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OUTLINE FOR THE PREPARATION

OF A

NATIONAL WATER RESOURCES LAW INVENTORY

by

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HOW TO USE THE OUTLINE

The purpose of this Outline is to assist in the preparation of country monographs intended to present a comprehensive inventory of all those norms, rules and regulations which directly or indirectly govern water resources management in the country under study.

Whereas the science and technology of water resources management has now for some decades abandoned the traditional use-oriented approach in favour of the now generally adopted integrated or resource-oriented approach, most legislations still regulate water uses on a sectoral basis and enable different government institutions to concurrently, and often competitively, administer different aspects of water resources conservation, development and utilization, as well as all sorts of water rights.

This Outline follows such a resource-oriented approach, which, itself, is based on the concept of the hydrological cycle; it is intended to produce a national water resources law inventory clearly identifying overlappings and gaps of both substance and procedure which are to be necessarily considered in reformulating an existing, or in drafting a new water legislation in line with modern water resources management techniques while fully respecting local geophysical, climatological and socio-political imperatives.

I. INTRODUCTION

The Introduction should be divided into two parts. The first should consist in a description of the geophysical and hydrological conditions of the country under study. The second part should briefly review the juridico-political history of the country with a view to underlining the essential features of relevant water resources developments and evolution of corresponding legal concepts and legislative provisions.

II. LEGISLATION IN FORCE

This section should merely contain the list of all relevant enactments presently in force and relating either directly or indirectly to water resources matters. Each enactment listed should show its full title and date of promulgation and, in the case of legislation incidental to water, possibly the relevant article or section.

In the following sections of the study, all statements should then be referred to the corresponding enactment, by means of a footnote, citing the title and appropriate section or article thereof.

III. OWNERSHIP OR OTHER JURIDICAL STATUS OF WATER RESOURCES

It is essential that the fundamental difference between the legal regime of the dominion or ownership over water resources and that of the right to use water, or water rights, be clearly identified in this and the following Section of the study.

Where relevant, two or more sub-sections may be used to cover the possible different regimes applicable to surface, flowing or diffused, atmospheric and underground waters, phreatic or contained.

Reference may usefully be made to one or more doctrinal theories in this respect such as State Control, State or Community Ownership or Prior Appropriation or to their sub-categories of Public and Private Waters as may apply to water resources in general or, separately, to surface and underground waters.

In a last sub-section, mention ought to be made to the various modes of acquiring ownership rights in water, where applicable, such as by virtue of the law in the case of land ownership as in the Riparian Doctrine, or through gift, inheritance, sale, contract or acquisitive prescription for instance. The content, extent and the application of such a legal regime to water appurtenances (river bed, embankments, etc..) should also be described.

IV. THE RIGHT TO USE WATER OR WATER RIGHTS

In a first sub-section, the modes of acquiring water rights are to be described. Where water ownership exists, it generally carries the corresponding use rights. The owner of water is also free to grant third-parties the right to use his water either freely or by contract. In certain cases, water rights are acquired by acquisitive prescription as well. Where water is either owned by, or under the control of the State, title to use water generally takes the form of an administrative deed for which prospective users are to apply.

The various water right titles, such as authorizations, permits, licenses or concessions, are to be enumerated in a second sub-section along with the general norms which govern them. Specifications as to water right titles issued for different purposes of use are however to be described in Section VI under each category of beneficial use and not here. Of particular relevance are the various terms and conditions of each category of water right title and, in particular, their duration, real or personal status, water use criteria, and modification, suspension, revocation, and forfeiture clauses, if any. General principles of application, investigation, publicity, registration and related procedures are to be mentioned along with the designation of any water title register or registers and of the agency responsible for their upkeep.

V. ORDER OF PRIORITIES

The purpose of this Section is to enumerate general priorities in water use which may be established by the basic legislation, at the exclusion of those particular priorities within the same category of use such as the regime of water turns for irrigation for instance which should rather be described within the relevant sub-section of Section VI.

One or more sub-sections are to be used here to differentiate priorities among the different types of use such as drinking over irrigation, or navigation over hydropower uses for instance; among different existing rights such as senior and junior rights in the prior appropriation system, or as public over private rights for instance; and among different areas, for instance in relation to the zoning or land use planning legislation, natural reserves, forest areas, etc..

VI. LEGISLATION ON BENEFICIAL USES OF WATER

In this Section, a comprehensive analysis should be made of all legal provisions governing the acquisition, mode, terms and conditions of water rights for each particular beneficial use. One sub-section should describe each use or type of water right, deleting or adding to the illustrative list given in the outline. It is to be noted that, in many countries, numerous legal provisions governing one particular use of water, such as for agricultural purposes, for instance, may be found in a variety of enactments other than governing agriculture.

In general, the sub-section on domestic and household uses includes drinking, limited washing, swimming, domestic, orchard and garden watering purposes, whereas that on municipal water uses includes city water supply for drinking, public places watering, public utilities,

fire-fighting and related purposes. Agricultural uses include the watering of animals. As to the sub-section on transport, it is to include navigation, floating and river-crossings at the exclusion of boating and aquatic sports which are to be described under recreational uses along with sport fishing, swimming and related touristic purposes.

VII. LEGISLATION ON HARMFUL EFFECTS OF WATER

All private and public law provisions aiming at the prevention and abatement of harmful effects of water are to be reported in this Section using appropriate sub-sections for each type of harmful effect. Mention may be made here in particular of provisions requiring the implementation of corresponding works, at the exclusion however of those provisions regulating the control and protection of waterworks and structures which are to be reported under Section X.

Whereas reference may be made to the use of water for sewerage purposes in the sub-section on municipal uses of Section VI, it is here that the detailed provisions concerning the disposal of domestic wastes by means of sewers and the regime of sewerage waterworks are to be discussed. If applicable, the regime of waste disposal right titles should be discussed in this Section as well. Legal provisions aiming at the abatement of harmful effects resulting from draught may also be considered.

VIII. LEGISLATION ON WATER USE, QUALITY AND POLLUTION CONTROL

A first sub-section should be used to describe those legislative provisions aiming at preventing the waste and misuse of water resources. As to the particular problem of re-cycling and re-using water, it should be discussed under a separate sub-section. Depending on the country under study, the treatment of water may be discussed either in the sub-section on pollution or in that covering the re-cycling and re-use of water.

The following two sub-sections have for purpose to discuss all those provisions relating to the sanitary aspects of water resources and to water pollution control. Where there is an existing water pollution control law, it should be discussed separately from health preservation or purely sanitary requirements. It may be noted in this connection that number of legislative provisions relating to sanitary water requirements are to be found in the public health, industrial or factories, municipalities, rural and food legislations for instance.

Environment protection legislation bearing on water resources should be discussed under the next sub-section.

IX. LEGISLATION ON GROUNDWATER RESOURCES USE

This Section has for purpose to discuss the legal regime of groundwater uses which in many countries is still treated separately from that of surface water uses. There should however be no reference here to groundwater resources ownership or control which is to be covered under Section III.

Different sub-sections are to be used, where relevant, to report on such legislative provisions as may govern the sinking, deepening, enlarging or repairing of underground water wells or extraction structures and equipment; on special provisions governing the licensing and qualifications of drillers, foremen or corporations; on those governing the terms and conditions, and procedures relating to both exploration and exploitation rights; and on those regulating groundwater protection, or conservation measures. Particular reference ought to be made in this latter sub-section to such activities as mining for instance which may or do interfere with the use of groundwater.

X. LEGISLATION ON THE CONTROL AND PROTECTION OF WATERWORKS AND STRUCTURES

Legislative provisions regulating the construction of all types of waterworks and, where applicable, the regime and procedures relating to construction authorizations, permits or concessions are to be discussed in a first sub-section; a second sub-section is to describe those provisions that govern the operation and maintenance of waterworks and structures. No reference should be made here to related financial aspects which are to be discussed under Section XIV.

In a third sub-section, general protection measures, including those provisions relating to the establishment of protected perimeters or areas around waterworks and structures are to be described. Reference to technical norms and criteria ought to be made whenever relevant.

XI. LEGISLATION ON THE DECLARATION OF PROTECTED ZONES OR AREAS

Whereas limited protected perimeters or areas established in connection with waterworks and structures are to be discussed in the preceding Section, legislative provisions having as purpose the declaration of water resources development or conservation zones or areas are to be described here. Different sub-sections may be used where relevant to report on the declaration of river or drainage basins and of smaller areas as development or beneficial water use control units, of temporary or permanent flood control, water shortage or other emergency areas, of water resources conservation areas or natural reserves and parks, and of pollution control zones. Where there is a general zoning or land use planning legislation, a special sub-section ought to be used.

Some of these provisions may be found in general legislation; others may be found in special legislation providing for temporary or permanent measures to apply in the case of exceptional occurrences or circumstances.

XII. GOVERNMENT WATER RESOURCES INSTITUTIONS AND ADMINISTRATION

This Section is of fundamental importance in that it should describe as concisely as possible the institutional framework and operation of the water resources administration in the country under study. Since the majority of government ministries, departments and agencies do have statutory prerogatives in water resources management which are very often not only overlapping but competitive, it is important to reflect as clearly as possible both vertical and horizontal lines of authority while separately identifying planning, policy and coordination functions on the one hand, and executive or operational functions on the other hand.

The first three sub-sections aim at describing the relevant water resources government structure at the national, intermediate and local levels in enumerating all responsible departments and agencies within each level and in showing at the same time their corresponding links from the national down to the users' levels. Each department or agency should be numbered and listed by order of importance in each sub-section and their sub-divisions giving their exact denomination, functions and powers in relation to i) water resources inventory, ii) conservation, development and utilization planning, iii) policy formulation, iv) coordination, v) project implementation, vi) waterworks operation, maintenance and control, and vii) dispute settlement. Of particular importance is the detailed description of water users' associations in the third sub-section, including their statutory functions, powers and mode of operation; wherever possible, customary institutions should be included as well whether centrally regulated or not.

In a fourth sub-section, reference should be made to any international water resources agreement and corresponding institutional arrangements. This sub-section should be brief but ought, wherever relevant, to clearly indicate functional links between the international and the national administrative frameworks.

Here again, no reference ought to be made to financial aspects which are to be reported on in Section XIV.

XIII. SPECIAL AND AUTONOMOUS WATER RESOURCES DEVELOPMENT AGENCIES

Any agency, corporation or other body dealing with water resources as para-governmental or autonomous institution is to be reported on in this Section giving its full designation, juridical status, functions and powers, mode of operation, financial aspects and links with the government water resources administration, if any. Different sub-sections are to be used in listing special and autonomous water resources development agencies at the national, regional or basin, project and users' levels.

XIV. LEGISLATION ON WATER RESOURCES DEVELOPMENT FINANCING

This Section has for purpose to give a comprehensive coverage of all those provisions which directly or indirectly relate to the financial aspects of water resources conservation, development and utilization.

Two sub-sections should be used to describe first direct and indirect government financing, including loans, grants and subsidies, and reimbursement policies and procedures; and, secondly, to describe the overall system or systems of water rates and charges together with relevant procedures, criteria for assessment and collection and modes of operation. It is important in this connection to carefully differentiate among water pricing in which water, as a commodity, is given a commercial value, and those systems according to which it is not the water itself but the service of making water available that is charged, usually in one way or another proportionately to the beneficial use made thereof, or of any other system adopted.

XV. WATER LAW IMPLEMENTATION

The purpose of this Section is to describe those legal provisions aiming at ensuring the due exercise and protection of water rights and to report on the corresponding judicial organization.

A first sub-section should be used to describe those legal provisions intended for the protection of water rights (such as rules of neighbourliness in the case of private waters) and as the terms and conditions of water use authorizations, permits and concessions, or other administrative regulations, in the case of public waters for instance.

In a second sub-section, modalities and procedures for the modification, suspension, termination, forfeiture or re-allocation of individual or collective water rights are to be discussed.

The judicial organization for water rights administration is to be dealt with in a third sub-section. Where applicable, a clear distinction ought to be made between special water tribunals or courts, the judicial powers of the competent administrative authorities of the government, and the regular courts of law. Special mention should also be made of customary water procedures and institutions for the settlement of disputes where these exist.

Finally, a fourth sub-section is to be used to give an indicative, or illustrative list of those penalties, both civil or administrative, and penal, which apply in the case of infringements to the provisions of the water and related legislation.

XVI. CUSTOMARY WATER LAW AND INSTITUTIONS

In countries wherein only customary law applies to water resources matters, or wherein customary law is kept in force for particular population groups or within particular areas in parallel with codified legislation, this Section should be used either instead or in addition to the fifteen first Sections of this Outline.

Various sub-sections are then to be used to report separately on the legal regime of water resources and of water rights; on water resources management institutions and practices together with, where required, on relationships between these and the central government administration; on the financial aspects of water resources development and use, with particular reference to water rates and charges or their equivalent; on the procedures for the settlement of water disputes; and on how the provisions of customary water law are implemented.

