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ENVIRONMENTAL EDUCATION AS A PROPOSAL FOR INSTRUMENTALIZATION OF SOCIAL ACTORS FOR THE MANAGEMENT OF WATER RESOURCES IN THE URUSSANGA RIVER BASIN, IN SANTA CATARINA, BRAZIL

Rose Maria Adami
Centro Universitário Barriga Verde (Unibave) and the Urussanga River Basin Committee, Criciúma, SC, Brazil.
rose_adami@hotmail.com

ABSTRACT

Management of water resources, in a decentralized and participative way, in a river basin, demands an uninterrupted process of education, with a view to the participation of the representatives from public power, water user and in the decisions and agreements of the different levels Institutional framework of the National Water Resources Management System (SINGREH - *Sistema Nacional de Gerenciamento de Recursos Hídricos*). In order to educate the participants in the participatory process of the members of the Urussanga River Basin Committee, in the southernmost region of Santa Catarina, the hydrographic region of the South Atlantic, Brazil, several Environmental Education activities were developed in 2006-2016, in order to instrumentalize them to ensure the management of water resources in the river basin in a coherent and responsible manner. Continuous Environmental Education to the representatives of the different segments of the Urussanga River Basin Committee and community in general makes it possible to collectively construct new values and attitudes towards the environment and broadens the systemic knowledge about the river basin, mainly on the use of land And the interference of these uses in the availability and quality of surface and groundwater in the ten municipalities within the river basin.

Keywords: Water Resources Management. Environmental Education. Social Actors. Urussanga River Basin

A EDUCAÇÃO AMBIENTAL COMO PROPOSTA DE INSTRUMENTALIZAÇÃO DOS ATORES SOCIAIS PARA GESTÃO DE RECURSOS HÍDRICOS NA BACIA DO RIO URUSSANGA, EM SANTA CATARINA, BRASIL

RESUMO

A gestão de recursos hídricos, de forma descentralizada e participativa, em uma bacia hidrográfica, demanda um processo ininterrupto de educação, com vistas à participação dos representantes dos setores do poder público, usuário de água e população da bacia nas decisões e pactuações dos diferentes níveis institucional do Sistema Nacional de Gerenciamento de Recursos Hídricos (SINGREH). Com objetivo de educar para o processo participativo dos membros do Comitê da Bacia do Rio Urussanga, extremo sul catarinense, região hidrográfica do Atlântico Sul, Brasil, foram desenvolvidas no período de 2006 a 2016 diversas atividades de Educação Ambiental, no intuito de instrumentalizá-los para efetivar a gestão de recursos hídricos na bacia hidrográfica de forma coerente e responsável. A Educação Ambiental contínua aos representantes dos diferentes segmentos do Comitê da Bacia do Rio Urussanga e comunidade em geral possibilita construir coletivamente novos valores e atitudes voltados ao meio ambiente e amplia o conhecimento sistêmico sobre a bacia hidrográfica, principalmente sobre o uso que se faz das terras e a interferência desses usos na disponibilidade e na qualidade das águas superficiais e subterrâneas no domínio dos dez municípios inseridos na bacia hidrográfica.

Palavras-chave: Gestão de Recursos Hídricos. Educação Ambiental. Atores Sociais. Bacia do rio Urussanga

INTRODUCTION

In Brazil, Law No. 9,433 / 1997 established that the river basin is the territorial unit for water resources planning, with management based on decentralization and the participation of sectors representative of public power, water users and communities, and managed by the River basin committees. The Law establishes the National Water Resources Policy (PNRH - Política Nacional de Recursos Hídricos), with the objective of ensuring the availability of water with adequate quality standards, the rational and integrated use of water, prevention and defense against critical hydrological events. The first two objectives defined by the Law can be achieved through two management tools, also implemented by the PNRH, which would be the water resources plans and the classification of watercourses into classes according to the predominant uses of water; The last objective can be reached by the implementation of the granting of rights of use, collection by use and the information system on water resources (BRASIL, 1997).

The guidelines, that is, the guiding paths that the PNRH will conduct, seek to manage water resources in an integrated way with the different elements of the physical, biological and socioeconomic aspects of the basin and with the estuarine systems; And the articulation between water use and land use sectors at the different planning levels of the multiple scales of the river basin (BRASIL, 1997). This integration is of paramount importance in a process of water resource planning, because the water that flows in the river basins, being a resource of common use, is used and shared by different uses and the degradation of its quality will bring damages to all the users.

The Hydrographic Basin Committees (CBH) are composed of collegial bodies composed of three sectors, representatives of the public power, users of water resources and communities, which are the basis of the National Water Resources Management System (SINGREH), to manage water resources in an integrated and decentralized way (Machado, 2003, page 7). However, this new form of management implemented by Law 9.433 / 1997 implies a cultural change of the population of the basin and the different levels of legislators in the geographic spaces of the hydrographic basins of the States and of the Union (CAMPOS and STUDART, 2001).

The change is necessary because, as of the implementation of the Law, it becomes the role of the Hydrographic Basin Committees within its area of activity, among other attributions, according to SINGREH, the monitoring of the execution of the hydrographic basin water resources plan, in the three stages of execution, diagnosis, prognosis and plan of actions, provided for in Resolution CNRH 145/2012. The river basin water resources plan is the main management tool, as they establish water policy in the basins and the priorities of actions for the Committees. In addition to the participation of the Committees, the general society will also be mobilized to participate in and contribute to the discussions of the three stages of drawing up the plan, through public consultations and / or other means of communication.

The participation of representatives (social actors) from the sectors of public power, water users and communities in the diagnostic, prognostic, action plan, implementation of different management instruments and in the socio-environmental monitoring of these actions guarantees the legitimacy of the water resources plan in the different territories within the river basin.

In addition to participating actively in the water resources plan, it is incumbent upon the members of the Committees to discuss issues related to the water resources of the catchment area covered by the Committees; Promote cooperation and reconciliation among users of water resources (BRASIL, 2017). In this paper, we present a proposal for the granting of rights to use water resources and for the collection of water resources. But for Committee members to actively participate in these discussions, proposals and agreements need to be made aware of the elements that make up the river basin. According to Frank (2010), this claim is far from the reality of most Brazilian river basin committees, since even with experience in the area of water resources and high schooling level, the members of the Committees representing the different entities that use water resources do not the complexity of a river basin.

Representatives have roles in river basin committees of extreme responsibility because they discuss and decide on the future uses of water resources in the river basin on behalf of the institutions they represent. Therefore, the members' understanding of the management process, their role as representative of other entities and institutions in river basin committees and understanding of the interrelationships established within the basin is of paramount importance for the Decision-making and agreements on the use of water resources within the river basin.

However, cultural changes occur slowly. In the case of the understanding of the river basin as a complex system that involves the interrelation of environmental and socioeconomic aspects, cultural changes in the use and appropriation of water resources need to be continuously encouraged through environmental education. Therefore, the members of the river basin committees are willing to be able to understand the basin as a complex system and its role in the Watershed Committee, through Environmental Education.

There are many ideological shades in the conceptions of Environmental Education, but the great majority of them present conception based on pedagogical process and the communication that aims at integrating society with nature with a view to sustainability (SILVA et al., 2015). Environmental Education makes it possible to understand the complexity of the basin in a holistic and interdisciplinary way under different knowledge. In this context, educating the members of river basin committees based on Environmental Education focused on water resources makes it possible to collectively construct new values and attitudes towards the environment and broadens the systemic knowledge on land use, availability and water quality in the domain Of the municipalities inserted in the hydrographic basins. This understanding is essential in the territorial planning process when water is an indispensable resource for the effective economic and social development of these geographical spaces.

In this sense, this abstract aims to present the Environmental Education activities developed with the social actors in the Urussanga River Basin Committee, in order to instrumentalize them to effectively manage the water resources in the river basin in a coherent and responsible manner.

MATERIAL AND METHOD

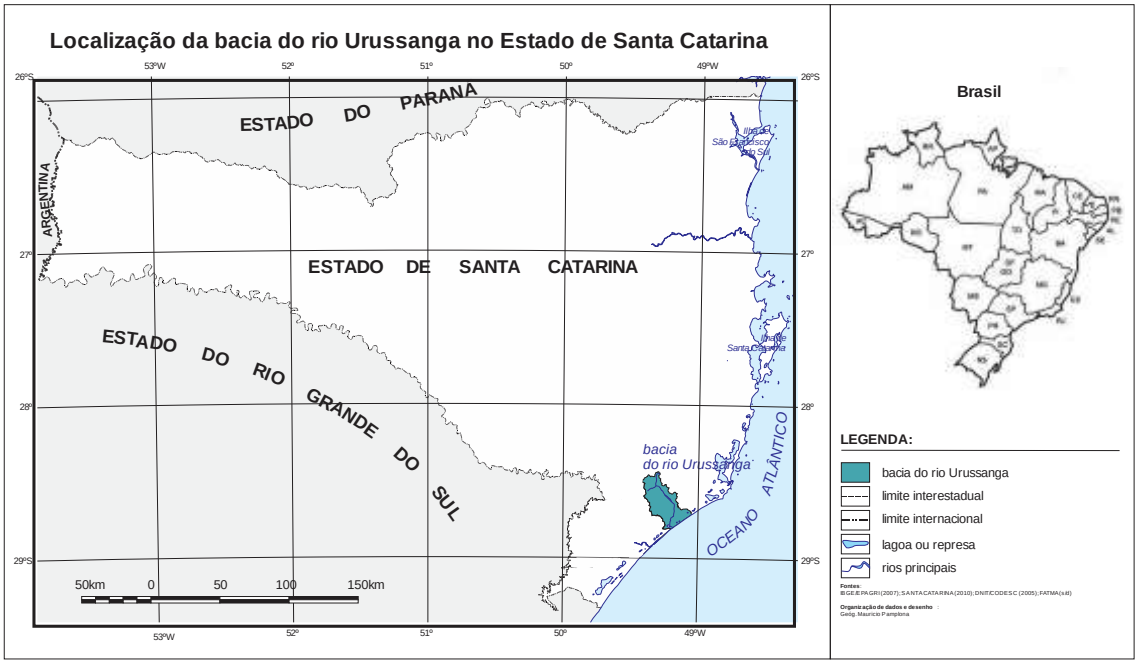
In order to identify the activities of Environmental Education developed with the representatives of the sectors of public power, water user and population in the Committee of the Urussanga River Basin, during the period from 2006 to 2016, a survey was carried out in the activity reports of the operations, on the social networks of the Urussanga River Basin Committee (Facebook and Blogspot) and the publications of Adami et al. (2010), Adami and Cunha (2014), Adami and Elias (2014) and Adami and Cunha (2015).

RESULTS AND DISCUSSION

The Urussanga River Basin Management Committee (Comitê da Bacia do Rio Urussanga), created by the Santa Catarina Decree No. 4,934 / 2006, is the collegiate body composed of 40 seats, distributed in 16 representatives of the Basin population entities, 16 representatives of water users and 08 representatives of state public bodies, with deliberative, advisory and normative powers, to implement the National Water Resources Policy in the river basin. The seats are distributed according to the State Law 9,748 / 1994 of Santa Catarina, which establishes the distribution of 20% of the seats are public bodies, 40% users of water resources and 40% representatives of the population of the basin.

The area of the Urussanga River Basin Committee, according to Adami and Cunha (2014), covers the watershed with an approximate population of 118,439 inhabitants, distributed in a total area of 679.16 km2 in 10 municipalities, in the extreme south of Santa Catarina, Brazil and the lagoon system composed of small lagoons and streams (Figure 01).

Figure 1. Location of the Urussanga river basin in Santa Catarina



Source: Adami and Cunha (2014)

The water and land of the Urussanga river basin, from the beginning of the colonization of the municipalities, in the late nineteenth century, were intensively used in the process of occupation and development of the colonial nuclei, at first for agriculture and livestock, and later for activities of Mining (coal, clay, sand and pebbles), industries, public supply, services and trade. Studies carried out in 2010 to subsidize the construction of the water resources plan in the hydrographic basin and published by Adami and Cunha (2014) and Adami et al. (2015), respectively, identified heterogeneity in the use of water resources, capture and launch, for uses in the riziculture, public supply, general companies, mining, leisure, services and commerce; (32.67%), medium and advanced forest regeneration (23.69%), agriculture (18.27%), urbanization (7.77%), Reforestation (7.32%), exposed soil (1.61%) and mining (0.89%).

These studies show that the Urussanga River basin is affected by deforestation, mining activities (coal, pebbles, clay and sand) and has high levels of pollutants due to agrochemicals, urban sewage, industrial and tailings Beneficiation of the extraction of open coal. Most of the areas degraded by the tailings are in the process of recovery, due to the TAC, which was instituted by a public civil action in order to recover the environmental damages caused by this economic activity in the southern region of Santa Catarina. However, even with the recovery of degraded areas, the water quality of the rivers and parts of the springs remains contaminated by heavy metals and is unfit for human consumption, with restrictions of use for other purposes.

In view of this environmental situation in the Urussanga river basin, the involvement of the different social actors in the management of water resources is a major challenge for the Committee. However, over the 10 years of existence, the social actors have been instrumentalised through Environmental Education activities, in order to raise awareness of the importance of knowledge of the interrelationship between physical and biological media with social and The economic, in the making of decisions and agreements in a conscious and responsible way, for the triggering of the management of water resources in the river basin.

In the first two years of the Committee's existence, in 2006 and 2007 (Figure 02), two meetings were held, involving researchers, technicians, members of the Committee and representatives of the Water Resources Directorate (DRHI - Diretoria de Recursos Hídricos) of the State Secretariat for Economic and Sustainable Development (SDS - Secretaria do Estado de Desenvolvimento Econômico e Sustentável) of Santa Catarina. These meetings aimed to present and discuss studies carried out by the different entities, in order to enable members on

the environmental reality of the Urussanga river basin. The discussions held at these meetings resulted in the creation of three subcommittees: (1) Agriculture, Fisheries and Livestock, (2) Industry, Commerce and Mining and (3) Environmental Education, with the challenge of outlining and developing Environmental Education and Sustainability actions For the different sectors involved in the Urussanga River Basin Committee.

Figure 02. Second meeting with members of the Urussanga River Basin Committee, in 2007. Urussanga (SC)

Collection: Rose Maria Adami

In the Subcommittee on Environmental Education, two proposals came up for the elaboration of an informative folder for the population, in order to explain the function of a River Basin Committee and a project of guided visits to the river basin to be developed together with the schools, to know the basin In which the schools were inserted and to develop educational actions in the rivers that passed in their surroundings. Both proposals were implemented, but at different times. The informative folder was launched in the beginning of 2008 and distributed in the activities carried out in the Committee until the year 2010, and the project of guided visits in the hydrographic basin was implemented in 2011, with the name of "My School, Meu Rio" Project. From 2011 to 2016, this Project served 1,531 students and 92 teachers from the schools of the municipal, private and state networks of the 10 municipalities inserted in the Urussanga river basin.

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From 2008 until the end of 2010, there was an intense work of mobilization and articulation of the society in order to build knowledge of the environmental reality of the Urussanga river basin, through the Piava Sul Project (ADAMI and CUNHA, 2015). The project, financed by the Petrobras Environmental Program, was an agreement between a university in the southern tip of Santa Catarina and the Water Agency Foundation of the Itajaí Valley (FAAVI - Fundação Agência de Água do Vale do Itajaí), which aimed to implement a policy of water protection in the municipalities inserted in river basins Araranguá and Urussanga. As the development of a water protection policy suggests an integrated view of river basin problems, which in turn requires the involvement and empowerment of management actors, the project sought to involve social actors in the conduct of the water management process. Discussion of the elaborated diagnosis, with a view to the planning of water resources of the basin. During this period, the

management of water resources in river basins was promoted through training and technical support to the river basin committees to obtain and organize a database with the purpose of elaborating the water resources plan of the river basin.

In the Urussanga river basin specifically, there were eight public training workshops for social actors, called "Our Waters", based on the synthesis of secondary data, referring to scientific publications and reports on the river basin. The objectives of the workshops were to train the members of the basin committees, public managers, technicians and municipal leaderships to exercise the function of water resource managers; to motivate the actors for the participatory construction of the water resources plan; and trigger the registration of users of water resources in the river basin.

The methodology allowed to gather scientific information published in the different Brazilian Universities and Institutions on the basin which were dispersed and to synthesize the existing data in the form of maps whose results were discussed publicly and consecutively in order to promote a process of water resources management, effectively participatory in the workshops. Data on the physical, biological, social and economic resources, surface water and groundwater availability, water demands and tendential scenarios for these demands and the social dynamics of the river basin were collected. Participatory processes for the elaboration of the first stage of the water resources plan of the Urussanga river basin were also described.

It sought to involve the public power, users of water resources, as well as the population in general, represented by civil society in the process of completing the data collected. This involvement of the local society in the management of water resources met the objectives of the National Water Resources Policy, which establishes participation and decentralization as the foundation of this management (Figure 03).

Figure 03. First training workshop of the Piava Sul Project. Urussanga (SC)

Collection: Piava Sul Project

The eight workshops allowed the participation of 407 people in a participatory and social learning process, innovative in terms of public management in the Urussanga river basin, as they promoted dialogue, understanding about the river basin and its physical, economic and social aspects. The exchange of experiences on water use practices has brought institutions and people engaged in economic and social activities in the river basin.

The synthesis of the data, the discussions and the agreements made in the workshops resulted in the diagnosis and prognosis of the water resources of the Urussanga river basin, according to Resolution 17/2001 of the National Council of Water Resources (CNRH - Conselho Nacional de Recursos Hídricos), designed to assist in the application of water resources management tools in the river basin. Subsequently, parts of these data will be used by the company responsible for drafting the water resources plan for the Urussanga river basin, scheduled to start in 2018.

From the diagnosis and prognosis of water resources in the Urussanga river basin, the Environmental Educator's Notebook of the Araranguá and Urussanga river basins, published in 2010 (ADAMI et al. 2010) and updated in 2014 (ADAMI and CUNHA, 2014), with the

assistance of the Santa Catarina Rural Program. Since the end of 2010, the Santa Catarina river basin committees have been strengthened by the support of the Santa Catarina Rural Program and financed with resources from the State Water Resources Fund (FEHIDRO), enabling important actions to be implemented, including Training and courses for representatives of member entities and members of the basin.

With the objective of promoting environmental education focused on water resources, the updated Environmental Educator's Notebook employed a more accessible language to socialize the knowledge generated in diagnosis, prognosis and provide guidance to environmental educators to develop environmental education activities and projects in a participatory manner And continued (Figure 04).

Figure 04. Notebook of the environmental educator of the Araranguá and Urussanga river basins, updated in 2014

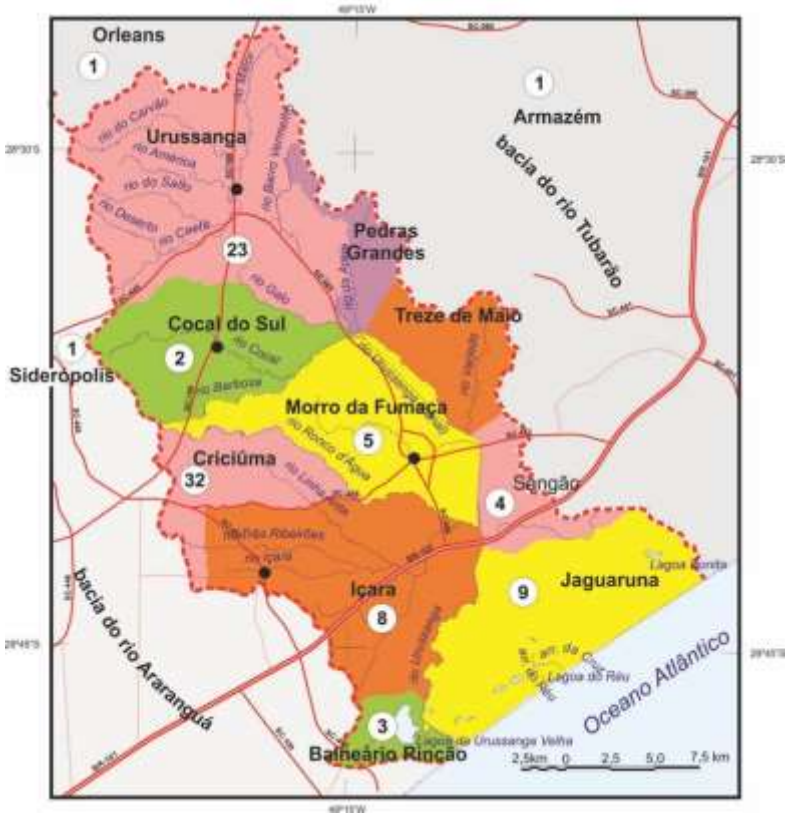
Collection: Rose Maria Adami

In order to contribute to understanding the watershed as a complex system involving physical, biological, social and economic elements, the contents of the Environmental Educator's Notebook in the 2014 update were reorganized into four guiding axes: environmental education and citizenship by water; basin: territorial unit of human occupation; basin: territorial unit of water resources planning; dnd citizen participation in environmental education and public policies. The organization of the Notebook allows to understand the watershed in an integrated way and makes it possible to rethink the process of planning of the water resources in its different territories and the public policies to carry out environmental actions.

In the following years, with the support of all the elaborated material, the members of the Committee were made aware of the different sectors (public power, users of water resources and population of the basin), through workshops for the understanding of the river basin as a unit of water resources planning and participation in discussions and pacts on management in a conscious and responsible manner.

In the years 2012 to 2014, four workshops were held with a 20-hour workload each, with a capacity of 89 people among members of the Committee, public managers, professionals from different areas and the community in general, to act as transformation agents in Its areas of activity, the municipalities inserted in the Urussanga river basin and neighboring municipalities belonging to the contiguous basins of the Tubarão river to the north and the Araranguá river to the south. In the four workshops offered, the largest number of participants concentrated in Criciúma, with 32 members, Urussanga, with 23, Jaguaruna with 09, and Içara with 08 (ADAMI and ELIAS, 2015), according to Figure 05.

Figure 05. location of the participants of the training courses promoted by the Urussanga Committee from 2012 to 2014



Source: Adami e Elias (2015)

The four workshops carried out in this period were aimed at environmental education, with a bias towards educational actions focused on water resource management, environmental law enforcement and water citizenship. Even with different themes, all the workshops had contents that were similar, such as the concepts of hydrographic basins, integrated and participatory management of water, spaces of participation and social mobilization; importance of water in environmental, social, economic and cultural contexts; environmental legislation related to water resources and their management instruments; guided visit to the river basin to know the physical, social and economic characteristics and their environmental problems; elaboration of projects of environmental education and public policies based on the environmental problems visualized in the guided visit, for implementation in the municipalities inserted in the Urussanga river basin.

The methodology adopted for the elaboration of Environmental Education projects, focused on water resources, was adapted from the Future Workshops of the "Cultivating Good Water Program", developed by ITAIPU (a Hydroelectric Plant), with changes in the titles of each stage and also in the proposed activities. The projects developed in these workshops by educators, representatives of civil society, members of the Committees and technicians presented proposals with different objectives.

The objective of the educators' projects was to educate the students and the school community about the importance of the integrated view of the Urussanga river basin for the protection of its waters, through permanent educational actions focused on the environmental theme, mainly water resources. From the representatives of organized civil society and members of the Committee, the objectives of the projects were directed towards the development of their peers in understanding and approving public policies aimed at preserving water resources, including permanent environmental education activities for the sustainable use of Water resources in the Urussanga river basin. From the technicians, the projects were directed to research the

physical, economic and social aspects and their interconnections with the quality of the waters of the basin. It is believed that these projects, when put into practice, will contribute to the construction of knowledge about the environmental reality of the Urussanga river basin and the multiplication of environmental actions directed to the water resources in the Urussanga river basin and adjacent basins.

In the years of 2013 and 2014, due to the changes of the members and of the entities that are part of the Committee, the Committee's board of directors sought alternatives to enable members to understand their role as representative of segments of society, with responsibilities for decisions made in the short, medium and long term related to water resources and the dissemination of the deliberations adopted in the Committee. During this period, the concern of the Committee becomes necessary, because if there is no exchange of information between the representative and the institutions that he represents in the Committee or vice versa, the management is not considered decentralized and participatory, and the representative does not adequately represent The interests for which he was elected.

To this end, two specific workshops were held for the members of the Committee, with a four-hour workload for each workshop, called "Urussanga River Committee Members Strengthening Workshops: Basin Committee Competencies and the Role of Members", with the objective of discussing Federal Law 9.433 / 1997, which establishes the National Water Resources Policy and creates the National System for the Management of Water Resources. In addition, group dynamics were carried out to learn how members refer decisions and covenants made in the Committee to the entities they represented and vice versa, since it is understood that this exchange of information strengthens participatory management of members in the negotiation process and planning of water resources in the Urussanga river basin. In these workshops, members were offered suggestions for referrals of decisions taken in the Committee to the institutions they represent, including sending their peers reports of meetings with the main topics discussed and deliberated, signed by the representative. In these two years, 35 members of the three segments, public power, users of water resources and population of the basin were trained.

Beginning in 2015, the methodology for conducting short-term training in Committee assemblies was adopted, since the understanding of the management process for members and their role as representative of other entities and institutions in the Committee is of Decision-making on the use of water resources within the river basin. The themes discussed in the capacitations held at the assemblies are focused on the water resources management instruments implemented in Law 9.433 / 1997 (BRASIL, 1997). We have already discussed the stages of the water resources plan, the classification of watercourses in classes, according to the prevailing uses of water and the implementation of the granting of rights to use water resources. The themes, usage charge and information system on water resources, will be discussed at the two meetings of the year 2017.

In addition to the workshops, a Territorial Development and Sustainability Forum was held in the Urussanga River Basin (2013) and two dialogues between Watersheds (2015 and 2016). The Forum, with an eight-hour workload, was carried out with the objective of triggering a broad discussion on possibilities and perspectives for the promotion of sustainable territorial development in the areas covered by the river basin. The event was attended by 141 participants from the segments of civil society, water users of the basin, government agencies, public managers, technicians, entity leaders, members of the Committee and representatives of the community in general.

In the Forum, to reach the proposed objective, two blocks of lectures were discussed, in addition to the opening lecture of the event. The opening lecture addressed issues related to water legislation in Brazil, the multiple uses of water resources to avoid conflicts of use, the National Water Resources Policy and the articulation with municipal legislations (Figure 06). In the first block of lectures, with the theme "Knowing the territory of the Urussanga river basin", three lectures were held so that the participants of the Forum could know the territory of the Urussanga river basin, regarding the quantity and quality of surface water and Basin, land use and the current situation of the recovery of areas degraded by mineral coal mining in the territory of the river basin. In the second block, with the theme "Management of the water

resources of the Urussanga river basin", three lectures were carried out on actions developed in the Urussanga river basin and in Santa Catarina, which unleash possibilities for sustainable development in the water resources management process. At the end of the event, a document was prepared with proposals to strengthen the management of water resources in the Urussanga river basin, serving as a subsidy for the water resources of the river basin, which will be elaborated later.

Figure 06. Opening speech of the 1st Territorial Development and Sustainability Forum in the Urussanga River Basin, with Dr. Cláudio Antônio Di Mauro (UFU), in Criciúma (SC).

Collection: Urussanga River Basin Committee

The two dialogues between the Hydrographic Basins of Extremo Sul Catarinense carried out in the years of 2015 and 2016 were carried out jointly with the Araranguá River Basin Committee, with an hourly workload of eight hours each event. The events were designed to bring together the water users, public authorities and the population of the 27 municipalities in the two river basins, in order to foster dialogue, strengthen and integrate water resources management actions and among the committees of river basins; stimulate the practice of public policies and Environmental Education projects focused on water resources; disseminate and evaluate the results of teaching, research and extension work carried out in educational institutions inserted in the two hydrographic basins.

The first dialogue Between Hydrographic Basins, held in 2015, aimed to socialize successful practices of water resources management that public authorities, water users and civil society develop in the Araranguá and Urussanga river basins. The event had three lectures and two dialogue tables. In the three lectures, the experiences of the Dialogue Interbacias event, which took place in São Paulo with representatives of 21 river basin committees, were initially presented, focusing on the dialogue between the network of environmental educators and the exchange of experiences for the implementation of strategies and development of Communication, as well as social mobilization in the management of water resources of the State. Subsequently, the water resource management practices and articulation, mobilization and environmental education experiences promoted by the Araranguá and Urussanga river basin committees in Santa Catarina were presented. The event was attended by 130 people including students, engineers, biologists, geographers, geologists, public managers, members of the committees, teachers, technicians and others interested in the management of water resources in the river basins.

The two dialogues were mediated by representatives of the Federal Public Prosecutor's Office and made up of representatives from institutions in the sectors, government, users of water resources and civil society. At the 1st dialogue panel called "Techniques for Utilization and Reuse of Water in the Treatment of Industrial, Agricultural and Other Uses", the panelists brought information about the activities that companies, schools and municipalities have

developed in relation to water reuse And treatment of effluents, as well as environmental education. At the 2nd dialogue panel entitled "Basic Sanitation Practices, Use and Rational Use of Water", the panelists presented the water use and wastewater treatment practices developed by sanitation companies, as well as practices for the use of water in rice cultivation Irrigated and conscious urban planning in one of the municipalities inserted in the territories of the two hydrographic basins. During the event there was also the exhibition of banners of the successful experiences that the institutions develop, mainly with respect to the environmental management in the companies.

The second dialogue between watersheds, held in 2016, aimed to awaken responsibility in civil society, in the sectors that use water and in the public power for the maintenance of the necessary water producing areas in the socioeconomic and environmental activities of the Araranguá river basins and Urussanga. In order for these results to be achieved, it was necessary to seek the participation of the sectors included in the river basins in the identification and search for solutions to environmental problems that degrade water resources; and define guidelines for the construction of water resources management agreements, with the participation of the sectors included in the Araranguá and Urussanga river basins.

The event had an opening speech and four groups of dialogues. The keynote address addressed the experience of the ITAIPU Binacional Good Cultivating Water Program. The four groups of dialogues were mediated by representatives of the Basin Committees of the Araranguá and Urussanga rivers that met concomitantly. The first three groups of dialogues, composed of representatives of the Araranguá River Basin Committee, use three goals related to environmental education, maintenance and restoration of riparian forest and payment for environmental services, as defined in the Basin Water Resources Plan Of the Araranguá River, together with the participants to suggest activities to be carried out in the future by the Committee, funding sources and deadlines. The fourth dialogue group, composed of representatives of the Araranguá River Basin Committee, uses two important questions to guide the dialogue "how do sectors identify the environmental problems that degrade water resources in the territories of the municipalities in the Urussanga river basin?" And "what actions do you take to minimize these environmental problems that degrade water resources?".

Based on these dialogues with the four groups, it was possible to prepare a document for each Committee, which was presented at the assemblies to be implemented in the river basins where the Committees are part. In the case of the Urussanga River Basin Committee, this document will also contribute to assisting the water resources of the river basin, which will be elaborated later. During the event, there was the exhibition of banners of the successful experiences realized in relation to the management of water resources in the two hydrographic basins.

At the end of 2016, the Urussanga River Basin Committee promoted the 1st Meeting of Environmental Educators, with an eight-hour workload. The goal was to bring together the professionals who have been trained since 2011 in order to create an Environmental Education Network called "Educate for Water". The Network intends to share successful actions related to water in order to promote citizenship, social participation and contribute to the understanding of the socio-environmental reality, in view of the management of water resources in the Urussanga river basin and adjacent basins.

In the meeting, it was discussed and agreed on the fact that the Educating for Water Network will be based on the principles of knowledge of the socio-environmental reality of watershed territories, Environmental Education and communication of information generated for the community in general, as educating for Water is to get people to understand it as a natural resource of paramount importance for economic and social activities. The conceptual basis of the Network was also built, involving the definition of founding and associated members, objectives, mission, principles and governance structure. In addition, a plan of action has been set out to be implemented in partner institutions over the next few years, based on the 17 Sustainable Development Objectives (ODS - Objetivos de Desenvolvimento Sustentável) of the global agenda adopted in 2015 at the United Nations Summit in New York for Sustainable Development, Composed of 17 objectives and 169 goals to be achieved by 2030.

During the 10 years of existence of the Urussanga River Basin Committee, the Environmental Education activities developed had the purpose of instrumentalizing the representatives of the

sectors of the public power, water users and population of the basin, in order to make them aware of the complexity and prepare them for water resources management in a conscious and responsible way.

CONCLUSIONS

In the Urussanga river basin, from 2006 to 2016, several Environmental Education activities were carried out, aimed at the collective construction of the integrated view of the river basin to protect its waters, with the community in general, and with those who manage and discuss decisions related to water resources in the river basin, in order to acquire knowledge about the environmental and socioeconomic reality of the river basin.

The participation of a large part of the people living in the river basin is of paramount importance for the management of water resources, mainly through their representatives who are part of the Committee, since they play the role of interlocutors between the Committee and the entities and vice versa. This interaction ensures that the management of water resources becomes decentralized and participatory, since the discussions and covenants made in the Committee represent the decisions taken in the institutions they represent.

The activities of Environmental Education sought to approach with public managers, municipal leaders, community in general and members of the Urussanga River Basin Committee, in order to bring information about the National Water Resources Policy and the role of the Committee and seek support and partnership Management of the basin's water resources. The dialogues constructed developed in the social actors the integrated vision of the environmental, social and economic aspects existing in the Urussanga river basin and prepared them for social participation, citizenship for the water resources and the function of members of the Committee. In the medium and long term, social actors are expected to build public policies aimed at the preservation, conservation and management of water resources in the territories of municipalities within the river basin.

However, the Environmental Education activities developed by the Committee require continuity to trigger the management of water resources, and in all subsequent stages, as they become essential in the understanding of the river basin as a unit of water resources planning, mainly for part of its component members.

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