

LEGAL ASPECTS ON BRAZILIAN LAND USE AND SOIL AND WATER CONSERVATION

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SUMMARY

The National Water Agency – ANA is responsible for the implementation of the National Water Resources Policy, that policy mentioned in the **Law n.º 9.433/97**, has to be integrated to the others, municipalities, estate and federal Policies, on the soil and water conservation aspects, to obey the item VI, of article 24, from the Federal Constitution, amongst others laws listed below:

Law n.º 9.984/00

Law n.º 6.225/75

Therefore, a specific law does not exist but a delegation of powers to the Ministry of Agriculture for the promotion, supervision and orientation of the national land use and soil conservation policy.

This competence was executed through programs of that Ministry and despite the generated advances, for example, with the National Program of Watersheds, that had success in some states of the south and southeastern region, in years 70 and 80, but it had problems.

The implementation of these programs was subjects to the interests of the governing and ministers who had occupied the folder of the Ministry of Agriculture, occurring discontinuities and not having of fact the creation and implantation of one policy of state on national land use and soil and water conservation.

It is in the context of the interaction of the soil and water conservation with the water availability and its multiple uses, imposes the implantation of one national land use and soil and water conservation policy, better formatted, in order to prevent discontinuities.

However, even so all the related legal body to the subject mentions "incentives" for the soil and water conservation, its viability is tied necessarily with the regulation of these devices, that never was considered and remains in open.

Had the great interaction between soil and water and considering the effect that the land use and the conservation of the soil on the quality and quantity of water from the watershed, consider it is proposed the articulation and development of one national land use and soil and water conservation policy.

INTRODUCTION

The rural diffuse pollution, that is mainly a result of the erosion processes and sedimentation, represents a serious threat to the water resources of the Country. Besides causing significant losses inside of the properties, the erosion presents environmental and socioeconomic significant externalization, starting from the carrying of sediments from the rural property to the courses of water.

With relation to the contamination of the underground water by pesticides, special attention should be given to the recharge areas, mainly in sandy soils, being defined like this for these areas guidelines, related to the land use planning, and to the control of the use of pesticides.

The costs of these externalizations, in other words, those relative to the additional expenses for the treatment, for the replacement of reservoirs and maintenance of rural highways in Brazil surpass US\$ 1,3 billion (Hernani et al., 2002).

In spite of the Brazilian rural producers be environmentally conscious, they have small disposition today to invest in conservationist handlings and practices, in function of their delicate economical-financial situation.

The rural producer is the main social actor when we spoke of the qualitative and quantitative conservation of the water resources, whether for the choice of the use type and soil handling, or be for the maintenance of the ciliary forest and for the protection of the spring, for the due disposition of the rural highways, among other factors.

In the general guidelines of National Policies of Water Resources, art. 3rd it is foreseen the interactions of the water resources administration with the environmental administration

and with the land use, due to hydrographic basin be the planning unit, and where all the physical processes of the hydrologic cycle happen. However, for an integration of these policies it is necessary that it is structured a policy of land use and soil and water conservation, with solid bases, complementing the National Policy of Hydrographic Resources from the Hydrographic Resource Planning, in the basin plans, to the interaction of the procedures of environmental licensing and it grants where the aspects of soil and water conservation could be best also observed, meditated and supervised.

However, although the Law no. 9.984, of 17/07/2000 - Law of creation of Water National Agency - ANA, in its art. 4.º clause XVII, it mentions "Propose to the National Council of Water Resources the establishment of incentives, besides financial, to the qualitative and quantitative conservation of water resources" incentives for the soil and water conservation, its viability is necessarily linked to the regulation of those devices, that was never considered and it stays open, even before the recognition of the importance of the matter.

OBJECTIVE

To revise the current Brazilian legislation of administration of the land use and soil and water conservation, as subsidy to the formulation of a national policy of land use and soil and water conservation, starting from the interrelation of this with the quality and amount of water, with the purpose of defining the attributions of the institutions better, removing the overpositions, and filling the voids left by the legislation and the potentials conflicts.

JUSTIFICATION

The National Policy of Water Resources – PNRH foresees the articulation of the administration of water resources with the one of the land use. However, the Brazilian legislation about the land use and soil and water conservation is not ordered, and several problems to be treated persist such as: overpositions of the treated themes in the legislation; obscure attributions of the institutions involved in the theme of administration of the land use and soil and water conservation, in the Municipal district, State and Union.

The implementation of National Policy of Water Resources should be reconciled to the implementation of other municipal, state and federal policies to make feasible the articulation of the administration of water resources and administration of the land use, the only way for the water and the soil be recognized as additional elements, inseparable especially in relation to the join of the territorial order with the productive action and the conservationist performance, unequivocal constituents of the sustainable development.

Now, with the agricultural expansion and occupation of the soil in the area of the Savannahs and in the Amazon, added to the largest intensification of the mechanization and use of agricultural inputs, the increasing of the process of degradation of the soils have been verified. Some states have elaborated legislations of soil and water conservation, and State Plans of Hydrographic Micro basins, with the objective of disciplining the use and the conservation of water and agricultural soil, and some state legislations, involving the research and technical attendance areas, proposes some innovations, such as:

- it makes responsible those who cause damages to the agricultural soil not only for the action, but also for the omission;

- it is supported in the concept of soil agricultural aptitude, through the planning based on the classes of capacity of the use of the lands and in the conservationist practice corresponding to them;

- it is flexible, allowing and stimulating all and any conservationist method, as long as there is technical coherence in the presuppositions that take to its choice;

- it establishes penalties for those that make bad use of the agricultural soil;

- it gives to the offender, time and opportunity to adapt to the determinations of the new regulation, avoiding fine;

- it establishes norms that allow intervention of the State in the extreme cases of degradation;

- it recognizes those farmers that show prominence in the soil conservation, and establishes some benefits such as: they will be declared benefactors of the soil and they will have privileged access to the technology and the technical support, including seeds and seedlings, besides establishing some awards.

- It can be verified starting from the investigation of the existent legal diplomas, about land use and soil and water conservation, that there is overpositions of the treated themes in the legislation and that the attributions of the institutions involved in the theme, in the several

spheres of government, Municipal, State and Federal, as well as the instruments and programs are not very defined and articulate and should be better defined and regulated, for a more efficient administration of the land use and soil and water conservation and the articulation with the National Policy of Water Resources - NPHR.

LEGAL NORMS ABOUT THE LAND USE AND SOIL AND WATER CONSERVATION

The Federal Constitution of 1988 gives the necessary help to the execution of the role of the Union, States and the Federal District in the intent to make feasible those reconcilable public policies, once it determines as competence of those "*to legislate concurrently on: (...) forests, hunting, fishing, fauna, conservation of the nature, soil and natural resources defense, protection of the environment and control of the pollution (...)*" (our bold).

In addition, the constitution deals with the assurance of a finer focus and detainee about the subjects related to the land use and occupation and it relates as competence of the municipal districts, among others, " to supplement the federal legislation and the state in what is necessary; (...) and to promote, in what is necessary, appropriate territorial ordainment by planning and controlling the use, the fractioning and the occupation of the urban soil (...)."

Those two clauses of the art. 30 of the Federal Constitution are of extreme importance so that the maintainable development is made possible in the municipal ambit. While the clause II allows, obviously in specific cases, that the municipal districts legislate to enlarge the legal content that it governs, for instance, the use and the occupation of the rural soil, the clause VIII checks them powers to promote the " appropriate territorial " ordainment that, in broad sense, will be contemplated in several instruments of the local, regional or national policies such as: the Municipal Master Plan, foreseen in the statute of the city, federal Law n.º 10.257/2001; the Ecological-economical Zoning - defined ZEE for the Presidential Ordinance S/N 28/12/2001; Plans of Water Resources, instrument foreseen in the Law no. 9.433/97, could be elaborated for hydrographic basin, for State and to the Country.

However, there is a detail of extreme importance in that context. Reached the municipal limits for the territorial ordainment - what would allow actions of soil conservation much more addressed to the local problem -, it would be fundamental the political articulation among the municipal districts so that the subject could be treated in the ambit of a

hydrographic basin, territorial unit as one of the foundations for the implementation of National Policies of Water Resources - NPHR and performance of the National System of Administration of Water Resources - SIGREH, but that can not only extrapolate the municipal limits but also join parts of a same municipal district in two or more basins.

Of course here the " fine " focus takes as hydrographic basin the smallest area unit that can be framed in the concept, in other words, the so-called " hydrographic microbasin " whose order doesn't allow that for her a committee of hydrographic basin is constituted, once it is not framed in the clauses of the art. 37 of the Law 9.433/97.

However, in the case of the administration of land use the assumption of the hydrographic basin as unit of planning is indispensable foundation, but differently of the possible unit for the installation of a committee of hydrographic basin foreseen for the implementation of PNRH and performance of SIGREH, must contain a facilitator for the most complex planning.

Such focus on a deeper policies, that includes the conciliation of municipal interests, should take as unit of planning and action one or more hydrographic microbasins, whose space dimension allows the continuous monitoring of the natural and antropics processes that there grow, with prominence for the objective headquarters of reversion of problems and help to the economical activity, based in the different environmental conditions and socioeconomics, especially, in the subjects related to the aptitude of the soils, to the physical possibilities and you delegate of your economical occupation, to the degree of the processes of degradation of the existent soil and the local peculiarities of use and occupation of the soil.

All those approaches create a multidisciplinary context for the administration of the use of the soil and he/she stiller interrelates her with the administration of the water resources, so much because the degradation of the soil determines the degradation of the water as for the fact of the use and the occupation of the soil, under the point of view of the economical development of the society, to have as elementary need the readiness of water in amount and compatible quality to the several intended uses.

As the integrated administration of the waters superficial, underground and meteoric the practices of soil and water conservation has great importance, mainly for acting in the hydrologic cycle, improving the infiltration of water in the soil, acting like this in the quantitative and qualitative characteristics of the water, improving the provisioning of the

aquifers, and, consequently, the base flux and the minimum flow and combating the diffuse pollution.

Moreover, the legal scope which respects to the matter includes more specific norms, which determine the back-up of government technical entities to best execute actions of soil and water conservation that can influence in an important way about the amount and quality of the water on the hydrographic basin.

Therefore, very wisely the Law 9.433/97 included among your general guidelines of action the articulation of the administration of water resources with the one of the land use, what demonstrates the recognition of the indelible entail between the water and the soil.

It fits to investigate what it is possible to use as base for that articulation, inside of the legal scope that governs the theme " use and conservation of the soil " in the national space, once the country already has a solid and modern National Policies of Water Resources.

With the proposal of setting up a chronological jigsaw puzzle of the legal devices that you/they regulate the land use and soil and water conservation, be in the space urban or rural, the picture was formatted to proceed:

Table 1. Legal Devices associated to the land use and soil and water conservation.

| LEGAL DEVICE | EMENTA |
|------------------|---|
| Law no. 4.771/65 | Institutes the new Forest Code. |
| Law no. 6.225/75 | Disposes about the discrimination, for the Ministry of the Agriculture, of areas for obligatory execution of plans of protection of the soil and of combat to the erosion. |
| Law no. 6.766/79 | Disposes on the fractioning of the urban soil and he/she gives other providences. |
| Law no. 6.938/81 | Disposes about the National Policies of the environment, your ends and formulation mechanisms and application, and he/she gives other providences. |
| Act no. 4.076/87 | It Disposes on National Program of Hydrographic Microbasins. |
| Law no. 7.802/89 | Disposes on the research, the experimentation, the production, the packing and labeling, the transport, the storage, the commercialization, the commercial propaganda, the use, the import, the export, the final destiny of the residues and packagings, the registration, the classification, the control, the inspection and the pesticides supervision, your components and kindred, and it disposes about other providences. |

| LEGAL DEVICE | EMENTA |
|---------------------------------|---|
| Law no. 8.171/91 | Disposes on the Agricultural Politics. |
| Law no. 9.433/97 | Institutes National Policies of Water Resources, it creates the National System of Administration on Water Resources, and it disposes about other providences. |
| Law no. 9.605/98 | Law no. 9.605/98 Disposes about the penal and administrative sanctions derived of conducts and harmful activities to the environment and it disposes about other providences. |
| Law no. 9.785/99 | Alters the Law no. 6.766/79 on fractioning of the urban soil. |
| Law no. 9.974/00 | Alters the Law no. 7.802/89 on pesticides. |
| Law n 10.257/01 | Regulates the arts. 182 and 183 of the Federal Constitution of 1988, establish general guidelines of the urban politics and he/she gives other providences (Statute of the Cities). |
| Act no. 4.739/03 | It transfers of the Ministry of the Agriculture, Livestock and Provisioning for the Ministry of the Agrarian Development the relative competence to the technical attendance and the rural extension. |
| Presidential act S/N 28/12/2001 | Instituted the group of permanent work of the Ecological-economical Zoning, in the national ambit, ZEE-BRAZIL. It is formed by federal and regional public organs with installed capacity and accumulated experience. |

There is no intention, after all, on draining the presentation of legal diplomas with the listing of the Table 1. There are also laws, norms and state and municipal regulations that they treat of that matter, besides other federal devices of content more punctual or specific.

Though, the Table 1 displays the series of laws and ordinances that have likeness with the theme, in your largest part the Table 1 just considers the subject of the administration of the use of the soil or, when more he/she approaches of that, it approaches very specific themes, as the fractioning of the urban soil, the national program of the hydrographic microbasins, the pesticides use and the agricultural politics.

Strangely, the Law no. 6.225/75, that should clear and to determine the introduction of measures for the conservation of the soil, they just stop in establishing competence for the promotion, supervision and orientation of the national policy of land use and soil and water conservation, not instituted in any legal diploma, to a Division belonging to a Department of the Ministry of the Agriculture, that today not even it exists.

It is worth to notice that the Environment National Policy brings in your art. 2nd, I title her/it of objective, the attendance of basic beginnings for the preservation, improvement and recovery of the favorable environmental quality to the life, among which it represents the

rationalization of the use of the soil, of the underground, of the water and of the air (interruption II).

It is pointed out the importance of the Technical Support and Rural Extension- (ATER) for the development of the practices of soil and water conservation of as well as the implantation of a national policy of land use and soil and water conservation. So much the Federal Constitution of 1988 as the Agricultural Law of 1991 determines that the Union maintains services of public and free ATER for the small farmers, commitment that MDA rescues, starting from now, establishing this National Policy, with views to assist the needs of the family agriculture, in a coherent way with the strategies of development of the country.

Moreover, the Table 1 also includes laws related to the environmental protection as a whole, where he/she hopes to have space the conservation of the soil, and an example of good tone is the Forest Code, that with the creation of areas of permanent preservation and of the Legal Forest Reservation it imposes restrictions to the alteration of land use in situations in which that determines risks and, in consequence, it promotes the protection of the soils, of courses of water and of areas of aquifers recharge.

However, a direct and objective treatment for the matter stays absent of the legal context and it is, without any doubt, a complication - or else a impeditive factor – for the movement of settle down the necessary articulation definitively between the administration of water resources and the one of the soil, in agreement with what have been told about such important general guideline of action of PNRH.

In the federal ambit, that is the reasonable space for the drawing of the foundations, guidelines and instruments for a national policy of land use and soil and water conservation, which one see it is a fragile legal argument, a lot although the presence of federal legal devices quite important that, however, they are not enough and incisive in what have been told respect the administration of the soil.

With relationship to the competence for the promotion, supervision and orientation of what would be a national policy of land use and soil and water conservation, it is known that was executed through programs of the Ministry of the Agriculture and, in spite of the reached progresses, for instance, for the National Program of Watersheds - that had success in some states of the south and southeast area in the years 70 and 80 -, this policy didn't have continuity.

The introduction of those programs was subject to the rulers' interests and ministers that occupied the past of the Agriculture and it didn't reach the creation and implantation of a national politics addressed to the administration and conservation of the soil.

CONCLUSION

Therefore, it is in the context of the interaction of the conservation of the soil with the water readiness and the viability of the multiple use of the water resources, that it is imposed the implantation of a national policy of land use and soil and water conservation, in way to avoid discontinuities in what it would be a program of government's effective actions, which can guarantee positive externalities as the increase of the readiness and improvement of the water quality, that will benefit the sections users of the water resources and the environment.

Like this, healthy extremely opportune the ransom and the valorization of the concept of conservationist and competitive agriculture associated to the protection of water and soil, that in the mat of the articulation between the administration of water resources and the administration of the use of the soil, extolled in the Law no. 9.433/97, it will guarantee the integration and the ordainment of responsibilities institutional, social and you delegate of the Ministries of the environment, of the Agriculture, of the Agrarian Development, as well as of the public and private organizations and of rural producers.

Besides, it means an important step to assist to the precepts of maintainable production, to enlarge competitive behavior in the international scope, to unblock non tariffs barriers, to make possible certification and traceability of products - assuring better quality and safety for the buyer, as well as marketing conditions in the international and national plan - and, especially, to enlarge the offer and to improve the quality of the water.

Inside of the production system, in the concept of conservationist agriculture, the farmer should consider the water not only as one of your inputs, but also as one of your products, and your appropriate handling cannot be considered an independent stage in the process of agricultural production, which integrates soil, water and it plants.

In that context, due to great interaction between water and soil and considering the effects that the use and occupation of this last one about the quality and amount of the water of the Hydrographic basin, fits to the National Plan on Water Resources to propose a strong articulation for the development of a national policy of land use and soil and water conservation, that it will contribute to define in a clear and direct way the attributions and

competences of the actions of that ambit and to make possible such necessary articulation between soil and water, foreseen in the Law 9.433/97.

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