water managers, at every level, both national and international being *presented* as functioning ' automatically ' and nearly ' *painlessly* '.

As a result, Prof. Dellapenna asserts that they are much in vogue, for this characteristics among the policy makers. Nevertheless *true* markets, however, have *seldom* existed for water rights and there are good reasons for believing, according to Dellapenna, that they seldom will. This is due to the fact that *water is an ambient resource* where the actions of any one user *necessarily affect* many *other users*. Therefore, if *true* markets are to be relied on to allocate for particular uses and distribute water among users, the *transaction costs* of organizing contracts with all holders of water rights (let alone those holding less formal claims affected by a sale or lease) generally have been and will be predictably quite *prohibitive*.



Prof. Joseph Dellapenna - Villanova University School of Law, Pennsylvania

Water, in short, is the *quintessential* public good for which markets simply do not work. Prof. Dellapenna explores the nature of markets and the forms of property developed for the rights to use water, explaining why water has *customarily* been treated as a public good. In Dellapenna's position *water*, when treated as a '*common property*' may lead tragically to its *over* exploitation as soon as water becomes a *scarce* commodity, describing also the market *failures* that emerge from of treating the right to water as being *private* property. Prof. Dellapenna uses the California Water Bank case as an example - a case usually made in support to the thesis that '*markets for water do work*', but he finds the *regulatory pattern* beneath it, explaining how it is '*masqueraded as a market*'. Dellapenna's position, in dealing with water trade in US, likes to stress the importance of recognising a *correct naming* of the mechanisms in action

“ If we do not get *the names* right, we cannot expect affairs to be in order ”

[Joseph Dellapenna – *former Director of the Model Water Code Project*, *American Society of Civil Engineers* - *International expert on Water Law*]

Dellapenna presents a "*regulated riparian mode*" for water management that operates in US on the basis that water is a form of inherently *public* property about which basic allocation distribution decisions must be made by *public* agencies. In his view, he leaves room for various *economic incentives*, including fees, taxes, and water banks as a possible way to finance and managing water as a public property, and that true markets must remain a *marginal* phenomenon to the enterprise of managing large quantities of water for the benefit of numerous users.

Commenters are now proposing the idea of '*quasi market*' to describe institutions that promote trades but that, for one reason or another, do not present *all* the attributes

classically attributed to markets. In US. The N.C. Water Allocation Study has begun a discussion of the costs, benefits and implementation issues of developing water markets or quasi-markets in North Carolina.

Water , as an *Economic Good*

THE CASE of WATER RIGHT MARKETS in CHILE

The General Context

The theme of *water* as an ‘*economic good*’ that is overlooked through reforms that are undertaken on the basis of an *economic* approach, therefore making use of *market incentives* and of other economic instruments to increase the efficiency of water use and allocation, is well represented by the history of the Water reforms that took place in Chile in the last decades of the XXth century. Carl Bauer²³, Jessica Budds²⁴ and other scholars documented, from the field, the strict relationship between *water* and *power* and the role played by *water reforms* undertaken throughout the country in the context of the consolidation of a bunch of neo-liberal reforms that brought to the establishment, in 1981, of the *Chilean Water Code*.



The Chilean example exhibits a water reform that took its shape rooted on the first wave of reforms of neo-liberal brand, heavily sustained by the US, reforms in which all Latin American governments were pushed towards the reformation of their internal economic programs to adopt *free market* policies. These policies, generally renowned as ‘the Washington Consensus’, were strongly advocated by the major multilateral financial institutions of the time such as the World Bank and the International Monetary Fund. The results of such reform policies had been strongly contended across the last decades among various commentators³⁶, and, unequivocally, their impacts showed to be dramatic especially because such neo-liberalistic policies - mainly based on the establishment of *private property rights*, and on their *tradability* - demonstrated to be entrenched in a *too narrow* interpretation of neo-liberal principles, with a predominant emphasis on *privatisation* and on *free markets* operations, to the detriment of *social equity* and *institutional correctness*.

The Chilean Example

“... Chilean Water Markets have enjoyed good press recently, *shining* in the reflected glow of the country’s dynamic economic growth... Nonetheless, the *empirical* result suggest that the Chilean model is something for other countries *to learn from* rather than to copy...”

[Carl Bauer, 1998..]

Since the *1981 Water Code** was promulgated, Chile remained one of the main examples at international level of water policies that well incarnate *free market* principles.

(* *In 1951, Chile adopted a precedent Water Code that provided a system of water rights administration, and granted licenses to private parties for the exclusive use of water, very similar to the system practiced in the Western US. In that the government granted provisional water rights that became protected property rights after being used. In 1967, a new Water Code was enacted to replace that of 1951 and was part of the Chilean agrarian law reform. The 1967 Water Code was intended to empower landowners to receive water, and attempted to redistribute water as a component of the governments strategy to reform agrarian policy. The 1967 Water Code strengthened Government control of water and enabled redistribution of large estates and the expropriation of land and water rights to be reallocated and without any compensation to the previous holders. Land expropriated prior to 1974 was divided into small farms and the rights to land and water were granted to the current occupants, including approximately 48,000 small farmers. Partly due to these reforms, and partly the deteriorating economic situation, prepared the terrain for the military overthrow of Pres. Allende, in 1973. The new military government of General Pinochet began adopting free-market economic policies and then signed a new constitution in 1980. The 1981 Water Code was enacted in those circumstances.*

In the two decades after the Code saw a raise in the interest among other countries’ researchers²⁵ and international development organisations in studying Chile, as it offered a unique opportunity to study the results and the effects, the strengths and the weaknesses in the experiment of *market – oriented* water policies. ‘ No country has taken the experiment as far as Chile ‘ says Bauer, who dedicated a major effort in digging deep into this experiment through his research. The Chilean case demonstrates :

“ *How* water markets work, how they *fail* to work and the importance of institutional and legal framework, when *regulating* the issue. “

Water Property and Water Ownership: Rights and Exclusion to the Right

The Chilean example – as many cases in Latin America - turns to be at the center of the debate between *proponents*³⁶ and *opponents* of ‘*market-friendly*’ environmental policies especially for what regards the definition of the concept of ‘*property rights*’, in its application to water. In her reflection on privatisation also Bakker asserts, that a ‘*water property right*’, in its general term, refers to a wide variety of *privileged uses* across the world and historic times, and can be very different in the various parts of the world. Bakker’s concept of ‘*property*’ is subject to *evolution*, being tightly bound to the *social relations*.

“ *Property* is not a fixed object framed by economic rationality; it is a *social relation* that can evolve over time.

“

[K. Bakker]

Nevertheless - at least in the case she mentions of Bolivian water rights - the creation of ‘*water rights*’ even when expressed in the case of ‘rights of *communities of indigenous people*’ - and therefore solicited in a *collective form* – may be always an element of the mainstream (neoliberalistic) development model as long as it defines *privileged uses* for water for *some* and the *exclusions* for others that are *not* part of the Community *owning* the right³⁵. Therefore Bakker ascribes that even the *collective water rights* (studied in the case of Bolivian indigenous communities) may reflect a nuance of extreme ‘privatisation feature’ in the appropriation of water.

In any case, always following Bakker :

“ *Water rights* create the possibility of the creation of *Water markets*, in which water right ‘owners’ are to be reimbursed for allowing “ their “ water to be diverted to others. In other words, a system of *water rights* akin to *private property rights* is being created .

... An ethic of *exclusive ownership* of water resources by some communities implies difficulties to re-allocate resources for the state... “

In practise,

“ ..Although these rights may provide some communities with an opportunity to engage in market exchange, via the *sale* of *water rights*, they may *not* necessarily *enable the poor within* or beyond these communities *to reap the benefits* that markets can putatively provide“

As always, it is most often an issue of *redistribution* either of the resource or the *benefit* that comes from the use of the resource.

The Market Approach to Water Rights

The Free-market Efficiency in allocating water resources

Since the neo-liberal market approach was applied in Chile, other countries in the region initially took this model as a guiding standard and tried to copy it²⁴. Some economists have hailed Chile's water rights trading system, which was established in 1981, as a *model of free-market efficiency* that allocates water to its highest economic use.

Private Property Rights

For the right point of views, in Chile water is formally ‘ a national good of *public use* ‘ , where, nevertheless *individual property rights* over *water* enjoy a very strong protection

Private Water Rights are recognized in its Constitution, in Article 24:

“ *Private Water Rights*, recognized or constituted in conformity with the law, *shall grant* their holders *ownership* over them . “

[Constitution of Chile, Article 24]

This means, in practise, that water rights in Chile override other regulatory norms.

To enforce this approach, practically, *Water Rights* must be defined as a *Property* that is :

1. *Private*
2. *Exclusive*
3. *Transferable*

Freedom to Use (and Abuse) for the Owner

When in 1981 the Water Code was issued, during the military dictatorship, it granted ‘ *total, permanent freedom to the owner of the way in which using water* ’, in such a way that the owner *may* use or *may not* use his rights to water , or can *transfer* them separately from the land, to use them anywhere else or *sell* them on the market.

“ *The idea is that free market* will be able, through the *competition* among users and among different water uses, *to choose and redistribute* water rights *to the user, or sector, with the most profitable use* for the water resource... “

“ By granting *water rights* to the *economically most beneficial, valuable use*, the regulatory function of the free market would *increase the value and the efficiency of the water use*²⁸ “

[C. Bauers and A. Dourojeanni, *Sustainable Development Water Experts*]

Expected Optimisation of Multiple Uses

“ By setting the *real price* of water on the market and, in general, *commoditizing* the resource *multiple uses of water could be compared*, determining the ‘optimal’ uses and users “

[C . Bauer]

Restrained Government Intervention

According to this view, Government intervention must be *limited ‘ to facilitating transactions among water users ‘* , reinforcing contracts among players, and protecting private property (Bauer 1998).

Condition for Success in Water Trading

In some regions of Chile, water markets have been successful at achieving the original objectives of reallocating water to higher-value uses and capturing economic efficiencies through trading.

Economic instruments in Chile showed to be beneficial under certain situations, for example, when applying the ‘ polluter pays principle ’ , or in the support of the reorganisation of water management within a territory where the productive system and the social relations were already *highly market oriented* - providing the condition of a legal and administrative framework that *effectively regulate and protects* the environmental and collective interests.

Failures of Water Trading

However, in the case of the Andean communities, the *commoditization of water rights* entailed enormous *environmental and social justice problems*, and often has the opposite effect from what was intended.

“The Chilean model has gone too far in the direction of *unfettered* regulation. It hasn’t thought through the *public interest*.”

“*Australia and the Western United States* have somewhat comparable systems, but they contain *stronger environmental regulation and conflict resolution* than Chile’s “

[C Bauer, 2009]

Especially when *social* usage priorities are *not* established, and beneficial use is not prescribed, *the most powerful actors*, like, for instance, *large mining companies* are *free to accumulate and speculate* with water rights²⁹.

[Solanes and Gonzalez – Villareal, 1999]

Therefore water rights are often transferred or purchased *by the economically most powerful entities* at the *expense of subsistence communities* ³⁰.

[Castro, 2002]

In the Andean countries *reality fails to resolve* multisectoral water rights conflicts, *where there is no strong and effective legal and institutional framework* to support it. In this situation such a water policy not only *encourages accumulation, monopolization and speculation* with water rights *by the dominant sectors,*

But it also tends to foster *disorganisation,* by *individualizing water management* and *externalising conflict resolution.*

The Gap between the Theory and the Practise

The predominant view among economists and thinkers inside and outside of Chile is that Chilean water markets and the 'Chilean model' of water management and broader economic development and have been *a success* - and this perception has strengthened other countries' decision to follow Chile's example in applying *free market-oriented* water law reforms. Nevertheless, much of the debate about Chilean water markets, has been based more on *theoretical* or political *beliefs* than on empirical study. Therefore the applied studies from the field collected by researchers like Carl Bauer of Budds that observed the evolution of these markets in the last decades assume particular significance, within a context of the mainstream culture, because of their considerations on long-term practises.

in theory, the Water code strengthens user organisation and grants them greater autonomy over using their rights, *it does not help with conflict resolution* and with *collaboration among users*

Concentration of Powers

As Hendriks ³¹ notes, studying the effects of Chilean water policies on the practises of peasant irrigation systems :

“ The *more individual owners* of water, *the fewer owners* “.

“ Because private rights are *So* strong relatively to the State’s regulatory authority, *the bigger and more powerful water users have little incentives to negotiate*. Irrigators, on the other hand, have less bargaining power, less political influence and face higher transaction costs in organising themselves . Moreover, the electric companies are **national** political players, while the irrigators influence is more local and regional “ [Bauer 1998]

Failure of Water market transactions.

Exclusion of Social Groups from markets

In 1999, two water experts at ECLAC, Dourojeanni and Jouravlev, published a comprehensive analysis of the Chilean Water Code, curiously entitled “*Between ideology and reality*” in which they tried to explain why water markets turned to be in practise *inactive* in Chile and why the *water rights transactions* have been so uncommon, trying to give an explanation of the various factors behind such failure. Many marginal social groups, particularly the poor and politically disenfranchised, lost access to water which had

been protected under a range of historical and traditional rights. *Limited access* to information and *prohibitive transaction costs* largely *excluded* some groups *from registering* water use or engaging in trade.

Speculation, Accumulation, Excessive Monopoly Power. Resistance to further Reforms.

In their report Dourojeanni and Jouravlev , describe the problems with the original allocation of water rights: *speculation, accumulation* and hoarding, by excessive monopoly power²⁸. They argue that these problems have been serious in the case of *non-consumptive* rights and the *electric* sector, and less serious unimportant in the case of consumptive rights and agriculture. They analysed the various factors that explain why water markets have been so inactive in Chile and why water rights transactions have been so uncommon.

In the following years, although the Government attempted to review the legislation proposing combined public and private multisectoral *agencies for watershed management* , the ‘*resistance*’ by powerful stakeholders has been still hegemonic and still resists strongly *against state interference* in any private or corporate business. ³² (ECLAC 1998).

Failures at Basin Level

Lack of Coordination among Different Uses and lack of Conflict Resolution

The task of coordinating different water uses at the level of river basin is left mainly to *voluntary bargaining among private right holders* and their organisations. Because state intervention is so limited, when bargaining fails the conflicts are supposed to be settled by the ordinary civil courts. Conflicts³⁷ among *multiple users* (f. i. agriculture and mining) are also arising.

Extinct River flows and Multiplied Environmental Pollution

Economic development based on market rights has multiplied *water pollution problems, underground water management issues, problems in preserving ecological flows*, and in governing transfers of water between basins . All these problems have been left to be settled through *ordinary civil law courts*, between private and privatised players of *unequal power*. ”³³ [Bauer 1998, Boelens and Davila 1998]. The system failed to protect the environment, as market-based allocation encouraged *over-registration, speculation* and the transfer of water rights across hydrological boundaries, whilst *administrative control* of the resource had been *significantly undermined*. [WWF – 2007].

QUILLAGUA – THE DRIEST PLACE ON EARTH

WITHERING OF A TOWN IN ATACAMA DESERT ³⁴

A Picture journey through water markets' shrinking dowry.

Quillagua, as is was



Rio Loa, Quillagua, Chile.

Quillagua is a town is recorded , in the book as *the driest place on earth* during the past four decades. The town *had* a *river*, feeding an oasis, in the Atacama desert.

Quillagua is also close to *mining companies*.

In the years, mining companies have polluted and bought up *so much* of the water according to the residents - that for months each year the river is *little more than a trickle* (un *goccio* it.) and its *unusable quality* for feeding their livestock.

Quillagua, as it is now.



Quillagua, listed as earth's driest place by the Guinness World Records, reached a population of 800 in the 1940s. Now 120 people live there. Most of the people left their houses and land in the 1960s after the lagoon that had sustained them dried up.

“ Concerns about *water shortages* plague Chile's economic expansion through the exploitation of its natural resources like *copper, fruits and fish* — all of which require *loads of water* in a country with limited supplies of it... “

[Alexei Barrionuevo – *Correspondant to The New York Times*]



Alejandro Sanchez, 77 visiting fields that once grew corn and alfalfa. [Photo : NYTimes]



Chile is the Largest producer of Copper in the world, and one of the largest of Lithium. The water discharges from mining activities are heavy and strongly impacting on the environment.



In Chile, where water rights are private property and not a public resource, agricultural producers and mining companies 'siphon off' rivers and tap scarce water supplies.



Now, the few remaining citizens Quillagua that didn't leave the town, attract their tourists with the 108 meteor crater sites present around town.

“ In the north, *agricultural producers* are competing with *mining companies* to siphon off rivers and tap scarce water supplies, leaving towns like this one bone dry and withering. “

[Alexei Barrionuevo – Correspondant
to The New York Times]



Mr Alejandro Sanchez , aged 77, showing the fields of corn that he used to grow.

“Everything, it seems, is against us,” says Bartolomé Vicentelo, aged 79, who once grew crops and fished for shrimp into the *Loa River*, and is resisting in living in Quillagua.

“ Nowhere is the system for buying and selling water more permissive than here in Chile “

[C Bauer]



In Chile, where water rights are private property and not a public resource, agricultural producers and mining companies siphon off rivers and tap scarce water supplies. Drinking water is trucked into Quillagua because the river that fed this oasis town is contaminated and almost dried up by mining discharges.

“ Private ownership is so concentrated in some areas that a single electricity company from Spain, Endesa , has bought up 80 percent of the water rights in a huge region in the south, causing an uproar.

Mining Legacy



Polluted water, blue with chlorine at the Lithium mine in Atacama Valley.



The Atacama desert grows more than a meter per day. Two thirds of Chile's territory is facing desertification.

Social Protests

“ Water rights *are* private property, *not a public resource, and can be traded like commodities* with little government oversight *or safeguards for the environment.* “

[C Bauer, 2009]



In recent years, Chile and many other Governments of Latin America had to *back track* on their hard neo-liberistic programs after *extensive public protests*, that obliged them to make amendments in their laws for the protection of the *environment* and. the safeguard of the *indigenous rights*. [A Dourojeanni]



A Sustainability Dilemma

“ The *dilemma* we are facing now is *whether we can permit ourselves to continue to develop* with the same amount of *water* we have now”

[Rodrigo Weisner, *Chile's Water Director*

Public Works Ministry]



Chapter 3. Glossary

Market-based Instruments (MBI): instruments of environmental policy that use *markets, price,* and other economic tools to create economic incentives to reduce or eliminate pollution, and to incorporating the external cost of production or consumption of resource in various ways, as *taxes, transferable permits.*

Market-based Tax approach : the polluter chooses its own *tax-rate* under which he can lead its productive activity . The *maximum cost* of the measures to reduce pollution is fixed; the quantity of pollution reduced depends on the chosen tax rate.

Market-based *Transferable Permit* : sets a ‘ cap ‘ , or a *maximum level of pollution,* which can be transferred , or traded through the market.
Nevertheless, as all market-based tools , critics reports that the maker of the permits can be heavily influenced by market strengths, like *liquidity* (the power to be sold without loss of value), being auctioned or allocated through *grandfathering*²⁰ (namely *exemptions* to the new rules, for privileged categories) and/or other market (or political) powers.

Water Licences

(*Water Rights*) : refer to the Right of a user to use water from a water source (a river, a stream, a pond or a groundwater source). They may be land-based (like riparian rights in eastern US) or use-based rights (western US). The firsts are based on land ownership or possession, the seconds rely only on the legal access of water user to the source and are disconnected to the ownership of the land; they can be traded and transferable. In case of riparian rights, water right cannot be sold or transferred without its adjoining land, while water cannot be transferred out of the watershed. Riparian rights include: the right to access for swimming, boating and fishing, and the right to wharf out to a point of navigability, the right to erect structures such as docks, piers, and boat lifts; the right to use the water for domestic purposes; the right to accretions caused by water level fluctuations. Riparian rights also apply the "reasonable use" principle, to ensure that the rights of one riparian owner are weighed fairly and equitably with the rights of adjacent riparian owners. Among the

use-based rights, appropriation rights *are the most common*. *The appropriation doctrine confers upon the owner who actually diverts and uses water the right to do so, provided that the water is used for “reasonable and beneficial” uses, regardless of whether that person owns land contiguous to the watercourse. Between appropriators, the rule of priority of use is 'first in time, first in right' (prior appropriation principle).*

Privatisation : We'll use here the term *water privatisation* in its wider use, in the way it is commonly used by the public, and therefore omitting the technical specifications, as may be found in the economics approaches

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Michael Perelman, in his book shows how *Capitalism* was an 'invention'. The requirement for capitalism's creation, for it to succeed, was that peasants would have to *abandon* their *self-sufficient lifestyle* and go to work for wages in a factory. Why would they willingly do this? Clearly, they did not go willingly. Michael Perelman shows, that the same economists who were making theoretical claims for capitalism, directly *contradicted* the *laissez-faire* principles they claimed to espouse, advocating government policies that deprived the peasantry of the means for *self-provision* in order to coerce these small farmers into wage labour.

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¹⁹ See the *Minimum amount* of water

²⁰ For example, a "grandfathered power plant" might be exempt from new, more restrictive pollution laws, but those rules would not apply if the plant were expanded. Often, such a provision is used as a *comromise* or out of practicality, to effect new rules without upsetting a well-established economical, logistical or *political* situation.

²¹ See Cynthia Barnett, "Mirage"

²² Dellapenna J, *The Importance of Getting Names Right: The Myth of Markets for Water*, William and Mary Environmental Law and Policy Review, Vol. 25, Pp. 317-377, 2000.

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Chapter 4.

A Tribute to Allan. The Politics of Water in Allan's Vision.

In the panorama of most acknowledged experts of the water politics contemporary scene, John Anthony Allan represents one of the most ample and versatile figures, with an in-depth vision and densely formulated political economical reflections, which he draws from his life-long acquaintance with dynamics on Middle East and North African countries, as well as a worldwide advisory activity. Allan's voice is unique because of its multidisciplinary view upon water - deeply rooted into the field of the human geography tradition - always open to the refreshing breath of new scientific intuitions – always inclusive, never closed, to the contribution of any other science, being it human or technical, that aims to put itself into a discursive frame with other disciplinary thoughts, in the attempt, never ended, to shed a glimpse of truth on the multifaceted reality that water issues propose. Allan discovers each time new perspective angles, contemporary new and timeless, grounded in (the honesty of) pure scientific approach, which assigns to the scientist the worthy role of appraising the truth and making use of always new views and panoramic for the investigation while remaining faithful to the original object of disentangling water issues/politics dynamics, always focused on the human.

Allan's reflections cover decades of water politics achievements, from risk perceptions, to the global water scarcity, to the Integrated Water Resource Management, to the effects of Trade of goods and services on water resources, this one, a last intuitively genuine conception, the one of Virtual Water, which is product of Allan's intuitive mind, which represents one of the modern highest scientific achievements and with the amplest ripercussion on modern research

On Reviewing the Water Management Predicament

“ The last year of the twentieth century witnessed an unprecedented level of international discourse involving the world's water users, managers and policy makers. They engaged in intense consultative activities. They reviewed the global water predicament and identified ways to secure regional water environments and the societies and economies which depend on them. The preparatory process produced numerous *reports* for the Second World Water Forum in The Hague in March 2000 (*World Water Council* 2000, *GWP* 2000, *World Water Commission* 2000). During the consultations for the report writing attention was drawn to the fundamental *political* nature of the *pre-Hague* process (Allan 1999). But the authors of the numerous reports were *unable* to escape their assumptions that water was a *narrow hydrological* phenomenon rather than a *multi-dimensional* resource enmeshed in nested political economies.

Nor could they think or write outside the *technical* and *economic* ideologies. There was talk of civil society, governance and stakeholders, even of political commitment. But the discourse *failed* the challenge of recognising that innovative outsider scientific information as well as outsiders principles of economy, equity and the environment *are subordinate* to *local political milieux* into which they would have to be introduced. “

[Tony Allan – *Millennial Water Management Paradigms*]

On Water as an Economic Resource

“ At *The Hague* (2000) the political reaction
to advocating that water is an *economic* resource
rather than a *social* resource
was strongly contended. “

[T. Allan – *Millennial Water Management Paradigms*]

“ *Water pricing* instruments and privatisation
were also very loudly contested
from the first moments
of the Forum.”

[T. Allan , speaking of the *Second World Water Forum*, in Le Hague]

On Water as a Political Resource

“ The purpose
is to draw attention
to the necessity of starting
with the *political* contexts
in which water resources
are allocated and managed. “

“ *The 5 Paradigms* “

“ The purpose of this study
is to draw attention
to the *paradigms*
that have determined *the way*
that water resources
have been perceived
and managed
during the twentieth century.
(including those that influenced the authors
of The Hague Forum reports
and those that *contested* them). “

1, 2. The *hydraulic mission*
(Swingedouw).

The paradigm that *Nature
could be controlled*
was one of the ideas that
dominated both capitalist
and socialist versions
of industrial modernity
- during the first 75 years
of the century.

3. A paradigm based on the notion that
environmental resources such as water
were being *damaged* rather than controlled
by the impact of the alliance of science,
engineering and national investment *gained
currency* in the North and Northern donors
by the mid-1970s.

This paradigm reflecting *environmental
concern* has only achieved very limited
purchase on water policy making in the
South of the world.

4. *In the 1990s* a further set of principles gained currency. That water *is* an *economic resource*. This idea seized the Northern professional Community. The same idea has been *resoundingly rejected* in the South.

5. *The Fifth Paradigm.*

Emerged in the last years of the 1990s, that of Integrated Water Resource Management (IWRM).

It requires a new holistic approach and an unprecedented level of political cooperation.

The Next Water Paradigm : Influencing Politics

“ The *Next* essential water resource management paradigm is that water users can assimilate IWRM *if* the *innovation* of integration is appreciated *as a political process* and not just as a ‘technical’, ‘investment’ or ‘information sharing’ process. “

“ Water policy will be transformed if it is *politically* feasible. “

Influencing political feasibility

is *the next* essential
water resource paradigm.”

Innovation in Water reforms

‘Such innovation will be achieved by taking an inclusive approach and emphasising the institutional dimension of the inescapably political integrated water resource management.’

Different Community Reactions

‘Water allocating and managing *communities* world-wide are *diverse*. Variously endowed and differentially developed socially, politically and economically.’
The economies of the plural North are relatively rich and deeply integrated into global information and trading systems.

Proper Communication of Scientific Knowledge

‘ Those concerned to *communicate* new knowledge and to *promote* innovatory water policy reform must be clear about the phase of innovation with which they are concerned ‘

Awareness

“ Achieving *widespread awareness*, at all levels of *the water using* and *water policy-making communities*, that *water’s role in livelihood futures* is *as important as* its current role in securing existing livelihoods, is essential. “

Innovation and Interests

“ *Those who have a stake in the status quo* will *effectively resist the economically and environmentally inspired innovations* of water use efficiency and the newest concepts of environmental sustainability.”

Sustainability : Economic and Social Dimensions

Fortunately Sustainability is no longer just an *ecological* concept. *Economic* and *social* dimensions are recognised to be as integral to the definition of *sustainability* as are the *environmental* priorities that were *constructed* by the green movement from the 1950s and 1960s.

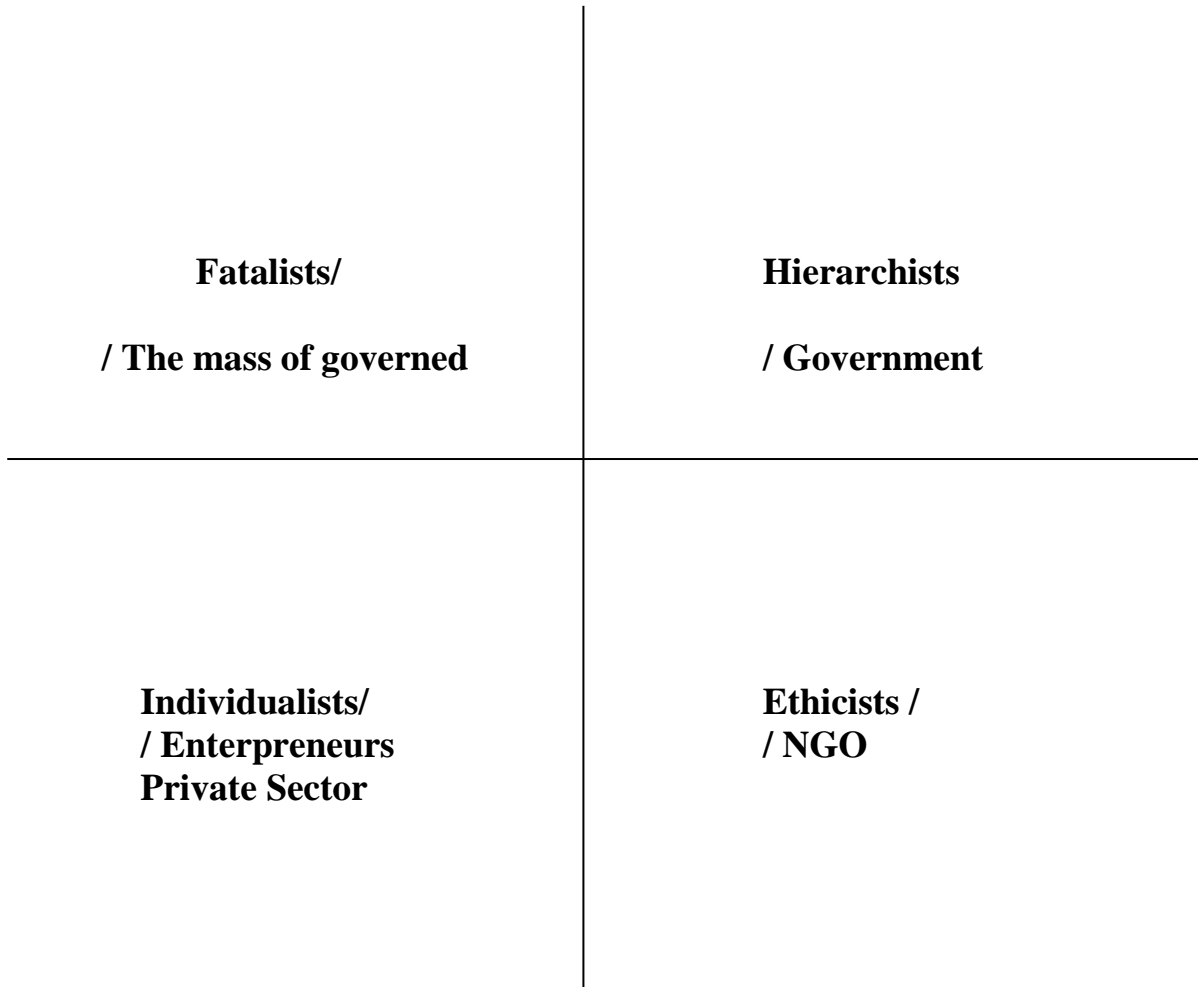
Global Water Deficit

*'In the Vision of Le Hague,
FFA process water specialists
Are trying to export their
perceptions of the risk
of a global water deficit
to peoples who have
overwhelming local anxieties
resulting from extreme poverty,
and to politicians fearful of
social instability
Water poverty is just one of their deficits.'*

Mary Douglas 'Ways of Life'

'A number of social theorists have pointed out that individuals and communities take different approaches to the way they perceive and utilise resources. Douglas developed her group/grid theory to provide insights into the attitudes and the expectations that determine the approach of major group of players.'

*[from Who's playing the Game: competing inspirations.
in Hydropolitics and the Global Economy]*



The Hierarchists

‘ First there are the individuals and political and *bureaucratic* elites which can exert influence on affairs through holding high positions in political hierarchies. These are the *hierarchists*, with power, democratically or otherwise founded, in positions in government departments, in religious bodies and in the institutions that regulate and provide public services. ‘

The Fatalists

‘ Second, Douglas termed *the mass of people* , that is civil society, the *fatalists*. Their role was to be responsive to the influences of individuals and institutions in other categories.’

The Individualists

‘ Thirdly , she identified *individualists* or *entrepreneurs*, who sought opportunities to use and combine resources to provide goods and services. ‘

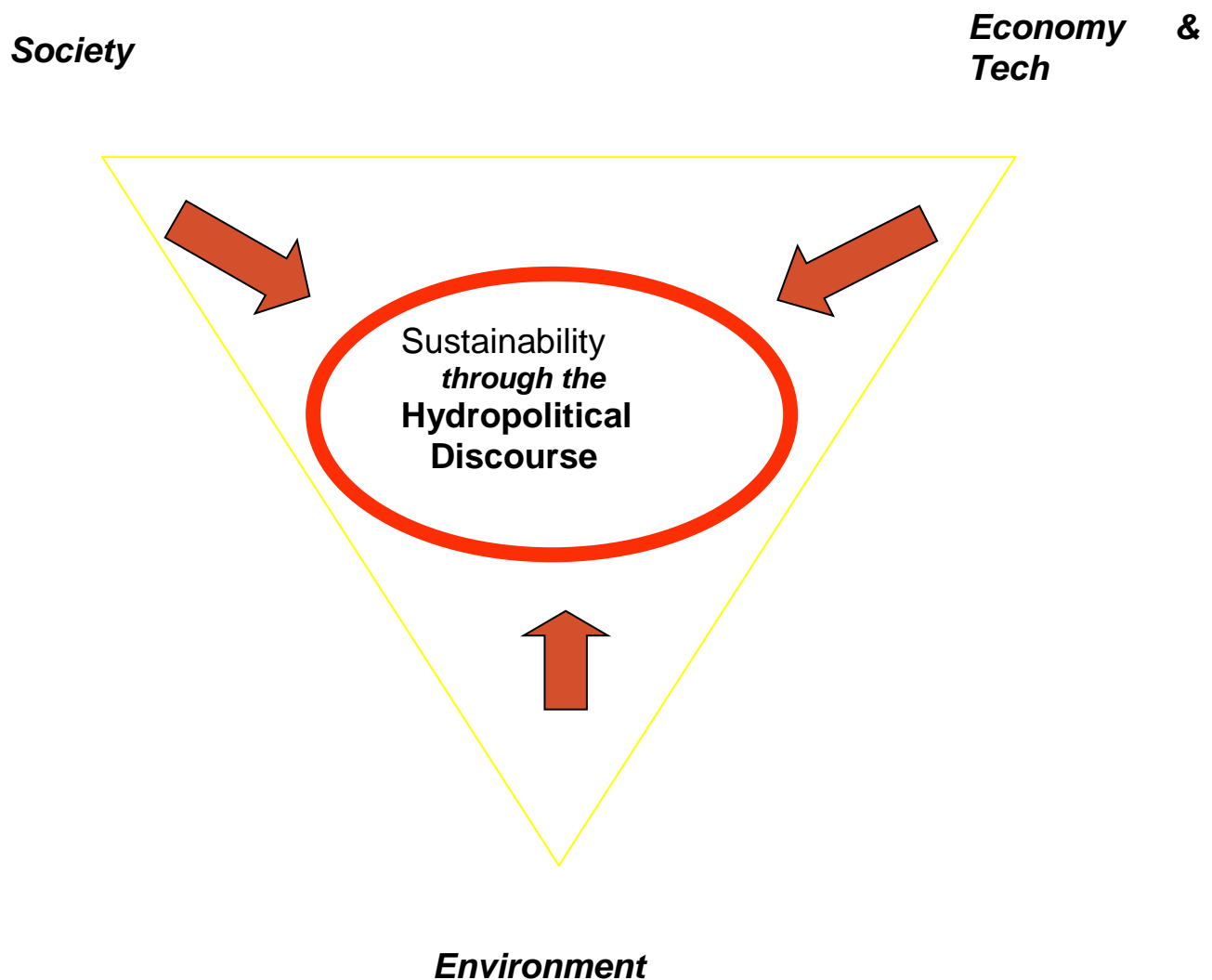
The Ethicists

‘ Finally , there were the *ethicists*, or egalitarians, who are inspired by principles of equity and, in the case of water, also by principles of environmentalism and economics. They want to improve the way that water is allocated and managed ‘.

This theory is very helpful in highlighting the *political relationships* between those inspired by the different approaches to allocating and managing water. It is also helpful in identifying *those* contributing to the water policy *discourses* and especially in identifying *the sources of new ideas* that might influence regional hydropolitical processes.

The Hydropolitical Discourse

‘ The role of politics is *integrating* the contention over the use and allocation of water, as illustrated (in the figure). Water is conceptualised as playing a role in the *environment*, in providing *society’s needs* and in providing *an input* to the *economy*. Each of these uses is at a point of a triangle. The relative and changing demands for water by society, the economy and the environment are represented by the arrows: as the volumes of water required by the respective users increase, the pull from each area increases. The resultant impact of the three water demand depends on the effectiveness with each *contending demand* can *communicat*, through the *hydropolitical discourse*, and *legitimise* its ideological and political arguments. ‘



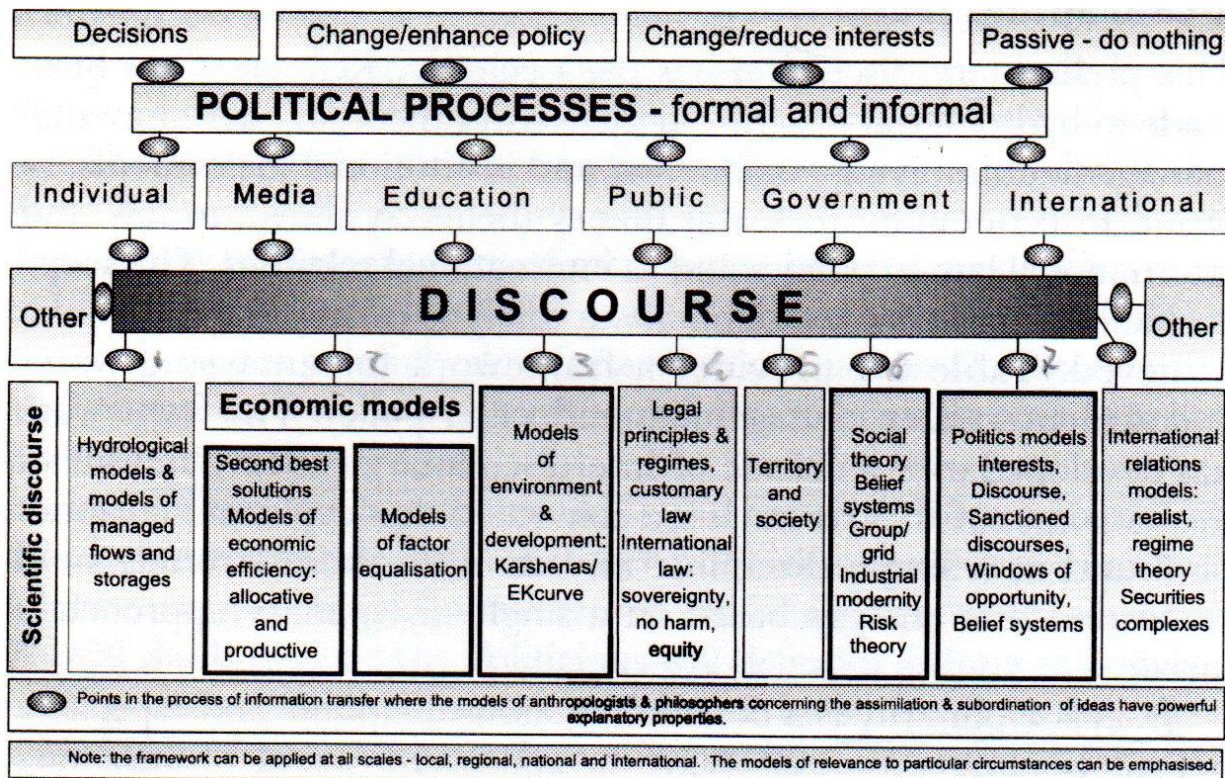
Foucault and Discourse Analysis

‘ The explanations of Foucault (1969, 1971, and 1980), concerning the lack of free will for individuals and the communities ‘ *discoursing* ‘ in political entities also brings useful theory to a discussion of the water politics. Foucaults argues that normal politics involves the interaction of interests. The resulting tension creates outcomes, which he termed ‘ networks of consensus ’ for which he used the word *discourse*. ‘ *Discourse* ‘ , in this usage, is *a form of power, the discursive power*.

Foucaults used this term to conceptualise the *discursive power* within a political entity, to distinguish it from *coercive power*. The *discourse*, is *the outcome* of the contention in formal, and informal (water) political processes. Such discursive power is not just concentrated in the hands of a few: it is *dispersed in the networks* through which the contending parts *communicate and share knowledge*. Those in formal power, experience ‘limits’ to their free will, as well as those they ‘govern’, and receive from *the process of contention* signals of what is *politically feasible*. Foucaultina insight explain why politician speak with many voices and fail to implement sound economic and political policies, of which they are aware. Such politicians are not ‘*free*’ to *initiate water reforms* because they are part of a system in which their inputs are just *some of many*. Their role is often to legitimise what is determined by the ‘discourse’. Often, in (a country) water politics, many of the statements of water resource use are determined by the national ‘discourse’ and not by the recommendations of government servants, or from outside.

Interdisciplinary Analysis : an Applied discipline.

‘ ...Reference has been made to *hydrological systems*, to the environment, to environmental management implying *engineering* and *institutional instruments*, to water, to *economics*, to *social theories* (belief systems), to *law*, to *politics* and to *international relations*. The framework has developed over a decade of interdisciplinary endeavour. One of the outcomes of that research is a conviction that explanation cannot be found in a single discipline , and an (even more strongly held) conviction that *analysis* based on a single disciplinary approach is *unsafe*. ‘



‘ *Interdisciplinarity* is demanding (..) , and risky of attracting sharp and destructive analysis by scientists with more specific disciplinary expertise .. Yet, *firms*, *governments*, and other entities which get things done *have to address problems* which are *inherently interdisciplinary*. ‘

Virtual water: The Mighty Invisible

‘ In complex industrialised economies the role of water is very important, but the role may be *not as visible* as it is in a subsistence system, where all inputs are locally accessed: the soil, the water, the livestock, the cultivating systems and the labour.

In industrialised economies *only a small part* of water used is *evident* (the drinking and the domestic water). Some other water used, is also evident, for example any water laboriously delivered to fields for crop production. But some even more important water, namely *soil water*, is *less evident*, unless there is a draught. In these circumstances the *absence* of *soil water* has an *economic impact*. Such soil water is not even accounted in the national water budgets.

Water use by industry and services is misunderstood (.). How much people know *how much*, or how little, *water* their firm, their office, their school uses per year¹ ? At the extreme of invisibility, the water *embedded* in *imported commodities*, such as *food* has no profile at all (2000) . This last water, in practise, gives life to the individual and *balances* and *stabilises water deficit* economie². The political economy of *virtual water* in *incalculable...*’

¹ A *university*, in a central city in an industrialised economy can be concentrated on a hectare. In mid 90s it used 10,000 m³/year of water, costing \$15,000 (for water and sewage services) and employed 1000-full time and part time staff, that is 1000 jobs, educated 3500 students per year, provided international library, consulting and other specialist services and turned over \$ 45 million per year, in 1996. If it had been a *wheat field*, the activity would also have used 10,000 m³/ year of rainfall falling on the site and would only have turned over about \$1,200 per year, and have provided 1 / 20th of one livelihood. (data for SOAS, located in Central London,1995).

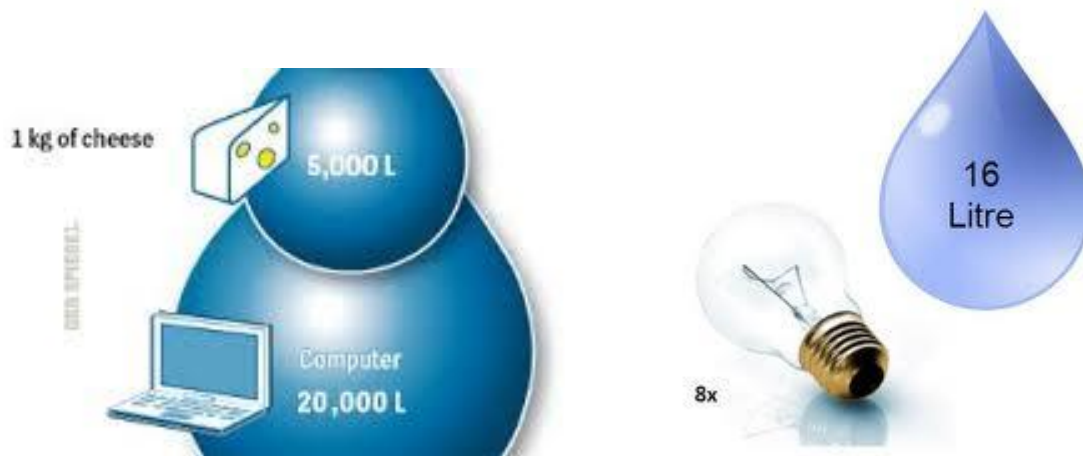


In 2008, Tony Allan was awarded the *Stockholm World Water Prize*, for his *Virtual Water* concept (*here, with Princess Victoria of Sweden*)

A vast new field of research developed, starting from the concept of *Virtual Water*, conceived by Prof. Tony Allan.

His legacy of Present researches move forward in such direction.

How Much Water do We need for ... ?



The Amounts of Water
Virtually embedded
in producing
a commodity

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