TOPIC: 4 - ENVIRONMENT AND SOCIETY

Social and environmental conflicts over water resource: Their Contribution to the characterization and a preliminary assessment of the tools used for prevention and resolution

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ABSTRACT
This article consists of a literature review which, considering the work of several researchers, we make an analysis of conflicts over water resources - management or availability - worldwide and in Brazil, contextualizing its availability and main problems. This article also presents some theoretical foundations of the study conflicts and tools applicable to your resolution. It is concluded that there is a wide range of types Conflict and varied sources of conflict, both in global and local instance. When analyzed from the perspective of geopolitics, in the case of these conflicts come to intensify, it is assumed that can generate significant socioeconomic consequences for human society. In this sense, it must be subject to constant reflections in view of the need for development of appropriate public policies for their effective management.
Keywords: environmental conflicts, conflicts over water, urban planning.

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1. INTRODUCTION

The systematic study of conflict is among the oldest in the history of man, preexisting training schools ancient Greek (BARBANTI JUNIOR, 2002), and the story reveals water has been at the heart of many of these conflicts, for various reasons, such as access, availability, multiple uses or as the object of military strategies.
In the past four decades, the company has experienced profound changes, in all corners of the world, cultural, economic, social and environmental, with emergence of conflicts intercurrent highly complex and interdependent, and that, through the scientific community, seeks understanding the problems involved in the which is, justifying the relevance of the proposed topic.
This article presents a review of the literature through analysis of information and data

authors who have written about the problems of water resource management and conflicts, enabling a reinterpretation of national and world stage, comparing information as availability and the state of water resources, the characterization of clashes and some tools for conflict resolution. The systematization of information can contribute to reflection, revision or reformulation of public policy to ensure access to water quality fair and equitable manner to all citizens, regardless of quadrant planet.

2. METHODOLOGY

The present work consisted in qualitative research, based on secondary data, and guided the analysis of information, using different research strategies (CRESWELL, 2010). In this case, it can be said that the investigation also has elements descriptive and exploratory research. The descriptive research aim essential description of the characteristics of a particular phenomenon, and exploratory research is purpose to develop, clarify and modify concepts and ideas, with a view to formulating problems most accurate searchable or hypotheses for further study (Gil, 1995).

The main tasks were analyzed *participation in environmental management in Brazil: watershed committees and the challenge of strengthening public boards* (JACOBI, 2006), *Watershed: Planning and Management* (BIRTH and Villaça, 2008), *Game Theoretical Approach to Conflict Resolution in Transboundary Water Resources Management* **(Eleftheriadou;** Mylopoulos, 2008), *Water Rightsand Water Fights: Preventing and Resolving Conflicts Before They Boil Over* (LEVY; SIDEL, 2011) and *hydrological cycle and integrated management* (TUNDISI, 2003). The main reference documents were Report *Insights from the Comprehensive Assessment of Water Management in Agriculture* (IWMI, 2006) and *Scenario of Water Resources in Brazil* (ANA, 2011), as well as, research

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General sites on the National Water Agency (ANA), the Brazilian Institute of Geography and Statistics (IBGE) and analysis of the applicable law.

3. LITERATURE REVIEW

The literature review identified some prospects approach relation to water availability, use and management of conflicts. The title of the presentation information gathered, these approaches have been systematized into three topics: (i) worldwide availability of water and its consumption, (ii) the waters of Brazil: availability and status, and (Iii) management of freshwaters in Brazil.

3.1 Worldwide availability of water and its consumption

For Levy and Sidel (2011), the scarcity of freshwater is presented as a problem of Public Health increasingly critical in many parts of the world, since approximately 97.5% of all water is salty and unfit for consumption. The remaining 2.5%, about 70% is frozen in glaciers and ice caps, leaving less than 0.01% available for use human, in lakes, rivers, reservoirs and aquifers accessible. According to the *International Water Management Institute* - IWMI (2006), over the past four decades, significant gains productivity accounted for an increase in world trade in food and Virtual resulting water flow (the water incorporated in the food production and export)

signifying an increase of demand in producing areas. This situation contributed to the increasing pollution of water bodies and water scarcity, a result of increased agricultural demand.

The urbanization process and economic growth will continue in the next decades, increasing demand for food, especially in the middle and lower classes income developing countries. In this regard, urbanization intensified the demand for water, wastewater and generates more pattern changes in demand for agricultural products, and represent an increase in the potential for contamination of surface water bodies and underground reserves of groundwater are already decreasing in densely populated areas North America, China, India and Mexico because of overexploitation (IWMI, 2006).

As Sivakumar (2011), the population explosion and its associated effects (Urbanization, water pollution, deforestation) represent huge pressure on resources natural world's freshwater and consequently on the environment and water, health and also on the economy. Citing data from the World Health Organization, the author points out that estimates are that approximately 900 million people still lack access to water drinking water, 2.5 billion people lack access to adequate sanitation and millions of people die each year from disasters and diseases related to water.

For the *Organisation for Economic Co-operation and Development* - OECD (2012) warns that if no new policies, in 2050 the availability of fresh water will be compromised due to population growth where an increase is estimated 2.3 billion

people worldwide, more than 40% of the current global population. This problem occurs particularly in watersheds that are already facing water problems, especially in North and South Africa and South and Central Asia. Thus, the demand for water is expected to increase in about 55%, due to the increasing demands of production (+400%), electricity generation Thermal (+140%) and household (130%). When discussing the problem of water in addition to availability issues and problems of increasing pollution, the discussion involving the conflicts of competing demands for water use are paramount. Accordingly, suitable platforms for discussing these conflicts should be incentivas.

3.2 The waters of Brazil: availability and state

According to Jacobi (2006), Brazil has 17% of all available fresh water in the world and about 12% of fresh surface water on the planet. However, although the country possesses high availability, there is the problem of uneven distribution of fresh water. The Amazon Basin accounts for approximately 70% of available fresh water in the country, but it is inhabited by approximately 5% of the population. In the South and Southeast of the country, is just 6% of the available water. In the Midwest concentrates 15% and 3% in the Northeast, with two thirds of these only located in the São Francisco. Regarding the consumption of water resources, the author adds that the agricultural sector uses the largest volume, approximately 72.5% of the total, followed the sector of drinking water, which captures about 18%, and the industrial sector that uses 9.5% of water.

The National Water Agency - ANA (2011) in its report Conjuntura 2011 features Results of water quality diagnosis conducted in Brazil. The study analyzed the

water quality in more than 1,700 points in several watersheds. Other numbers are representative of the problems arising from floods and drought. According to the report, 19%
of municipalities (563) decreed emergency or state of emergency
public due to the occurrence of floods or drought or drought problems. The semiarid region and
Amazon focused most (521 municipalities). Regarding the questions demand
versus surface water availability, the study reported potential areas of conflict, which are:
• Bowls semiarid region - water stress due to low water availability;
• Tietê Basin - water stress due to high demand for urban water supply, and
• Sub-basins of the Hydrographic Regions Uruguay and South Atlantic - water stress due to extremely high demand for irrigation.
For the NGO SOS Mata Atlântica, the water quality of rivers and streams in the country is compromised. According to a study conducted in 11 Brazilian states, the 49 water bodies monitored, 75.5% were classified as "regular" and 24.5% at the "bad". However,
any of the collection points analyzed was indicated as "good" or "excellent". The water bodies

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have worked best in the study were: river Santa Maria da Vitória, in Vitória (ES);
Paraíba do Sul River in Resende (RJ); Bica da Marina, in Angra dos Reis (RJ); Arroyo Jupira in Foz
Iguaçu (PR) and Camboriu River in the city of Balneario Camboriu (SC). Moreover, the worst
results were obtained by the rivers Cricklewood (SC) and Itapicuru Mirim (BA).

3.3 Management of fresh water in Brazil

To Abers and Jorge (2005) water management in Brazil has developed so
fragmented according to the needs of each sector (such as energy, agriculture
irrigation, sanitation, etc..) and centralized (due to policies set by the state and
without federal participation of municipal governments, water users and civil society.
During the 1980s, technical and national experts discussed the need to change
this scenario, with the creation of an integrated and decentralized management, in a moment in which international and national debates were coincident on the definition of a new
decentralized management model for the basin level, integrating all policies
sector involved in water management, water users and civil society, from the water to be treated as an economic good.
Port and Harbour (2012), claim that abacia basin can be interpreted as a
systemic entity, since there are held the balance of incoming and outgoing water, and
allow delineation of basins and sub-basins and their interconnections. Birth and Villaça (2008), contributing to the spatial interpretation, stating that the hydrographic network (also river network or drainage network) is formed by all the rivers of a watershed,
hierarchically interrelated. Both the basin as the river network does not have
fixed dimensions. The basin can be subdivided and it processes occur circulation matters eenergia involving fluvial channels, flood plains and slopes, in which
internal processes are of great importance. Knowing your limits means considering spatial first spatial distribution of all the processes involved in all
subsystems.
To Tundisi (2003), the adoption of Agenda 21 was vital in changing
paradigm and translating the concept of integrated management at the basin level

watershed, which in turn has important elements such as the decentralization of management, promotion and implementation of legal instruments and action by organizing institutional protection hidrociclo and springs, purification and sewage treatment industrial and domestic waste, conservation of biodiversity and *habitats* in the basin. It also promotes joint monitoring and management of the quantitative and water quality, management of conflicts and optimization of multiple uses, adapting them the regional economy, the promotion of technological advances and the expansion of the predictive ability, should result in the integration cycle *hidrosocial* with the hydrological cycle. By virtue of the implementation of the National Policy of Water Resources (1997), arises in the scenario participatory public management, the figure of the watershed committee. According to the Agency National Water basin committees are collegiate bodies that are part of the System

National Water Resources Management composed of members representing sectors of society with interest over the water and it holds the power of decision on management.

Abers and Jorge (2005), to prepare a study of the formation of Watershed Committees, identified 91 state committees created, installed and its members inducted six federal committees. Such boards exhibit great variation with respect to the size of the basins under its jurisdiction, of which 30% are in basins of up to 5,000 km ², more than half are in basins 5,000 to 20,000 km ² and 15% are in basins larger than 20,000 km ². Further find that 28% are located in watersheds predominantly rural, 11% in watersheds predominantly urban and 55% in basins that include urban and rural areas, and that 14% of state committees if located in coastal areas.

According to the ANA (2011), the basin committees were 150 in 2007 and reached A173 in 2010 164 with nine interstate and state. Cardoso (2003), is the understanding that the adoption of watershed as a planning unit has some weaknesses, especially because the basin mean a redelineamento territorial overlaps the political divisions between traditional administrative counties, states and countries, presenting itself as a generating potential conflicts, especially in Brazil where municipalities are strong units in administrative and political standing committees in countercurrent to the strengthening of municipalism, since it creates an instance supra, generating a clash of powers.

4. ANALYSIS AND DISCUSSION OF RESULTS

The information gathered for the study of conflict were codified in four topics: (i) the study of conflicts, (ii) water conflicts in the international arena, (iii) conflicts over water in Brazil, and (iv) tools for the prevention and resolution of conflicts.

4.1. The study of conflicts

The systematic study of conflict is among the oldest in the history of man (BARBANTI JUNIOR, 2002), and it is certain that the water was always present in such conflicts is as a strategic element or even motivating. For the author, the systematic study of conflicts in modern society materialized from the 1920s, when the United States, by virtue of general strikes caused by the economic recession, labor disputes contributed to the creation of the Federal Mediation and Conciliation. Deepening the

issue of conflicts around natural resources, according to Cost and Limoncic (1997) cited Andrade *et al.* (2002), takes place from the second half of the nineteenth century, when they arise discussions concerning the issue of natural resource economics and relationships of living things with the means in which they live, gradually setting precedents for environmental issues approached the social sciences, some guiding lines of ecological thought and social proposing that the defense of management contradictory social relations.

In this scenario, the conflicts present with high complexity, address the issue of the uses multiple resources and the multiplicity of social actors involved, contributing to the design of a new class conflict: the environmental conflicts. For Little (2004), environmental conflicts are those in which collisions occur between multiple social groups, in interaction with each other and with their biophysical environment, due to their different modes of inter-ecological relationship. In such cases, the crux of the conflict revolves around the interactions ecological. Also according to Little (2001) cited in Ferreira *et al.* (2009), the analysis of these conflicts, three basic dimensions should be considered:

a) the biophysical world and the natural cycles;
b) man's world with its social structures, and
c) the dynamic and interdependent relationship between these two worlds.

Little (2001) cited by Ferreira *et al.* (2009) also warns that the problems and conflicts around the use of water resources are shown increasing with the expansion of disputes, both between basins and within the same basin. Loucks and Stedinger (1981) apud Mendes and Lima (2007) classified the conflicts in the process of supply and demand environmental watershed as follows:

a) conflicts of use destination - occurs when water is used for other allocations than those established by political decisions, justified or not social concerns;
b) availability of qualitative conflict - occurs when it involves uses in bodies polluted water, and
c) conflicts of quantitative availability - situation arising from the depletion of quantitative availability due to intensive use.

4.2. Water conflicts in the international arena

On the world stage, conflicts over natural resources, especially water, have in largely motivations related to distribution and the political boundaries that society human established, since the waters know no boundaries.

Approximately three-fifths of the water flowing in the rivers is shared by two or more countries in 263 watersheds in 145 countries, where there are two fifths of the world population lives. As a result, many countries are highly dependent on water resources that originate outside your territory. For example, 34% of water resources in India and 76% of water resources in Pakistan originate from outside these countries. As another example, the Nile basin is shared by 11 countries that are mutually dependent for its water resources. (LEVY; SIDEL, 2011, p.778, translation ours).

To Priscoli (2012), citing UN figures, almost 40% of world population
lives in river basins shared by two or more countries in an area which is about

50% of the earth's land mass. Also according to the author, two-thirds of the population speaking
Arab Middle East depend on transboundary waters. One of the most emblematic
that region is the competition for water resources is between Arabs and Israelis, which reaches
the current theme of newspaper articles in the world press, still unsolved
satisfactory to the parties involved. According Jerozolimski (2003), under the Peace Agreement
Oslo, Israel should provide 70 to 80 million cubic meters of water annually to
Palestinian population, has Wallensteen and Swain (1992-1995), they add that the war between Arab
and Israelis in 1967 arose out of the competition by the waters of the Jordan River.
In the literature on global conflicts for water, those originated are highlighted
competition for resources in transboundary surface or underground. Are high conflict
complexity, that "(...) require an understanding of hydrology, economies, cultures and laws
(...) "(Bowman, 1993, p.2, our translation). This wide range of work can be cited:
• Transfer of water from Lake Gaston - United States: Cox (2006), who studied the
conflicts arising due to transfer project (273,000 m
3
/ Day) of water
Lake Gaston, located on the border between Virginia and North Carolina, for the system
water supply that serves much of the population of the area's most urbanized
southeastern Virginia, with different impacts of economic, social and environmental.
• Disputes involving the Rio Grande - the United States and Mexico: Bowman (1993), which
studied the conflicts related to resources of Rio Grande (Rio Bravo in Mexico). Three
problems presented themselves as the emergency scenario: (i) the growing demand for water
and potential shortages, (ii) the contamination of surface and groundwater due
to inadequate treatment of sewage and (iii) contamination by industrial waste and
chemicals originating in agricultural production. With the waters of the Rio Grande Mexico
irrigates about 1.1 million acres within the basin and the U.S. irrigate approximately 993 000
hectares (almost 98,000 of them in Texas). The population, according to the author, along
border increased significantly and projections indicate that the Rio Grande and tributaries
aquifers will decrease approximately 273,985 acre-feet per year (3.38 x10
-4
m
3
.)
• Disputes involving water war in the Middle East - its genesis and solution are
studied by many researchers. Wolf (1996), brought contributions
the present study regarding the problems related to the basins of the Nile River
Jordan and the Tigris-Euphrates. Hummel (2006), to address the problems in the Jordan River basin,
highlights that the basin is a complex system of sub-basins, and
geopolitically fragmented and almost all water resources are significant
in border areas over which political control is disputed.

The analysis of the availability and water scarcity in the international scenario suggests the existence
large number of areas of increased tension. As the report of the Intelligence Service

United States reported by Reuters (2012), the fresh water supplies will not be able to meet world demand in 2040, leading to increased political instability, compromising economic growth and endangering the global food. The report also highlights the importance of efficient management of the water used in agriculture, since it accounts for 70% of the overall usage of fresh water.

4.3. Water conflicts in Brazil

In Brazil, the scenario does not seem less serious. According to the Pastoral Land Commission - CPT (2011), conflicts over water increased 93.3% in 2010 compared to 2009, having been and recorded 87 incidents affecting 197 210 (201 675 were affected by conflicts over water 45 conflicts occurred in 2009). The largest number of conflicts was recorded in Bahia, being 15.4 conflicts relating to dams and 11 relating to the use and preservation of water. By region, the first was the Northeast (38 conflicts, 43.7%), followed by the Southeast (22, 25.5%), North (17, 19.5%) and Central West and South (five each, 5.7%). In such conflicts, there were 14 death threats four assassination attempts, two prisons and two murders. Such conflicts, according to the Report Conflicts in the Countryside - Brazil 2010 CPT (2011), are given mainly by the lack of attention to biological, environmental and social when it comes to the issue of water.

The multiplicity of motivations for the occurrence of environmental conflicts for water has been studied by several researchers. Among these conflicts cite the following themes:

• Conflict management of local resources - Barban and Sertorius (2005) studied issues involving actors and social conflicts around the management and use of water and soil in the basins Guarapiranga-Tietê basin and headboards, describing the controversies and conflicts identifying with respect to water and soil, as well as difficult to build its intervention in the management of shared basin. Brito and Vianna (2012) studied the conflict by use of the reservoir water Pessoa (PB) in Microrregião Cariri Paraiba, Basin Paraíba River Watershed. Hespanhol and Tucci (2003), addressed the conflicts arising from the concurrent use of water supply and irrigation in critical areas such as Northeast or regions of strong agricultural demand in southern Brazil, analyzing still problematic in the Metropolitan Region of São Paulo, which imports most of the water Piracicaba river basin due to contamination of water sources neighbors. Moretti and Gontijo Junior (2005) add that the review and updating of Plan Director of

Water Supply of the Metropolitan Region of São Paulo - São Paulo Metropolitan Area (at the time
update), predicted in his project horizon (2025), a population around
22.5 million inhabitants to the region, meaning an increase of 4.5 million
people, requiring new sources of contributions. The Production System Cantareira
responds by supplying almost 50% of the population, contributing a
average annual flow of 31.3 m 3 / s (reference year 2003).

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Conflict management features double dominion - Eca and Fracalanza (2010),
ordemtécnica studied conflicts, political and administrative associated with dual
dominion in basins (rivers dual dominion), exemplifying with the

deployment of the instrument collection of water in the Watershed Rivers
Piracicaba, Capivari and Jundiaí (PCJ basins), where the charge for raw water was implanted
primarily on water resources under federal jurisdiction in 2006, later
extending the rivers of dominion of the State of São Paulo from 2007. The
authors argue that the users' behavior in relation to water consumption
may be disciplined by charging for the use of raw water, it promotes their
enhancement and rationalization, reducing consumption and waste. Thus, the objective
if internalize the negative externalities or social costs and retrieval
and preservation of many bodies of water, by means of structural and non-
structural. As for Ioris (2006), this charge as much as the regulation and
privatization of services related to water management, serve primarily the interests
a strategic alliance formed between market forces and environmentalists
Conservatives.

According to the ANA (2011), in 2010 the charge for water use went into operation in
São Francisco River basin, integrating with bowls of Paraíba do Sul and Piracicaba,
Capivari and Jundiaí (PCJ), the set of basins interstate collection located.

• Conflicts arising from the environmental crimes of lesser impact - and Netto Moura
Junior (2011) studied the environmental crimes that occurred in the river basin
Sergipe, characterized the defendants as young workers and social classes in basic
Brazilian economic pyramid catching with their surroundings working relationship,
being employed or small business owners not having the resources, capital or assets
characterized as landlords and property, causing damage small and localized,
result of the very culture of being in relation to the environment.

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Conflicts arising in processes, projects and construction of hydropower - and Santos
Hernandez (2009) studied the conflicts arising from the design and construction of
hydroelectric Tucuruí (PA), Balbina (AM), and the Belo Monte project (PA). Studied
mainly conflicts and positioning of the various stakeholders (population,
Indians, NGOs, entrepreneurs, segments of the public authorities, the scientific community, among
others). Verdun *et al.* (2012) studied the conflicts arising from the construction of
hydropower, reported that in the period between 1992 to 2002 (albeit with problems
obtaining information and reliability data), were met or relocated
about 80,000 people or 20,912 families, with a ratio of 5.11 inhabitants per MW and
that for the decade 2007/2016 provides a population reached approximately
101,000 people, about 25,359 families in 57 hydroelectric projects with a

ratio of 2.75 inhabitants / MW for the total population affected (0.88 for urban and 1.61 for the rural population per megawatt), or about 97 million people (being approximately 32,247 people in urban areas and 59,175 people in rural areas).

4.4. Tools for the prevention and resolution of conflicts

For Levy and Sidel (2011), there are approaches to prevent conflicts over water, requiring a set of measures, namely: (i) reduce the use of water through of reduced waste and increased efficiency in the use, (ii) increase the availability clean water, reducing industrial pollution and sewage contamination, improving also the treatment of wastewater and river basin management, (iii) establish and keep new groundwater wells, (iv) develop and implement better methods desalination, and (v) expand the use of gray water (wastewater from activities household that can be recycled for some uses), the example of Singapore and Israel. To authors, it is essential to preventive measures aimed at solving conflicts. Such measures necessarily include: (i) laws and regulations instance local, state or provincial, national or international, (ii) proactive cooperation between nations or between states or provinces within nations, and (iii) the use of mediation and arbitration. The authors add that were ratified internationally over 3,800 unilateral declarations, bilateral or multilateral agreements or conventions relating to water, including 286 treated, but very needs to be done to strengthen the enforcement of existing laws and regulations and develop new measures to address current issues.

To Priscoli (2012), International Law and its legal principles, the deliberations of the International Law Commission, the Helsinki Rules, the Convention adopted by the Assembly General of the United Nations, have extreme importance as tools for disciplinary / resolve issues related to the use of the waters "no navigation", establishing Briefly: (i) the equitable and reasonable utilization, (ii) the obligation not to cause harm appreciable, (iii) the general obligation to cooperate; (iv) regular exchange of data and information.

In the field of relations among users, the ADR *(Alternative Dispute Resolution* - ADR) brought new perspectives to the practice of negotiation and bargaining, promoting meetings between the parties, assisted by experts in facilitation or mediation. The author goes on to state that the creation of institutions for conflict management and resource water, the debate is characterized as a dialectic between two philosophical principles: (i) the model of analytical reasoning and (ii) the market model or utilitarian free. The rational view analytical features some explicit holistic notion of the resource and the criteria for its use, theory ecological systems, or other regional projects, many of which conflict. The reasoning Analytical emphasizes the concepts of water scarcity and public participation in decision-making techniques. The market model sees utilitarian institutional arrangements emerging from the interaction spontaneous autointeressados reasonably satisfying their interests in some way, emphasizing individual freedom and public participation through purchase and sale in the markets.

Eleftheriadou and Mylopoulos (2008), proposed as a tool for conflict resolution Game theory. According to the authors,

(...) Game theory can be described as the mathematical study of the interactions among decision makers that often result in conflicts. The techniques

developed mathematical allow to analyze any situation with interests conflicting decisions affect where, inevitably, all parties involved. A solution concept is defined in game theory as methodology for resolving conflicting situations by estimating the equilibrium point of the conflict. (Eleftheriadou; Mylopoulos, 2008, p.466, our translation).

Already Gopalakrishnan (2005), presents a tool, the Model Chart for Resolution Conflict II *(Graph Model for Conflict Resolution II* - GMCR II), which allows to investigate conflicts providing a strategic decision support system. An example of its use is given in the state of Hawaii in a conflict regarding the allocation problems of surplus water on Oahu.

To Priscoli (2012), there are many cases local levels, as occurred at the border Hungary with Slovakia, where citizens of both sides of the river, Hungarians and Slovaks, for its own initiative, gathered to discuss solutions for remediation and water management, to reduce the risks to the health of the population as a whole. The dialogue resulted in agreement and remains as an example of appropriation by individuals, forcing governments to take action.

5. FINAL

Population growth coupled with the constant expansion of the global consumption pattern has contributed to the increase in global demand for surface and groundwater resources of freshwater. It is noteworthy that most of these resources are transboundary, needing to management and use of building peaceful relations with cooperation between the parties. The solutions to the problems in global instance are many, ranging from those that use tools to assist in the discussion and formulation of agreements, such as those propose new technologies, such as desalination, or new approaches such as recovery of rivers, such as the Cheong Gye Cheon river in Seoul (Lee, 2012). However, given cultural issues and economic, or even by secular disputes unresolved, there strong possibility of outbreak or escalation of conflicts, including war in the coming years and that, when assessed from the perspective of geopolitics, could plunge the planet into deep crisis.

In Brazil, a country of continental dimensions, presents a diverse background with many conflicts over water resources resulting from different motivations. Among these motivations, it emphasizes water stress and advancement in compromised quality of surface and groundwater due to contamination. The water balance already points different regions with serious potential problems while other studies point to problem of inadequate land occupation without planning and works of engineering misleading and could result in thousands of flood victims in coming years.

Already the discussion spaces, are still going strong in the figure of the Basin Committees, with potential solutions to wide range of collisions. Are the public spaces, built by the statutes, where social actors must have their share of guaranteed Proper and balanced manner without parts that will become the hostage other manipulations which might accumulate higher quotas of power.

Agreeing with Netto and Junior Moura (2011), the social reorganization in the environmental perspective is complex, requiring rediscussion social relations, democratization of power and model development, bringing bioethics as a fundamental component in the process of discussion involving the participation of various actors in social change and implementation of a new set of practices and values.

Barbi and Jacobi (2007), claim that the organized social movements put in democratization agenda of the need to ensure basic social rights as part component of gaining citizenship, notwithstanding any arguments that are fragmented, dispersed and fragile; Agrawal and Ribot (2000), assert that decentralization can only result in democratization when there are mechanisms to ensure the local populations control the decisions and actions of the decentralized decision-making agents. The spatialized arenas of conflict, must find the basin committees, support and tools examination and resolution of conflicts, fair and balanced way.

Agreeing with Cardoso (2003), the basin committees are helping to strengthen the role of social actors in the discussion and creation of public policies that address the interests of higher layer population, the most disadvantaged, and is of a political process itself that is being built in its dynamics brings fresh air, but is loaded with old vices and requires careful that it does not become a mere instrument to strengthen the power of political elites, widening inequalities.

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