

Wakal River Basin, India

Integrated Water Resource Management



Assessment Report

Anil Mehta



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Integrated Water Resource Management Assessment Report: Wakal River Basin, India

The Enabling Environment (Water Related Policies, Laws and Institutional Mechanism)

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About GLOWS

The Global Water for Sustainability (GLOWS) program is a consortium financed by the United States Agency for International Development (USAID) working to increase social, economic, and environmental benefits to people through clean water, healthy aquatic ecosystems and sustainable water resources management. Launched in early 2005, GLOWS works on-the-ground to implement improved practices, build local capacity through multi-level training activities, and share lessons learned and advancements in the practice of Integrated Water Resources Management.

Because water resources touch so many elements of human systems and ecosystems, management must be integrated across water use sectors, across scales of governance, across space in a river basin context, and across time. Many current water problems stem from the fragmented, single-issue and single-sector approaches that have characterized water resources management in the past. GLOWS works to integrate the environmental, technical, governmental, and management elements of IWRM. The basic goal is to manage the human and environmental elements of IWRM to ensure that abundant quantities of sufficiently clean freshwater are available in the correct place at the correct time. This requires a governance and management system that integrates science-based understanding of the natural controls on water abundance and quality with appropriate and effective human technologies and actions.

Working at a basin, watershed or aquifer scale, the GLOWS partner organizations provide expertise across the policy, governance, institutional, educational, and technical dimensions of IWRM. Approaches combine advanced analytical techniques, innovative mechanisms for sustainable resource management and biodiversity conservation, community-based programs in poverty alleviation, improved sanitation and potable water supply, and global networking of local NGOs to achieve IWRM objectives.

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FOREWORD

The Wakal River originates northwest of Udaipur near Sran village. The river flows in a generally south direction up to Manpur village in Udaipur district, where it turns northeast and after a distance of about 90km leaves Rajasthan near the Gaupipli village and joins Sabarmati River near Eitarwar village in Gujrat. The catchments in Rajasthan is situated in Udaipur district between latitudes 24°0' and 24°52' and longitudes 73°4' and 73°36' and covers 1688.82 km². The main tributaries of Wakal are Mansi and Parvi rivers. The total length of the basin is 71.77 Km whereas the maximum width is 44.67 km. The Wakal River Basin is most water-stressed regions with diverse water related problems; and as such there is an urgent need of implement the IWRM strategy in this basin.

In an effort to encourage a move towards more sustainable approaches to water development and management, the World Summit on Sustainable Development (WSSD) in 2002 called for all countries to craft IWRM and water efficiency strategies, such as reducing poverty, increasing food security, fostering economic growth, protecting ecosystems, Tackle specific water challenges, such as controlling flooding, mitigating the effects of drought, expanding access to water and sanitation, and addressing increasing competition for water and water scarcity.

To implement IWRM the first and foremost requirement is the enabling environment i.e. policy and legislative framework and institutional mechanism. This document compiles, analyse and evaluate various policies, legislations and notifications related to water in India, State of Rajasthan in general and Wakal sub basin in particular.

The IWRM tools and other related material provided by Global Water Partnership and CapNet are extensively used in developing this report. An extensive survey was carried out in the months of February and March 2008 in 19 representative villages of Wakal Sub basin; besides, formal and informal discussions were held with representatives of few prominent NGOs working in Wakal basin. The analysis of survey and results would establish a strong foundation for any IWRM strategy to be implemented in Wakal basin.

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(Anil Mehta)

EXECUTIVE SUMMARY

1. IWRM in Wakal Basin

To implement IWRM in the Wakal basin ,the first and foremost requirement is the enabling environment i.e. a policy and legislative framework and institutional mechanism . IWRM has been defined by GWP as `a process which promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital eco-systems' . An IWRM approach promotes the coordinated development and management of water, land, and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.; This includes more coordinated development and management of land and water, surface water and groundwater, the river basin and its adjacent environment, upstream and downstream interests. IWRM is also about reforming and capacity building human systems to enable people to benefit from those resources.

2. Enabling Environment

A proper enabling environment ensures the rights and assets of all stakeholders are safeguarded and environment is protected. Basically the enabling environment is determined by national, state level and local level policies and legislations. An enabling framework ensure participation of all stakeholders in the development and management of water resources, enhancing access to water, in bringing about a balance between conservation and development, and in treating water as a social and economic good.

3. IWRM Survey in Wakal Basin

To know and check the awareness and understanding of stakeholders and assess the effect and impact of various water related policies, legislations and acts as well as concerned participation of women, young people in water related issues, an extensive survey was conducted across the length and breadth of the Wakal basin covering nineteen representative villages. The respondents were from all walks of life and included 25% women; and 40% young people of the age group of 20 to 30.

4. Policies, Legislative and Constitutional Provisions

Water in Indian Constitution:

The constitutional provisions in respect of allocation of responsibilities between the State and Centre fall into three categories: The Union List (List-I), the State List (List-II) and the Concurrent List (List-III). The Forty Second Amendment to the Constitution in 1976 underscored the importance of 'green thinking'. Article 48A enjoins the state to protect and improve the environment and safeguard the forests and wildlife in the country. Further, Article 51A(g) states that the "fundamental duty of every citizen is to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures". Article 246, Article 262 of the Constitution deals with subject matter of laws to be made by the Parliament and by Legislature of the States. As most of the rivers in the country are inter-State, the regulation and development of waters of these rivers, is a source of inter-State differences and disputes. In the Constitution, water is a matter included in Entry 17 of List-II i.e. State List. This entry is subject to the provision of Entry 56 of List-I i.e. Union List.

Policies:

Policies are the framework within which water resources are managed, and thus a framework within which to develop an IWRM approach. Policy formulation is a core government role. Since water is at the core of every development, the issue of water is addressed in various other policies also. National and state water policies set goals and objectives for the management of water resources and include provisions for regions, catchments, shared or transboundary water resources, and cover issues like maximizing water availability, project planning, institutional reforms, participation of water users, inter-basin transfers etc. They address the quantity and quality aspects of both surface and groundwater resources and also deals with delivery of water services. The national and state level water and other policies which are applicable on wakal basin are as follows :-

- **The National Water Policy, 2002:** It contains provisions for developing, conserving, sustainable utilizing, governing and managing important water resources with national perspectives. The NWP recognize the need of IWRM in the preamble of the policy itself.
- **State Water Policy of Rajasthan:** The state water policy of Rajasthan(1999) is under revision. The policy is framed on the lines of NWP with the state perspective. The policy has sketchy reference on an integrated and multi-

disciplinary approach to planning, evaluation, approval and implementation of irrigation and drainage projects, including river basin management, of surface and ground water . The policy emphasize on promoting beneficiaries' participation in all aspects of water planning and management.

- **National Environment' Policy, 2004:** The National Environment Policy addresses the issue of water in detail. The policy recognize water as invaluable natural resource and give various action plans for integrated management of this resource. The policy states that the State is not an absolute owner, but merely a trustee of all natural resources, which are by nature meant for public use and enjoyment, subject to reasonable conditions, necessary to protect the legitimate interest of a large number of people, or for matters of strategic national interest.
- **National Women Policy:** The advancement, development and empowerment of women is of highest importance in achieving the IWRM. The National women policy specifically address the issue of women's health in the context of water . The policy recognize the role and importance of women and ensure their effective participation in all water related development activities.
- **National Forest Policy, 1988:** This policy is aimed towards maintenance of environmental stability through preservation and restoration of the ecological balance and conserving the natural heritage of the country by preserving the remaining natural forests and Checking soil erosion and denudation in the catchment areas of rivers, lakes, reservoirs in the "interest of soil and water conservation, for mitigating floods and droughts and for the retardation of siltation of reservoirs.
- **The National Tribal Policy:** The demographic composition of Wakal basin is dominated by Scheduled tribes. Government of India has drafted a national tribal policy aimed at providing an enabling framework for the tribal people to progress, develop while retaining the best elements of their tradition, cultural life and ethos. The policy states that access to health care services, safe drinking water and improved sanitation will be ensured. The Government will Endeavour to improve health, drinking water supply, hygiene and sanitation by Improving overall awareness about health, hygiene and improved sanitation among tribal community and empowering them to plan, implement, operate and maintain their own water supply and sanitation systems. Encouraging rainwater harvesting and developing gravity-based small water

supply systems, which are easy to operate and maintain by the local tribal community at low O&M cost for assured availability of safe drinking water throughout the year in all tribal habitations.

Legislative Framework

Water policy translated into laws and acts by various legislations and create a framework for protection, conservation and management of water resources. Such laws and acts are framed to clarify the role, entitlement and responsibilities of users and water providers, state vis-à-vis other stakeholders; formalize the process of transfer of water allocations; Provide legal status for various water user groups; and ensure sustainability of the resource.

a) National Laws And Acts :-

I. The Inter State Water Dispute Act 1956:- Wakel basin is sub basin of Sabarmati river which flows in two states viz. Rajasthan and Gujrat. This is an act provided for the adjudication of disputes relating to waters of inter-State rivers and river valleys.

II. The River Boards Act 1956

:-

This is an act provided for the establishment of river boards for regulation of inter state rivers and river valleys. As per this act the central Government can take under its control the development and regulation of inter state rivers.

III. Environment and Provisions of Indian Penal Code:-

Provisions relating to offences related to the environment and affecting the public health, safety, convenience, decency and morals (public nuisance) contemplated in the Indian Penal Code (IPC) and are applicable on Wakal basin as such. The provisions of Sections 120A and 120B IPC are also relevant in the context of water. The other important offences are fouling water of public spring or reservoir (Sec. 277), making atmosphere noxious to health (Sec. 278), acts endangering life or personal safety of others (Secs. 336 to 338), mischief by injury to works of irrigation or by wrongly diverting water (Section 430), mischief by injury to public road, bridge, river or channel (Section 431), mischief by causing inundation or obstruction with the public drainage, attended with damage (Section 432), The Code of Criminal Procedure dealing with maintenance of public order and tranquility has relevance to the subject of environment by virtue of Section 10(4) of the present Environment Act.

IV. Environment (Protection) Act, 1986 :- Environment (Protection) Act, 1986 has a broad coverage in which 'Environment' includes **water**, air and land and there exists an interrelationship among water, air, land, human beings and other creatures. It empowers to take measures in protecting and improving the quality of the environment through preventing, controlling and abating environmental pollution.

V. The Water (Prevention and Control of Pollution) Act, 1974

The Water (Prevention and Control of Pollution) Act, 1974 is an "Act to provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water.

VI. Water Cess Act, 1977 was adopted to strengthen the Pollution control Boards financially, to promote water conservation. This Act empowers the Central Government to impose a **Cess** on water abstracted from natural resources by industries and local authorities.

VII. The Forest (Conservation) Act, 1980 and rules 2003.

Wakal basin is full of forest as on today (%) and therefore this valuable natural resources must be protected at any cost. The draft National Forest Policy of 1988 pays significant concern on protection and preservation of water bodies. The forest (conservation) act, 1980 and rules 2003 are enacted with the purpose of the conservation of forests and for matters connected therewith or ancillary or incidental thereto.

VIII. The Biological Diversity act, 2002 and rules 2004:-

Water is of prime importance for sustenance of biological diversity. There is an act to provide for conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of biological resources.

IX. The Scheduled Tribes (Recognition of Forest Rights) Bill, 2005 :-

This is a BILL to recognize and vest the forest rights and occupation in forest land in forest dwelling Scheduled Tribes who have been residing in such forests for generations but whose rights could not be recorded; to provide for a framework for recording the forest rights so vested and the nature of evidence required for such recognition and vesting in respect of forest land. It has special significance as Wakal Basin is predominantly a Tribal.

b) State Laws and Acts:

I. Rajasthan Irrigation and Drainage Act, 1954 and Rules :-The act provide the detailed provisions for regulating and controlling the irrigation and drainage activities other then minor irrigation activities.

II. The Rajasthan Minor Irrigation Works Act., 1953 and Rules 1956:-This is an Act to provide for the construction. improvement and maintenance of minor irrigation works in the State of Rajasthan. The rules are applicable to the minor irrigation works like Construction of small Bunds and Nadas; Construction and improvement of water-courses, whether defined artificial channels or natural channel; Construction of masonry wells; Conversion of Kham wells into masonry wells;Construction of Kham wells; Improvement of masonry wells which are out of use and the lands whereunder have been classed as Barani during the current settlement; and Boring of wells.

III. Panchayat Raj Act 1994 :- This act leads towards village governance and establish the bottom up approach. There is three tier system in all village development and governance activities ,and village . This act leads towards village governance and establish the bottom up approach. Various institutions established under this act are Panchayat, Panchayat Samiti,and Zila Parishad.

IV. The Rajasthan Soil and Water Conservation Act, 1964 :- An Act to provide for the conservation and improvement of soil and water resources in the State of Rajasthan

V. Farmers Participation in Management of Irrigation Systems act 2000.

This is an act to provide for farmers participation in the way of farmers organisation for the management of irrigation system. The Farmers' Organisation is to promote and secure distribution of water among its users, adequate maintenance of the irrigation system, efficient and economical utilization of water to optimize agricultural production, to protect the environment, and to ensure ecological balance by involving the farmers, including a sense of ownership of the irrigation system in accordance with the water budget and the operational plan.

VI. Other Important Acts :- Fisheries Act, Rajasthan Forest Act,1953 and Rajasthan Land Revenue Act, Section 173.

VII. Draft acts :- Draft act on Drinking water and sanitation, Draft bill for regulation and control of ground water .

5. Concerns of High court and Supreme Court: The Supreme court of India and the Rajasthan High court have passed various directions for the protection and conservation of water resources. They are regarding Environment and Education, Environment and Sustainable Development (Principles of "Polluter Pays" and "Precautionary Principle"), Preventive measures to check water pollution, - Water Pollution - Mining Operations - Need to Develop Green Belt and On encroachments and pollution of rivers and lakes and restoration of their their catchments. The directions are applicable in Wakal basin as well.

6. Recommendation on Policies and Legislations: There are various laws and acts related to water at the level of state and the country. The different I W R M principles and strategies are addressed in piecemeal in different policies and there is no cross sectoral integration and coordination. There is need of integrated policy on water supported by the unified legislation. Our survey in Wakal Basin shows that people at large, including elected representatives' officials and NGOs , are not educated on policies and laws, there is no dissemination on this. There are various types of conflicts and participation of women and youth is meager. The recommendations are as follows:

- a) The policy must clearly suggest and spell the role, rights and obligations of local tribal and other communities in planning, development and management of water resources.
- b) Take Holistic View of Water as Resource to ensure efficient, equitable and sustainable supply of water to the citizens within a given time frame.
- c) There should be cross sectoral coordination and linking with other national plans and strategies like environment policy, forest policy, women policy, tribal policy etc and with the respective ministries.
- d) To be integrated, water policies must mesh with overall national economic policy and related national sectoral policies
- e) The policy should clarify the roles of Governments and other stakeholders in achieving overall goals and specially the role of Government as regulator ,an organizer of the participatory process and, as a last resort, adjudicator in the cases of conflict.
- f) River Basins should be the basic unit of Water Resource Planning: This new approach based on river basin as the unit ensure sustainable development and management of water resources. For implementation, a river basin plan could be disaggregated into watershed development plans,

which may further be disaggregated into district/block level plans co-terminus with the existing administrative boundaries..

- g)** If the community has to play an important role, the policies and programmes should generate a sense of ownership; and community should be mobilized and involve right from the inception of any water sector activity and eventually, the collaborative arrangements should be institutionalized.
- h)** Land use and other activities should be explicitly linked in the water policies. Most successful schemes of equitable sharing of water have started with the concept of water resource as a common pool resource and household's entitlement for water for irrigation and drinking purposes on some equitable principles.
- i)** We ought to have an holistic view on the availability of water which should take the river basin as the primary unit. This would imply not only fresh administrative arrangements for basin level planning, but will also involve devolution of adequate technical and financial resources of the state to the basin level organizations
- j)** It is very necessary to increase capacity building of PRI,s by providing training programmes.
- k)** The water use associations and Lift committees need to be strengthened and participation of all stakeholders should be ensured. There is a multiplicity of laws covering various aspects of irrigation management and administration resulting in inefficiency of administration through multiple authorities. For efficient administration the existing irrigation laws of state be consolidated into one statute to avoid multiplicity, and the acts/provisions which have become irrelevant should be deleted.
- l)** Other wise There are various laws and acts on water and therefor an integrated water law should be prepared considering basin as the basic unit and territory. The Integrated water Law should be socially acceptable and administratively feasible. The close links between land use and water availability and quality should be reflected in water law..
- m)** The 'ownership' should not vest in government but it should be declared as the property of the people of the state.
- n)** The law should include the important Key factors like transparency in water allocation and rights to reduce potential social unrest;
- o)** Preventive and corrective measures to protect the quality of water resources should be encoded in legislation.

- p) Some of the existing laws or some of their provisions have outlived their utility and are outdated. They must be repealed or amended suitably.
- q) There is strong need to develop enforceable rules for regulating extraction of ground water by tube wells.

7. Departments/Agencies on Water

The state water sector is managed by a large number of departments, each with its own program, 'territory' and mandate; Every department has its state level, division level, district level and block level offices.

- a) **Irrigation Department:** The main activities include survey, investigation, design and planning of surface water schemes, hydrological and meteorological studies, optimal utilization of available surface water by construction of major, medium, and minor irrigation schemes and, flood control measures;
- b) **Ground Water Department:** The main activities include planning, .
 .
 development, exploitation, exploration and utilization of groundwater resources. It also conducts periodic surveys of available groundwater supplies in different blocks.
- c) **Watershed Development Department:** It is responsible for construction of .
 .
 water harvesting structures such as anicuts, bunds etc, and also for management of catchment area.
- d) **Public Health Engineering Department:** This department is responsible for .
 .
 planning and execution of drinking water supply schemes for urban and rural areas. Surface and ground water is used as per availability in a particular area and supplemented, when necessary, by outside sources. This is a major consumer of available surface and ground water resources.
- e) **Water Pollution Control Board:** It is responsible for controlling pollution of .
 .
 land and water resources.
- f) **Panchayat Raj Institution Bodies** -Gram Panchayats, Panchayat Samities, Jila Parishad
- g) **NGOs**

8. Present Institutional Arrangement

- a) **State Water Resources Planning Department (SWRPD)** :-The Government of Rajasthan has established a separate department for integrated water resources development in the state on these lines in March 2005.

- b) State Water Resources Council (SWRC):-** This Council was constituted in August 1994 under the Chairmanship of the Chief Minister of the state with Irrigation Minister as its Vice-Chairman. Ministers and Secretaries of different water related Departments are its members. Its role is to approve multi-sectoral strategies and policies for integrated and sustainable water resources development in the state. It has neither regular meetings nor a fixed, time-bound agenda.
- c) Rajiv Gandhi Water Management Mission:** -It was constituted in July 2001. It is also chaired by the state Chief Minister. Ministers and secretaries of different water related departments are its members. Four renowned subject matter specialists are also included as members of the Mission. The main objective of the Mission is to prepare schemes for utilization of all surface and ground water in accordance with the State Water Policy in a co-ordinated fashion and with a multi-disciplinary approach.
- d) Standing Committee on State's Water Resources:** This was constituted in February 1993 with the Chief Secretary as its Chairman. It was reconstituted and strengthened in May 2000 with the Irrigation Minister as its Chairman. The objectives of this Committee are integrated water resources development, planning and utilization, with active involvement of beneficiaries, stakeholders and society.
- e) District Level Water Distribution Committee:** These were constituted in June 1993 for co-ordinated water use planning at the district level. Concerned Divisional Commissioner chairs this Committee for major and medium irrigation projects covering two or more districts. The District Collector is the Chairman where projects cover only one district. The Sub Divisional Officer is the Chairman for minor irrigation projects. The committee has neither the clout nor the expertise and a representative character to implement its mandate.
- f) Sub-Committee for Water Harvesting Structures:** This Committee with Secretary, Irrigation as Chairman was constituted in June 2000. Its objective is to plan and implement the watershed development and water conservation schemes for ground water recharge in accordance with the principles of the State Water Policy. It is basically a departmental committee with limited functions.
- g) District Level Committee for Water Conservation:** This Committee with Superintending Engineer, Irrigation, as Convener, was formed in July 2000 for implementing water conservation and harvesting schemes at panchayat

levels. None of these committees, many of which were organized more than a decade ago, has any record of achievement worth noting.

- h) In addition to the above, other committees, working groups, task forces, etc at state, district and panchayat levels also deal with water-related issues.

9. Suggestions on Institutional Mechanisms

Many activities of these departments, agencies and institutions overlap, and sometimes clash with each other. At present there is no effective linkage between these departments, resulting in an absence of a co-ordinated approach to development and management of water resources. The existing institutional arrangement has an inherent conflict of interest among different water-providers and water-users, as there are no well defined objectives or set of priorities.

Proposed Institutional Mechanism

- **Apex and Sub-Apex Bodies:** Apex bodies consist of a range of entities such as high-level steering groups within state and national governments, inter-agency task forces (for specific purposes, e.g. water pollution control), and international consortia for the management of water resources. For an apex body to function effectively, all the stakeholders who are involved in the functions under its jurisdiction need to develop commitment to it and ensure it has appropriate powers. Conflict management and awareness raising techniques are important here.
- **Establishing a steering group:** Putting together an inter-ministerial steering group-preferably supported by a management team of qualified professionals-can help create joint ownership of the strategy across sectors and successful implementation of IWRM principles.
- **Distribution of roles and responsibilities across levels of government:** The I W R M strategy must be well anchored at various levels of government (central, regional, local) and in the community at large to avoid disruption from change of government or departure of key personnel. This can be achieved through the selection of the steering and management groups and through facilitating organizations, such as NGOs.
- **Administrative Structure:** There is a clear need for a high-level State Water Council to oversee the whole sector from a wider perspective, ensuring efficiency and equity. The foundation of the administrative structure of the entire water sector should be Water Users Associations at village level, block

level, district level and river basin There should be an effective middle level..

tier institution between WUAs, PRIs and the concerned state departments.

- **Need for Water Regulatory Authority:** Establishment of a Water Regulatory Agency can be a step in the direction that is likely to contribute to progressive approximation of the cost of water when it is used as an economic good, as in irrigation. The fact that such a regulatory body is already proposed in Maharashtra should give greater support to the idea in Rajasthan. The scope of activities of such an Authority should be enlarged to include settling the inter-basin disputes relating to water delivery and development. Its organisation could be modeled after the existing Power Regulatory Authority. Its total independence from the government of the day, however, must always be ensured.
- **Core stakeholders to be included:**
 - a) Government Ministries and related organizations/departments involved in development planning and policy making, domestic water supply and sanitation, irrigation, agriculture, energy, health, industry, transport, fisheries and tourism
 - b) Local communities and community-based organizations. (Sarpanchs, Pradhan, religious leaders etc)
 - c) The private sector, including but not limited to water supply and sanitation service providers
 - d) Financial agencies (e.g. donor agencies, international banks, micro-credit institutions)
 - e) Sectoral interest groups such as farmers and fishermen.
 - f) Women's groups and associations
 - g) Representatives of indigenous communities
 - h) Non-government organizations
 - i) Media representatives
 - j) Research and training institutions, including Universities
- **River basin organizations:** Basin organizations deal with the water resource management issues in a river basin, a lake basin, or across an important aquifer. They can be useful in transcending administrative divisions within countries as well as national boundaries. Basin organizations provide a mechanism for ensuring that land use and needs are reflected in water management-and vice versa. Their functions range from water allocation, resource management and planning; to education of basin communities; to

developing natural resources management strategies and programs of remediation of degraded lands. They may also play a role in consensus building, facilitation, and conflict management. Basin-level organizations should be created with well-defined functions and adequate technical and financial resources.

The main functions of RBOs will be collection of data and development of basin-level information system, and planning, co-ordination and monitoring of the basin level projects. RBOs should be formed by restructuring field offices of the water-related departments, especially irrigation and PHE departments. An advisory committee composed of the representatives of the political leadership, PRIs, urban local self-government bodies, and NGOs should be constituted to guide RBOs. Proper representation of women, SC and ST members and other disadvantaged groups must be ensured in RBOs.

River basin organizations, if successful, can ensure integrated management across sectoral and administrative lines. River basin or catchment agencies can also serve as linking mechanisms between national planning and more local decision-making. . At the WUA level, i e within the village or a small number of villages. There is a greater likelihood of inter-personal conflicts. At the higher tier of RBOs, Panchayat Samiti people will be involved and greater objectivity could be expected.

a) Key characteristics of effective river basin management organizations:

1. An ability to establish trusted technical competencies;
2. A focus on serious recurrent problems such as flooding or drought or supply shortages, and the provision of solutions acceptable to all stakeholders;
3. Broad stakeholder involvement, catering for grassroots participation at a basin-wide level (e.g. through water forums);
4. The capacity to collect fees, and attract grants and/or loans;
5. Clear jurisdictional boundaries and appropriate powers.

b) Encouraging meaningful participation: Communication and dissemination activities should help all stakeholder groups to construct a realistic picture of water resource use and management, and ensure all are up-to-date on how they can contribute and how their contri-

butions will be used. Communication among stakeholders must be two-way and be "bottom up" as well as "top down."

An associated "participatory platform" entailing a wide range of forums-informal meetings, workshops, consultation processes, public meetings, focus group interviews, policy dialogues, round tables, and media events-can help different groups meaningfully contribute to the I W R M development process. Such a platform should encourage a continuous refining of aims, objectives, and activities. Ideally the platform should be perceived generally as the appropriate and logical forum for any matter concerning the management of water resources. Strategies are much more likely to achieve their objectives if women are active participants and decision-makers.

- **Mechanism for Negotiation and conflict management:** Mechanisms for negotiation and managing conflict are an important ingredient. Much of integrated water resources management is essentially conflict management. It is ultimately Government's role to sort out potential conflicts at the strategy formulation phase. While these measures will reduce the numbers of conflicts that emerge at later implementation stages, they will not eliminate them. Thus, it will normally be necessary to set up some formal process for conflict resolution on an ongoing basis.

ABBREVIATIONS

IWRM	Integrated Water Resource Management
GWP	Global Water Partnership
RBO	River Basin Organization
ST	Schedule Tribe
SC	Schedule Cast
PRI	Panchayati Raj Institution
WUA	Water Use Association
NGO	Non Governmental Organization

1. Integrated Water Resources Management (IWRM)

1.1 Concepts:

Water is a critical element in sustainable development. Water is not only the most basic of needs but is also at the centre of sustainable development and is essential for poverty eradication. Water is intimately linked to health, agriculture, energy and biodiversity. There is strong need to be able to ensure reliable and readily accessible supplies of unpolluted water in order to improve health conditions reduce childhood mortality, advance the status of women; increase the agricultural production. Water is a key ingredient in generating rural livelihoods, growing food, producing energy, encouraging industrial and service sector growth, and ensuring the integrity of ecosystems and the goods and services they provide. At the same time water also poses its own development challenges-floods, droughts, and water-related diseases can have a huge impact on communities and indeed on state and national economies.

An IWRM approach promotes the coordinated development and management of water, land, and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.; This includes more coordinated development and management of land and water, surface water and groundwater, the river basin and its adjacent environment, upstream and downstream interests. IWRM is also about reforming human systems to enable people to benefit from those resources.

1.2 Basics of IWRM: Dublin principles

There are no fix set of IWRM "rules". The approach is founded on the Dublin principles, which assert that:

1. **Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment** - Since water sustains life; effective management of water resources demands a holistic approach, linking social and economic development with protection of natural ecosystems. Effective management links land and water uses across the whole of a catchments area or groundwater aquifer.
2. **Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels** - The participatory approach involves raising awareness of the importance of water among policy-makers and the general public. It means that decisions are taken at the lowest

appropriate level, with full public consultation and involvement of users in the planning and implementation of water projects.

3. Women play a central part in the provision, management and safeguarding of water - This pivotal role of women as providers and users of water and guardians of the living environment has seldom been reflected in institutional arrangements for the development and management of water resources. Acceptance and implementation of this principle requires positive policies to address women's specific needs and to equip and empower women to participate at all levels in water resources programs, including decision-making and implementation, in ways defined by them.

4. Water has an economic value in all its competing uses and should be recognized as an economic good - Within this principle, it is vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price. Past failure to recognize the economic value of water has led to wasteful and environmentally damaging uses of the resource. Managing water as an economic good is an important way of achieving efficient and equitable use, and of encouraging conservation and protection of water resources.

1.3 Why IWRM?

If effective, long lasting solutions to water problems are to be found, a new water governance and management paradigm is required. Such a new paradigm is encapsulated in the IWRM concept, which has been defined by GWP as 'a process which promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital eco-systems' (GWP Technical Advisory Committee 2000).

1.3.1 IWRM as a tool for change

An IWRM approach requires positive change-in the enabling environment, in institutional roles, and in management instruments. A proper enabling environment ensures the rights and assets of all stakeholders are safeguarded and environment is protected. Basically the enabling environment is determined by national, state level and local level policies and legislation that constitute the "rules of the game" and enable all stakeholders to play their respective roles in the development and management of water resources. In order to achieve efficient, equitable and sustainable water management within the IWRM approach, major institutional change is needed. Both top-down and bottom-up participation of all stakeholders

needs to be promoted from the national-level down to the catchments or watershed level. Decision-making should be governed by the principle of subsidiarity, which drives down action to the lowest appropriate level.

In addition to government agencies and private companies, water development and management should involve NGOs, community-based organizations that have full participation of women and disadvantaged groups, and other sections of civil society. All these organizations and agencies have an important role to play in enhancing access to water, in bringing about a balance between conservation and development, and in treating water as a social and economic good.

1.4 The Key IWRM Change Areas

1.4.1 The enabling environment

1. Policies - setting goals for water use, protection and conservation.
2. Legislative framework - the rules to follow to achieve policies and goals.
3. Financing and incentive structures - allocating financial resources to meet water needs.

1.4.2 Institutional roles

4. Creating an organizational framework - forms and functions.
5. Institutional capacity building - developing human resources. Management instruments

1.4.3 Management Instruments

6. Water resources assessment - understanding resources and needs.
7. Plans for IWRM - combining development options, resource use and human interaction.
8. Demand management - using water more efficiently.
9. Social change instruments - encouraging a water-oriented civil society.
10. Conflict resolution - managing disputes, ensuring sharing of water.
11. Regulatory instruments - allocation and water use limits.
12. Economic instruments - using value and prices for efficiency and equity.
13. Information management and exchange- improving knowledge for better water management

1.4.4 BOX 1: IWRM TOOL BOX

A THE ENABLING ENVIRONMENT

A1 Policies - setting goals for water use, protection and conservation.

A group of tools in the Toolbox deal with water policies and their development. Policy development gives an opportunity for setting national objectives for managing water resources and water service delivery within a framework of overall development objectives.

A2 Legislative framework - the rules to follow to achieve policies and goals.

The Toolbox includes tools for use in the development of water law. Water law covers the ownership of water, the permits to use (or pollute) it, the transferability of those permits, and customary entitlements and underpin regulatory norms for e.g. conservation, protection, and priorities.

A3 Financing and incentive structures - allocating financial resources to meet water needs.

The financing needs of the water sector are huge, water projects tend to be indivisible and capital-intensive, and many countries have major backlogs in developing water infrastructure. The Toolbox has a group of financing and incentive tools.

B INSTITUTIONAL ROLES

B1 Creating an organizational framework - forms and functions.

Starting from the concept of reform of institutions for better water governance, the Toolbox can help the practitioner create the needed organizations and institutions- from trans-boundary organizations and agreements, basin organizations, regulatory bodies, to local authorities, civil society organizations and partnerships.

B2 Institutional capacity building - developing human resources.

The Toolbox includes tools for upgrading the skills and understanding of public decision- makers. Water managers and professionals, for regulatory bodies and capacity building for empowerment of civil society groups.

C MANAGEMENT INSTRUMENTS

C1 Water resources assessment - understanding resources and needs.

A set of tools are assembled to assist water resources assessment. Assessment starts with the collection of hydrological, physiographic, demographic and socio-economic data, and setting up systems for routine data assembly and reporting.

C2 Plans for IWRM - combining development options, resource use and human interaction. Tools are available for river and lake basin planning entailing the comprehensive assembly and modeling of data from all relevant domains. The planning should recognize the need for parallel action plans for development of the management structures.

C3 Demand management - using water more efficiently.

Demand management involves a set of tools for balancing supply and demand focusing on the better use of existing water withdrawals or reducing excessive use rather than developing new supplies.

C4 Social change instruments - encouraging a water-oriented civil society.

Information is a powerful tool for changing behavior in the water world, through school curricula, university water courses and professional and mid-career training. Transparency and product labelling are other key aspects.

C5 Conflict resolution - managing disputes, ensuring sharing of water.

Conflict management has a separate compartment in the Toolbox since conflict is endemic in the management of water in many countries and several resolution models are described

C6 Regulatory instruments - allocation and water use limits.

A set of tools on regulation is included covering water quality, service provision, land use and water resource protection. Regulations are key for implementing plans and policies and can fruitfully be combined with economic instruments.

C7 Economic instruments - using value and prices for efficiency and equity.

The Toolbox holds a set of economic tools involving the use of prices and other market-based measures to provide incentives to consumers and to all water users to use water carefully, efficiently and avoid pollution

C8 Information management and exchange- improving knowledge for better water management.

Data sharing methods and technologies increase stakeholder access to information stored in public domain data banks and effectively complement more traditional methods of public information

2 IWRM SURVEY IN WAKAL BASIN

2.1 Methodology

To know and check the awareness and understanding of stakeholders and assess the effect and impact of various water related policies, legislations and acts as well as concerned participation of women, young people in water related issues, an extensive survey was conducted in nineteen representative villages of wakal sub basin. A detailed, but simple to understand, questionnaire was developed and surveyors (local youth, after initial briefing) were sent to these villages. The composition of respondents include cross section of the society including women, youth, NGOs, elected representatives, farmers, landless labors, government employees, minorities, police personnel's, teachers etc.

2.2 Questionnaire and Responses

The first part of the questionnaire was related to the general information of the area like name of river, water projects, water related schemes running in the village ,the sources of water for drinking, irrigation, live stock ; sanitation facilities etc. The questionnaire contained following specific queries with relevant multiple answer choices.

Questions	Responses
1. Can Encroachments in the rivers, lakes be stopped by legal provisions?	No/Not aware (66%)
2. Is there any committee of villagers for management and execution of watershed development projects?	No/Not aware (75%)
3. Is there any intravillage committee for catchments management?	No/Not aware (85%)
4. Name the NGOs working in your village.	No/Not aware (57%)
5. Do NGOs involve villagers in there project activities.	No/Not aware (70%)
6. Who is the owner of surface and ground water?	Govt. (32%), Panchayat(27%) (27%), Village Community (15%),

7. Are there any provisions related to water in the constitution

No/Not aware

of India.	(71%)
8. Have you ever heard / (do you know) about the tribal policy of Government of India.	No/Not aware (63%)
9. Have you ever heard/(do you know) about the Women policy	No/Not aware (65%)
10. Have you ever heard / (do you know) about the pollution control board.	No/Not aware (58%)
11. Do you have any knowledge of Farmers participation in management of irrigation systems act?	No/Not aware (76%)
12. Are you satisfied with the policies and legislations related to water?	Yes (19%)
13. Are villagers involved in deciding the methods and locations of watershed development activities?	Yes (39%)
14. Do PHED officers interact and involve the villagers.	No/Not aware (84%)
15. Are villagers involved in management and upkeep of the dam and reservoir?	No/Not aware (68%)
16. Is WUA constituted in the village?	No/Not aware (85%)
17. Are meetings of WUA organized regularly?	No/Not aware (86%)
18. Do you attend the meetings of WUA?	yes (35%)
19. Who dominates and take decisions in the meetings of WUA.	Joint Decisions (44%), Sarpanch (29%)
20. Are meetings of GRAM SABHA (Village Council) organized regularly?	Yes (56%)
21. Does village council discuss the water issues?	Yes (45%)
22. Do women attend the meetings of village council?	Yes (18%)
23. Do women members actively participate in the meetings of village council	Yes (13%)

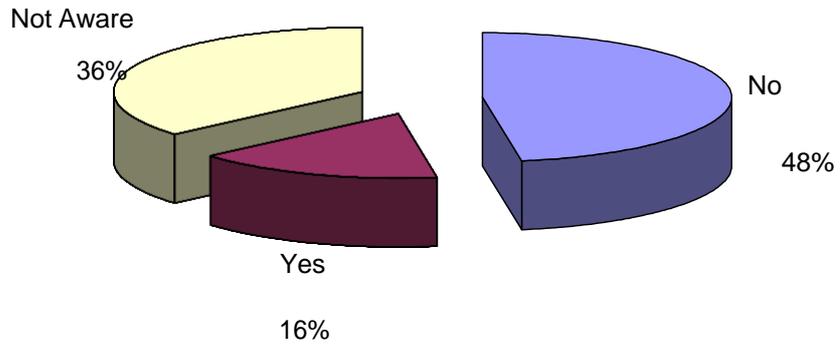
24. Do you have rotational system of distribution of water in village?	Yes (34%)
25. Are there any conflicts between farmers and between villages	No (44%)
26. Are there incidences of water borne diseases in the village?	Yes (60%),
27. Can government/Panchayat punish those who pollute the water?	Yes (55%)

2.2. Villages Covered:-

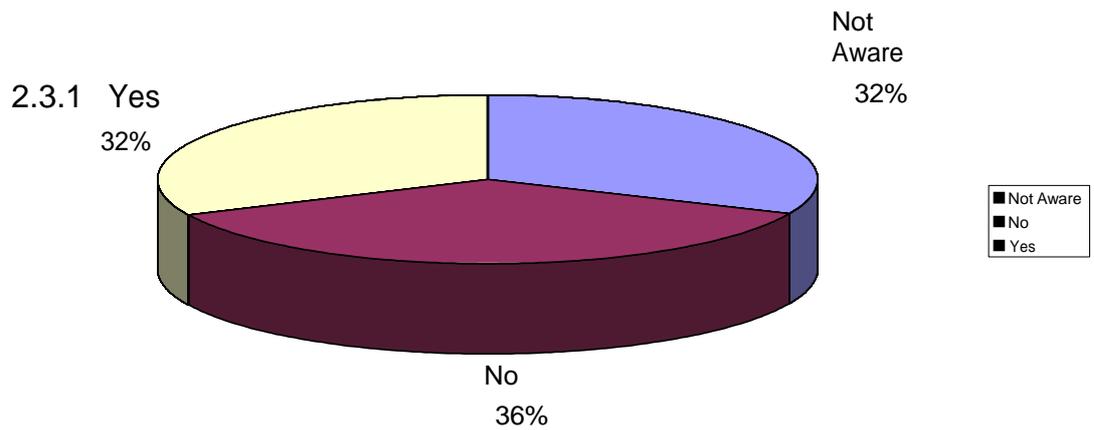
- Koala
- Falasia
- Nagmala
- Gogla
- Manas
- Velnia
- Shivpura
- Bhadrana
- Kantharia
- Gorana
- Kolyari
- Jhadapipla
- Manpur
- Bhiyana
- Jawli Ka Naka
- Madada
- Vas
- Ogana and Nal

2.3 Survey Results :-

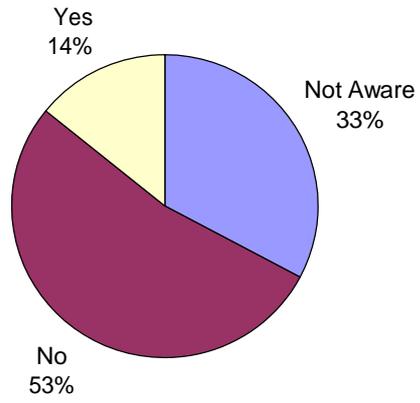
Do PHED Officers interact with and involve villagers ?



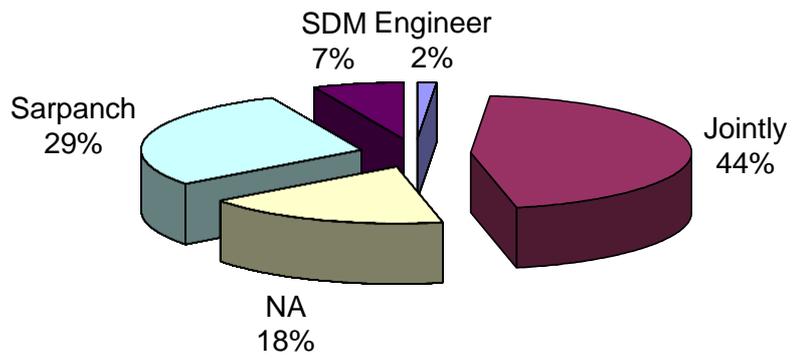
Are Villagers involved in management of Dams, Reservoirs and Lakes ?



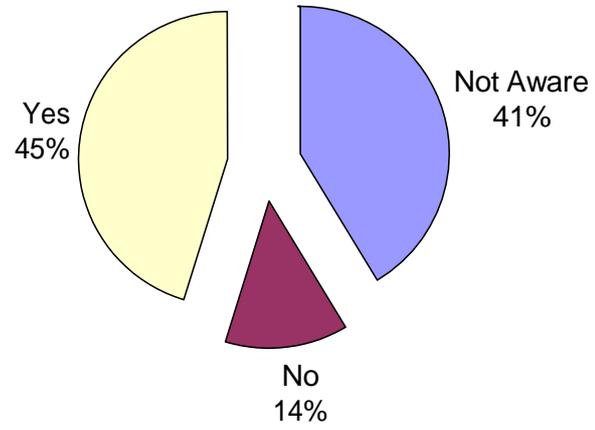
Are meetings of WUA Organised regularly ?



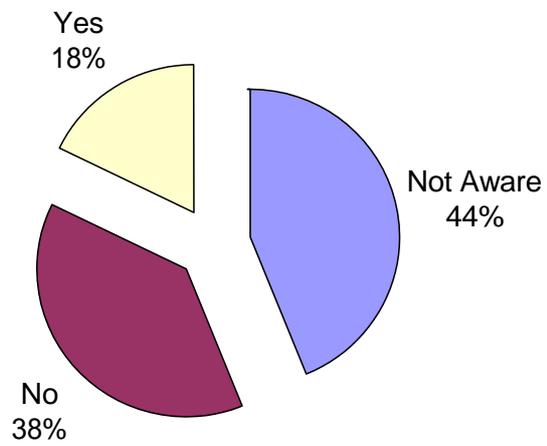
2.3.1.1 Decisions in WUA are taken by ?



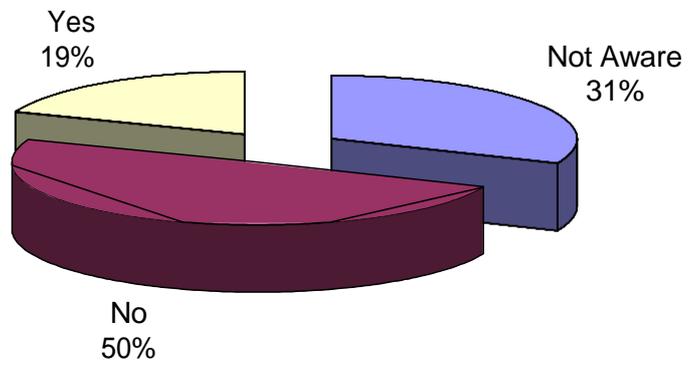
2.3.1.2 Do Gram Sabha discuss issues related to water ?



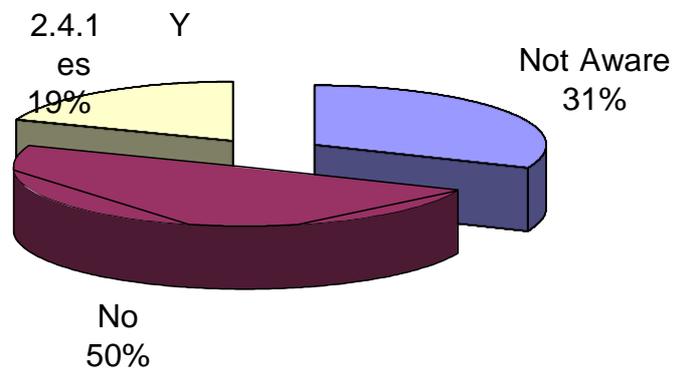
Do women participate in the meetings of Gramsabha



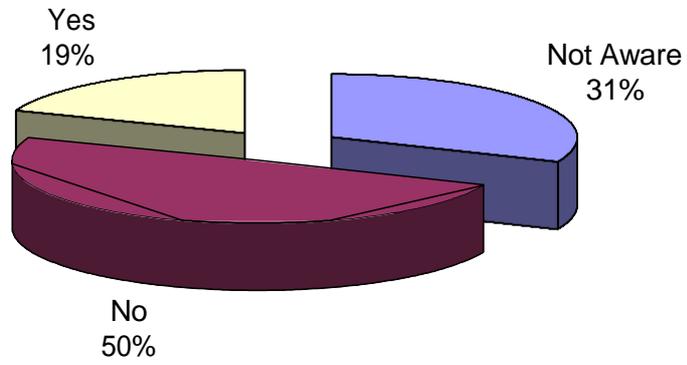
Are you satisfied with Govt. policies and Laws on water Management ?



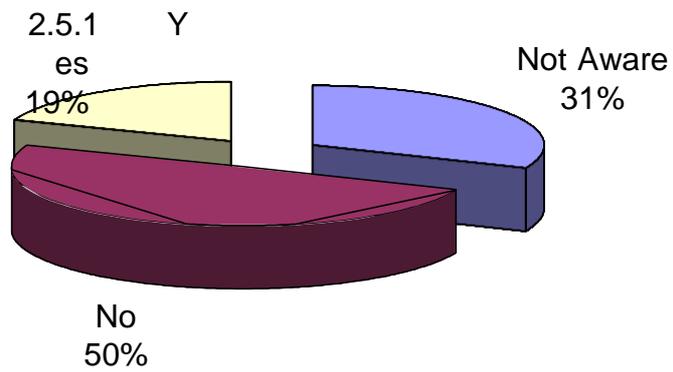
2.4 Do people suffer from Water Borne disease ?



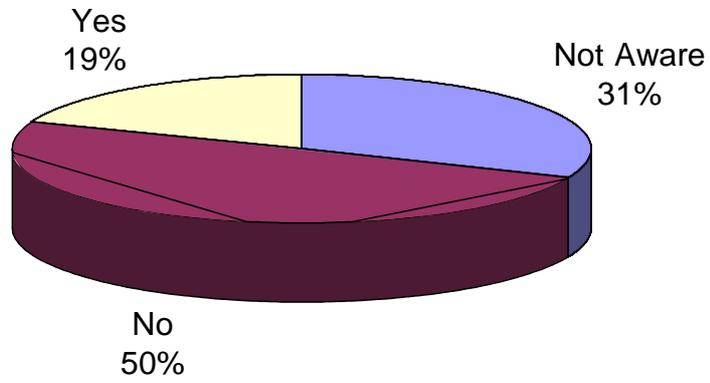
Is there any rule for protection of river catchments



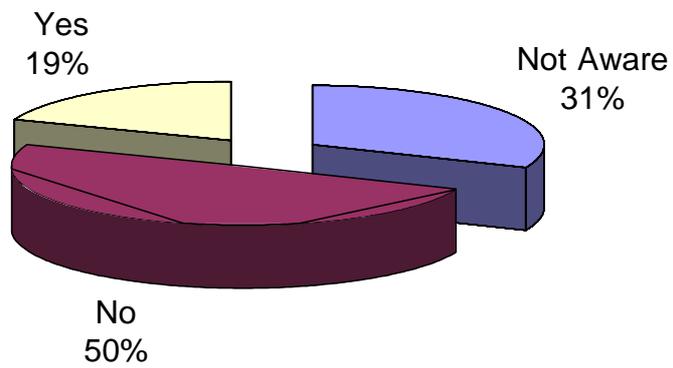
2.5 Are encroachments in rivers and lakes punishable ?



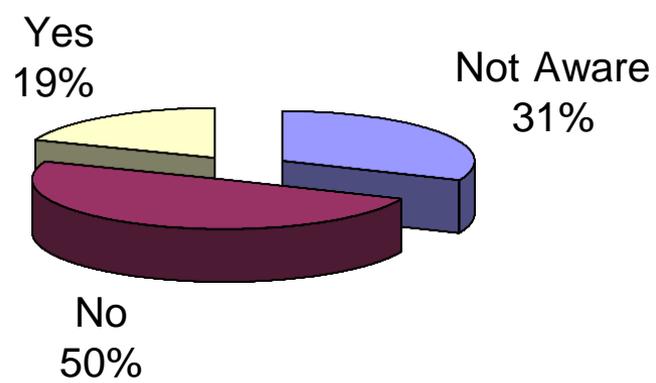
Do NGO's involve people ?



Are there any provisions in constitution on Water preservation and safe guarding ?



Are you satisfied with Govt. policies and Laws on water Management ?



3 WATER IN INDIAN CONSTITUTION

3.1 Articles and Entries:

India is union of States. The constitutional provisions in respect of allocation of responsibilities between the State and Centre fall into three categories: The Union List (List-I), the State List (List-II) and the Concurrent List (List-III). Article 246 of the Constitution deals with subject matter of laws to be made by the Parliament and by Legislature of the States. As most of the rivers in the country are inter-State, the regulation and development of waters of these rivers, is a source of inter-State differences and disputes. In the Constitution, water is a matter included in Entry 17 of List-II i.e. State List. This entry is subject to the provision of Entry 56 of List-I i.e. Union List.

3.1.1 Article 246

Notwithstanding anything in clauses (2) and (3), Parliament has exclusive power to make laws with respect to any of the matters enumerated in List I in the seventh Schedule (in this Constitution referred to as the "Union List").

Notwithstanding anything in clause (3), Parliament, and, subject to clause (1), the legislature of any State also, have power to make laws with respect to any of the matters enumerated in List III in the Seventh Schedule (in this Constitution referred to as the "Concurrent List").

Subject to clauses (1) and (2), the Legislature of any State has exclusive power to make laws for such State or any part thereof with respect to any of the matters enumerated in List II in the Seventh Schedule (in this Constitution referred to as the "State List"). Parliament has power to make laws with respect to any matter for any part of the territory of India not included in a State notwithstanding that such matter is a matter enumerated in the State List.

3.1.2 Article 262

In case of disputes relating to waters, Article 262 provides:

Parliament may by law provide for the adjudication of any dispute or complaint with respect to the use, distribution or control of the waters of, or in, any inter-State river or river valley.

Notwithstanding anything in this Constitution, Parliament may, by law provide that neither the Supreme Court nor any other court shall exercise jurisdiction in respect of any such dispute or complaint as is referred to in Clause (1).

3.1.3 Entry 56 of List I of Seventh Schedule

Entry 56 of List I of Seventh Schedule provides that "Regulation and development of inter-State rivers and river valleys to the extent to which such regulation and development under the control of the Union are declared by Parliament by law to be expedient in the public interest".

3.1.4 Entry 17 under List II of Seventh Schedule

Entry 17 under List II of Seventh Schedule provides that "Water, that is to say, water supplies, irrigation and canals, drainage and embankments, water storage and water power subject to the provisions of Entry 56 of List I".

As such, the Central Government is conferred with powers to regulate and develop inter-State rivers under Entry 56 of List I of Seventh Schedule to the extent declared by the Parliament by law to be expedient in the public interest. It also has the power to make laws for the adjudication of any dispute relating to waters of Inter-State River or river valley under Article 262 of the Constitution.

3.1.4.1 **Box 2: 'Protection of Environment' Provisions in India's Constitution**

The Forty Second Amendment to the Constitution in 1976 underscored the importance of 'green thinking'. Article 48A enjoins the state to protect and improve the environment and safeguard the forests and wildlife in the country. Further, Article 51A (g) states that the "fundamental duty of every citizen is to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures".

Box 3: International Agreements

- (i) India is a signatory of the United Nations Conference on Human Environment, held in Stockholm on 5 to 16 June, 1972, and,
- (ii) United Nations Convention on Environment and Development held at Rio-de-Janeiro, held from 3 to 14 June, 1992.

3.2 Constitution of India and Environmental Protection

The following are some of the important Articles of the Constitution of India which have relevance to the subject of environmental protection, namely:

I. Articles 136, 137, 226, 227, 246, 249, 250, 252, 253, 254, 356 (right to writ remedy, special leave appeal, power of Parliament to make laws, etc.)

II. Fundamental Rights: Articles 14, 19(1) (g), 21, 32 and 226 etc.

III. Directive Principles of State Policy: -- Articles 47, 48, and 49.

IV. Fundamental Duties: (Part IV-A), 5 1 A (g);

V. Seventh Schedule.

List I - Entries 52 to 55 and 57

List II - Entries 6, 14, 18, 21, 24, 25.

List III - Entries 17-A, 17B, 20(e) and (d).

4 POLICIES

4.1 Setting goals for water use, protection and conservation

Policies are the framework within which water resources are managed, and thus a framework within which to develop an IWRM approach. Policy formulation is a core government role. Since water is at the core of every development, the issue of water is addressed in various other policies also. National and state water policies set goals and objectives for the management of water resources and include provisions for regions, catchments, shared or Trans boundary water resources, and cover issues like maximizing water availability, project planning, institutional reforms, participation of water users, inter-basin transfers etc. They address the quantity and quality aspects of both surface and groundwater resources and also deals with delivery of water services. The national and state level water and other policies which are applicable on wakal basin are discussed in brief here. The relevant texts are attached as annexure.

4.2 The National Water Policy, 2002:

It contains provisions for developing, conserving, sustainable utilizing, governing and managing important water resources with national perspectives. Concern due to water logging, ingress of soil salinity and over-exploitation of groundwater will be addressed on the basis of common policies and strategies. The policy includes improvements in existing strategies, innovation of new techniques to eliminate the pollution of surface and groundwater resources to improve water quality. It has emphasized on water resource planning, development of institutional mechanism, water allocation, groundwater development and participatory approach to water resource management. Regular water quality monitoring programme for both surface and groundwater will be undertaken with particular emphasis on pollution control at source.

The NWP recognize the need of IWRM in the preamble of the policy itself. The main provisions which are more relevant for Wakal basin are summarized below:-

(A) Water resources development and management will have to be planned for a hydrological unit such as drainage basin as a whole or for a sub-basin....; With a view to give effect to the planning, development and management of the water resources on a hydrological unit basis, along with a multi-sectoral, multi-disciplinary and participatory approach as well as integrating quality, quantity and the

environmental aspects, the existing institutions at various levels under the water resources sector will have to be appropriately reoriented / reorganized and even created, wherever necessary.

(B) Appropriate river basin organizations should be established for the planned development and management of a river basin as a whole or sub-basins, wherever necessary. The scope and powers of the river basin organizations shall be decided by the basin states themselves.

(C) Management of the water resources for diverse uses should incorporate a participatory approach; by involving not only the various governmental agencies but also the users and other stakeholders, in an effective and decisive manner, in various aspects of planning, design, development and management of the water resources schemes. Necessary legal and institutional changes should be made at various levels for the purpose, duly ensuring appropriate role for women. Water Users' Associations and the local bodies such as municipalities and *gram panchayats* should particularly be involved in the operation, maintenance and management of water infrastructures / facilities at appropriate levels progressively, with a view to eventually transfer the management of such facilities to the user groups / local bodies.

(D) There should be an integrated and multi-disciplinary approach to the planning, formulation, clearance and implementation of projects, including catchments area treatment and management, environmental and ecological aspects, the rehabilitation of affected people and command area development.

(E) the involvement and participation of beneficiaries and other stakeholders should be encouraged right from the project planning stage itself. Formation of Water Users' Association with authority and responsibility should be encouraged to facilitate the management including maintenance of irrigation system in a time bound manner.

(F) Special efforts should be made to investigate and formulate projects either in, or for the benefit of, areas inhabited by tribal or other specially disadvantaged groups such as socially weak, scheduled castes and scheduled tribes.

(G) Watershed management through extensive soil conservation, catchments-area treatment, preservation of forests and increasing the forest cover and the construction of check-dams should be promoted.

(H) Adequate safe drinking water facilities should be provided to the entire population both in urban and in rural areas... Drinking water needs of human beings and animals should be the first charge on any available water.

(I) in the planning and operation of systems, water allocation priorities should be broadly as follows:

- Irrigation
- Drinking water
- hydro-power
- Agroecology
- industries and
- non
- agricultural
- industries
- **A**
navigation
- **and** other
- **N**ses

(J) Drought-prone areas should be made less vulnerable to drought-associated problems through soil moisture conservation measures, water harvesting practices, minimization of evaporation losses, development of the ground water potential including recharging and the transfer of surface water from surplus areas where feasible and appropriate. Pastures, forestry or other modes of development which are relatively less water demanding should be encouraged. In planning water resource development projects, the needs of drought-prone areas should be given priority. Relief works undertaken for providing employment to drought-stricken population should preferably be for drought proofing

(K) Exploitation of ground water resources should be so regulated as not to exceed the recharging possibilities, as also to ensure social equity.

(L) Integrated and coordinated development of surface water and ground water resources and their conjunctive use should be envisaged right from the project

planning stage and should form an integral part of the project implementation.

(M) Irrigation planning either in an individual project or in a basin as a whole should take into account the irrigability of land, cost-effective irrigation options possible from

all available sources of water and appropriate irrigation techniques for optimizing water use efficiency. Irrigation intensity should be such as to extend the benefits of irrigation to as large a number of farm families as possible, keeping in view the need to maximize production.

(N) Water allocation in an irrigation system should be done with due regard to equity and social justice. Irrigation being the largest consumer of fresh water, the aim should be to get optimal productivity per unit of water. Scientific water management, farm practices and sprinkler and drip system of irrigation should be adopted wherever feasible.

(O) The subsidy on water rates to the disadvantaged and poorer sections of the society should be well targeted and transparent.

(P) Both surface water and ground water should be regularly monitored for quality. A phased programme should be undertaken for improvements in water quality. Effluents should be treated to acceptable levels and standards before discharging them into natural streams.

(Q) There should be water zoning of the country and the economic activities should be guided and regulated in accordance with such zoning.

(R) The resources should be conserved and the availability augmented by maximizing retention, eliminating pollution and minimizing losses. For this, measures like selective linings in the conveyance system, modernization and rehabilitation of existing systems including tanks, recycling and re-use of treated effluents and adoption of traditional techniques like mulching or pitcher irrigation and new techniques like drip and sprinkler may be promoted, wherever feasible.

(S) The water sharing / distribution amongst the states should be guided by a national perspective with due regard to water resources availability and needs within the river basin. Necessary guidelines, including for water short states even outside the basin, need to be evolved for facilitating future agreements amongst the basin states.

(T) There should be a close integration of water-use and land-use policies. Necessary legislation is to be made for preservation of existing water bodies by preventing encroachment and deterioration of water quality.

(U) The Inter-State Water Disputes Act of 1956 may be suitably reviewed and amended for timely adjudication of water disputes referred to the Tribunal.

(V) There is an urgent need of paradigm shift in the emphasis in the management of water resources sector. From the present emphasis on the creation and expansion of water resources infrastructures for diverse uses, there is now a need to give greater emphasis on the improvement of the performance of the existing water resources facilities. Therefore, allocation of funds under the water resources sector should be re-prioritized to ensure that the needs for development as well as operation and maintenance of the facilities are met.

(W). In view of the vital importance of water for human and animal life, for maintaining ecological balance and for economic and developmental activities of all kinds, and considering its increasing scarcity, the planning and management of this resource and its optimal, economical and equitable use has become a matter of the utmost urgency. Concerns of the community need to be taken into account for water resources development and management.

4.3 State Water Policy of Rajasthan:

The state water policy of Rajasthan (1999) is under revision. The policy is framed on the lines of NWP with the state perspective. The main provisions which are more related to Wakal basin are summarized below:

(A) Objectives in brief:

Assuring an integrated and multi-disciplinary approach to planning, evaluation, approval and implementation of irrigation and drainage projects, including river basin management, of surface and ground water; Optimization of water resources exploitation and raising the level of reliability of supplies through conjunctive use of surface and ground water; Judicious and economically sound allocation of water resources to different sectors, with drinking water supply as a first priority; Optimum utilization of water resources to maximize production in all user sectors; Minimizing adverse impacts of water resources development on the natural environment and on population affected by project implementation works; Promoting beneficiaries'

participation in all aspects of water planning and management, with particular emphasis on Water User Associations intended to manage and maintain irrigation systems, both physically and financially; Motivating and encouraging water conservation through appropriate and socially acceptable water rates, introduction of water-saving devices and practices in all sectors, and educational campaigns; Ensuring well coordinated and efficient decision making, planning, design, execution and operation and maintenance activities among all GOR agencies; Facilitating private initiative in development, operation and management of water projects.

(B) To maximize the water availability, following actions shall be taken:

(a) Comprehensive and integrated water resource planning for the State on the basis of hydrological units i.e. basin or a sub-basin;

(b). Waste water reclamation in all basin plans. Encouragement to efficient water application and utilization practices.

(c) Creation of a Central Planning Authority for policy related issues for integrated water resources development and management.

(d) Preservation of traditional water harvesting practices. Preparation of projects for artificial recharge of ground water.

(e) Preparation of Inter basin transfer projects based on a State-wide perspective, after taking into account the requirements within the basins.

(C) The State Water Policy shall be reflected in all plans recommended for implementation. Special attention shall be given to the objectives of reduction of poverty, basic food self-sufficiency, overall economic growth, environmental well-being, progress of weaker sections of the population, etc.

(D) The institutional and procedural reforms and manpower development in projects shall be carried out. Water User Associations shall be encouraged to undertake maintenance, repairs and modernization of works.

(E) Dam Safety Legislation may be enacted to ensure proper inspection, maintenance and surveillance of existing dams and also to ensure proper planning, investigation, design and construction for safety of new dams.

(F) Exploitation of groundwater resources should be so regulated as not to exceed recharging possibilities, and also to ensure social equity. For this, various legal,

organisational, social, educational, technological measures will be taken. Existing laws shall be amended /new legislation shall be enacted.

(G) In the planning and operation of systems, water allocation priorities shall be to Drinking water, Irrigation, Power generation and Industrial and other uses in that order.

(H) A detailed methodology for multi-priority analysis shall be developed for decision making in the Central Planning Authority to enable prioritization in water resources planning and management. The demands of drinking water, irrigation, power generation, industrial and other uses shall be studied scientifically for appropriate development and allocation of funds.

(I) Adequate drinking water facilities shall be provided to the entire population both in urban and in rural areas. Drinking water needs of human beings and animals shall be the first charge on any available water and following actions shall be taken to fulfill this need:

(J) Irrigation planning, either in an individual project or in a basin as a whole, should take into account the irrigability of land, cost-effective irrigation options possible from all available sources of water, and appropriate irrigation and drainage techniques. Water allocation in an irrigation system is done with due regard to equity and social justice, disparities in the availability of water between head-reach and tail-end farms and between large and small farms should be obviated by adoption of a rotational water distribution system, supply of water on a volumetric basis subject to certain ceilings is introduced and there is close integration of water-use and land-use policies.

(K) Water rates shall be so decided that it conveys the scarcity value of water to users and foster the motivation for economy in water usage. Rates shall be gradually increased to cover the annual maintenance and operation charges and part of the fixed costs to assure undisturbed and timely supply of irrigation water. Water rates shall be rationalized with due regard to the interests of small and marginal farmers. It shall be accompanied by volumetric measurement of water consumption in all sectors.

(L) Farmers shall be involved in various aspects of management of irrigation systems, particularly in water distribution and collection of water charges. Assistance of voluntary agencies shall be taken in educating the farmers in efficient water use and water management.

(M) Both surface water and ground water as well as soil quality shall be regularly monitored for quality and a phased program shall be undertaken for improvements in water quality. Effluents should be treated to acceptable levels and standards before discharging them in natural streams.

(N) Government shall issue orders to routinely enter future water and soil quality figures in the water resources database and publish groundwater statistics and maps for River Basins. Minimum flow should be ensured in the perennial streams for maintaining ecology and social considerations.

(O) Sound watershed management through extensive soil conservation, catchments area treatment, preservation of forests and increasing the forest area and construction of check dams shall be promoted to reduce the intensity of floods. Adequate flood cushion shall be provided in water storage projects whenever feasible to facilitate better flood management

(P) Drought prone areas shall be made less vulnerable to drought associated problems through measures listed below. In planning water resource development projects, the needs of drought prone areas should be given priority. Relief works undertaken for providing employment to drought stricken populations should preferably be for drought proofing.

(Q) Standardized training shall be a part of water resources management and should cover all its aspects and all personnel involved in it, including farmers. The State shall also encourage education of the public at large. Scholarships, study tours, incentives etc. shall be provided by the State to encourage and support training. Technology transfer shall be made obligatory on all technical assistance and consulting services. Emphasis on research on all matters related to water management shall also be given.

(R) With a view to improve and streamline their scope and cover in the legal framework all aspects pertaining to water resources management, protection of

water quality, flood protection, drought proofing, abstraction licensing, water rights, etc. the Government shall introduce the following measures:

- a. Enact the necessary amendments and additions to existing Act, rules, regulations, orders, decisions, etc.;
- b. Ensure that the responsibilities and powers of Governmental agencies and the rights and obligations of individuals are clearly spelled-out in the relevant laws and regulations;
- c. Ensure that the legislation would allow for easy implementation of policy decisions while protecting the interests of individuals and taking into account the administrative capacity to implement them;
- d. Empower the appropriate agencies to carry out their obligations and responsibilities as implied by the public ownership of water projects, and spell out the administrative procedures necessary for coordinated, equitable and efficient control, as well as the resolution of conflicts which may arise from them;
- e. Provide legal support for the formation of WUAs and handing over to them the distribution of water for irrigation and the maintenance of canals;
- f. Establish rules and regulations for the involvement of the private sector in development and operation of water-related projects;
- g. Provide in the law for an effective participation of farmers in the planning and decision making processes which involve users and public authorities;
- h. Introduce the necessary legislation for a periodic amendment of water rates and tariff structures which would enable the full coverage of O&M expenditures, based, as far as possible on volumetric metering of supplies, while motivating users to economize in the use of water, and catering for the weaker sections of the population;
- i. Establish effective conflict resolution legal entities and procedures.

(S) The entire body of water-related laws and regulations will eventually be amalgamated into a State Water Law, which would, in addition to the above mentioned subjects, establish the State ownership of all the water resources within the State, as well as waters imported from outside the State under various agreements, and the requirement for any public or private entity or individual to obtain from the Government a permit to abstract surface water or groundwater, to utilize it, to sell or distribute it, or to dispose off after use. Permitting and enforcement rules and regulations will be spelled-out accordingly.

4.3.1 NATIONAL ENVIRONMENT POLICY, 2004

Action Points

The National Environment Policy addresses the issue of water in detail. The policy recognizes water as invaluable natural resource and gives various action plans for integrated management of this resource.

(A) River systems:

Promote integrated approaches to management of river basins by the concerned river authorities, considering upstream and downstream inflows and withdrawals by season, pollution loads and natural regeneration capacities, to ensure maintenance of adequate flows and adherence to water quality standards throughout their course in all seasons.

(B) Groundwater:

- a) Take explicit account of impacts on groundwater tables of electricity tariffs and pricing of diesel.
- b) Promote efficient water use techniques, such as sprinkler or drip irrigation, among farmers. Provide necessary pricing, inputs, and extension support to feasible and remunerative alternative crops from efficient water use.
- c) Support practices of contour bunding and revival of traditional methods for enhancing groundwater recharge.
- d) Mandate water harvesting in all new constructions in relevant urban areas, as well as design techniques for road surfaces and infrastructure to enhance groundwater recharge.
- e) Support R&D in cost effective techniques suitable for rural drinking water projects for removal of arsenic and mainstream their adoption in rural drinking water schemes in relevant areas.

(C) Wetlands:

- a) Set up a legally enforceable regulatory mechanism for identified valuable wetlands to prevent their degradation and enhance their conservation. Develop a national inventory of such wetlands.
- b) Formulate conservation and prudent use strategies for each significant catalogued wetland, with participation of local communities, and other relevant stakeholders.

c) Formulate and implement eco-tourism strategies for identified wetlands through multi stakeholder partnerships involving public agencies, local communities, and investors.

d) Take explicit account of impacts on wetlands of significant development projects during the environmental appraisal of such projects; in particular, the reduction in economic value of wetland environmental services should be explicitly factored into cost benefit analyses.

e) Consider particular unique wetlands as entities with "Incomparable Values", in developing strategies for their protection.

(D) Public Trust Doctrine:

The State is not an absolute owner, but merely a trustee of all natural resources, which are by nature meant for public use and enjoyment, subject to reasonable conditions, necessary to protect the legitimate interest of a large number of people, or for matters of strategic national interest.

(E) Land Degradation:

(a) Encourage adoption of science-based, and traditional sustainable land use practices through research and development, pilot scale demonstrations, and large scale dissemination, including farmer's training, and where necessary, access to institutional finance.

b) Promote reclamation of wasteland and degraded forestland through formulation and adoption of multistakeholder partnerships involving the land owning, agency, local communities, and investors.

c) Prepare and implement thematic action plans for arresting and reversing desertification.

(F) Pollution Abatement:

(i) Water Pollution:-

(a) Develop and implement, initially on a pilot scale, public -private partnership models for setting up and operating effluent and sewage treatment plants. Once the models are validated, progressively use public resources, including external assistance, to catalyze such partnerships. Enhance the capacities of municipalities for recovery of user charges for water and sewage systems.

b) Enhance reuse of treated sewage and industrial wastewater before final discharge to water bodies.

- c) Enhance capacities for spatial planning among the State and Local Governments, with adequate participation by local communities, to ensure clustering of polluting industries to facilitate setting up of common effluent treatment plants to be operated on cost recovery basis.
- d) Promote R&D in development of low cost technologies for sewage treatment at different scales, in particular, replication of the East Kolkata wetlands model for sewage treatment to yield multiple benefits.
- e) Take explicit account of groundwater pollution in pricing policies of agricultural inputs, especially pesticides, and dissemination of agronomy practices involving their use.
- f) Develop a strategy for strengthening regulation, and addressing impacts, of ship-breaking activities on coastal and near marine resources.

(ii) Soil Pollution:

- a) Develop and implement viable models of public-private partnerships for setting up and operating secure landfills and incinerators for toxic and hazardous waste, both industrial and biomedical, on payment by users, taking the concerns of local communities into account. The concerned local communities and State Governments must have clear entitlements to specified benefits from hosting such sites, if access is given to non-local users.
- b) Develop and implement strategies for clean up of pre-existing toxic and hazardous waste dumps, in particular, in industrial areas, and reclamation of such lands for future, sustainable use.
- c) Strengthen the capacities of local bodies for segregation, recycling, and reuse of municipal solid wastes, and setting up, and operating sanitary landfills, in particular through competitive outsourcing of solid waste management services.
- d) Give legal recognition to, and strengthen the informal sector systems of collection and recycling of various materials in particular enhance their access to institutional finance and relevant technologies.
- e) Promote organic farming of traditional crop varieties through research in and dissemination of techniques for reclamation of land with prior exposure to agricultural chemicals, facilitating marketing of organic produce' in India and abroad, including by development of transparent, voluntary, science-based labeling schemes.
- f) Develop and implement strategies for recycle, reuse, and final environmentally benign disposal of plastics wastes, including through promotion of relevant technologies, and use of incentive based instruments.

(G) Environmental Awareness, Education, and Information:

- a) Mainstream scientifically valid environment content in the curricula of formal education, at primary, secondary, tertiary, and professional levels, focusing on the content appropriate at each stage, and without increasing the course load overall. Special mid-career training programmes may be conducted for groups with special responsibilities, e.g. the judiciary, policy makers, legislators, industrial managers, city and regional planners, voluntary and community based organizations, etc.
- b) Prepare and implement a strategy for enhancing environmental awareness among the general public, and special groups, by professional production and airing of information products through diverse media catering to the different target groups. The media products should, as far as possible, eschew focusing on the achievements of public agencies, but instead document real world events of human interest. The production, as well as dissemination may involve public, private, and voluntary agencies.
- c) Enhance real-time, on line public access to monitoring information, both in respect of ambient quality, as well as major point sources of pollution. Archival data to be also made publicly available in convenient format.

(H) Partnerships and Stakeholder Involvement:

- a) Public -Community Partnerships, by which public agencies and local communities cooperate in the management of a given environmental resource, each partner bringing agreed resources, assuming specified responsibilities, and with defined entitlements, e.g. Joint Forestry Management.
- b) Public -Private Partnerships, by which specified public functions with respect to environmental management are contracted out competitively to private providers, e.g. monitoring of environmental quality.
- c) Public -Community-Private Partnerships, in terms of which the partners assume joint responsibility for a particular environmental function, with defined obligations and entitlements for each, with competitive selection of the private sector partner, e.g. afforestation of degraded forests.
- d) Public -Voluntary Organization Partnerships, similar to public - private partnerships, in respect of functions in which voluntary organizations may have a comparative advantage over others, the voluntary organizations, in turn, being selected competitively, e.g. environmental awareness raising.
- e) Public -Private-Voluntary Organization Partnerships, in which the provision of specified public responsibilities is accomplished on competitive basis by the private

sector, and the provision is monitored by competitively selected voluntary organizations, e.g. "Build, Own, Operate" sewage and effluent treatment plants.

4.3.2 National Women Policy:

The advancement, development and empowerment of women is of highest importance in achieving the IWRM. The National women policy specifically address the issue of women's health in the context of water . The policy recognizes the role and importance of women in all water related development activities as summarized below:

(1) The Policy would aim to encourage changes in laws relating to ownership of property and inheritance by evolving consensus in order to make them gender just.

(2) Decision Making : Women's equality in power sharing and active participation in decision making, including decision making in political process at all levels will be ensured for the achievement of the goals of empowerment.

(3) Policies, programmes and systems will be established to ensure mainstreaming of women's perspectives in all developmental processes, as catalysts, participants and recipients. Women's issues and concerns as a result will specially be addressed and reflected in all concerned laws, sectoral policies, plans and programmes of action.

(4) Macro economic policies and poverty eradication programmes will specifically address the needs and problems of such women.

(5) Women's perspectives will be included in designing and implementing macro-economic and social policies by institutionalizing their participation in such processes.

(6) The programmes for training women in soil conservation, social forestry, dairy development and other occupations allied to agriculture like horticulture, livestock including small animal husbandry, poultry, fisheries etc. will be expanded to benefit women workers in the agriculture sector.

(7) Women-friendly personnel policies will also be drawn up to encourage women to participate effectively in the developmental process.

(8) Equal access to education for women and girls will be ensured. Special measures will be taken to eliminate discrimination, universalize education, eradicate illiteracy, create a gender-sensitive educational system, increase enrolment and retention rates of girls and improve the quality of education to facilitate life-long learning as well as development of occupation/vocation/technical skills by women.

(9) A holistic approach to women's health which includes both nutrition and health services will be adopted and special attention will be given to the needs of women and the girl at all stages of the life cycle. This policy reiterates the national demographic goals for Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR) set out in the National Population Policy 2000. Women should have access to comprehensive, affordable and quality health care. Measures will be adopted that take into account the reproductive rights of women to enable them to exercise informed choices, their vulnerability to sexual and health problems together with endemic, infectious and communicable diseases such as malaria, TB, and water borne diseases as well as hypertension and cardio-pulmonary diseases. The social, developmental and health consequences of HIV/AIDS and other sexually transmitted diseases will be tackled from a gender perspective.

(10) Special efforts will be made to tackle the problem of macro and micro nutrient deficiencies especially amongst pregnant and lactating women as it leads to various diseases and disabilities. Widespread use of nutrition education would be made to address the issues of intra-household imbalances in nutrition and the special needs of pregnant and lactating women. Women's participation will also be ensured in the planning, superintendence and delivery of the system.

(11) Special attention will be given to the needs of women in the provision of safe drinking water, sewage disposal, toilet facilities and sanitation within accessible reach of households, especially in rural areas and urban slums. Women's participation will be ensured in the planning, delivery and maintenance of such services.

(12) Women's participation will be ensured in the conservation of the environment and control of environmental degradation. The vast majority of rural women still depends on the locally available non-commercial sources of energy such as animal dung, crop waste and fuel wood. In order to ensure the efficient use of these energy resources in an environmental friendly manner, the Policy will aim at promoting the programmes of non-conventional energy resources. Women will be involved in

spreading the use of solar energy, biogas, smokeless chulahs and other rural application so as to have a visible impact of these measures in influencing eco system and in changing the life styles of rural women.

4.3.3 National Forest Policy, 1988

The Government of India in the erstwhile Ministry of Food and Agriculture enunciated a Forest Policy to be followed in the management of State Forests in the country. This was revised/reviewed in the year 1988 with following water sector related objectives and actions:

- Maintenance of environmental stability through preservation and, where necessary, restoration of the ecological balance that has been adversely disturbed by serious depletion of the forests of the country.
- Conserving the natural heritage of the country by preserving the remaining natural forests with the vast variety of flora and fauna, which represent the remarkable biological diversity and genetic resources of the country?
- Checking soil erosion and denudation in the catchments areas of rivers, lakes, reservoirs in the "interest of soil and water conservation, for mitigating floods and droughts and for the retardation of siltation of reservoirs.
- Increasing substantially the forest/tree cover in the country through massive afforestation and social forestry programmes, especially on all denuded, degraded and unproductive lands.
- Creating a massive people's movement with the involvement of women, for achieving the objectives and to minimize pressure on existing forests.
- The principal aim is to ensure environmental stability and maintenance of ecological balance including atmospheric equilibrium which is vital for sustenance of all life forms, human, animal and plant. The derivation of direct economic benefit must be subordinated to this principal aim.

4.3.3.1 **Actions Programmes and Strategies:**

1. Existing forests and forest lands should be fully protected and -their productivity improved. Forest and vegetal cover should be increased rapidly on hill slopes, in catchments areas of rivers, lakes and reservoirs and ocean shores and, on semi-arid, and desert tracts.
2. For the conservation of total biological diversity, the network of national parks, sanctuaries, biosphere reserves and other protected areas should be strengthened and extended adequately.
3. Provision of sufficient fodder, fuel and pasture, especially in areas adjoining forest, is necessary in order to prevent depletion of forests beyond the sustainable limit. Since fuel wood continues to be the predominant source of energy in rural areas, the programme of afforestation should be intensified with special emphasis on augmenting fuel wood production to meet the requirement of the rural people.
4. Minor forest produce provides sustenance to tribal population and to other communities residing in and around the forests. Such produce should be protected, improved and their production enhanced with due regard to generation of employment and income.
5. It is necessary to encourage the planting of trees alongside of roads, railway lines, rivers and streams and canals, and on other unutilized lands under State/corporate, institutional_ or private ownership. Green belts should be raised in urban/industrial areas as well as in arid tracts. Such a programme will help to check erosion and desertification as well as improve the microclimate.
6. Village and community lands, including those on foreshores and environs of tanks, not required for other productive uses, should be taken up for the development of tree crops and fodder resources.
7. Schemes and projects which interfere with forests that clothe steep slopes, catchments of rivers, lakes, and reservoirs, geologically unstable terrain and such other ecologically sensitive areas should be severely restricted.

8. No forest should be permitted to be worked without - the Government having approved the management plan, which should be in a prescribed format and in keeping with the National Forest Policy. The Central Government should issue necessary guidelines to the State Governments in this regard and monitor compliance.

9. Diversion of forest land for any non-forest purpose should be subject to the most careful examinations by specialists from the standpoint of social and environmental costs and benefits. Construction of dams and reservoirs, mining and industrial development and expansion of agriculture should be consistent with the needs for conservation of trees and forests. Projects which involve such diversion should at least provide in their investment budget, funds for regeneration/compensatory afforestation.

4.3.4 The National Tribal Policy:

The demographic composition of Wakal basin is dominated by Scheduled tribes. Government of India has drafted a national tribal policy aimed at providing an enabling framework for the tribal people to move according to their own genius in a system of self-governance while sharing the benefits of development, retaining the best elements of their tradition, cultural life and ethos. A large segment of the tribal population lives below the poverty line and suffers from a high infant mortality rate, severe malnutrition, various communicable diseases, lower literacy rates and an extremely slow pace of development. The policy include following provisions related to water sector:

(1) Regulatory Protection: - Preventing alienation of land owned by STs and restoring possession of wrongfully alienated lands; Protection and vesting of rights of STs on forest lands and other forest rights including ownership over minor forest produce (MFP), minerals and water bodies through appropriate legislations and conversion of all forest villages into revenue villages; Providing a legislative frame for rehabilitation and resettlement in order to minimize displacement, ensure that affected persons are partners in the growth.

(2) Ensuring access to health care services, safe drinking water and improved sanitation by the end of the Eleventh Five Year plan;

(3) The principle of least displacement would be mandatory followed. All the technological/ financial/ displacement alternatives should be explored and reasons given to justify that the proposed project involves least displacement. There shall be a threshold of displacement viz. the maximum number of persons that can be displaced in one project. Projects involving displacement of more than a fixed number, say 50000, would not be considered, if the majority are STs, or would be subjected to more stringent appraisal norms. An exhaustive social impact assessment would be conducted before initiating a development project.

(4) Poor quality of drinking water and lack of awareness about hygiene and improved sanitation are major sources of water borne diseases. Since tribal have different kinds of terrain, different methods or provision of drinking water will have to be adopted.

(5) The Government will Endeavour to improve health, drinking water supply, hygiene and sanitation by Improving overall awareness about health, hygiene and improved sanitation among tribal community and empowering them to plan, implement, operate and maintain their own water supply and sanitation systems. Encouraging rainwater harvesting and developing gravity-based small water supply systems, which are easy to operate and maintain by the local tribal community at low O&M cost for assured availability of safe drinking water throughout the year in all tribal habitations.

(6) A comprehensive survey of water resources, including surface water and ground water, would be undertaken in tribal areas with the help of remote sensing to prepare land use maps. Where water levels have gone down, integrated water shed management approach will have to be adopted. Ponds and tanks will be increased in number and renovated for optimum use.

(7) The rights of planning and management of minor water bodies in Scheduled Areas will vest in Panchayats. Decisions will be taken collectively in the gram sabha, instead of adopting a top down approach.

(8) Their wisdom is reflected in their water harvesting techniques, indigenously developed agricultural practices and irrigation systems, construction of cane bridges in hills, adaptation to desert life, utilization of forest species like herbs and plants for medicinal purposes, meteorological assessment etc. Efforts will be made to preserve, promote and document tribal traditional knowledge and wisdom.

4.4 POLICIES- A CRITICAL REVIEW AND SUGGESTATIONS

4.4.1 Vision and Action Elements:

Appropriate policies can deal with the many inter-related and complex issues involved in IWRM, including: Assessing the relative environmental, economic and social values of water; Recognising the role of men and women as users and managers of water resources ; Taking into account sustainability and environmental issues in the planning, design, construction, operation and management of major water projects; Assessment of the social impact of water resource developments; Restoring and protecting the quality of surface and groundwater; Introducing procedures to designate, evaluate and conserve surface waters; Introducing flexible drought and flood management strategies; Mandating the provision of easily accessible, accurate and up-to-date data on water resources and needs; Linking water policies with other ecosystem, economic and social policies.

Policy formulation is a core government role. Through its policies, government can delimit the direct and indirect activities of all stakeholder groups, including itself. Government can be a direct provider, or regulate and support other providers. Appropriate policies can encourage participatory, demand-driven and sustainable development. Policies that encourage integrated water resources management include reference to the nation's wider social and economic objectives that make up the development goals of the society.

The critical analysis of different policies reveals that much is still to be done in order to derive and implement IWRM strategies within the present framework policies. Here are some suggestions:

(1) Delegation and Decentralization:-The matters related to jurisdiction and delegation, decentralization of water management, the use of economic incentives, capacity building to meet institutional challenges, and monitoring and control to reduce ecosystem degradation etc should be elaborated in more clear way. Further the water policies must clearly suggest and spell the role, rights and obligations of local communities in planning development and management of water resources.

(2) Holistic Approach:-There is only single sector water planning. Enough attention is to be given on multi-objective and integrated planning of land and water

resources, recognizing the wider social, economic and development goals. There is strong need to Take Holistic View of Water as Resource to ensure efficient, equitable and sustainable supply of water to the citizens within a given time frame."

(3) Coordination and Linking:-There should be cross-sectoral coordination and linking with other national plans and strategies like environment policy, forest policy, women policy, tribal policy etc. The issues related to water and water management are dealt with by many ministries and policies but there is little co-ordination between them, and their focus is more on development type issues than on water resource management. Therefore, the institutional structure that would be required for linking and coordination should be defined .

(4) Policies Integration:-To be integrated, water policies must mesh with overall national economic policy and related national sectoral policies. IWRM means that water issues within every economic and social sector must be taken into account. The ways in which water policies may have an impact on other environmental media and vice versa- must be recognized. At the same time, economic and social policies need to take account of possible water resource implications. Developments outside the water sector for other infrastructure developments (e.g. public transportation,) should be evaluated for possible impacts on the water resource.

(5) Non fragmented Approach:- Water management is fragmented among sectors and institutions with little regard for resolving conflicts or achieving synergy among social, economic and environmental agencies. Policies do not recognize potential conflicts among stakeholders and do not focus on ways for conflict resolution. Therefore, the policies should clarify the roles of government and other stakeholders in achieving overall goals and especially specify the role of government as regulator, as organizer of the participatory process and , as a last resort, adjudicator in cases of conflict; Since the multiple users of water are competing, and the pressure on resources is increasing because of growing pollution, it is of utmost importance to ensure the participation of as many different stakeholders and authorities as possible in the integrated management of water resources.

(6) Basin Level Planning :- As water is a resource with finite availability and growing demand, the water policies particularly the SWP should advocate an integrated approach while viewing the water sector and prioritizing various activities. This would suggest an overall planning of the water resources based on dependable information at the basin level; this should then be co-coordinated at the state level and eventually at the national level keeping in view the international agreements.

Policies must define the institutional, financial and administrative mechanisms of RBOs, which are also necessary for establishing constructive and systematic relationship between the Panchayati Raj Institutions and Water Users Associations.

River Basins as Units of Water Resource Planning: Ground and surface water base flows (surface water-groundwater interaction), catchments, and return flows from irrigation and wastewater flows into surface water and aquifers are the physical parameters affecting the overall water availability. They are hydraulically interconnected. At the level of river basins. Change in the availability and condition of one component is likely to have an impact on another at another point of time. For instance, excessive withdrawal of groundwater from the upper catchments of the basin might affect the groundwater-surface water interaction, resulting in reduced stream flow in rivers during non-monsoon periods. Similarly, alteration in the natural course of water from rivers might affect the recharge of groundwater. Therefore, this new approach based on river basin as the unit is needed to ensure sustainable development and management of water resources. For implementation, a river basin plan could be disaggregated into watershed development plans, which may further be disaggregated into district/block level plans co-terminus with the existing administrative boundaries.

(7) Ownership:-The issue of ownership on water resources should be clear. The water policies tend to establish the state ownership on all water resources where as the environment policy emphasizes on Public Trust Doctrine i.e. The State is not an absolute owner, but merely a trustee of all natural resources. If the community has to play an important role, the policies and programmes should generate a sense of ownership; and the community should be mobilized and involve right from the inception of any water sector activity and eventually, the collaborative arrangements should be institutionalized.

(8) Water Rights: - Land use and other activities should be explicitly linked in the water policies. The current practice is to treat water Rights as adjunct to land rights, which in large parts of the country approximate to Proprietorship rights. This has led to indiscriminate 'mining' of water with adverse consequences for other well owners drawing water from same aquifer. Under this arrangement, landless households do not have any claim on water. Most successful schemes of equitable sharing of water have started with the concept of water resource as a common pool resource and household's entitlement for water for irrigation and drinking purposes on some

equitable principles. These requirements have to be stipulated in the water policy of the state. These may include (i) organization of owners of overlying land in some formal association, (ii) association to evolve its own strategy for judicious use of water (iii) association to have reliable technical information on the groundwater.

(9) Organizational Aspects: Water as cultural and ecological good is not recognized in the water policy. Water is fragmented in various components. Instead of this the approach should be towards decentralized but co-ordinate planning of this critical resource. This would mean that in place of a fragmentary approach confined to groundwater or surface water, or drinking water or irrigation water, we ought to have a holistic view on the availability of water which should take the river basin as the primary unit. This would imply not only fresh administrative arrangements for basin level planning, but will also involve devolution of adequate technical and financial resources of the state to the basin level organizations, meaningful participation of the stakeholders at that level, and greater autonomy in the functioning of such an organization.

(10) Administrative Aspects: There is heavy dependence on centralized administration to develop, operate and maintain water systems. The result is the development of a 'dependency syndrome' among water users, leaving major responsibility for development and management of water resources to the state. This is in sharp contrast to the earlier traditions in this state when community had the major responsibility of developing and maintaining water resources. (One can find several examples in the Wakal basin: .e.g. in Gogala - Aaya Rehat and Vehua Rehat where local communities themselves are managing water). As per the Panchayati raj act, PRI's have great role in the governance issues, but these institutions are not working effectively in the wakal basin area. The meetings of Gram Sabhas are very formal and the involvement of community is very marginal. There is more beurocratisation and politisation of the PRI,s.,then democratization.Thre are increasing incidents of political manipulation in the planning, implementation and management of water resources. They lack capacity in key management area as well as effective mechanism for planning, execution and management. Therefore, it is very necessary to increase capacity building of PRI's by providing training programmes. The School of Local Self Government and Responsible Citizenship (Panchayati raj Sansthan) of Vidya Bhawan Society, Udaipur is pioneer institution in this field. The institute provides residential training programmers for PRI's elected representatives on governance, administration and management issues (with

significant emphasis on water related issues). The institute has trained 7500 elected representatives in last nine years and majority of them were from Wakal basin area. The Centre for Voluntarism and Social Change of MSMMT, Udaipur is another major institution actively engaged in capacity building of Community Leaders through various Workshops, Seminars and Training Programs.

(11) Financial Aspects: - Policies must clearly recognize and explain the underlying deficiencies of the existing organizational systems, legal, financial, constitutional or administrative barriers in system of water resource development, management and operation. Policies must suggest that how financial resources to Invest in additional Water Infrastructure and management would be arranged.

(14) Irrigation Reforms:- The policies should address the clear mechanism of *Irrigation Reforms*. Even marginal saving of irrigation water will make significant contributions to drinking water and other uses. It can be achieved through clearly defined judicious mix of technological, hydrological, agroclimatological, agronomic, and economic measures.

(15) Subsidiary: - There should be defined process of subsidiarity for ensuring water resource allocation decisions to be taken at the lowest appropriate level.

(16) Long Term Gains:-The policies should take into account trade-offs between short-term costs and long-term gains.

4.4.2 Governance Elements:

The range of political, social, economic and administrative systems that are in place to develop and manage water resources, and the delivery of water services, at different levels of society (GWP, January 2002).

(A) Principles for Effective Water Governance

(1) Open and Transparent: Institutions should work in an open and transparent manner.

(2) Inclusive and Communicative: Improved participation - depending on all levels of government - is likely to create more confidence in the end result and in the Institutions that deliver policies.

(3) Policies and action must be Coherent and Integrative:

(4) Equitable and Ethical: All men and women should have opportunities to improve or maintain their well-being. Equity between and among the various interest groups, stakeholders, and consumer-voters needs to carefully monitor throughout the process of policy development and implementation.

(5) Accountable: Roles in the legislative and executive processes need to be clear. Each institution must explain and take responsibility for what it does.

(6) Efficient: providing economic efficiency, and also concepts of political, social, and environmental efficiency

(7) Responsive and Sustainable: Policies must deliver what is needed on the basis of demand, clear objectives, an evaluation of future impact and, where available, of past experience

4.4.2.1 BOX:-4

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Recommendations

- 1 Water Campaign for awareness generation
- 2 Ways to tap unharnessed water
- 3 Rejuvenation and renovation of old irrigation projects/works, including those transferred to PRIs.
- 4 Improving maintenance and plugging leakages/ water loss in Drinking water
5. Water saving in Agriculture
6. Involving Community/ PRIs, User Groups, NGOs
7. Associating District Administration in RCBAW
8. Waste water re-use and desalination
9. Capacity enhancement of PRIs/ Water User Groups

5 LEGISLATIVE FRAMEWORK: WATER POLICY TRANSLATED INTO LAWS AND ACTS

Water legislation creates a framework for protection, conservation, management of water resources. Such laws and acts are framed to clarify the role, entitlement and responsibilities of users and water providers, state vis-à-vis other stakeholders; formalize the process of transfer of water allocations; Provide legal status for various water user groups; and ensure sustainability of the resource.

5.1 National Laws and Acts:-

5.2 The Inter State Water Dispute Act 1956:-

This is an act to provide for the adjudication of disputes relating to waters of inter-State rivers and river valleys. It extends to whole of India. If it appears to the Government of any State that a water dispute with the Government of another State has arisen or is likely to arise by reason of the fact that the interests of the State or of any of the inhabitants thereof. In the waters of an Inter-State river or river valley have been, or likely to be, affected prejudicially by The failure of the other State or any authority therein to exercise any of their powers with respect to the use, distribution or control of such waters; or The failure of the other State to implement the terms of any agreement relating to the use, distribution or control of such waters; the State Government may, in such form and manner as may be prescribed, request the Central Government to refer the water dispute to a Tribunal for adjudication. As per this act no State Government shall, be reason only of the fact that any works for the conservation, regulation or utilization of water resources of an inter State river have been constructed within the limits of the State, impose, or authorize the imposition of, any seignior age or additional rate or fee (by whatever name called in respect of the use of such water by any other State or the inhabitants thereof.

5.3 The River Boards Act 1956:-

This is an act provided for the establishment of river boards for regulation of inter state rivers and river valleys .As per this act the central Government can take under its control the development and regulation of inter state rivers.

5.4 Environment and Provisions of Indian Penal Code:-

Provisions relating to offences affecting the public health, safety, convenience, decency and morals contemplated in Chapter XIV of the Indian Penal Code (IPC)

have some relevance to the environmental matters. Of all the offences covered by

this Chapter of IPC, the offence of "Public Nuisance" is more relevant in the context of the Environmental pollution.

Section 268 of the Indian Penal Code describes the term "public nuisance" which has nexus with the environmental protection in the following manner, namely that "A person is guilty of public nuisance, who does any act or is guilty of an illegal omission, which causes any common injury, danger or annoyance to the public or to the people in general who dwell or occupy property in the vicinity or must necessarily cause injury, obstruction, danger or annoyance to persons who may have occasion to use any public right.

A common nuisance is not excused on the ground that it causes some convenience or advantage Public nuisance vis-à-vis private nuisance:-- Public nuisance is also known as common nuisance affecting the public much large or some considerable portion of them: and it must interfere with the rights which members of the community might otherwise enjoy. Whereas private nuisance is anything done to hurt or annoyance of the lands, tenements or hereditaments of another and not amounting to trespass. Private nuisance is an act affecting some particular individual or individuals as distinguished from the public at large. It is in the quantum of annoyance that private nuisance diverse from public nuisance. It is a ground of civil action for damages or an injunction or both'. In this connection the provisions of Sections 120A and 120B IPC are also relevant.

5.4.1 Other offences under IPC relevant to Environmental Pollution:

The other important offences covered under Chapter XI V besides the offences of public nuisance as referred to above include, inter-alia, neglecting or malignant acts likely to spread infection of diseases dangerous to life (Sees. 269 and 270), Adulteration of Food or Drink (Sec. 272), fouling water of public spring or reservoir (Sec. 277), making atmosphere noxious to health (Sec. 278), continuance of nuisance after injunction to discontinue (Section 291), acts endangering life or personal safety of others (Sees. 336 to 338), mischief by injury to works of irrigation or by wrongly diverting water (Section 430), mischief by injury to public road, bridge, river or channel (Section 431), mischief by causing inundation or obstruction with the public drainage, attended with damage (Section 432),

5.4.2 Environment and Provisions of the Code of Criminal Procedure, 1973:

- Chapter X of the Code of Criminal Procedure dealing with maintenance of public order and

tranquility has relevance to the subject of environment by virtue of Section 10(4) of the present Environment Act or otherwise. Section 13 of this Code provides provision for conditional order for removal of nuisance. Section 134 deals with service or notification of order (of Magistrate). Section 135 thereof provides for obligations of the person to whom such order is addressed to, to obey or show cause. Section 136 deals with consequences of failing to obey the orders of Magistrate, (with penalty as provided under Sec. 188 of the IPC). Section 137 prescribes the procedure where existence of public right is denied. Section 138 provides for procedure where the person appears to show cause. Section 139 deals with the powers of the Magistrate to direct local investigation and examination of an expert for the purpose of an enquiry under Section 137 or Section 138 Cr.P.C. Section 140 deals with the power of the Magistrate to furnish written instructions etc. Section 141 provides for procedure where an order has been made absolute as also consequences of disobedience. Section 142 empowers the Magistrate to grant injunction pending enquiry. Section 143 empowers the Magistrate to order prohibiting the objection or continuation of public nuisance. Section 144 of the Code empowers the Magistrate to issue orders in urgent cases of nuisance or apprehended danger. Section 482 dealing with saving of inherent powers of High Court shall also be of some relevance to the present subject.

5.5 Environment (Protection) Act, 1986

Environment (Protection) Act, 1986 has a broad coverage in which 'Environment' includes water, air and land and there exists an interrelationship among water, air, land, human beings and other creatures. It empowers to take measures in protecting and improving the quality of the environment through preventing, controlling and abating environmental pollution. The Government is authorized to set national standards for ambient environmental quality and controlling discharges to regulate industrial locations, to prescribe procedure for hazardous substance management and to collect and disseminate information regarding environmental pollution. The Act provides for severe penalties for those who fail to comply with or contravenes any provision of the Act.

5.6 The Water (Prevention and Control of Pollution) Act, 1974

The Water (Prevention and Control of Pollution) Act, 1974 is an "Act to provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution, for

conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith". Since the subject matter of water falls under List II of the Seventh Schedule to the Constitution, the Act has been passed by the Parliament on 23rd March, 1974 in pursuance of Clause (1) of Article 25, 2 of the Constitution of India, and the concomitant resolutions passed by all the Houses of the Legislatures of the State of Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Rajasthan, Tripura and West Bengal to the effect that the aforesaid matters should be regulated in those States by Parliament, by law. The Act was, therefore, made applicable in the first instance, to the above said States and with a provision that it shall also apply to such other States which adopt the same by passing necessary resolutions in that behalf under Clause (1) of Article 252 of the Constitution. The Act has come into force in the said States with immediate effect. The central Pollution Board (& its regional office) is supposed to monitor and look after the prevention and control of pollution of water as per this act and associated rules. Water Cess Act, 1977 was adopted to strengthen the Pollution control Boards financially, to promote water conservation. This Act empowers the Central Government to impose a Cess on water abstracted from natural resources by industries and local authorities.

5.7 The Forest (Conservation) Act, 1980 and rules 2003

The conservation and management of Forest areas are of utmost importance for the sustenance of vital ecosystems, which is a primary concern in all I W R M strategies. The Wakal basin is full of forest as on today (%) and therefore this valuable natural resources must be protected at any cost. In the draft National Forest Policy of 1988, there is significant concern on protection and preservation of water bodies. The forest (conservation) act, 1980 and rules 2003 are enacted with the purpose of the conservation of forests and for matters connected therewith or ancillary or incidental thereto.

5.8 The Biological Diversity act, 2002 and rules 2004

This Act and associated rule has great significance in Wakal basin with respect to IWRM. If the provisions of this act are properly and religiously adhered, the rich biodiversity of Wakal basin can be effectively conserved which in turn will strengthen the principles of IWRM. The is an act to provide for conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of biological resources, knowledge and for matters connected therewith or incidental thereto.

As per this act and associated rule every local body shall constitute a Biodiversity Management Committee (BMCs) within its area of jurisdiction. The Biodiversity Management Committee shall consist of a Chairperson and not more than six persons nominated by the local body, of whom not less than one third should be women and not less than 18% should belong to the Scheduled Castes/ Scheduled Tribes.

5.9 The Scheduled Tribes (Recognition of Forest Rights) Bill, 2005:

This is a Bill to recognize and vest the forest rights and occupation in forest land in forest dwelling Scheduled Tribes who have been residing in such forests for generations but whose rights could not be recorded; to provide for a framework for recording the forest rights so vested and the nature of evidence acquired for such recognition and vesting in respect of forest land. The Important provisions of this bill are as follows:

(1) The following rights shall be the forest rights of forest dwelling Scheduled Tribes, namely:- (a) right to hold and live in the forest land under the individual or common occupation for habitation or for self cultivation for livelihood by a member or members of a forest dwelling Scheduled Tribe; (b) right of access to, use or dispose of minor forest produce; (c) other rights of uses or entitlements such as grazing (both settled and transhumant) and traditional seasonal resource access of nomadic or pastoralist communities, (d) right to protect, regenerate or conserve or manage any community forest resource which they have been traditionally protecting and conserving.

(2) The forest rights recognized and vested in the forest dwelling Scheduled Tribe shall – (a) be exercised only for bonafide livelihood purposes and not for exclusive commercial purposes; (b) include the responsibility of protection, conservation and regeneration of forests.

(3) Duties :- The holder of any forest right under this Act shall ensure that, –(a) save as those activities that are permitted under such rights, no activity shall be carried out that adversely affects the wild life, forest and the biodiversity in the area including clearing of forest land or trees which have grown naturally on that land for any non-forestry purposes including reforestation; (b) catchments areas, water sources and other ecologically sensitive areas are adequately protected; (c) the habitat of forest dwelling Scheduled Tribes is preserved from any form of destructive practices affecting their cultural and natural heritage; (d) any activity that adversely affects the

wild life, forest and the biodiversity is intimated to the Gram Sabha and to the forest authorities; (e) appropriate measures taken in the Gram Sabha to regulate access to community forest resource and stop any activity which adversely affects the wild life, forest and the biodiversity are complied with.

6 STATE LAWS AND ACTS RELATING TO WATER

- (1) RAJASTHAN IRRIGATION & DRAINAGE ACT 1954 & RULES, 1955
- (2) THE RAJASTHAN MINOR IRRIGATION WORKS ACT, 1953
- (3) PANCHAYAT RAJ ACT 1994
- (4) THE RAJASTHAN SOIL AND WATER CONSERVATION ACT, 1964
- (5) THE FARMERS PARTICIPATION IN MANAGEMENT OF IRRIGATION SYSTEMS ACT 2000

6.1 RAJASTHAN IRRIGATION AND DRAINAGE ACT, 1954 AND RULES

The act provide the detailed provisions for regulating and controlling the irrigation and drainage activities other then minor irrigation activities. According to this act "irrigation work" include all lands occupied by the State Government for the purpose of irrigation works, and all buildings, machinery, fences, gates and other erections, trees, crops, plantations or other produce, occupied by, or belonging to the State Government, upon such lands.

The Act is divided into ten parts. Part I provided for short title and extent, commencement and interpretation; Part II provided for application on a water for public purposes; Part III is meant for the construction and maintenance of works; Part IV provided for the supply & water; Part V is for water rates; Part VI relates to drainage; Part VII is meant for obtaining; Labor for irrigation and drainage works; Part VIII specials for jurisdiction; Part IX provides for offences and penalties. Part X provides for subsidiary Rules. The associated rule is the Rajasthan Irrigation & Drainage Rules, 1955. The act and rule are attached as annexure as such. As per this act/rule the state government has all Powers to prohibit obstructions or order removal in any river, stream or drainage channel whenever it appears to the State Government that injury to any land or the public health or public convenience has arisen or may arise from such obstructions.

State has Power to arrest without warrant any person who willfully damages or obstructs any irrigation or drainage work; and without proper authority interferes with the supply of flow of water in or from any irrigation or drainage work or in any river or stream, so as to endanger, damage or render less useful any irrigation or drainage work.

6.2 THE RAJASTHAN MINOR IRRIGATION WORKS ACT. 1953 AND RULES 1956

This is an Act to provide for the construction, improvement and maintenance of minor irrigation works in the State of Rajasthan. The rules are applicable to the minor irrigation works like Construction of small Bunds and Nada's; Construction and improvement of water-courses, whether defined artificial channels or natural channel; Construction of masonry wells; Conversion of Kham wells into masonry wells; Construction of Kham wells; Improvement of masonry wells which are out of use and the lands where under have been classed as Barani during the current settlement; and Boring of wells.

6.3 PANCHAYAT RAJ ACT:

This act leads towards village governance and establish the bottom up approach. There are three tier systems in all village development and governance activities, and village. This act leads towards village governance and establish the bottom up approach. The Panchayati raj Institutions are defined as institutions of self government for rural areas whether at the level of a village or a block or a district. Various institutions established under this act are Panchayat, Panchayat Samiti, and Zila Parishad. There is three tier systems in all village development and governance activities, and village panchayat is at the first tier. For every ward of the Panchayat, ward Sabha meetings are organized at least two times in a year. The ward sabha consists of all adults of that ward as members and discuss all matters related to that ward. There are GRAM SABHAs, the most powerful constituents of PRIs, constituted for each Panchayat circle consisting of the persons registered in the electoral rolls relating to that village or the group of villages comprised within the area of the panchayat. The Block development Officers and representatives of other government departments are required to attend the meetings of Gram Sabha. All projects, plans and programmes taken for implementation by the Panchayat must be approved by the Gram Sabha. The Panchayat has to consider all suggestions, plan, projects made by Gram Sabha.

The powers and functions of PRIs, related to water sector, are as given under:

(a) Functions and Powers of panchayats

1 General Functions:

(i) preparation of annual plans for the development of the panchayat area: (ii) preparation of annual budget ;(iii) mobilizing relief's in natural calamities ;.(iv) removal of encroachments on public properties.(v) organizing voluntary labor and contribution for community works;(vi) maintenance of essential statistics of village(s).

2. *Minor Irrigation:* Control and maintenance of tanks irrigating up to 50 acres.
3. *Drinking Water :*(i) construction, repairs and maintenance of drinking water wells, tanks and ponds;(ii) prevention and control of water pollution;(iii) maintenance of hand pumps and tank schemes.
4. *Rural Sanitation:* (i) maintenance of general sanitation; (ii) cleaning of public roads, drains, tanks, wells and other public places; (iii) maintenance and regulation of burning and burial grounds; (iv) construction and maintenance of rural latrines facility parks, bathing platforms, soak pits etc.; (v) disposal of unclaimed corpses and carcasses; (vi) management and control of washing and bathing ghats.

(b) Functions and Powers of Panchayat Samitis

1. General Functions:

- (i) preparation of the Annual Plans in respect of the schemes entrusted to it by virtue of the Act and those assigned to it by the Government or the Zila parishad and submission thereof to the Zila Parishad within the prescribed time for integration with the District Plan; (ii) consideration and consolidation of the Annual Plans of all Panchayats in the Panchayat Samiti area and submission of the consolidated plan to the Zila Parishad: (iii) preparation of Annual Budget of the Panchayat Samiti; (iv) performing such functions and executing such works as may be entrusted to it by the Government or Zila Parishad; (v) providing relief in natural calamities.

2. Land Improvement and Soil Conservation:

Assisting the Government and Zila Parishads in the implementation of land improvement and soil conservation programmes of the Government.

3. Minor Irrigation, Water Management and Watershed Development:

- (i) Construction and maintenance of minor irrigation works, anicuts, lift irrigation, irrigation wells, bunds, mud bunds; (ii) implementation of community and individual irrigation works.

4. Drinking Water:

- (i) monitoring, repair and maintenance of Hand Pumps and Pump and Tank Scheme of Panchayats, (ii) maintenance of rural water supply schemes; (iii) prevention and control of water pollution; (iv) implementation of rural sanitation schemes.

The general Powers of the Panchayat Samitis are to do all acts necessary for or incidental to the carrying out of the functions entrusted, assigned or delegated to it and, in particular, and without prejudice to the foregoing power, to exercise all powers specified in this Act.

(c) General Functions of Zila parishads :

To prepare plans for economic development and social justice of the district, and to ensure the coordinated implementation of such plans in respect of matters including those enumerated in the items following.

1. Minor Irrigation, Ground water resources and watershed Development:

(i) construction, renovation and maintenance of "C" & "D" class minor irrigation works up to 2500 acres and lift irrigation; (ii) Providing for the timely and equitable distribution and full use of water under irrigation schemes under the control of Zila Parishad and revenue realization; (ii) development of ground water resources; (iii) Installation .of Community Pump sets; (iv) watershed development programme.

2 . Soil Conservation:

(i) soil conservation works; (ii) land development works.

6.4 THE RAJASTHAN SOIL AND WATER CONSERVATION ACT, 1964 :

An Act to provide for the conservation and improvement of soil and water resources in the State of Rajasthan panchayat is at the first tier, Every plan and project is required to be conceived and developed by the Gram Sabha. The powers and functions ,related to water sector, are as given under:

(a) Functions and powers of panchayats

1 General Functions:

(i) preparation of annual plans for the development of the panchayat area: (ii) preparation of annual budget;(iii) mobilizing relief's in natural calamities;.(iv) removal of encroachments on public properties.(v) organizing voluntary labor and contribution for community works;(vi) maintenance of essential statistics of village(s).

2. Minor Irrigation: Control and maintenance of tanks irrigating up to 50 acres.

3. Drinking Water: (i) construction, repairs and maintenance of drinking water wells, tanks and ponds;(ii) prevention and control of water pollution;(iii) maintenance of hand pumps and tank schemes.

4. Rural Sanitation: (i) maintenance of general sanitation; (ii) cleaning of public roads, drains, tanks, wells and other public places; (iii) maintenance and regulation of burning and burial grounds; (iv) construction and maintenance of rural latrines facility parks, bathing platforms, soak pits etc.; (v) disposal of unclaimed corpses and carcasses; (vi) management and control of washing and bathing ghats.

(b) Functions and Powers of Panchayat Samitis

1. General Functions:

(i) preparation of the Annual Plans in respect of the schemes entrusted to it by virtue of the Act and those assigned to it by the Government or the Zila parishad and submission thereof to the Zila Parishad within the prescribed time for integration with the District Plan; (ii) consideration and consolidation of the Annual Plans of all Panchayats in the Panchayat Samiti area and submission of the consolidated plan to the Zila Parishad; (iii) preparation of Annual Budget of the Panchayat Samiti; (iv) performing such functions and executing such works as may be entrusted to it by the Government or Zila Parishad; (v) providing relief in natural calamities.

2. Land Improvement and Soil Conservation:

assisting the Government and Zila Parishads in the implementation of land improvement and soil conservation programmes of the Government.

3. Minor Irrigation, Water Management and Watershed Development:

(i) construction and maintenance of minor irrigation works, anicuts, lift irrigation, irrigation wells, bunds, mud bunds; (ii) implementation of community and individual irrigation works.

4. Drinking Water:

(i) monitoring, repair and maintenance of Hand Pumps and Pump and Tank Scheme of Panchayats, (ii) maintenance of rural water supply schemes; (iii) prevention and control of water pollution; (iv) implementation of rural sanitation schemes.

General Powers of the Panchayat Samitis are to do all acts necessary for or incidental to the carrying out of the functions entrusted, assigned or delegated to it and, in particular, and without prejudice to the foregoing power, to exercise all powers specified in this Act.

(c) General Functions of Zila parishads :

To prepare plans for economic development and social justice of the district, and to ensure the coordinated implementation of such plans in respect of matters including those enumerated in the items following.

1. Minor Irrigation, Ground water resources and watershed Development:

(i) construction, renovation and maintenance of "C" & "D" class minor irrigation works up to 2500 acres and lift irrigation; (ii) Providing for the timely and equitable distribution and full use of water under irrigation schemes under the control of Zila Parishad and revenue realization; (ii) development of ground water resources; (iii) installation .of Community Pump sets; (iv) watershed development programme.

2 . Soil Conservation:

(i) soil conservation works; (ii) land development works.

6.5 FARMERS PARTICIPATION IN MANAGEMENT OF IRRIGATION SYSTEMS ACT 2000

This is an act to provide for farmers participation in the way of farmers organization for the management of irrigation system and for matters connected therewith or incidental thereto. The objects of the Farmers' Organization is to promote and secure distribution of water among its users, adequate maintenance of the irrigation system, efficient and economical utilization of water to optimize agricultural production, to protect the environment, and to ensure ecological balance by involving the farmers, including a sense of ownership of the irrigation system in accordance with the water budget and the operational plan.

The Water Users' Association shall perform the following functions, namely:

- (a) to prepare and implement a warabandi schedule for each irrigation season, consistent with the operational plan, based upon the entitlement, area, soil and cropping pattern;
- (b) to prepare a plan for the maintenance, extension, improvements, renovation and modernization of irrigation system in the area of its operation and carry out such works of both distributary's system and field drains in its area of operation with the funds of the association from time to time;
- (c) to regulate the use of water among the various outlets under its area of operation according to the warabandi schedule of the system;
- (d) to promote economy in the use of water allocated ;
- (e) to prepare demand and collect water charges;
- (f) to maintain a register of land owners as published by the revenue department;
- (g) to prepare and maintain an inventory of the irrigation system within the area of operation;
- (h) to monitor flow of water for irrigation;
- (i) to resolve the disputes, if any, between its Members and water users in its area of operation;
- (j) to raise resources;
- (k) to maintain accounts;
- (l) to cause annual audit of its accounts;
- (m) to assist in the conduct of elections to the Managing Committee;

- (n) to maintain such other records, as may be prescribed;
- (o) to abide by the decisions of the Distributary's and Project Committee

There will be a project committee (Distributary's and Project Committee) and it will conduct regular water budgeting and also to conduct periodical social audit in the manner, as may be prescribed. The distributary's committee will perform the following functions, namely :

- (a) to prepare an operational plan based on its entitlement area, soil, cropping pattern at the beginning of each irrigation season, consistent with the operational plan prepared by the Project Committee;
- (b) to prepare a plan for the extension, improvements, renovation, modernization and annual maintenance of both distributaries and medium drains within its area of operation;
- (c) to regulate the use of water among the various Water Users' Associations under its area of operation;
- (d) to resolve disputes, if any, between the Water Users' Associations in its area of operation;
- (e) to maintain a register of Water Users' Associations in its area of operation;
- (f) to maintain an inventory of the irrigation system in the area of its operation, including drains;
- (g) to promote economy in the use of water allocated;
- (h) to maintain accounts;
- (i) to cause annual audit;
- (j) to maintain such other records, as may be prescribed;
- (k) to monitor the flow of water for irrigation;
- (l) to conduct General Body Meetings in the manner, as may be prescribed;
- (m) to abide by the decisions of the Project Committee;
- (n) to cause regular water budgeting and also the periodical social audit in the manner, as may be prescribed;
- (o) to assist in the conduct of elections of the Managing Committee;
- (p) to encourage avenue plantations in its area of operation.

7 SUGGESTIONS ON LAWS AND ACTS

All legislation related to water should provide a structure to achieve both conservation and development goals. Security and flexibility of rights are two main structural features of legislation in general and of water (& related) laws in particular. Water legislation addresses, among other things, the ownership of water resources, the legal nature and stability of water rights, the effective and beneficial use of water, the transferability of water rights, and the need to acknowledge and respect existing uses and customary entitlements when changing water legislation. There are various laws and acts on water and therefore an integrated water law should be prepared considering basin as the basic unit and territory. The suggestions are as follows:

7.1 Ownership Issue:

In present laws, that *de jure*, the state has the ultimate right on water. But *de facto*, as far as ground water is concerned, the owner of the land assumes the right to water beneath the land. Similarly, those on the banks of surface water sources claim their preemptive right. The 'ownership' should not vest in government but it should be declared as the property of the people of the state. The riverine community as well as those who have land above ground water sources may have *usufruct* rights subject to overall needs of the community. Availability and demand for water at the basin level in terms of ground water as well as surface water may facilitate in defining *usufruct* rights of the communities. The proposed RBOs may play an important role in facilitate the demarcation of the user community.

7.2 Water Rights:

Water right is the right to use water- not to own it. The water law while acknowledging the existing uses and rights, include customary uses and aboriginal entitlements. the laws should be flexible enough to permit reform in response to technological change and socio-economic need. The tenets of effective and beneficial use are:

(i) Water must not be obtained for speculation or be wasted; (ii) The end use must be a socially acceptable use; (iii) Water is not to be misused; (iv) The use must be reasonable as compared with other uses.

In the matter of irrigation supplies, the government should not inflict injury on other riparian owners or diminish the supply, which the irrigators have hitherto utilized. The government cannot abdicate its duty of seeing that there is equitable distribution of

water between tenants under each channel source. As regards ground water, it may be suggested that the state governments should have the legal power to regulate ground water but waters down to a state making such variations as special circumstances may necessitate.

(1) The law should include the important Key factors like:

(i) Transparency in water allocation and rights to reduce potential social unrest; (ii) Adequate information and availability of data on the surface and groundwater resource (iii) A mechanism that ensures that allocation of water between competing demands is compatible with sustainable use; (iv) Explicitly setting out conditionality before water rights are granted or recognized, to prevent laborious political wrangling if changes are needed; (v) Although many legal systems allow perpetual rights, time-bound concessions might be preferred for the same reason.

(2) Water Quality:

Preventive and corrective measures to protect the quality of water resources should be encoded in legislation. Preventive measures include effluent and discharge regulations, technical standards and requirements for treating polluted effluents, economic instruments as well as quality standards for receiving waters, set according to expected or existing water uses and services. Corrective measures include cease and desist orders, compensation for damage and economic losses, and abatement and remediation requirements. The polluter pays principle allocates responsibility for damage costs. Other legal instruments for quality protection include liability, both strict and fault based, reversals in the burden of the proof, joint and several liability for pollution caused by more than one actor, fines, and other penalties such as imprisonment. Personal liability for employees and officers of corporations causing pollution can operate as a useful deterrent. To be effective, water quality law needs a supporting system of indicators and institutional capacity for the measurement, interpretation and application of environmental quality objectives or water standards.

7.3 Reform of existing legislations:

Some of the existing laws or some of their provisions have outlived their utility and re outdated. They must be repealed or amended suitably. In case of Central laws, parliamentary action and/or presidential assent would be needed. Those which are beneficial for the State can be reformulated, reenacted and made part of the proposed comprehensive legislation. Some existing laws may have to be incorporated into the Proposed comprehensive legislation.

As far as irrigation laws are concerned, the state has enacted legislation covering various aspects of irrigation to fulfill primary responsibility to develop and manage water resources. But, there is a multiplicity of laws covering various aspects of irrigation management and administration resulting in inefficiency of administration through multiple authorities. For efficient administration of irrigation, it may be suggested that existing irrigation laws of state be consolidated into one statute to avoid multiplicity, and the acts/provisions which have become irrelevant should be deleted.

7.4 IWRM Elements:

Legislation may be reformed to include the core elements of IWRM, that is, the value of water in use (water as a social and economic good), the role of women in water management and the sustainability of the resource. The legal framework may emphasize principles in support of such IWRM elements, such as: polluter pays principle, the river basin approach, public participation, reform of financing, ecological protection and equitable access to water resources. Other legal reform topics which help create a strong IWRM framework include:

- (a) The enabling institutional framework, including the legal roles and responsibilities of institutions and their inter-relationship;
- (b) Mechanisms for stakeholders to participate in water resources management;
- (c) Conflict resolution mechanisms;
- (d) Water services and associated rights and responsibilities, covering, for example: provision of water for basic human needs, and standards of service (quality of water provided, assurance of supply, efficiency levels, etc);
- (e) Tariff and water pricing systems, including principles of fairness, affordability and protection of the poorest;
- (f) Customer protection mechanisms, such as timely and appropriate access to information, participation and involvement in water management; - Equitable allocation of water rights;
- (g) Clear mechanisms for the transfer of water rights to minimize conflicts and risk of social unrest.

7.5 New Regulations:

There is strong need to develop enforceable rules for regulating extraction of ground water. These should combine economic measures (positive and negative) and

administrative measures. Subsidizing sprinkler or drip irrigation and encouraging low water consuming crops are examples of positive economic measures. Putting a graduated tax on the size of water lifting devices (depending on the water availability in different aquifer) is an example of negative incentive. Similarly, registration of rigs and regulating and monitoring their use, is a measure of administrative nature. These measures will succeed to the extent public opinion in their favor is created, and administrations of the measures ensure deep involvement of the communities.

7.6 Attributes:

The Integrated water Law should be socially acceptable and administratively feasible. The close links between land use and water availability and quality should be reflected in water law.. Water law needs to tread a careful line between completeness and flexibility. It needs to be flexible enough to reflect changing circumstances, yet explicit and complete enough to ensure full discussion of the basic principles and policies and their implications. If not sufficiently firm and clear, framework legislation may allow for arbitrary decision-making by implementers.

7.7 International Agreements:

National water laws must take into account the International Conventions accepted by India; Legislative change creates stress for existing uses and water rights. In law reform, existing rights and uses and the entitlements of rural and indigenous populations should be protected and transitional provisions made.

8 CONCERNS OF HIGH COURTS AND SUPREME COURTS

8.1 Environment and Education:

(1) Having regard to the grave consequences of the pollution of water and air and the need for preventing and improving the natural environment which is considered to be one of the fundamental duties under the Constitution of India as enshrined in Clause (g) of Article 51 A, the Supreme Court held that it is the duty of the Central Government to direct all the educational institutions throughout India to teach at least one hour in a week the lessons relating to the protection and improvement of the natural environment including forests, lakes, rivers and wild-life. The Central Government shall get text books written for the said purpose and distribute to all the educational institutions free of cost. Children should be taught about the need for maintaining cleanliness commencing with the cleanliness of the house both inside and outside and in streets where they live. Clean surroundings will lead to healthy body and healthy mind. **(M. C. Mehta vs. Union of India and Others, AIR 1988 SC 1037.)**

(2) We are in a democratic polity where dissemination of information is the foundation of the system. Keeping the citizen informed is an obligation of the Government. It is equally the responsibility of the society to adequately educate every component of it, so that the social level is kept up. The Ministry of Information and Broadcasting of the Government of India should without delay start producing information films of such duration as is being done now on various other aspects of environment pollution bringing out the benefits for society on the environment being protected and the hazards involved in the environment being polluted. **(M. C. Mehta vs. Union of India, AIR 1992 SC 382)**

(3) In **M C. Mehta v. Union of India and others, 2004 (1) SCC 571**, the issue was relating to bringing environment awareness by means of education as a compulsory subject of study, vide Direction (4) issued by the Supreme Court in its Order dated 22.11.1991 published as **M. C. Mehta v. Union of India, 1992 (1) SCC 358**. In the facts and circumstances of the case and having heard the learned counsel for the parties and also bearing in mind the burden that may be imposed on the students by introducing an additional subject, the Hon'ble Supreme Court held, inter alia, as follows:

(a) "We think for the present the steps taken by the respondents as indicated in their affidavits could be accepted pending further consideration in this regard. However, to make sure that these steps taken by the States concerned are implemented without fail, we direct all the respondent States and other authorities concerned to take steps to see that all educational institutions under their control implement the respective steps taken by them and as reflected in their affidavits fully, starting from the next academic year viz. 2004-05 at least, if not already implemented. The authorities so concerned shall duly supervise such implementation in every educational institution and ; non-compliance with the same by any of the institutions should be treated ; as a disobedience calling for instituting disciplinary action against such institutions."

(b) "This acceptance of an interim arrangement, however, will not prevent the respondent States and other authorities from drawing up or taking further steps to more effectively fulfill the objects of the directions issued by this Court earlier."

(I) Environment and Sustainable Development (Principles of "Polluter Pays" and "Precautionary Principle"):- In Vellore Citizens Welfare Forum vs. Union of India and Others, AIR 1996 SC 2715, (2720, 2722, 2726).

The Supreme Court held, inter-alia, that "Sustainable Development" is a balancing concept between ecology and the development and has been accepted as a part of the customary international law, though its salient features have yet to be finalized by the international law jurists.

The "Polluter Pays Principle" and the "Precautionary Principle" are essential features of Sustainable Development, and are part of the environmental law of the country.

"Polluter Pays Principle" means that the absolute liability for harm to the environment extends not only to compensate the victims of the pollution but also the cost of restoring the environmental degradation. Remediation of the damage and environment is part of the process of Sustainable Development and therefore polluter is liable not only to pay costs to the individual sufferers but also to the cost of reversing the damaged ecology. To implement the twin principles, namely, "Polluter Pays" and "Precautionary Principle", the Supreme Court directed the Central Government to constitute an authority under the Environment Act by conferring necessary powers on it to deal with the situations created by the tanneries and other polluting industries in the State of Tamil Nadu. The Court

approved the concept of "Sustainable Development" rather than "Absolute Development" or "Development at all costs".

8.2 Preventive measures to check water pollution:

(1) Our environmental law operates on a deterrent theory of Criminal Justice Administration. The Act has been enacted for the prevention and control of water pollution and for maintaining and restoring wholesomeness of water. Section 33 intends to arrest the damage and repair it and to take preventive measures to check the pollutants of each water source. **(Maharajashree Umaid Mills Ltd., Pali vs. State of Rajasthan and Others, AIR 1998 Raj. 9).**

(2) Water Pollution -Mining Operations - Need to Develop Greenbelt:

The Badkal lake and Surajkund lake, which are considered to be monsoon fed water bodies, are now fed by the natural drainage pattern of the surrounding hill area during rainy season and that the mining activity in the vicinity of these tourist resorts may disturb the rain water trends which in turn may badly affect the water level as well as the water quality. Such mining may also cause fractures and cracks in the sub-soil, rock layer causing disturbance to the aquifers which are the source of ground water, and may also disturb the hydrology of the area. Therefore, the Supreme Court, by taking into consideration the report of the NEERI, has issued directions not to undertake any mining activity around 2 kms. radius of the tourist resorts of Badkal and Surajkund lakes, and for starting of plantation of trees for developing the green belts etc., by the concerned officers of the Forest Department.

8.2.1.1 (M.C. Mehta vs. Union of India and Others, AIR 1996 SC 1977.)

(2) On encroachments and pollution of rivers and lakes and their catchments:

(a) **Hinch Lal Tiwari, Appellant vs. Kamala and other Respondents. AIR 2001 SC 3215:** It is important to note that material resources of the community like forests, tanks, ponds, hillock, mountain etc. are nature's bounty. They maintain delicate ecological balance. They need to be protected for proper and healthy environments which enable people to enjoy a quality life which is essence of the guaranteed right under Article 21 of the Constitution. The Government including revenue authorities, i.e. respondents 11 to 13 having noticed that a pond is falling in disuse, should have bestowed their attention to develop the same which would on one hand, have prevented ecological disaster and on the other provided better

environment for the benefit of public at large. Such vigil is the best protection against knavish attempts to seek allotment in non abadi sites.

For the aforementioned reasons, we set aside the order of the High Court; restore the order of the Additional Collector dated February 25, 1999 confirmed by the Commissioner on March 12, 1999. Consequently, respondents 1 to 10 shall vacate the land, which was allotted to them, within six months from today. They will, however, be permitted to take away the material of the houses which they have constructed on the said land. If respondents 1 to 10 do not vacate the land within the said period the official respondents i.e. respondents 11 to 13 shall demolish the construction and get possession of the said land in accordance with law. The state including respondents 11 to 13 shall restore the pond, develop and maintain the same as a recreational spot which will undoubtedly be in the best interest of the villagers. Further it will also help in maintaining ecological balance and protecting environment in regard to which this court has repeatedly expressed its concern. Such measures must begun at the grassroots level if they were to become the nation's pride.

(b) Abdul Rahman Versus STATE OF RAJASTHAN & ORS. (D.B. Civil writ Petition No. 1536/2003-Decided on 2.8.2004): Restoration of catchments area-public interest Litigation-Nadi land can not be used for construction –State directed to consider –Recommendations of expert committee constituted by State under orders of Court dated 18.7.2003 and to chalk out plat for restoration of catchments areas to their original shape.

1 All land shown as drainage channels like nalla, rivers, tributaries etc. as on 15.8.1947 should be declared as Govt. land. Any conversions made after 15.8.1947 should be declared illegal. The relevant act and rules must be amended accordingly.

2. Demarcation of catchments areas should be done by construction pillars at suitable spacing depending upon size of the catchments area with the help of GT sheet of scale 1:25000 or 1:50000 and/or "Water Shed Atlas of Rajasthan" prepared by the State remote Sensing Application Centre, Jodhpur.

3. Demarcation of drainage channels –

(i) In inhabited areas this can be done by installing pillars at suitable spacing or by constructing side wall depending upon size of drainage channel and its importance.

(ii) In urban and rural areas, the demarcation of drainage channels must essentially be done by constructing side walls of appropriate height and thickness.

4. In the Government owned lakes and other and other water bodies, the Khatedari rights of private persons in their submergence area should be brought under the ownership of the Government

5. The drainage channels in the catchments areas should be got inspected by engineering professionals ad Patwaris. Wherever there are obstructions in nalla, it should be suitable removed by constructing culverts, depending and widening of nallas etc.

6. Wherever here are any construction activities which may interfere with the flow of water in drainage channels, no objection certificate must be obtained from the irrigation department.

7. The Anicuts more than 2 m height above deepest nalla bed should be identified. The eight more than 2 m should be dismantled.

8. Wherever residential colonies have been constructed obstructing flow in drainage channels, the obstruction must be removed and nallas may be deepened/constructed.

9. On the periphery of lakes, ponds, water bodies in urban and rural areas, a puce drain should be constructed on periphery of the water body to prevent entry of domestic, industrial and other waste in the water body.

10. For soil conservation work, suitable guidelines must be issued by the "Watershed & Soil conservation Department" so that these works make minimum possible interference with the flow of water.

11. The district administration should specify places for dumping various types of waste material. If any body is found to dump the waste material in other places, particularly drainage channels, then suitable punishment should be provided in the law.

12. The government should use television, radio and newspapers to create awareness in this matter.

13. Possibility should be explored to use marble slurry as construction material, for filling depressions etc. as has been done for disposal of fly ash from Thermal power houses.

14. The water quality of water bodies should regularly be monitored.

15. Wherever over burden or waste materials generated from mines and processing units have been dumped obstructing flow must be in drainage channels; diversion drains and check walls must be constructed. For that purpose, special condition should be incorporated in the lease/license agreement.

9 INSTITUTIONAL ARRANGEMENT

9.1 Present Setup

The state water sector is managed by a large number of departments, each with its own program, 'territory' and mandate. Departments directly dealing with water resources and the scope of their activities are briefly indicated below:

(1) *Irrigation Department*: The main activities include survey, investigation, design and planning of surface water schemes, hydrological and meteorological studies, optimal utilization of available surface water by construction of major, medium, and minor irrigation schemes and, flood control measures

(2).. *Ground Water Department*: The main activities include planning, development, exploitation, exploration and utilization of groundwater resources. It also conducts periodic surveys of available groundwater supplies in different blocks.

(3).. *Watershed Development Department*: It is responsible for construction of water harvesting structures such as anicuts, bunds etc, and also for management of catchment area.

(4).. *Public Health Engineering Department*: This department is responsible for planning and execution of drinking water supply schemes for urban and rural areas. Surface and ground water is used as per availability in a particular area and supplemented, when necessary, by outside sources. This is a major consumer of available surface and ground water resources.

(5) *Water Pollution Control Board*: It is responsible for controlling pollution of

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land and water resources.

(6) *PRI Bodies*:-Gram Panchayats, Panchayat Samities, Jila Parishad

(7) *NGOs*

Many activities of these departments, agencies and institutions overlap, and sometimes clash with each other. At present there is no effective linkage between these departments, resulting in an absence of a co-ordinated approach to development and management of water resources. For example, the same groundwater aquifer may be used for irrigation as well as urban and rural drinking water supply in certain regions without any agency co-coordinating the efforts. Under the present institutional arrangement, planning and development of surface water resources of the state is handled primarily by the irrigation department, whereas planning and development of the ground water resources is the

responsibility of the ground water department. Besides, other departments

(watershed development, soil conservation, and agriculture) and some NGOs are also involved in harnessing water resources by constructing water harvesting structures and anicuts etc. A score of water user departments utilize the water resources developed by these departments. The unfortunate consequence of the above, highly fragmented, institutional arrangement is that for the purpose of water resources planning and development, surface and ground water are treated separately and state's precious water resources are used in piece-meal fashion, often leading to waste and inefficiency. The existing institutional arrangement has an inherent conflict of interest among different water-providers and water-users, as there are no well defined objectives or set of priorities. The same departments are responsible for development as well management and regulation of water supplies at present. Experiences from all over the world suggest that functions relating to overall water resources management involving multiple users are highly specialized and need to be separated from service delivery functions to ensure optimal planning and management of water resources on a sustainable basis. Regulation is again an entirely separate task from the others, which are more facilitating and pro-active ones. (Report of the Expert Committee on Integrated Development of Water Resources, June 2005 www.rajirrigation.gov.in)

9.2 Present Institutional Arrangement

(1) *State Water Resources Planning Department (SWRPD)*: The Government of Rajasthan has established a separate department for integrated water resources development in the state on these lines in March 2005.

(2) *State Water Resources Council (SWRC)*: This Council was constituted in August 1994 under the Chairmanship of the Chief Minister of the state with Irrigation Minister as its Vice-Chairman. Ministers and Secretaries of different water related Departments are its members. Its role is to approve multi-sectoral strategies and policies for integrated and sustainable water resources development in the state. It has neither regular meetings nor a fixed, time-bound agenda.

(3) *Rajiv Gandhi Water Management Mission*: It was constituted in July 2001. It is also chaired by the state Chief Minister. Ministers and secretaries of different water related departments are its members. Four renowned subject matter specialists are also included as members of the Mission. The main objective of the Mission is to prepare schemes for utilisation of all surface and ground water in accordance with the State Water Policy in a co-ordinated fashion and with a multi-disciplinary approach.

(4) *Standing Committee on State's Water Resources*: This was constituted in February 1993 with the Chief Secretary as its Chairman. It was reconstituted and strengthened in May 2000 with the Irrigation Minister as its Chairman. The objectives of this Committee are integrated water resources development, planning and utilisation, with active involvement of beneficiaries, stakeholders and society. There is no evidence of its effective functioning.

(5) *District Level Water Distribution Committee*: These were constituted in June 1993 for co-ordinated water use planning at the district level. Concerned Divisional Commissioner chairs this Committee for major and medium irrigation projects covering two or more districts. The District Collector is the Chairman where projects cover only one district. The Sub Divisional Officer is the Chairman for minor irrigation projects. The committee has neither the clout nor the expertise and a representative character to implement its mandate.

(6) *Sub-Committee for Water Harvesting Structures*: This Committee with Secretary of Irrigation as Chairman was constituted in June 2000. Its objective is to plan and implement the watershed development and water conservation schemes for ground water recharge in accordance with the principles of the State Water Policy. It is basically a departmental committee with limited functions.

(7) *District Level Committee for Water Conservation*: This Committee with Superintending Engineer, Irrigation, as Convener, was formed in July 2000 for implementing water conservation and harvesting schemes at panchayat levels. None of these committees, many of which were organized more than a decade ago, has any record of achievement worth noting.

(8) In addition to the above, other committees, working groups, task forces, etc at state, district and panchayat levels also deal with water-related issues. It is evident from the constitution of these bodies that the roles, responsibilities and objectives of most of them overlap. There is also duplication in the tasks assigned to these committees. Further, there is lack of co-ordination among the committees and no feedback is passed on from one to other committee. In any event, hardly any committee meets with a regular agenda and a work plan.

9.3 Proposed Institutional Mechanism

Institutional structures are essential mechanisms for dialogue and co-ordination to ensure some measure of integration. Institutions are necessary for encouraging coordinated action on water and related issues, such as land management, across sectors and/or decision-making levels and encouraging more participatory management of resources. The River Basin Organizations are the first and foremost

to achieve IWRM. However, experience shows that river basin organizations alone will not guarantee an IWRM approach-they must also be supported by appropriate policies, legislation and capacity building.

9.4 Suggestions for institutional mechanism:

(1) Apex and Sub-Apex Bodies:

Apex bodies consist of a range of entities such as high-level steering groups within national governments, inter-agency task forces (for specific purposes, e.g. water pollution control), and international consortia for the management of water resources. The aim of such bodies is to provide structures for coordination between different organizations involved in water resource management. In some cases water policy and management is centered in a specific body of government but in many situations responsibility for water is shared between a number of bodies (e.g. ministries for irrigation, water supply, environment ,panchayati raj ,tribal and public works) that may not be able to operate easily together. Here an apex body may provide a useful co-ordinating function. For encouraging a more "big picture" approach to water decision-making: The creation of apex bodies can free water allocation decisions from being driven solely by sectoral interests, enabling more strategic allocation. Or it can enable reforms, which, although badly needed from the point of view of sustainable development, may run counter to political interests within a specific sector. For an apex body to function effectively, all the stakeholders who are involved in the functions under its jurisdiction need to develop commitment to it and ensure it has appropriate powers. Conflict management and awareness raising techniques are important here.

(a) Establishing a steering group:

Putting together an inter-ministerial steering group-preferably supported by a management team of qualified professionals-can help create joint ownership of the strategy across sectors and successful implementation of IWRM principles. The inter-ministerial committees can play active roles in these processes, not simply approving finished plans and strategies but in fact taking a role in steering the process. Because the steering committee does play such an important role in the success of a strategy, choice of members needs to weigh both level of influence and commitment to the process. The same steering group might also monitor implementation progress and be held to account to a higher authority.

(b) Distribution of roles and responsibilities across levels of government:

The IWRM strategy must be well anchored at various levels of government (central, regional, local) and in the community at large to avoid disruption from change of government or departure of key personnel. This can be achieved through the selection of the steering and management groups and through facilitating organizations, such as NGOs.

(c) Administrative Structure:

There is a clear need for a high-level State Water Council to oversee the whole sector from a wider perspective, ensuring efficiency and equity. For this reason it will have a limited, co-ordination, role. The foundation of the administrative structure of the entire water sector should be Water Users Associations. .Activities of WUAs must be phased, starting with effective and coherent association with a project and only later, after due preparations, should include

the responsibility of management of a sub- surface and ground water system;

Sources should be treated in an integrated fashion in the operational area of a WUA.

There should be an effective middle tier institution between WUAs and the concerned state departments. Offices of these departments at the project or district level should have close relation and association with grass root organizations. WUAs must get the needed attention, guidance and support from departments . Therefor,middle level organizations should be created. The National Water Board mooted the idea of a middle tier organization in India, and a committee was set up in 1992 to prepare a policy paper on river basin organizations. The effort, however, was not brought to completion.

(d) Need for Water Regulatory Authority:

Establishment of a Water Regulatory Agency can be a step in the direction that is likely to contribute to progressive approximation of the cost of water when it is used as an economic good, as in irrigation. The fact that such a regulatory body is already proposed in Maharashtra should give greater support to the idea in Rajasthan. The scope of activities of such an Authority should be enlarged to include settling the inter-basin disputes relating to water delivery and development. Its organization could be modeled after the existing Power Regulatory Authority. Its total independence from the government of the day,

however, must always be ensured.

(e) Core stakeholders to be included:

(1) Government Ministries and related organizations/departments involved in development planning and policy making, domestic water supply and sanitation, irrigation, agriculture, energy, health, industry, transport, fisheries and tourism.

(2) Stakeholders including :

- (a) Local communities and community based organizations. (Sarpanchs, Pradhan, religious leaders etc).
- (b) The private sector, including but not limited to water supply and sanitation service providers.
- (c) Financial agencies (e.g. donor agencies, international banks, micro-credit institutions).
- (d) Sectoral interest groups such as farmers and fishermen.
- (e) Women's groups and associations
- (f) Representatives of indigenous communities
- (g) Non-government organizations
- (h) Media representatives
- (i) Research and training institutions, including Universities.

(2) River basin organizations:

Basin organizations deal with the water resource management issues in a river basin, a lake basin, or across an important aquifer. They can be useful in transcending administrative divisions within countries as well as national boundaries. Basin organizations provide a mechanism for ensuring that land use and needs are reflected in water management-and vice versa. Their functions range from water allocation, resource management and planning; to education of basin communities; to developing natural resources management strategies and programs of remediation of degraded lands. They may also play a role in consensus building, facilitation, and conflict management. Basin-level organizations should be created with well-defined functions and adequate technical and financial resources.

The main functions of RBOs will be collection of data and development of basin-level information system, and planning, co-ordination and monitoring of the basin level projects. RBOs should be formed by restructuring field offices of the water-related departments, especially irrigation and PHE departments. An advisory committee composed of the representatives of the political leadership, PRIs, urban local self-

government bodies, and NGOs should be constituted to guide RBOs. Proper representation of women, SC and ST members and other disadvantaged groups must be ensured in RBOs.

River basin organizations, if successful, can ensure integrated management across sectoral and administrative lines. River basin or catchment agencies can also serve as linking mechanisms between national planning and more local decision-making. . At the WUA level, i e within the village or a small number of villages. There is a greater likelihood of inter-personal conflicts. At the higher tier of RBOs, Panchayat Samiti people will be involved and greater objectivity could be expected.

(a) Key characteristics of effective river basin management organizations :

- (1) An ability to establish trusted technical competencies;
- (2) A focus on serious recurrent problems such as flooding or drought or supply shortages, and the provision of solutions acceptable to all stakeholders;
- (3) Broad stakeholder involvement, catering for grassroots participation at a basin-wide level (e.g. through water forums);
- (4) The capacity to collect fees, and attract grants and/or loans;
- (5) Clear jurisdictional boundaries and appropriate powers.

(b) Encouraging meaningful participation:

Communication activities should help all stakeholder groups to construct a realistic picture of water resource use and arrangement, and ensure all are up-to-date on strategy preparation and understand how they can contribute and how their contributions will be used. Communication among stakeholders must be two-way and be "bottom up" as well as "top down." Trying to "sell" decisions made behind closed doors will not work.

An associated "participatory platform" entailing a wide range of forums-informal meetings, workshops, consultation processes, public meetings, focus group interviews, policy dialogues, round tables, and media events-can help different groups meaningfully contributes to the strategic development process. Such a platform should encourage a continuous refining of aims, objectives, and activities. Ideally the platform should be perceived generally as the appropriate and logical forum for any matter concerning the management of water resources.

Strategies are much more likely to achieve their objectives if women are active participants and decision-makers.

(3) Mechanism for Negotiation and conflict management:

It is not going to be possible to please everyone, so mechanisms for negotiation and managing conflict are an important ingredient. Much of integrated water resources management is essentially conflict management. It is ultimately Government's role to sort out potential conflicts at the strategy formulation phase. While these measures will reduce the numbers of conflicts that emerge at later implementation stages, they will not eliminate them. Thus, it will normally be necessary to set up some formal process for conflict resolution on an ongoing basis.

10 APPENDICES

10.1 Appendix 1: National water resources policy

Ministry of Water Resources 1 April 1, 2002

Preamble : India is endowed with a rich and vast diversity of natural resources, water being one of them. Its development and management plays a vital role in agriculture production. Integrated water management is vital for poverty reduction, environmental sustenance and sustainable economic development. National Water Policy (2002) envisages that the water resources of the country should be developed and managed in an integrated manner.

Water is food and fire is the eater of the food. Fire is established in water and ***Water is established in fire***

-Taittiriya Upanishad 3.8

Need for a National Water Policy

1.1 Water is a prime natural resource, a basic human need and a precious national asset. Planning, development and management of water resources need to be governed by national perspectives.

1.2 As per the latest assessment (1993), out of the total precipitation, including snowfall, of around 4000 billion cubic meter in the country, the availability from surface water and replenishable ground water is put at 1869 billion cubic metre. Because of topographical and other constraints, about 60% of this i.e. 690 billion cubic metre from surface water and 432 billion cubic metre from ground water, can be put to beneficial use. Availability of water is highly uneven in both space and time. Precipitation is confined to only about three or four months in a year and varies from 100 mm in the western parts of Rajasthan to over 10000 mm at Cherrapunji in Meghalaya. Rivers and under ground aquifers often cut across state boundaries. Water, as a resource is one and indivisible: rainfall, river waters, surface ponds and lakes and ground water are all part of one system.

1.3 Water is part of a larger ecological system. Realizing the importance and scarcity attached to the fresh water, it has to be treated as an essential environment for sustaining all life forms.

1.4 Water is a scarce and precious national resource to be planned, developed, conserved and managed as such, and on an integrated and environmentally sound basis, keeping in view the socio-economic aspects and needs of the States. It is one of the most crucial elements in developmental planning. As the country has entered the 21st century, efforts to develop, conserve, utilize and manage this important resource in a sustainable manner, have to be guided by the national perspective.

1.5 Floods and droughts affect vast areas of the country, transcending state boundaries. One-sixth area of the country is drought-prone. Out of 40 million hectare of the flood prone area in the country, on an average, floods affect an area of around 7.5 million hectare per year. Approach to management of droughts and floods have to be co-ordinated and guided at the national level.

1.6 Planning and implementation of water resources projects involve a number of socio-economic aspects and issues such as environmental sustainability, appropriate resettlement and rehabilitation of project-affected people and livestock, public health concerns of water impoundment, dam safety etc. Common approaches and guidelines are necessary on these matters. Moreover, certain problems and weaknesses have affected a large number of water resources projects all over the country. There have been substantial time and cost overruns on projects. Problems of water logging and soil salinity have emerged in some irrigation commands, leading to the degradation of agricultural land. Complex issues of equity and social justice in regard to water distribution are required to be addressed. The development, and overexploitation of groundwater resources in certain parts of the country have raised the concern and need for judicious and scientific resource management and conservation. All these concerns need to be addressed on the basis of common policies and strategies.

1.7 Growth process and the expansion of economic activities inevitably lead to increasing demands for water for diverse purposes: domestic, industrial, agricultural, hydro-power, thermal-power, navigation, recreation, etc. So far, the major consumptive use of water has been for irrigation. While the gross irrigation potential is estimated to have increased from 19.5 million hectare at the time of independence

to about 95 million hectare by the end of the Year 1999-2000, further development of a substantial order is necessary if the food and fiber needs of our growing population are to be met with. The country's population which is over 1027 million (2001 AD) at present is expected to reach a level of around 1390 million by 2025 AD.

1.8 Production of food grains has increased from around 50 million tones in the fifties to about 208 million tones in the Year 1999-2000. This will have to be raised to around 350 million tones by the year 2025 AD. The drinking water needs of people and livestock have also to be met. Domestic and industrial water needs have largely been concentrated in or near major cities. However, the demand in rural areas is expected to increase sharply as the development programmes improve economic conditions of the rural masses. Demand for water for hydro and thermal power generation and for other industrial uses is also increasing substantially. As a result, water, which is already a scarce resource, will become even scarcer in future. This underscores the need for the utmost efficiency in water utilisation and a public awareness of the importance of its conservation.

1.9 Another important aspect is water quality. Improvements in existing strategies, innovation of new techniques resting on a strong science and technology base are needed to eliminate the pollution of surface and ground water resources, to improve water quality. Science and technology and training have to play important roles in water resources development and management in general.

1.10 National Water Policy was adopted in September, 1987. Since then, a number of issues and challenges have emerged in the development and management of the water resources. Therefore, the National Water Policy (1987) has been reviewed and updated.

10.2 Information System

2.1 A well developed information system, for water related data in its entirety, at the national / state level, is a prime requisite for resource planning. A standardized national information system should be established with a network of data banks and data bases, integrating and strengthening the existing Central and State level agencies and improving the quality of data and the processing capabilities.

2.2 Standards for coding, classification, processing of data and methods / procedures for its collection should be adopted. Advances in information technology

must be introduced to create a modern information system promoting free exchange of data among various agencies. Special efforts should be made to develop and continuously upgrade technological capability to collect, process and disseminate reliable data in the desired time frame.

2.3 Apart from the data regarding water availability and actual water use, the system should also include comprehensive and reliable projections of future demands of water for diverse purposes.

10.3 Water Resources Planning

3.1 Water resources available to the country should be brought within the category of utilizable resources to the maximum possible extent.

3.2 Non-conventional methods for utilisation of water such as through inter-basin transfers, artificial recharge of ground water and desalination of brackish or sea water as well as traditional water conservation practices like rainwater harvesting, including roof-top rainwater harvesting, need to be practiced to further increase the utilizable water resources. Promotion of frontier research and development, in a focused manner, for these techniques is necessary.

3.3 Water resources development and management will have to be planned for a hydrological unit such as drainage basin as a whole or for a sub-basin, multi-sectorally, taking into account surface and ground water for sustainable use incorporating quantity and quality aspects as well as environmental considerations. All individual developmental projects and proposals should be formulated and considered within the framework of such an overall plan keeping in view the existing agreements / awards for a basin or a sub basin so that the best possible combination of options can be selected and sustained.

3.4 Watershed management through extensive soil conservation, catchment-area treatment, preservation of forests and increasing the forest cover and the construction of check-dams should be promoted. Efforts shall be to conserve the water in the catchment.

3.5 Water should be made available to water short areas by transfer from other areas including transfers from one river basin to another, based on a national perspective, after taking into account the requirements of the areas / basins.

10.4 Institutional Mechanism

4.1 With a view to give effect to the planning, development and management of the water resources on a hydrological unit basis, along with a multi-sectoral, multi-disciplinary and participatory approach as well as integrating quality, quantity and the environmental aspects, the existing institutions at various levels under the water resources sector will have to be appropriately reoriented / reorganized and even created, wherever necessary. As maintenance of water resource schemes is under non-plan budget, it is generally being neglected. The institutional arrangements should be such that this vital aspect is given importance equal or even more than that of new constructions.

4.2 Appropriate river basin organizations should be established for the planned development and management of a river basin as a whole or sub-basins, wherever necessary. Special multi-disciplinary units should be set up to prepare comprehensive plans taking into account not only the needs of irrigation but also harmonizing various other water uses, so that the available water resources are determined and put to optimum use having regard to existing agreements or awards of Tribunals under the relevant laws. The scope and powers of the river basin organizations shall be decided by the basin states themselves.

10.5 Water Allocation Priorities

5. In the planning and operation of systems, water allocation priorities should be broadly as follows:

- Drinking water
- Irrigation
- Hydro-power
- Ecology
- Agro-industries and non-agricultural industries
- Navigation and other uses.
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- A
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- N
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However, the priorities could be modified or added if warranted by the area / region specific considerations.

10.6 Project Planning

6.1 Water resource development projects should as far as possible be planned and developed as multipurpose projects. Provision for drinking water should be a primary consideration.

6.2 The study of the likely impact of a project during construction and later on human lives, settlements, occupations, socio-economic, environment and other aspects shall form an essential component of project planning.

6.3 In the planning, implementation and operation of a project, the preservation of the quality of environment and the ecological balance should be a primary consideration. The adverse impact on the environment, if any, should be minimized and should be offset by adequate compensatory measures. The project should, nevertheless, be sustainable.

6.4 There should be an integrated and multi-disciplinary approach to the planning, formulation, clearance and implementation of projects, including catchment area treatment and management, environmental and ecological aspects, the rehabilitation of affected people and command area development. The planning of projects in hilly areas should take into account the need to provide assured drinking water, possibilities of hydro-power development and the proper approach to irrigation in such areas, in the context of physical features and constraints of the basin such as steep slopes, rapid run-off and the incidence of soil erosion. The economic evaluation of projects in such areas should also take these factors into account.

6.5 Special efforts should be made to investigate and formulate projects either in, or for the benefit of, areas inhabited by tribal or other specially disadvantaged groups such as socially weak, scheduled castes and scheduled tribes. In other areas also, project planning should pay special attention to the needs of scheduled castes and scheduled tribes and other weaker sections of the society. The economic evaluation of projects benefiting such disadvantaged sections should also take these factors into account.

6.6 The drainage system should form an integral part of any irrigation project right from the planning stage.

6.7 Time and cost overruns and deficient realization of benefits characterizing most water related projects should be overcome by upgrading the quality of project

preparation and management. The inadequate funding of projects should be obviated by an optimal allocation of resources on the basis of prioritization, having regard to the early completion of on-going projects as well as the need to reduce regional imbalances.

6.8 The involvement and participation of beneficiaries and other stakeholders should be encouraged right from the project planning stage itself.

10.7 Ground Water Development

7.1 There should be a periodical reassessment of the ground water potential on a scientific basis, taking into consideration the quality of the water available and economic viability of its extraction.

7.2 Exploitation of ground water resources should be so regulated as not to exceed the recharging possibilities, as also to ensure social equity. The detrimental environmental consequences of overexploitation of ground water need to be effectively prevented by the Central and State Governments. Ground water recharge projects should be developed and implemented for improving both the quality and availability of ground water resource.

7.3 Integrated and coordinated development of surface water and ground water resources and their conjunctive use, should be envisaged right from the project planning stage and should form an integral part of the project implementation.

7.4 Over exploitation of ground water should be avoided especially near the coast to prevent ingress of seawater into sweet water aquifers.

10.8 Drinking Water

8. Adequate safe drinking water facilities should be provided to the entire population both in urban and in rural areas. Irrigation and multipurpose projects should invariably include a drinking water component, wherever there is no alternative source of drinking water. Drinking water needs of human beings and animals should be the first charge on any available water.

10.9 Irrigation

9.1 Irrigation planning either in an individual project or in a basin as a whole should take into account the irrigability of land, cost-effective irrigation options possible from

all available sources of water and appropriate irrigation techniques for optimizing water use efficiency. Irrigation intensity should be such as to extend the benefits of irrigation to as large a number of farm families as possible, keeping in view the need to maximize production.

9.2 There should be a close integration of water-use and land-use policies.

9.3 Water allocation in an irrigation system should be done with due regard to equity and social justice. Disparities in the availability of water between head-reach and tail-end farms and between large and small farms should be obviated by adoption of a rotational water distribution system and supply of water on a volumetric basis subject to certain ceilings and rational pricing.

9.4 Concerted efforts should be made to ensure that the irrigation potential created is fully utilized. For this purpose, the command area development approach should be adopted in all irrigation projects.

9.5 Irrigation being the largest consumer of fresh water, the aim should be to get optimal productivity per unit of water. Scientific water management, farm practices and sprinkler and drip system of irrigation should be adopted wherever feasible.

9.6 Reclamation of water logged / saline affected land by scientific and cost-effective methods should form a part of command area development programme.

10.10 Resettlement and Rehabilitation

10. Optimal use of water resources necessitates construction of storages and the consequent resettlement and rehabilitation of population. A skeletal national policy in this regard needs to be formulated so that the project affected persons share the benefits through proper rehabilitation. States should accordingly evolve their own detailed resettlement and rehabilitation policies for the sector, taking into account the local conditions. Careful planning is necessary to ensure that the construction and rehabilitation activities proceed simultaneously and smoothly.

10.11 Financial and Physical Sustainability

11. Besides creating additional water resources facilities for various uses, adequate emphasis needs to be given to the physical and financial sustainability of existing

facilities. There is, therefore, a need to ensure that the water charges for various uses should be fixed in such a way that they cover at least the operation and maintenance charges of providing the service initially and a part of the capital costs subsequently. These rates should be linked directly to the quality of service provided. The subsidy on water rates to the disadvantaged and poorer sections of the society should be well targeted and transparent.

10.12 Participatory Approach to Water Resources Management

12. Management of the water resources for diverse uses should incorporate a participatory approach; by involving not only the various governmental agencies but also the users and other stakeholders, in an effective and decisive manner, in various aspects of planning, design, development and management of the water resources schemes. Necessary legal and institutional changes should be made at various levels for the purpose, duly ensuring appropriate role for women. Water Users' Associations and the local bodies such as municipalities and *gram panchayats* should particularly be involved in the operation, maintenance and management of water infrastructures / facilities at appropriate levels progressively, with a view to eventually transfer the management of such facilities to the user groups / local bodies.

10.13 Private Sector Participation

13. Private sector participation should be encouraged in planning, development and management of water resources projects for diverse uses, wherever feasible. Private sector participation may help in introducing innovative ideas, generating financial resources and introducing corporate management and improving service efficiency and accountability to users. Depending upon the specific situations, various combinations of private sector participation, in building, owning, operating, leasing and transferring of water resources facilities, may be considered.

10.14 Water Quality

14.1 Both surface water and ground water should be regularly monitored for quality. A phased programme should be undertaken for improvements in water quality.

14.2 Effluents should be treated to acceptable levels and standards before discharging them into natural streams.

14.3 Minimum flow should be ensured in the perennial streams for maintaining ecology and social considerations.

14.4 Principle of 'polluter pays' should be followed in management of polluted water.

14.5 Necessary legislation is to be made for preservation of existing water bodies by preventing encroachment and deterioration of water quality.

10.15 Water Zoning

15. Economic development and activities including agricultural, industrial and urban development, should be planned with due regard to the constraints imposed by the configuration of water availability. There should be a water zoning of the country and the economic activities should be guided and regulated in accordance with such zoning.

10.16 Conservation of Water

16.1 Efficiency of utilisation in all the diverse uses of water should be optimized and an awareness of water as a scarce resource should be fostered. Conservation consciousness should be promoted through education, regulation, incentives and disincentives.

16.2 The resources should be conserved and the availability augmented by maximizing retention, eliminating pollution and minimizing losses. For this, measures like selective linings in the conveyance system, modernization and rehabilitation of existing systems including tanks, recycling and re-use of treated effluents and adoption of traditional techniques like mulching or pitcher irrigation and new techniques like drip and sprinkler may be promoted, wherever feasible.

10.17 Flood Control and Management

17.1 There should be a master plan for flood control and management for each flood prone basin.

17.2 Adequate flood-cushion should be provided in water storage projects, wherever feasible, to facilitate better flood management. In highly flood prone areas, flood control should be given overriding consideration in reservoir regulation policy even at the cost of sacrificing some irrigation or power benefits.

17.3 While physical flood protection works like embankments and dykes will continue to be necessary, increased emphasis should be laid on non-structural measures such as flood forecasting and warning, flood plain zoning and flood proofing for the minimization of losses and to reduce the recurring expenditure on flood relief.

17.4 There should be strict regulation of settlements and economic activity in the flood plain zones along with flood proofing, to minimize the loss of life and property on account of floods.

17.5 The flood forecasting activities should be modernized, value added and extended to other uncovered areas. Inflow forecasting to reservoirs should be instituted for their effective regulation.

10.18 Land Erosion by Sea or River

18.1 The erosion of land, whether by the sea in coastal areas or by river waters inland, should be minimized by suitable cost-effective measures. The States and Union Territories should also undertake all requisite steps to ensure that indiscriminate occupation and exploitation of coastal strips of land are discouraged and that the location of economic activities in areas adjacent to the sea is regulated.

18.2 Each coastal State should prepare a comprehensive coastal land management plan, keeping in view the environmental and ecological impacts, and regulate the developmental activities accordingly.

10.19 Drought-prone Area Development

19.1 Drought-prone areas should be made less vulnerable to drought-associated problems through soil moisture conservation measures, water harvesting practices, minimization of evaporation losses, development of the ground water potential including recharging and the transfer of surface water from surplus areas where feasible and appropriate. Pastures, forestry or other modes of development which are relatively less water demanding should be encouraged. In planning water resource development projects, the needs of drought-prone areas should be given priority.

19.2 Relief works undertaken for providing employment to drought-stricken population should preferably be for drought proofing.

10.20 Monitoring of Projects

20.1 A close monitoring of projects to identify bottlenecks and to adopt timely measures to obviate time and cost overrun should form part of project planning and execution.

20.2 There should be a system to monitor and evaluate the performance and socio-economic impact of the project.

10.21 Water Sharing / Distribution amongst the States

21.1 The water sharing / distribution amongst the states should be guided by a national perspective with due regard to water resources availability and needs within the river basin. Necessary guidelines, including for water short states even outside the basin, need to be evolved for facilitating future agreements amongst the basin states.

21.2 The Inter-State Water Disputes Act of 1956 may be suitably reviewed and amended for timely adjudication of water disputes referred to the Tribunal.

10.22 Performance Improvement

22. There is an urgent need of paradigm shift in the emphasis in the management of water resources sector. From the present emphasis on the creation and expansion of water resources infrastructures for diverse uses, there is now a need to give greater emphasis on the improvement of the performance of the existing water resources facilities. Therefore, allocation of funds under the water resources sector should be re-prioritized to ensure that the needs for development as well as operation and maintenance of the facilities are met.

10.23 Maintenance and Modernization

23.1 Structures and systems created through massive investments should be properly maintained in good health. Appropriate annual provisions should be made for this purpose in the budgets.

23.2 There should be a regular monitoring of structures and systems and necessary rehabilitation and modernization programmes should be undertaken.

23.3 Formation of Water Users' Association with authority and responsibility should be encouraged to facilitate the management including maintenance of irrigation system in a time bound manner.

10.24 Safety of Structures

24. There should be proper organizational arrangements at the national and state levels for ensuring the safety of storage dams and other water-related structures consisting of specialists in investigation, design, construction, hydrology, geology, etc. A dam safety legislation may be enacted to ensure proper inspection, maintenance and surveillance of existing dams and also to ensure proper planning, investigation, design and construction for safety of new dams. The Guidelines on the subject should be periodically updated and reformulated. There should be a system of continuous surveillance and regular visits by experts.

10.25 Science and Technology

25. For effective and economical management of our water resources, the frontiers of knowledge need to be pushed forward in several directions by intensifying research efforts in various areas, including the following:

- hydrometeorology;
 - snow and lake hydrology;
- surface and ground water hydrology;
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- river morphology and hydraulics;
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assessment of water resources; water harvesting and ground water recharge; water quality; water conservation; evaporation and seepage losses; a t

- r. recycling and re-use;
- better water management practices and improvements in operational technology;
- crops and cropping systems; soils and material research;
- new construction materials and technology (with particular reference to roller compacted concrete, fiber reinforced concrete, new methodologies in tunneling technologies, instrumentation, advanced numerical analysis in structures and back analysis);

- seismology and seismic design of structures;
- .
- .
- t. he safety and longevity of water-related structures;
- economical designs for water resource projects;
- .
- .
- r. isk analysis and disaster management;
- use of remote sensing techniques in development and management;
- use of static ground water resource as a crisis management measure;
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- u. edimentation of reservoirs;
- . se of sea water resources;
- . revention of salinity ingress;
- S. revention of water logging and soil salinity;
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- r. eclamation of water logged and saline lands;
- environmental impact;
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- r. egiional equity.

10.26 Training

26. A perspective plan for standardized training should be an integral part of water resource development. It should cover training in information systems, sectoral planning, project planning and formulation, project management, operation of projects and their physical structures and systems and the management of the water distribution systems. The training should extend to all the categories of personnel involved in these activities as also the farmers.

10.27 Conclusion

27. In view of the vital importance of water for human and animal life, for maintaining ecological balance and for economic and developmental activities of all kinds, and

considering its increasing scarcity, the planning and management of this resource and its optimal, economical and equitable use has become a matter of the utmost urgency. Concerns of the community need to be taken into account for water resources development and management. The success of the National Water Policy will depend entirely on evolving and maintaining a national consensus and commitment to its underlying principles and objectives. To achieve the desired objectives, State Water Policy backed with an operational action plan shall be formulated in a time bound manner say in two years. National Water Policy may be revised periodically as and when need arises.

11 Appendix 2: State Water Policy Of Rajasthan

11.1 The Need For A State Water Policy

Water is a prime natural resource, a basic human need and a precious asset of the State. Planning, development, operation and maintenance of all water resources to support the growth of the state economy and the well being of the population, in response to the growing need for drinking water, agricultural products, industrial production and electricity, a general improvement of living conditions and employment is of utmost importance. Planning and development of water resources need to be governed by the state's perspectives. The requirement of utilizing all available water resources, surface and ground, in a judicious and equitable, as well as sound economic manner needs a well defined **State Water Policy**.

The State of Rajasthan is the second largest state in the country covering an area of 34.271 Million ha which is more than 10% of the total geographical area of the country. About 5% of the total population of the country resides in the state and it has more than 15.7 million ha of land suitable for agriculture. The State of Rajasthan is one of the driest states of the country and the total surface water resources in the state are only about 1% of the total surface water resources of the country. The rivers of the state are rain fed and identified by 14 major basins divided into 59 sub-basins. The surface water resources in the state are mainly confined to south and south-eastern parts of the State. There is a large area in western part of the state which does not have any defined drainage basin. Thus the water resources in the state are not only scarce but have highly uneven distribution both in time and space. The ground water also plays an important role especially in agriculture and drinking water supply. The situation of ground water exploitation is also not satisfactory as in areas where surface irrigation is provided there is a tendency of not using ground water for agriculture which creates problem of water table rise and even water logging. On the contrary, in large areas of the State, ground water is being over exploited and the water table in some areas is going down even at the rate of 3 metre per year.

This background leads to the formulation of the following water resources development and management objectives:

a. Development of all utilizable water resources to the maximum possible extent, including surface water - local and imported - groundwater and waste water, for optimal economic development and social well-being.

- b. Assuring an integrated and multi-disciplinary approach to planning, evaluation, approval and implementation of irrigation and drainage projects, including river basin management, of surface and ground water.
- c. Optimization of water resources exploitation and raising the level of reliability of supplies through conjunctive use of surface and ground water.
- d. Judicious and economically sound allocation of water resources to different sectors, with drinking water supply as a first priority.
- e. Optimum utilisation of water resources to maximize production in all user sectors.
- f. Providing flood protection and drainage facilities, as well as assuring minimal supplies during drought periods.
- g. Maintenance of water quality at acceptable standards and reduction of water resources' pollution by urban and industrial sewage.
- h. Ensuring proper functioning of existing structures, conveyance systems and other assets through adequate maintenance and operation.
- i. Minimizing adverse impacts of water resources development on the natural environment and on population affected by project implementation works.
- j. Promoting beneficiaries' participation in all aspects of water planning and management, with particular emphasis on Water User Associations intended to manage and maintain irrigation systems, both physically and financially.
- k. Motivating and encouraging water conservation through appropriate and socially acceptable water rates, introduction of water-saving devices and practices in all sectors, and educational campaigns.
- l. Advancing the technological and scientific level of all the staff in the water sector through intensification of applied research, technology transfer, training and education.
- m. Ensuring well coordinated and efficient decision making, planning, design, execution and operation and maintenance activities among all GOR agencies.
- n. Facilitating private initiative in development, operation and management of water projects.
- o. Emphasis to be given for recharge of ground water aquifers to mitigate the crisis of drinking water supply and demand of drinking water supply and for industrial and other purposes.

11.2 Information System

The prime requisite for resources planning is a well developed information system. There should be free exchange of data among the various agencies and duplication in data collection should be avoided. Timely availability of reliable information,

conveniently accessible to all users, is necessary as a tool for integrated planning of new projects, and for following up the performance of existing systems and the status of water resources. Following actions shall be taken in this regard:

- a. Setting up of a central information center for the entire water sector of Rajasthan.
- b. Clear definition of duties and responsibilities of those charged with data collection.
- c. Detailing of main reports to be generated.

11.3 Maximizing the water Availability

Due to the high variability of hydro meteorological phenomena not all the potentially available resources can be harnessed and made utilizable. The overwhelming interest of the State is to bring, by physical and managerial measures, as much of the potentially available resources into beneficial utilisation as is physically and economically feasible. The resources shall be conserved and the availability for use augmented by measures for maximizing retention and minimizing losses. Following actions shall be taken for maximizing water availability:

- c. Comprehensive and integrated water resource planning shall be done for the State on the basis of hydrological units i.e. basin or a sub-basin.
- d. Water resources potentials, both surface and ground, shall be assessed.
- e. Basin-wise and State-level water resources development and environmental plans shall be prepared.
- f. Water resources development projects shall be prioritized on economic, social and financial criteria to aid in budget allocation.
- g. Waste water reclamation shall be considered in all basin plans.
- h. Efficient water application and utilisation practices shall be encouraged.
- i. A **Central Planning Authority** for policy related issues for integrated water resources development and management shall be created.
- j. Traditional water harvesting practices shall be preserved and encouraged.
- k. Projects for artificial recharge of ground water shall be prepared.
- l. Inter basin transfer projects shall be prepared based on a State-wide perspective, after taking into account the requirements within the basins.
- m. The case for full utilisation of State's share in Ganga waters shall be pursued.

11.4 Project Planning

Water resources development planning shall aim at assuring accelerated growth by contributing to the States economic and social advancement, and improving the general social and economic conditions of the population, while keeping the

environmental and ecological balance. The State Water Policy shall be reflected in

all plans recommended for implementation. Special attention shall be given to the non-structural elements of this policy, aimed at achieving the objectives of reduction of poverty, basic food self-sufficiency, overall economic growth, environmental well-being, progress of weaker sections of the population, etc.

Water resource development projects shall as far as possible be planned and developed as comprehensive and multi-purpose projects. All present and predictable future demands, including irrigation, domestic and livestock demand, industries, thermal and hydroelectric power stations, pisciculture and recreation, and all sources of natural water as well as reclaimed wastewater must be considered. Provision for drinking water shall be a primary consideration. The study of the impact of a project, during its construction period as well as during its operational life, on human lives, settlements, occupations, economic and other social aspects, shall be an essential component of project planning.

Time and cost overruns and deficient realization of benefits characterizing most irrigation projects shall be overcome by upgrading the quality of project preparation and management. The under-funding of projects shall be obviated by an optimal allocation of resources, having regard to the early completion of ongoing projects as well as the need to reduce regional imbalances.

The following institutional and procedural reforms and manpower development in projects shall be carried out:

11.4.1 Institutional Reforms:

- n. integrated long and short term planning of water resources development.
- o. economic analysis and feasibility studies of projects.
- p. monitoring and evaluation of existing projects.
- q. drafting annual and multi-annual expenditure programmes for the entire water sector and obtaining approval.
- r. encourages private initiative in water sector.

11.4.2 Human Resources Development:

- a. Introduce training courses and professional career incentives, and foster professional dedication, with emphasis on client management.

11.5 Procedural Reforms:

- a. Improvement in process of project planning, sanctioning, bidding, etc.
- b. Define accountability and authority.
- c. Define information flow routes and access to data.

- d. Establish guidelines for priority in public spending in water sector.

11.5.1 Maintenance and Modernization

For maintaining the existing structures and systems in satisfactory condition and timely modernization, the following actions shall be taken:

- a. Adequate budget for maintenance, repair, modernization of existing structures and systems shall be allocated.
- b. Water rates shall be increased and collections shall be improved.
- c. Orders and instructions for inspections / reporting of maintenance, repair and replacement works shall be issued.
- d. Maintenance oriented training programmes shall be undertaken.
- e. Water User Associations shall be encouraged to undertake maintenance, repairs and modernization of works.

11.5.2 Safety Of Structures

The Dam Safety Organization shall be reinforced and supported, at State level, for ensuring the trained staff in improved inspection, analysis and evaluation techniques of dams and other structures. Guidelines issued by State authorities on the subject shall be kept under constant review and periodically updated and re-formulated. Dam Safety Legislation may be enacted to ensure proper inspection, maintenance and surveillance of existing dams and also to ensure proper planning, investigation, design and construction for safety of new dams.

11.5.3 Ground Water Development

Exploitation of groundwater resources should be so regulated as not to exceed recharging possibilities, and also to ensure social equity. There should be a periodical reassessment on a scientific basis of groundwater potentials, taking into consideration the quality of the water available and economic viability. Following steps shall be taken in this regard:

Legal : Existing laws shall be amended /new legislation shall be enacted.

Organizational : Organizational structures and procedures shall be changed. Attempt to control deep drilling through licensing and control on private operators shall be made.

Social: Public awareness for self-control in ground water exploitation from WUAs shall be fostered.

Educational: Sense of water scarcity and need to conserve shall be developed.

Technological : Data collection shall be improved, conjunctive use of ground and surface water shall be planned, mathematical modeling of aquifer shall be done and artificial recharge of ground water shall be planned.

Environmental : The detrimental environmental consequences of over exploitation of ground water need to be effectively prevented.

11.5.4 Water allocation Priorities

In the planning and operation of systems, water allocation priorities shall be to Drinking water, Irrigation, Power generation and Industrial and other uses in that order. However, these priorities might be modified if necessary in particular regions with reference to area specific considerations, and they may be different in the context of allocating water to existing consumers than in the context of planning the development of water resources for new consumers. A detailed methodology for multi-priority analysis shall be developed for decision making in the Central Planning Authority to enable prioritization in water resources planning and management. The demands of drinking water, irrigation, power generation, industrial and other uses shall be studied scientifically for appropriate development and allocation of funds.

11.5.5 Drinking Water

Adequate drinking water facilities shall be provided to the entire population both in urban and in rural areas. Future irrigation and multi-purpose projects shall invariably include a drinking water component wherever there is no dependable alternative source of drinking water. Drinking water needs of human beings and animals shall be the first charge on any available water and following actions shall be taken to fulfill this need:

11.5.6 Irrigation Water

Irrigation planning, either in an individual project or in a basin as a whole, should take into account the irrigability of land, cost-effective irrigation options possible from all available sources of water, and appropriate irrigation and drainage techniques. The irrigation intensity should be such as to extend the benefits of irrigation to as large as number of farm families as possible, keeping in view the need to maximize production.

Following measures shall be taken to ensure that the irrigation potential created is fully utilized, the gap between the potential created and its utilisation is removed, water allocation in an irrigation system is done with due regard to equity and social

justice, disparities in the availability of water between head-reach and tail-end farms and between large and small farms should be obviated by adoption of a rotational water distribution system, supply of water on a volumetric basis subject to certain ceilings is introduced and there is close integration of water-use and land-use policies.

To achieve these objectives a multidisciplinary and integrated approach will be followed under C.A.D. programme:

- a. It shall be ensured that the Government regulations are adhered to by law and persuasion.
- b. Farmers shall be encouraged to adopt high efficiency water equipments and practices and use of ground water in conjunction with surface water.
- c. Water charges shall be reviewed and realistic water rates shall be introduced.
- d. Reclamation of waterlogged / saline affected land by scientific methods should form a part of command area development programme.

11.5.7

11.5.8 Water Rates

Water rates shall be so decided that it conveys the scarcity value of water to users and foster the motivation for economy in water usage. Rates shall be gradually increased to cover the annual maintenance and operation charges and part of the fixed costs to assure undisturbed and timely supply of irrigation water. Water rates shall be rationalized with due regard to the interests of small and marginal farmers. It shall be accompanied by volumetric measurement of water consumption in all sectors.

11.6 Participation of Water Users

Farmers shall be involved in various aspects of management of irrigation systems, particularly in water distribution and collection of water charges through following measures:

- a. Evaluating results of on-going pilot projects where farmers' participation has been introduced.
- b. Introducing changes in legislation for fostering user participation in irrigation.
- c. Giving priority of funds for rehabilitation and modernization of irrigation projects to those projects where farmers are willing to organize into WUAs.
- d. Assistance of voluntary agencies shall be taken in educating the farmers in efficient water use and water management.

11.7 Water Quality Monitoring

Both surface water and ground water as well as soil quality shall be regularly monitored for quality and a phased program shall be undertaken for improvements in water quality. Government shall issue orders to routinely enter future water and soil quality figures in the water resources database and publish groundwater statistics and maps for River Basins. Proposals for contracting the work of water sampling and analysis to private operators will be studied. Effluents should be treated to acceptable levels and standards before discharging them in natural streams. Minimum flow should be ensured in the perennial streams for maintaining ecology and social considerations.

11.8 Water Zoning

2. The efficiency of utilisation in all the diverse uses of water should be improved and an awareness of water as a scarce resource should be fostered. Conservation consciousness shall be promoted through education, regulation, incentives and disincentives by taking following actions:

A. Domestic Sector:

- Introduction of domestic water saving devices
- Water meters on all consumers.
- Progressive water tariff structure.
- Auditing of water balance from distribution systems. etc...

B. Industrial sector:

- Progressive water tariff.
- Water recycling facilities.
- Treated urban sewage water for cooling and other processes.

C. Agriculture Sector:

- Water rates on volumetric basis should be kept sufficient for maintenance.
- Treated sewage water for non-edible crops.
- Saline water for tolerant crops.
- Improvement in irrigation practices and reduction of water losses.
- Pressure irrigation systems to be introduced

D. Watershed management for each basin:

- Afforestation, soil conservation.
- Livestock management.
- Treatment and disposal of sewage.

Every drop of water needs to be conserved and optimally utilized for which detailed scheme shall be framed ensuring its time bound implementation.

11.9 Flood Control and Drainage Management

Sound watershed management through extensive soil conservation, catchment area treatment, preservation of forests and increasing the forest area and construction of check dams shall be promoted to reduce the intensity of floods. Adequate flood cushion shall be provided in water storage projects whenever feasible to facilitate better flood management. An extensive network for flood forecasting shall be established for timely warning to the settlements in the flood plains, along with the introduction of regulation for settlements and economic activity in the flood-prone zones to minimize loss of life and property caused by floods. Master plan for flood control and management for each flood prone basin / area shall be got prepared. Due consideration to provide proper drainage shall also be given to build up capabilities to tackle water logging and salinity problems.

11.10 Drought Management

Drought prone areas shall be made less vulnerable to drought associated problems through measures listed below. In planning water resource development projects, the needs of drought prone areas should be given priority. Relief works undertaken for providing employment to drought stricken populations should preferably be for drought proofing:

- a. Continue efforts to assure water supply and livelihood to population and care for livestock.
- b. Employment and direct provision of basic needs to population in times of crisis.
- c. Drought-proofing of the area in measures such as plantation, dry farming.
- d. Development of training and skills to enable population to supplement the earnings from agriculture.

Development of the ground water potential including recharging and the transfer of surface water from surplus areas wherever feasible and appropriate.

11.11 Training and Education

Standardized training shall be a part of water resources management and should cover all its aspects and all personnel involved in it, including farmers. The State shall also encourage education of the public at large. Scholarships, study tours, incentives etc. shall be provided by the State to encourage and support training.

Technology transfer shall be made obligatory on all technical assistance and consulting services. Emphasis on research on all matters related to water management shall also be given.

11.12 Legislation and Regulation

After a critical examination of rules, regulations, ordinances, legal and legislative measures related to the States water sector has been made, with a view to improve and streamline their scope and cover in the legal framework all aspects pertaining to water resources management, protection of water quality, flood protection, drought proofing, abstraction licensing, water rights, etc. the Government shall introduce the following measures:

- a. Enact the necessary amendments and additions to existing Act, rules, regulations, orders, decisions, etc.;
- b. Ensure that the responsibilities and powers of Governmental agencies and the rights and obligations of individuals be clearly spelled-out in the relevant laws and regulations;
- c. Ensure that the legislation would allow for easy implementation of policy decisions while protecting the interests of individuals and taking into account the administrative capacity to implement them;
- d. Empower the appropriate agencies to carry out their obligations and responsibilities as implied by the public ownership of water projects, and spell out the administrative procedures necessary for coordinated, equitable and efficient control, as well as the resolution of conflicts which may arise from them;
- e. Provide legal support for the formation of WUAs and handing over to them the distribution of water for irrigation and the maintenance of canals;
- f. Establish rules and regulations for the involvement of the private sector in development and operation of water-related projects;
- g. Provide in the law for an effective participation of farmers in the planning and decision making processes which involve users and public authorities;
- h. Introduce the necessary legislation for a periodic amendment of water rates and tariff structures which would enable the full coverage of O&M expenditures, based, as far as possible on volumetric metering of supplies, while motivating users to economize in the use of water, and catering for the weaker sections of the population;
- i. Establish effective conflict resolution legal entities and procedures.

The entire body of water-related laws and regulations will eventually be amalgamated into a State Water Law, which would, in addition to the above

mentioned subjects, establish the State ownership of all the water resources within the State, as well as waters imported from outside the State under various agreements, and the requirement for any public or private entity or individual to obtain from the Government a permit to abstract surface water or groundwater, to utilize it, to sell or distribute it, or to dispose off after use. Permitting and enforcement rules and regulations will be spelled-out accordingly.

12 Appendix 3: National Environment Policy

13

13.1 Freshwater Resources:

India's freshwater resources comprise the single most important class of natural endowments enabling its economy and its human settlement patterns. The freshwater resources comprise the river systems, groundwater, and wetlands. Each of these has a unique role, and characteristic linkages to other environmental entities.

13.1.1.1 (i) River Systems:

India's river systems typically originate in its mountain eco-systems, and deliver the major part of their water resources to the populations in the plains. They are subject to siltation from sediment loads due to soil loss, itself linked to loss of forest and tree cover. They are also subject to significant net water withdrawals along their course, due to agricultural, industrial, and municipal use; as well as pollution from human and animal waste, agricultural run-offs, and industrial effluents. Although the rivers possess significant natural capacity to assimilate and render harmless many pollutants, the existing pollution inflows in most cases substantially exceed such natural capacities. This fact, together with progressive reductions in stream flows, ensures that the river water quality in the vast majority of cases declines as one goes downstream. The results include loss of aquatic flora and fauna, leading to loss of livelihoods for river fisher folk, significant impacts on human health from polluted water, loss of habitat for many bird species, and loss of inland navigation potential. Apart from these, India's rivers are inextricably linked with the history and religious beliefs of its peoples, and the degradation of important river systems accordingly offends their spiritual, aesthetic, and cultural sensibilities.

The broad direct causes of rivers degradation are, in turn, linked to several policies and regulatory regimes. These include tariff policies for irrigation systems and industrial use, which, through inadequate cost-recovery, provide incentives for overuse near the headwork's of irrigation systems, and drying up of irrigation systems at the tail-ends. The result is excessive cultivation of water intensive crops near the headwork's, which is otherwise inefficient, water logging , and alkali-
Stalinization of soil. The irrigation tariffs also do not yield resources for proper maintenance of irrigation systems, leading to loss in their potential; in particular, resources are generally not available for lining irrigation canals to prevent seepage

loss. These factors result in reduced flows in the rivers. Pollution loads are similarly

linked to pricing policies leading to inefficient use of agricultural chemicals, and municipal and industrial water use. In particular, revenue yields for the latter two are insufficient to install and maintain sewage and effluent treatment plants, respectively. Pollution regulation for industries is typically not based on formal spatial planning to facilitate clustering of industries to realize scale economies in effluent treatment, resulting in relatively high costs of effluent treatment, and consequent increased incentives for non-compliance. There is, accordingly need to review the relevant pricing policy regimes and regulatory mechanisms in terms of their likely adverse environmental impacts.

The following comprise elements of an action plan for river systems:

- a) Promote integrated approaches to management of river basins by the concerned river authorities, considering upstream and downstream inflows and withdrawals by season, pollution loads and natural regeneration capacities, to ensure maintenance of adequate flows and adherence to water quality standards throughout their course in all seasons.
- b) Consider and mitigate the impacts on river flora and fauna, and the resulting change in the resource base for livelihoods, of multipurpose river valley projects, power plants, and industries.
- c) Consider mandating the installation of water saving closets and taps in the building byelaws of urban centers.

(ii) Groundwater:

Groundwater is present in underground aquifers in many parts of the country. Aquifers near the surface are subject to annual recharge from precipitation, but the rate of recharge is impacted by human interference. Deep aquifers, on the other hand, occur below a substratum of hard rock. The deep aquifers generally contain very pure water, but since they are recharged only over many millennia, must be conserved for use only in periods of calamitous drought such as may happen only once in several hundred years. The boundaries of groundwater aquifers do not generally correspond to the spatial jurisdiction of any local public authorities or private holdings, nor are they easily discernible, nor can withdrawals be easily monitored, leading to the unavoidable situation of groundwater being an open access resource.

The water table has been falling rapidly in many areas of the country in recent decades. This is largely due to withdrawal for agricultural, industrial, and urban use, in excess of annual recharge. In urban areas, apart from withdrawals for domestic

and industrial use, housing and infrastructure such as roads, prevent sufficient recharge. In addition, some pollution of groundwater occurs due to leaching of stored hazardous waste and use of agricultural chemicals, in particular, pesticides. Contamination of groundwater is also due to geogenic causes, such as leaching of arsenic from natural deposits. Since groundwater is frequently a source of drinking water, its pollution leads to serious health impacts.

The direct causes of groundwater depletion have their origin in the pricing policies for electricity and diesel. In the case of electricity, where individual metering is not practiced, a flat charge for electricity connections makes the marginal cost of electricity effectively zero. Subsidies for diesel also reduce the marginal cost of extraction to well below the efficient level. Given the fact that groundwater is an open access resource, the user then "rationally" (i.e. in terms of his individual perspective), extracts groundwater until the marginal value to him equals his now very low marginal cost of extraction'. The result is inefficient withdrawals of groundwater by all users, leading to the situation of falling water tables. Support prices for several water intensive crops with implicit price subsidies aggravate this outcome by strengthening incentives to take up these crops rather than less water intensive ones.

Falling water tables have several perverse social impacts, apart from the likelihood of mining of deep aquifers, "the drinking water source of last resort". The capital costs of pump sets and bore wells for groundwater extraction when water tables are very deep may be relatively high, with no assurance that water would actually be found. In such a situation, a user who may be a marginal farmer able to borrow the money only at usurious rates of interest, may, in case water is not found, find it impossible to repay his debts. This may lead to destitution, or worse. Even if the impacts were not so dire, there would be excessive use of electricity and diesel. The marginal cost of extraction equals the marginal cost to the farmer of power ("zero") or diesel, and a small labor and depreciation cost. The capital cost of a bore well as well as the flat rate connection charge are sunk costs and do not count in the marginal cost of water.

The efficient use of groundwater would, accordingly, require that the practice of non-metering of electric supply to farmers be discontinued in their own enlightened self-interest. It would also be essential to progressively ensure that the environmental impacts are taken into account in setting electricity tariffs, and diesel pricing.

Increased run-off of precipitation in urban areas due to impermeable structures and infrastructure prevents groundwater recharge. This is an additional cause of falling water tables in urban areas. In rural areas several cost-effective contour bunding techniques have been proven to enhance groundwater recharge. A number of effective traditional water management techniques to recharge groundwater have been discontinued by the local communities due to the onset of pump sets extraction, and need to be revived. Finally, increase in tree cover, is also effective in enhancing groundwater recharge.

Pollution of groundwater from agricultural chemicals is also linked to their improper use, once again due to pricing policies, especially for chemical pesticides, as well as agronomic practices, which do not take the potential environmental impacts into account. While transiting through soil layers may considerably eliminate organic pollution loads in groundwater, this is not true of several chemical pesticides.

The following action points emerge:

- a) Take explicit account of impacts on groundwater tables of electricity tariffs and pricing of diesel.
- b) Promote efficient water use techniques, such as sprinkler or drip irrigation, among farmers. Provide necessary pricing, inputs, and extension support to feasible and remunerative alternative crops from efficient water use.
- c) Support practices of contour bunding and revival of traditional methods for enhancing groundwater recharge.
- d) Mandate water harvesting in all new constructions in relevant urban areas, as well as design techniques for road surfaces and infrastructure to enhance groundwater recharge.
- e) Support R&D in cost effective techniques suitable for rural drinking water projects for removal of arsenic and mainstream their adoption in rural drinking water schemes in relevant areas.

(ii) Wetlands:

Wetlands, natural and manmade, freshwater or brackish, provide numerous ecological services. They provide habitat to aquatic flora and fauna, as well as numerous species of birds, including migratory species. The density of birds, in particular, is an accurate indication of the ecological health of a particular wetland. Several wetlands have sufficiently unique ecological character as to merit international recognition as Ramsar Sites'.

Wetlands also provide freshwater for agricultural and domestic use, help groundwater recharge, and provide livelihoods to fisher-folk. They may also

comprise an important resource for sustainable tourism and recreation'. They may be employed as an alternative to power, technology, and capital intensive municipal sewage plants; however, if used for this purpose without proper reckoning of their assimilative capacity, or for dumping of solid and hazardous waste, they may become severely polluted, leading to adverse health impacts. The inadvertent introduction of some alien species of flora in wetlands' have also degraded their ecology.

Wetlands are under threat from drainage and conversion for agriculture and human settlements, besides pollution. This happens because public authorities or individuals having jurisdiction over wetlands derive little revenues from them, while the alternative use may result in windfall financial gains to them. However, in many cases, the economic values of wetlands' environmental services may significantly exceed the value from alternative use. On the other hand, the reduction in economic value of their environmental services due to pollution, as well as the health costs of the pollution itself, are not taken into account while using them as a waste dump. There also does not yet exist a formal system of wetland regulation outside the international commitments made in respect of Ramsar sites.

The following action points emerge:

- a) Set up a legally enforceable regulatory mechanism for identified valuable wetlands to prevent their degradation and enhance their conservation. Develop a national inventory of such wetlands.
 1. For example, the Chilka Lake and the East Kolkata Wetlands.
 2. For example, the Dal Lake (Srinagar), the Otacamund Lake, and the Nainital Lake.
 3. e.g. Water Hyacinth.
- b) Formulate conservation and prudent use strategies for each significant catalogued wetland, with participation of local communities, and other relevant stakeholders.
- c) Formulate and implement eco-tourism strategies for identified wetlands through multistakeholder partnerships involving public agencies, local communities, and investors.
- d) Take explicit account of impacts on wetlands of significant development projects during the environmental appraisal of such projects; in particular, the reduction in economic value of wetland environmental services should be explicitly factored into cost benefit analyses.

e) Consider particular unique wetlands as entities with "Incomparable Values", in developing strategies for their protection.

13.1.1.2 Public Trust Doctrine:

The State is not an absolute owner, but merely a trustee of all natural resources, which are by nature meant for public use and enjoyment, subject to reasonable conditions, necessary to protect the legitimate interest of a large number of people, or for matters of strategic national interest.

5.2 Enhancing and Conserving Environmental Resources:

Perverse production and consumption practices are the immediate causes of environmental degradation, but an exclusive focus on these aspects alone is insufficient to prevent environmental harm. The causes of degradation of environmental resources lie ultimately in a broad range of policy, and institutional, including regulatory shortcomings, leading to the direct causes. However, the range of policies, and legal and institutional regimes, which impact the proximate factors, is extremely wide, comprising fiscal and pricing regimes, and sectoral and cross - sectoral policies, laws, and institutions. Accordingly, apart from programmatic approaches, review and reform of these regimes to account for their environmental consequences is essential. In addition, there is lack of awareness of the causes and effects of environmental degradation, and how they may be prevented, among both specialized practitioners of the relevant professions, including policymakers, as well as the general public, which needs to be redressed. In this subsection, in respect of major categories of environmental resources, the proximate and deeper causes of their degradation, and specific initiatives for addressing them are outlined.

5.2.1 Land Degradation:

The degradation of land, through soil erosion, alkali-Salinization, water logging, pollution, and reduction in organic matter content has several proximate and underlying causes. The proximate causes include loss of forest and tree cover (leading to erosion by surface water run-off and winds), excessive use of irrigation (in many cases without proper drainage, leading to leaching of sodium and potassium salts), improper use of agricultural chemicals (leading to accumulation of toxic chemicals in the soil), diversion of animal wastes for domestic fuel (leading to reduction in soil nitrogen and organic matter), and disposal of industrial and domestic wastes on productive land. These in turn, are driven by implicit and explicit subsidies for water, power, fertilizer and pesticides, and absence of conducive

policies and regulatory systems to enhance people's incentives for afforestation and forest conservation. It is essential that the relevant fiscal, tariffs, and sectoral policies take explicit account of their unintentional impacts on land degradation, if the fundamental basis of livelihoods for the vast majority of our people is not to be irreparably damaged. In addition, to such policy review, the following specific initiatives would be taken:

- (a) Encourage adoption of science-based, and traditional sustainable land use practices through research and development, pilot scale demonstrations, and large scale dissemination, including farmer's training, and where necessary, access to institutional finance.
- b) Promote reclamation of wasteland and degraded forestland through formulation and adoption of multistakeholder partnerships involving the land owning, agency, local communities, and investors.
- c) Prepare and implement thematic action plans for arresting and reversing desertification.

5.2.7 Pollution Abatement;

Pollution is the inevitable' generation of waste streams from the production and consumption of anything. Pollution directly impacts the quality of the receiving medium, i.e. air, water, soil, or electromagnetic spectrum, and when this impaired medium acts upon a receptor, say, a living being, also impacts the receptor. In general, the impacts on the receptor are adverse, but not always. Typically, ecosystems have some natural capacities to assimilate pollution; however, these vary considerably with the nature of the pollutant and the ecosystem. In general, it is cheaper to reduce the emissions of pollution, than to mitigate it after generation, or to treat the receiving medium or receptor. The impacts of pollution may differentially impact the poor, or women, or children, or developing regions, who may also have relatively low contributions to its generation, and accordingly the costs and benefits of abatement may have important implications for equity.

(ii) Water Pollution:

The direct and indirect causes of pollution of surface (river, wetlands) water sources, groundwater, and coastal areas have been discussed above. The following comprise further elements of an action plan:

- a) Develop and implement, initially on a pilot scale, public -private partnership models for setting up and operating effluent and sewage treatment plants. Once the models are validated, progressively use public resources, including external

assistance, to catalyze such partnerships. Enhance the capacities of municipalities for recovery of user charges for water and sewage systems.

b) Enhance reuse of treated sewage and industrial wastewater before final discharge to water bodies.

c) Enhance capacities for spatial planning among the State and Local Governments, with adequate participation by local communities, to ensure clustering of polluting industries to facilitate setting up of common effluent treatment plants to be operated on cost recovery basis.

d) Promote R&D in development of low cost technologies for sewage treatment at different scales, in particular, replication of the East Kolkata wetlands model for sewage treatment to yield multiple benefits.

e) Take explicit account of groundwater pollution in pricing policies of agricultural inputs, especially pesticides, and dissemination of agronomy practices involving their use.

f) Develop a strategy for strengthening regulation, and addressing impacts, of ship-breaking activities on coastal and near marine resources.

(iii) Soil Pollution:

Similarly, the immediate and deeper causes of soil pollution have been considered above. The following are elements of an action plan:

a) Develop and implement viable models of public-private partnerships for setting up and operating secure landfills and incinerators for toxic and hazardous waste, both industrial and biomedical, on payment by users, taking the concerns of local communities into account. The concerned local communities and State Governments must have clear entitlements to specified benefits from hosting such sites, if access is given to non-local users.

b) Develop and implement strategies for clean up of pre-existing toxic and hazardous waste dumps, in particular, in industrial areas, and reclamation of such lands for future, sustainable use.

c) Strengthen the capacities of local bodies for segregation, recycling, and reuse of municipal solid wastes, and setting up, and operating sanitary landfills, in particular through competitive outsourcing of solid waste management services.

d) Give legal recognition to, and strengthen the informal sector systems of collection and recycling of various materials in particular enhance their access to institutional finance and relevant technologies.

e) Promote organic farming of traditional crop varieties through research in and dissemination of techniques for reclamation of land with prior exposure to

agricultural chemicals, facilitating marketing of organic produce' in India and abroad, including by development of transparent, voluntary, science-based labeling schemes.

f) Develop and implement strategies for recycle, reuse, and final environmentally benign disposal of plastics wastes, including through promotion of relevant technologies, and use of incentive based instruments.

1. There is considerable evidence of consumer preference for organic produce, which thereby may command a substantial premium.

5.5 Environmental Awareness, Education, and Information:

Enhancing environmental awareness is essential to harmonize patterns of individual behavior with the requirements of environmental conservation. This would minimize the demands placed on the monitoring and enforcement regimes; in fact, large-scale non-compliance would simply overwhelm any feasible regulatory machinery. Awareness relates to the general public, as well as specific sections, e.g. the youth, urban dwellers, industrial and construction workers, municipal and other public employees, etc. Awareness involves not only internalization of environmentally responsible behavior, but also enhanced understanding of the impacts of irresponsible actions, including to public health, living conditions, and livelihood prospects.

Environmental education is the principal means of enhancing such awareness, both among the public at large, and among focused groups. Such education may be formal, or informal, or a combination of both. It may rely on educational institutions at different levels; the print, electronic, or live media; and various other formal and informal settings.

Access to environmental information is the principal means by which environmentally conscious stakeholders may evaluate compliance by the concerned parties with environmental standards, legal requirements, and covenants. They would thereby be enabled to stimulate necessary enforcement actions, and through censure, motivate compliance. Access to information is also necessary to ensure effective, informed participation by potentially impacted publics in various consultation processes, such as for preparation of environmental impact assessments and environment management plans of development projects.

The following actions would be taken:

- a) Mainstream scientifically valid environment content in the curricula of formal education, at primary, secondary, tertiary, and professional levels, focusing on the content appropriate at each stage, and without increasing the course load overall. Special mid-career training programmes may be conducted for groups with special responsibilities, e.g. the judiciary, policy makers, legislators, industrial managers, city and regional planners, voluntary and community based organizations, etc.
- b) Prepare and implement a strategy for enhancing environmental awareness among the general public, and special groups, by professional production and airing of information products through diverse media catering to the different target groups. The media products should, as far as possible, eschew focusing on the achievements of public agencies, but instead document real world events of human interest. The production, as well as dissemination may involve public, private, and voluntary agencies.
- c) Enhance real-time, on line public access to monitoring information, both in respect of ambient quality, as well as major point sources of pollution. Archival data to be also made publicly available in convenient format.

5.6 Partnerships and Stakeholder Involvement:

Conservation of the environment requires the participation of multiple stakeholders, who may bring to bear their respective resources, competencies, and perspectives, so that the outcomes of partnerships are superior to those of each acting alone. Implementing and policy making agencies of the Government, at Central, State, Municipal, and Panchayat levels; the legislatures and judiciary; the public and private corporate sectors; financial institutions; industry associations; academic and research institutions; independent professionals and experts; the media; community based organizations; voluntary organizations; and multilateral and bilateral development partners may each play important roles in partnerships for the formulation, implementation, and promotion of measures for environmental conservation.

In seeking to realize partnerships among these diverse actors, it is essential to eschew the confrontational posturing sometimes adopted in the past. While it is not possible that the interests and perceptions of all stakeholders will coincide on each occasion, nevertheless, it is necessary to realize that progress will be seriously impeded if the motives of other partners are called into question during public discourse. It is also essential that all partnerships are realized through, and are

carried out in terms of the principles of good governance, in particular, transparency, accountability, cost effectiveness, and efficiency.

A number of specific themes for partnerships have been identified above. A generic classification of some, not exhaustive, possible partnerships is as follows:

a) Public -Community Partnerships, by which public agencies and local communities cooperate in the management of a given environmental resource, each partner bringing agreed resources, assuming specified responsibilities, and with defined entitlements, e.g. Joint Forestry Management.

b) Public -Private Partnerships, by which specified public functions with respect to environmental management are contracted out competitively to private providers, e.g. monitoring of environmental quality.

c) Public -Community-Private Partnerships, in terms of which the partners assume joint responsibility for a particular environmental function, with defined obligations and entitlements for each, with competitive selection of the private sector partner, e.g. afforestation of degraded forests.

d) Public -Voluntary Organization Partnerships, similar to public - private partnerships, in respect of functions in which voluntary organizations may have a comparative advantage over others, the voluntary organizations, in turn, being selected competitively, e.g. environmental awareness raising.

e) Public -Private-Voluntary Organization Partnerships, in which the provision of specified public responsibilities is accomplished on competitive basis by the private sector, and the provision is monitored by competitively selected voluntary organizations, e.g. "Build, Own, Operate" sewage and effluent treatment plants.

14 Appendix 4: National Policy for the Empowerment of Women - 2001 - India Source: Department of Women and Child Development

14.1 Introduction

The principle of gender equality is enshrined in the Indian Constitution in its Preamble, Fundamental Rights, Fundamental Duties and Directive Principles. The Constitution not only grants equality to women, but also empowers the State to adopt measures of positive discrimination in favor of women. Within the framework of a democratic polity, our laws, development policies, Plans and programmes have aimed at women's advancement in different spheres. From the Fifth Five Year Plan (1974-78) onwards has been a marked shift in the approach to women's issues from welfare to development. In recent years, the empowerment of women has been recognized as the central issue in determining the status of women. The National Commission for Women was set up by an Act of Parliament in 1990 to safeguard the rights and legal entitlements of women. The 73rd and 74th Amendments (1993) to the Constitution of India have provided for reservation of seats in the local bodies of Panchayats and Municipalities for women, laying a strong foundation for their participation in decision making at the local levels.

India has also ratified various international conventions and human rights instruments committing to secure equal rights of women. Key among them is the ratification of the Convention on Elimination of All Forms of Discrimination Against Women (CEDAW) in 1993. The Mexico Plan of Action (1975), the Nairobi Forward Looking Strategies (1985), the Beijing Declaration as well as the Platform for Action (1995) and the Outcome Document adopted by the UNGA Session on Gender Equality and Development & Peace for the 21st century, titled "Further actions and initiatives to implement the Beijing Declaration and the Platform for Action" have been unreservedly endorsed by India for appropriate follow up. The Policy also takes note of the commitments of the Ninth Five Year Plan and the other Sectoral Policies relating to empowerment of Women.

The women's movement and a wide-spread network of non-Government Organizations which have strong grass-roots presence and deep insight into women's concerns have contributed in inspiring initiatives for the empowerment of women. However, there still exists a wide gap between the goals enunciated in the Constitution, legislation, policies, plans, programmes, and related mechanisms on the one hand and the situational reality of the status of women in India, on the other.

This has been analyzed extensively in the Report of the Committee on the Status of Women in India, "Towards Equality", 1974 and highlighted in the National Perspective Plan for Women, 1988-2000, the Shramshakti Report, 1988 and the Platform for Action, Five Years After- An assessment.

Gender disparity manifests itself in various forms, the most obvious being the trend of continuously declining female ratio in the population in the last few decades. Social stereotyping and violence at the domestic and societal levels are some of the other manifestations. Discrimination against girl children, adolescent girls and women persists in parts of the country. The underlying causes of gender inequality are related to social and economic structure, which is based on informal and formal norms, and practices. Consequently, the access of women particularly those belonging to weaker sections including Scheduled Castes/Scheduled Tribes/ Other backward Classes and minorities, majority of whom are in the rural areas and in the informal, unorganized sector – to education, health and productive resources, among others, is inadequate. Therefore, they remain largely marginalized, poor and socially excluded.

Goal and Objectives

The goal of this Policy is to bring about the advancement, development and empowerment of women. The Policy will be widely disseminated so as to encourage active participation of all stakeholders for achieving its goals. Specifically, the objectives of this Policy include:

- Creating an environment through positive economic and social policies for full development of women to enable them to realize their full potential
- The de-jure and de-facto enjoyment of all human rights and fundamental freedom by women on equal basis with men in all spheres – political, economic, social, cultural and civil
- Equal access to participation and decision making of women in social, political and economic life of the nation
- Equal access to women to health care, quality education at all levels, career and vocational guidance, employment, equal remuneration, occupational health and safety, social security and public office etc.
- Strengthening legal systems aimed at elimination of all forms of discrimination against women

- Changing societal attitudes and community practices by active participation and involvement of both men and women.
- Mainstreaming a gender perspective in the development process.
- Elimination of discrimination and all forms of violence against women and the girl child; and
- Building and strengthening partnerships with civil society, particularly women's organizations.

14.2 Policy Prescriptions

Judicial Legal Systems

Legal-judicial system will be made more responsive and gender sensitive to women's needs, especially in cases of domestic violence and personal assault. New laws will be enacted and existing laws reviewed to ensure that justice is quick and the punishment meted out to the culprits is commensurate with the severity of the offence.

At the initiative of and with the full participation of all stakeholders including community and religious leaders, the Policy would aim to encourage changes in personal laws such as those related to marriage, divorce, maintenance and guardianship so as to eliminate discrimination against women.

The evolution of property rights in a patriarchal system has contributed to the subordinate status of women. The Policy would aim to encourage changes in laws relating to ownership of property and inheritance by evolving consensus in order to make them gender just.

14.3 Decision Making

Women's equality in power sharing and active participation in decision making, including decision making in political process at all levels will be ensured for the achievement of the goals of empowerment. All measures will be taken to guarantee women equal access to and full participation in decision making bodies at every level, including the legislative, executive, judicial, corporate, statutory bodies, as also the advisory Commissions, Committees, Boards, and Trusts etc. Affirmative action such as reservations/quotas, including in higher legislative bodies, will be considered whenever necessary on a time bound basis. Women-friendly personnel policies will

also be drawn up to encourage women to participate effectively in the developmental process.

14.4 Mainstreaming a Gender Perspective in the Development Process

Policies, programmes and systems will be established to ensure mainstreaming of women's perspectives in all developmental processes, as catalysts, participants and recipients. Wherever there are gaps in policies and programmes, women specific interventions would be undertaken to bridge these. Coordinating and monitoring mechanisms will also be devised to assess from time to time the progress of such mainstreaming mechanisms. Women's issues and concerns as a result will specially be addressed and reflected in all concerned laws, sectoral policies, plans and programmes of action.

14.5 Economic Empowerment of women

Poverty Eradication

Since women comprise the majority of the population below the poverty line and are very often in situations of extreme poverty, given the harsh realities of intra-household and social discrimination, macro economic policies and poverty eradication programmes will specifically address the needs and problems of such women. There will be improved implementation of programmes which are already women oriented with special targets for women. Steps will be taken for mobilization of poor women and convergence of services, by offering them a range of economic and social options, along with necessary support measures to enhance their capabilities

Micro Credit

In order to enhance women's access to credit for consumption and production, the establishment of new, and strengthening of existing micro-credit mechanisms and micro-finance institution will be undertaken so that the outreach of credit is enhanced. Other supportive measures would be taken to ensure adequate flow of credit through extant financial institutions and banks, so that all women below poverty line have easy access to credit.

Women and Economy

Women's perspectives will be included in designing and implementing macro-economic and social policies by institutionalizing their participation in such processes. Their contribution to socio-economic development as producers and

workers will be recognized in the formal and informal sectors (including home based workers) and appropriate policies relating to employment and to her working conditions will be drawn up. Such measures could include:

- Reinterpretation and redefinition of conventional concepts of work wherever necessary e.g. in the Census records, to reflect women's contribution as producers and workers.
- Preparation of satellite and national accounts.
- Development of appropriate methodologies for undertaking (i) and (ii) above.

Globalization

Globalization has presented new challenges for the realization of the goal of women's equality, the gender impact of which has not been systematically evaluated fully. However, from the micro-level studies that were commissioned by the Department of Women & Child Development, it is evident that there is a need for re-framing policies for access to employment and quality of employment. Benefits of the growing global economy have been unevenly distributed leading to wider economic disparities, the feminization of poverty, increased gender inequality through often deteriorating working conditions and unsafe working environment especially in the informal economy and rural areas. Strategies will be designed to enhance the capacity of women and empower them to meet the negative social and economic impacts, which may flow from the globalization process.

14.5.1 Women and Agriculture

In view of the critical role of women in the agriculture and allied sectors, as producers, concentrated efforts will be made to ensure that benefits of training, extension and various programmes will reach them in proportion to their numbers. The programmes for training women in soil conservation, social forestry, dairy development and other occupations allied to agriculture like horticulture, livestock including small animal husbandry, poultry, fisheries etc. will be expanded to benefit women workers in the agriculture sector.

14.5.2 Women and Industry

The important role played by women in electronics, information technology and food processing and agro industry and textiles has been crucial to the development of these sectors. They would be given comprehensive support in terms of labor legislation, social security and other support services to participate in various

industrial sectors. Women at present cannot work in night shift in factories even if they wish to. Suitable measures will be taken to enable women to work on the night shift in factories. This will be accompanied with support services for security, transportation etc.

14.6 Support Services

The provision of support services for women, like child care facilities, including crèches at work places and educational institutions, homes for the aged and the disabled will be expanded and improved to create an enabling environment and to ensure their full cooperation in social, political and economic life. Women-friendly personnel policies will also be drawn up to encourage women to participate effectively in the developmental process.

14.7 Social Empowerment of Women

14.7.1 Education

Equal access to education for women and girls will be ensured. Special measures will be taken to eliminate discrimination, universalize education, eradicate illiteracy, create a gender-sensitive educational system, increase enrolment and retention rates of girls and improve the quality of education to facilitate life-long learning as well as development of occupation/vocation/technical skills by women. Reducing the gender gap in secondary and higher education would be a focus area. Sectoral time targets in existing policies will be achieved, with a special focus on girls and women, particularly those belonging to weaker sections including the Scheduled Castes/Scheduled Tribes/Other Backward Classes/Minorities. Gender sensitive curricula would be developed at all levels of educational system in order to address sex stereotyping as one of the causes of gender discrimination.

14.7.2 Health

A holistic approach to women's health which includes both nutrition and health services will be adopted and special attention will be given to the needs of women and the girl at all stages of the life cycle. The reduction of infant mortality and maternal mortality, which are sensitive indicators of human development, is a priority concern. This policy reiterates the national demographic goals for Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR) set out in the National Population Policy 2000. Women should have access to comprehensive, affordable and quality health care. Measures will be adopted that take into account the reproductive rights of women to enable them to exercise informed choices, their vulnerability to sexual and

health problems together with endemic, infectious and communicable diseases such as malaria, TB, and water borne diseases as well as hypertension and cardio-pulmonary diseases. The social, developmental and health consequences of HIV/AIDS and other sexually transmitted diseases will be tackled from a gender perspective.

To effectively meet problems of infant and maternal mortality, and early marriage the availability of good and accurate data at micro level on deaths, birth and marriages is required. Strict implementation of registration of births and deaths would be ensured and registration of marriages would be made compulsory.

In accordance with the commitment of the National Population Policy (2000) to population stabilization, this Policy recognizes the critical need of men and women to have access to safe, effective and affordable methods of family planning of their choice and the need to suitably address the issues of early marriages and spacing of children. Interventions such as spread of education, compulsory registration of marriage and special programmes like BSY should impact on delaying the age of marriage so that by 2010 child marriages are eliminated.

Women's traditional knowledge about health care and nutrition will be recognized through proper documentation and its use will be encouraged. The use of Indian and alternative systems of medicine will be enhanced within the framework of overall health infrastructure available for women.

14.7.3 Nutrition

In view of the high risk of malnutrition and disease that women face at all the three critical stages viz., infancy and childhood, adolescent and reproductive phase, focused attention would be paid to meeting the nutritional needs of women at all stages of the life cycle. This is also important in view of the critical link between the health of adolescent girls, pregnant and lactating women with the health of infant and young children. Special efforts will be made to tackle the problem of macro and micro nutrient deficiencies especially amongst pregnant and lactating women as it leads to various diseases and disabilities.

Intra-household discrimination in nutritional matters vis-à-vis girls and women will be sought to be ended through appropriate strategies. Widespread use of nutrition education would be made to address the issues of intra-household imbalances in

nutrition and the special needs of pregnant and lactating women. Women's participation will also be ensured in the planning, superintendence and delivery of the system.

14.7.4 Drinking Water and Sanitation

Special attention will be given to the needs of women in the provision of safe drinking water, sewage disposal, toilet facilities and sanitation within accessible reach of households, especially in rural areas and urban slums. Women's participation will be ensured in the planning, delivery and maintenance of such services.

14.7.5 Housing and Shelter

Women's perspectives will be included in housing policies, planning of housing colonies and provision of shelter both in rural and urban areas. Special attention will be given for providing adequate and safe housing and accommodation for women including single women, heads of households, working women, students, apprentices and trainees.

14.7.6 Environment

Women will be involved and their perspectives reflected in the policies and programmes for environment, conservation and restoration. Considering the impact of environmental factors on their livelihoods, women's participation will be ensured in the conservation of the environment and control of environmental degradation. The vast majority of rural women still depend on the locally available non-commercial sources of energy such as animal dung, crop waste and fuel wood. In order to ensure the efficient use of these energy resources in an environmental friendly manner, the Policy will aim at promoting the programmes of non-conventional energy resources. Women will be involved in spreading the use of solar energy, biogas, smokeless chulahs and other rural application so as to have a visible impact of these measures in influencing eco system and in changing the life styles of rural women.

14.7.7 Science and Technology

Programmes will be strengthened to bring about a greater involvement of women in science and technology. These will include measures to motivate girls to take up science and technology for higher education and also ensure that development projects with scientific and technical inputs involve women fully. Efforts to develop a

scientific temper and awareness will also be stepped up. Special measures would be taken for their training in areas where they have special skills like communication and information technology. Efforts to develop appropriate technologies suited to women's needs as well as to reduce their drudgery will be given a special focus too.

Women in Difficult Circumstances

In recognition of the diversity of women's situations and in acknowledgement of the needs of specially disadvantaged groups, measures and programmes will be undertaken to provide them with special assistance. These groups include women in extreme poverty, destitute women, women in conflict situations, women affected by natural calamities, women in less developed regions, the disabled widows, elderly women, single women in difficult circumstances, women heading households, those displaced from employment, migrants, women who are victims of marital violence, deserted women and prostitutes etc.

14.7.8 Violence against women

All forms of violence against women, physical and mental, whether at domestic or societal levels, including those arising from customs, traditions or accepted practices shall be dealt with effectively with a view to eliminate its incidence. Institutions and mechanisms/schemes for assistance will be created and strengthened for prevention of such violence, including sexual harassment at work place and customs like dowry; for the rehabilitation of the victims of violence and for taking effective action against the perpetrators of such violence. A special emphasis will also be laid on programmes and measures to deal with trafficking in women and girls.

14.7.9 Rights of the Girl Child

All forms of discrimination against the girl child and violation of her rights shall be eliminated by undertaking strong measures both preventive and punitive within and outside the family. These would relate specifically to strict enforcement of laws against prenatal sex selection and the practices of female foeticide, female infanticide, child marriage, child abuse and child prostitution etc. Removal of discrimination in the treatment of the girl child within the family and outside and projection of a positive image of the girl child will be actively fostered. There will be special emphasis on the needs of the girl child and earmarking of substantial investments in the areas relating to food and nutrition, health and education, and in vocational education. In implementing programmes for eliminating child labor, there will be a special focus on girl children.

14.8 Mass Media

Media will be used to portray images consistent with human dignity of girls and women. The Policy will specifically strive to remove demeaning, degrading and negative conventional stereotypical images of women and violence against women. Private sector partners and media networks will be involved at all levels to ensure equal access for women particularly in the area of information and communication technologies. The media would be encouraged to develop codes of conduct, professional guidelines and other self regulatory mechanisms to remove gender stereotypes and promote balanced portrayals of women and men.

14.9 Operational Strategies

Action Plans

All Central and State Ministries will draw up time bound Action Plans for translating the Policy into a set of concrete actions, through a participatory process of consultation with Centre/State Departments of Women and Child Development and National /State Commissions for Women. The Plans will specifically including the following: -

- Measurable goals to be achieved by 2010.
- Identification and commitment of resources.
- Responsibilities for implementation of action points.
- Structures and mechanisms to ensure efficient monitoring, review and gender impact assessment of action points and policies.
- Introduction of a gender perspective in the budgeting process.

In order to support better planning and programme formulation and adequate allocation of resources, Gender Development Indices (GDI) will be developed by networking with specialized agencies. These could be analyzed and studied in depth. Gender auditing and development of evaluation mechanisms will also be undertaken along side.

Collection of gender disaggregated data by all primary data collecting agencies of the Central and State Governments as well as Research and Academic Institutions in the Public and Private Sectors will be undertaken. Data and information gaps in vital areas reflecting the status of women will be sought to be filled in by these immediately. All Ministries/Corporations/Banks and financial institutions etc will be

advised to collect, collate, disseminate and maintain/publish data related to programmes and benefits on a gender disaggregated basis. This will help in meaningful planning and evaluation of policies.

14.10 Institutional Mechanisms

Institutional mechanisms, to promote the advancement of women, which exist at the Central and State levels, will be strengthened. These will be through interventions as may be appropriate and will relate to, among others, provision of adequate resources, training and advocacy skills to effectively influence macro-policies, legislation, programmes etc. to achieve the empowerment of women.

National and State Councils will be formed to oversee the operationalisation of the Policy on a regular basis. The National Council will be headed by the Prime Minister and the State Councils by the Chief Ministers and be broad in composition having representatives from the concerned Departments/Ministries, National and State Commissions for Women, Social Welfare Boards, representatives of Non-Government Organizations, Women's Organizations, Corporate Sector, Trade Unions, financing institutions, academics, experts and social activists etc. These bodies will review the progress made in implementing the Policy twice a year. The National Development Council will also be informed of the progress of the programme undertaken under the policy from time to time for advice and comments.

National and State Resource Centers on women will be established with mandates for collection and dissemination of information, undertaking research work, conducting surveys, implementing training and awareness generation programmes, etc. These Centers will link up with Women's Studies Centers and other research and academic institutions through suitable information networking systems.

While institutions at the district level will be strengthened, at the grass-roots, women will be helped by Government through its programmes to organize and strengthen into Self-Help Groups (SHGs) at the Anganwadi/Village/Town level. The women's groups will be helped to institutionalize themselves into registered societies and to federate at the Panchayat/Municipal level. These societies will bring about synergistic implementation of all the social and economic development programmes by drawing resources made available through Government and Non-Government channels, including banks and financial institutions and by establishing a close Interface with the Panchayats/ Municipalities.

14.11 Resource Management

Availability of adequate financial, human and market resources to implement the Policy will be managed by concerned Departments, financial credit institutions and banks, private sector, civil society and other connected institutions. This process will include:

- Assessment of benefits flowing to women and resource allocation to the programmes relating to them through an exercise of gender budgeting. Appropriate changes in policies will be made to optimize benefits to women under these schemes;
- Adequate resource allocation to develop and promote the policy outlined earlier based on (a) above by concerned Departments.
- Developing synergy between personnel of Health, Rural Development, Education and Women & Child Development Department at field level and other village level functionaries'
- Meeting credit needs by banks and financial credit institutions through suitable policy initiatives and development of new institutions in coordination with the Department of Women & Child Development.

The strategy of Women's Component Plan adopted in the Ninth Plan of ensuring that not less than 30% of benefits/funds flow to women from all Ministries and Departments will be implemented effectively so that the needs and interests of women and girls are addressed by all concerned sectors. The Department of Women and Child Development being the nodal Ministry will monitor and review the progress of the implementation of the Component Plan from time to time, in terms of both quality and quantity in collaboration with the Planning Commission. Efforts will be made to channelize private sector investments too, to support programmes and projects for advancement of women

14.12 Legislation

The existing legislative structure will be reviewed and additional legislative measures taken by identified departments to implement the Policy. This will also involve a review of all existing laws including personal, customary and tribal laws, subordinate legislation, and related rules as well as executive and administrative regulations to eliminate all gender discriminatory references. The process will be planned over a time period 2000-2003. The specific measures required would be evolved through a

consultation process involving civil society, National Commission for Women and Department of Women and Child Development. In appropriate cases the consultation process would be widened to include other stakeholders too.

Effective implementation of legislation would be promoted by involving civil society and community. Appropriate changes in legislation will be undertaken, if necessary. In addition, following other specific measures will be taken to implement the legislation effectively. Strict enforcement of all relevant legal provisions and speedy redressal of grievances will be ensured, with a special focus on violence and gender related atrocities. Measures to prevent and punish sexual harassment at the place of work, protection for women workers in the organized/ unorganized sector and strict enforcement of relevant laws such as Equal Remuneration Act and Minimum Wages Act will be undertaken. Crimes against women, their incidence, prevention, investigation, detection and prosecution will be regularly reviewed at all Crime Review fora and Conferences at the Central, State and District levels. Recognised, local, voluntary organizations will be authorized to lodge Complaints and facilitate registration, investigations and legal proceedings related to violence and atrocities against girls and women. Women's Cells in Police Stations, Encourage Women Police Stations Family Courts, Mahila Courts, Counselling Centers, Legal Aid Centers and Nyaya Panchayats will be strengthened and expanded to eliminate violence and atrocities against women. Widespread dissemination of information on all aspects of legal rights, human rights and other entitlements of women, through specially designed legal literacy programmes and rights information programmes will be done.

14.13 Gender Sensitization

Training of personnel of executive, legislative and judicial wings of the State, with a special focus on policy and programme framers, implementation and development agencies, law enforcement machinery and the judiciary, as well as non-governmental organizations will be undertaken. Other measures will include:

- Promoting societal awareness to gender issues and women's human rights.
- Review of curriculum and educational materials to include gender education and human rights issues
- Removal of all references derogatory to the dignity of women from all public documents and legal instruments.

- Use of different forms of mass media to communicate social messages relating to women's equality and empowerment.

14.14 Panchayati Raj Institutions

The 73rd and 74th Amendments (1993) to the Indian Constitution have served as a breakthrough towards ensuring equal access and increased participation in political power structure for women. The PRIs will play a central role in the process of enhancing women's participation in public life. The PRIs and the local self Governments will be actively involved in the implementation and execution of the National Policy for Women at the grassroots level.

14.15 Partnership with the voluntary sector organizations

The involvement of voluntary organizations, associations, federations, trade unions, non-governmental organizations, women's organizations, as well as institutions dealing with education, training and research will be ensured in the formulation, implementation, monitoring and review of all policies and programmes affecting women. Towards this end, they will be provided with appropriate support related to resources and capacity building and facilitated to participate actively in the process of the empowerment of women.

14.16 International Cooperation

The Policy will aim at implementation of international obligations/commitments in all sectors on empowerment of women such as the Convention on All Forms of Discrimination Against Women (CEDAW), Convention on the Rights of the Child (CRC), International Conference on Population and Development (ICPD+5) and other such instruments. International, regional and sub-regional cooperation towards the empowerment of women will continue to be encouraged through sharing of experiences, exchange of ideas and technology, networking with institutions and organizations and through bilateral and multi-lateral partnerships.

15 Appendix 5: THE INTER-STATE RIVER WATER DISPUTES ACT, 1956

33 OF 1956

(As modified upto 6th August, 2002)

(28th August, 1956)

An Act to provide for the adjudication of disputes relating to waters of inter-State rivers and river valleys.

BE in enacted by Parliament in the Seventh Year of the Republic of India as Follows:-

33 of 1956	1	(1)	This act may be called the Inter -State River water Disputes Act 1956	short title and extent
		(2)	It extends to whole of India	
	2.		In this Act, unless the context otherwise requires	Definitions
		(a)	“Prescribed” means prescribed by rules made under this Act:	
		(b)	“Tribunal” means a Water Disputes Tribunal constituted under section 4;	
		(i)	The use, distribution or control of the waters of, or in, any Inter-State river or river valley :or	
		(ii)	The interpretation of terms of any agreement relating to the use; distribution or control of such waters or the implementation of such agreement ; or	
		(iii)	The levy of any water rate in contravention of the prohibition contained in Section 7.	
	3.		It is appears to the Government of any State that a water dispute with the Government of another State has arisen or is likely to arise by reason of the fact that the interests of the State or of any of the inhabitants thereof. In the waters of an Inter-State river or river valley have been, or likely to be, affected prejudicially by-	Complaints by State Governments as to water disputes
		(a)	Any executive action or legislation taken or passed, or proposed to be taken or passed, by the other State, or	
		(b)	The failure of the other State or any authority therein to exercise	

			any of their powers with respect to the use, distribution or control of such waters; or	
		(c)	The failure of the other State to implement the terms of any agreement relating to the use, distribution or control of such waters; the State Government may, in such form and manner as may be prescribed, request the Central Government to refer the water dispute to a Tribunal for adjudication.	
	4.	(1)	When any request under section 3 is received from any State Government in respect of any water dispute and the Central Government is of opinion that the water dispute cannot be settled by negotiations, the Central Government shall, within a period not exceeding one year from the date of receipt of such request, by notification in the Official Gazette, constitute a Water Disputes Tribunal for the adjudication of the water dispute.	Constitution of Tribunal
			Provided that any dispute settled by a Tribunal before the commencement of Inter-State Water Disputes (Amendment) Act. 2020 shall not be re-opened	
		(2)	The Tribunal shall consist of a Chairman and two other members nominated in this behalf by the Chief Justice of India from among persons who at the time of such nomination are Judges of the Supreme Court or of a High Court.)	
		(3)	The Central Government may, in consultation with the Tribunal, appoint two or more persons as assessors to advise the Tribunal in the proceedings before it.	
	5	(1)	When a Tribunal has been constituted under section 4, the Central Government shall, subject to the prohibition contained in section 8, refer the water dispute and any matter appearing to be connected with, or relevant to, the water dispute to the Tribunal for adjudication.	Adjudication of Water disputes.
		(2)	The Tribunal shall investigate the matters referred to it and forward to the Central Government a report setting out the facts as found by it and giving its decision on the matters referred to it within a period of three years.	
			Provident that if the decision cannot be given for unavoidable reason, within a period of three years, the Central Government may extend the period for a further period not exceeding two	

		years.	
		(3) If, upon consideration of the decision of the Tribunal, the Central Government or any State Government is of opinion that anything therein contained requires explanation or that guidance is needed upon any point not originally referred to the Tribunal, the Central Government or the State Government, as the case may be, within three months from the date of the decision, again refer the matter to the Tribunal for further consideration, and on such reference, the Tribunal may forward to the Central Government a further report within one year from the date of such reference giving such explanation or guidance as it deems fit and in such a case, the decision of the Tribunal shall be deemed to be modified accordingly.	
		Provided that the period of one year within which the Tribunal may forward its report to the Central Government may be extended by the Central Government, for such further period as it considers necessary	
		(4) If the members of the Tribunal differ in opinion or any point, the point shall be decided according to the opinion of the majority	
		(5) If, for any reason a vacancy (other from a temporary absence) occurs in the office of the Chairman or any other member of a Tribunal, such vacancy shall be filled by a person to be nominated in this behalf by the Chief Justice of India in accordance with the provisions of sub-section (2) of section 4, and the investigation of the matter referred to the Tribunal may be continued by the Tribunal after the vacancy is filled and from the stage at which the vacancy occurred.	
	6	(1) The Central Government shall publish the decision of the Tribunal in the Official and the decision shall be final and binding on the parties to the dispute and shall be given effect to by them	Publication of decision of Tribunal
		(2) The decision of the Tribunal, after its publication in the Official Gazette by the Central Government under sub-section (1) shall have the same force as an order to decree of the Supreme Court.	
	6A	(1) Without prejudice to the provisions of section 6, the Central Government may, be notification in the official Gazette, frame a	Power to make

		scheme or schemes whereby provision may be made for all matters necessary to give effect to the decision of a Tribunal	scheme to implement decisions of Tribunal
	(2)	A scheme framed under sub-section (1) may provided for:	
	(a)	The establishment of any authority (whether described as such or as a committee or other body) for the implementation of the decision or directions of the Tribunal	
	(b)	The composition, jurisdiction, powers and functions of the authority, term of office and other conditions of service of the procedure to be follow by, and the manner of filling vacancies along, the members of the authority.	
	(c)	The holding of a minimum member of meetings of the authority every year, the quorum of such meetings and the procedure thereat;	
	(d)	The appointment of any standing, ad hoc or other committees by the authority	
	(e)	The employment of a Secretary and other staff by the authority, the pay and allowances and other conditions or service of such staff	
	(f)	The constitution of a fund by the authority, the amounts that may be credited to such fund and the expenses to which the fund may be applied.	
	(g)	The form and the manner in which accounts shall be kept by the authority	
	(h)	The submission of an annual report by the authority of its activities	
	(j)	The decisions of the authority shall be subject to review:	
	(k)	The constitution of a committee for making such review and the procedure to be followed by such committee; and	
	(k)	Any other matter which may be necessary to proper for the effective implementation of the decision or directions of the Tribunal	
	(3)	In making provision in any scheme framed under sub-section (1) for the establishment of an authority for giving effect to the	

		decision of a Tribunal; the Central Government may, having regard to the nature of the jurisdiction, powers and functions required to be vested in such authority in accordance with such decision and all other relevant circumstances, declare in the said scheme, that such authority shall, under the name specified in the said scheme, have capacity to acquire, hold and dispose of property, enter into contracts, sue and be sued and do all such acts as may be necessary for the proper exercise and discharge of its jurisdiction, powers and functions.	
	(4)	A Scheme may empower the authority to make, with the previous, approval of the Central Government, regulations for giving effect to the purposes of the Scheme.	
	(5)	The Central Government may, be notification in the Official Gazette, add to, amend or vary, and scheme framed under sub section (1)	
	(6)	Every scheme framed under this section shall have effect notwithstanding anything contained in any law for the time being in force (other than this Act) or any instrument having effect by virtue of any law other than this Act.	
	(7)	Every scheme and every regulation made under a scheme shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both the Houses agree in making any modification in the Scheme or the regulation or both Houses agree that the scheme or the regulation should not be made, the Scheme or the regulation shall thereafter have effect only in such modified form or be of no effect, as the case may be; So, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under the scheme or regulation.	
	7	(1) No State Government shall, be reason only of the fact that any works for the conservation, regulation or utilization of water resources of an inter State river have been constructed within	Publication of levy of seignior age

			the limits of the State, impose, or authorize the imposition of, any seignior age or additional rate or fee (by whatever name called in respect of the use of such water by any other State or the inhabitants thereof.	etc.
		(2)	Any dispute or difference between two or more State Government with respect to the levy of any water rate in contravention of the prohibition contained in sub-section (1) shall be deemed to be a water dispute.	
49 of 1956	8		Notwithstanding anything contained in section 3 or section 5 no reference shall be made to a Tribunal of any dispute that may arise regarding any matter which may be referred to arbitration under the River Bonds Act 12(1956)	Bar of reference of certain disputes to Tribunal
5 of 1908	9	(1)	The Tribunal shall have the same powers as are vested in a Civil Court under the Code of Civil Procedure, 1908, in respect of the following matters namely	
		(a)	Summoning and enforcing the attendance of any person and examining him on oath;	
		(b)	Requiring the discovery and production of documents and material objects;	
		(ba)	Requisitioning of any data as may be required for it.	
		(c)	Issuing commissions for the examination of witnesses or for local investigation	
		(d)	Any other matter which may be prescribed	
		(2)	The Tribunal may require any State Government to carry out or permit to be carried out, such surveys and investigation as may be considered necessary for the adjudication of any water dispute pending before it.	
		(3)	A decision of the Tribunal may contain directions as to the Government by which the expense of the Tribunal and any costs incurred by any State Government in appearing before the Tribunal are to be paid, and may fix the amount of any expenses or costs to be so paid, and so far as it relates to expenses or costs, may be enforced as if it were an order made by the Supreme Court.	
		(4)	(Subject to the provisions of this Act and any rules that may be	

		made hereunder) the Tribunal may, by order, regulate its practice and procedure.	
9A	(1)	The Central Government shall maintain a data bank and information system at the national level for each river basin which shall include data regarding water resources, land, agriculture and matters relating thereto, as the Central Government may prescribe from time to time. The State Government shall supply the data to the Central Government or in an agency appointed by The Central Government for the purpose, as and when required.	Maintenance of data bank and information
	(2)	The Central Government shall have powers to verify the data supplied by the State Government, and appoint any person or persons for the purpose and take such measures as it may consider necessary. The persons so appointed shall have the powers to summon such records and information from the concerned State Government as are considered necessary to discharge their functions under this section.	
10		The Chairman and other members of a Tribunal and the assessors shall be entitled to receive such remuneration, allowances or fees as may be prescribed.	Allowances or fees for Chairman and other members of Tribunal and assessors
11.		Notwithstanding anything contained in any other law, neither the Supreme Court nor any other court shall have or exercise jurisdiction in respect of any water dispute which may be referred to a Tribunal under this Act.	Bar of jurisdiction of Supreme Court and other Courts.
12.		The Central Government shall dissolve the Tribunal after it has forwarded its report and as soon as the Central Government is satisfied that no further reference to the Tribunal in the matter would be necessary	Dissolution of Tribunal
13	(1)	The Central Government, after consultation with the State Governments may, by notification in the Official Gazette, make rules to carry out the purpose of this Act.	Power to make rules

	(2)	In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely,-	
	(a)	The form and manner in which a complaint as to any water dispute may be made by any State Government	
	(b)	The matters in respect of which a Tribunal may be vested with the powers of a civil Court.	
	(c)	The procedure to be followed by a tribunal under this Act	
	(d)	The remuneration, allowances, or fees payable to the Chairman and other members) of a Tribunal and assessors.	
	(e)	The terms and conditions of service of officers and assessors of the Tribunal	
	(g)	Any other matter which has to be or may be prescribed.	
	(3)	Every rule made under this section shall be laid as soon as may be after it is made, before each House of Parliament while it is in session for a total period of thirty days. (which may be comprised in one session or in two or more successive session, and if, before the expiry of the session immediately, following the session or the successive sessions aforesaid) both Houses agree in making ay modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be: so however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule)	
14	(1)	Notwithstanding anything contained in the foregoing previous of this Act, the Central Government may, by notification in the Official Gazette constitute a Tribunal under this Act, to be known as the Ravi and Beas Waters Tribunal for the verification and adjudication of the matters referred to in paragraphs 9.1 and 9.2 respectively, of the Punjab Settlement0	
	(2)	When a Tribunal has been constituted under sub-section (1) the provisions of sub-sections (2) and (3) of Section 4, sub sections (2), (3) and (4) of section 5 and sections 5A to 13 (both inclusive) of this Action relating to the constitution, jurisdiction, powers, authority and bar of jurisdiction shall so far as may be,	

			but subject to sub-section (s) hereof, apply to the constitution , jurisdiction, powers, authority and bar of jurisdiction in relating to the Tribunal Constituted under sub section (i)	
		(3)	When a Tribunal has been constituted under sub-section (1) the Central Government alone may sue motto or at the request of the concerned State Government refer the matters specified in paragraphs 9.1 and 9.2 of the Punjab settlement to such Tribunals.	
			Explanation: for the purpose of this section “Punjab Settlement” means the memorandum of Settlement signed at New Delhi on the 24 th Day of July, 1985.	

1. Extended to Dadra and Nagar Haveli by Regulation 6 of 1963, section 2 and Scheduled and to Pondecheery by Regulation 7 of 1963, section 3 Schedule
2. Substituted by Act 14 of 2002, section 2 for insertion of word –“River (with effect from 06.08.2002)
3. Substituted by Act 14 of 2002, section 3(a) (with effect from 06.08.2002)
4. Substituted by Act 35 of 1968, section 2, for the previous sub-section
5. Substituted by Act 14 of 2002, section 3(b) (with effect from 06.08.2002)
6. Substituted by Act 14 of 2002, section 4 (with effect from 06.08.2002)
7. Substituted by Act 14 of 2002, section 4 (with effect from 06.08.2002)
8. Inserted by act 35 of 1968 section 3
9. Inserted by Act 35 of 1968, section 4
10. Inserted by Act 14 of 2002, section 5 (with effect from 06.08.2002)
11. Inserted by Act 45 of 1980, section 2 (with effect from 27.8.1980)
12. Substituted by Act 36 of 1957, section 3 and schedule II for “195)
13. Inserted by Act 14, of 2002, section 6 (with effect fro 06.08.2002)
14. Substituted by Act 35 of 1968, section 5, for certain words.
15. Inserted by Act 18 of 2002, section 7 (with effect from 06.08.2002)
16. Substituted by Act 35, of 1968, section 6, for certain words
17. Substituted by section 7, by Act 35 of 1968 for the Presiding Officer
18. Substituted by Act 14 of 2002, section 8 for insertion of word “Assessors” (with effect from 06.08.2002)
19. Substituted by section 7, by Act 35 of 1968 for the former sub-section
20. Substituted by Act 45, of 1980, section 3, for certain words (with effect from 27.8.1980)

21. Inserted by Inter State Water Disputes (Amendment Act, 1986)

16 Appendix 6: The River Boards Act, 1956

(No 49 of 1956)

An Act provides for the establishment of River Boards for the regulation a development of inter-State rivers and river valleys. Be it enacted by Parliament in the Seventh Year of the republic of India as Follows:-

16.1 CHAPTER I PRELIMINARY

1. (1) This Act may be called the River Boards Act, 1956
(2) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

- 2 It is hereby declared that it is expedient in the public interest that the Central Government should take under its control and regulation and development of inter-State rivers and river valleys to the extent hereinafter provided.

3. In this Act, unless the context otherwise requires,
 - (a) "Board" means a River Board established under Section 4:
 - (b) "Government interested", in relation to a Board, means the Government of those Stats which, in the opinion of the Central Government, are likely to be interested I, or affected by, the functions of the Board under this Act:
 - (c) "Member" means a member of a Board and includes its Chairman:
 - (d) "Prescribed" means prescribed by rules made under this Act

16.2 CHAPTER II ESTABLISHMENT OF RIVER BOARDS

4. (1) The Central Government may, on a request received in this behalf from a State Government or otherwise, by notification in the Official Gazette establish a River Board for advising the Governments interested in relation to such matters concerning the regulation or development of an

inter-State river or river valley or any specified part thereof and for performing such other functions as may be specified in the notification, and different Boards may be established for different inter-State rivers or river valleys:

Provided that no such notification shall be issued except after consultation with the Government interested with respect to the proposal to establish the Board, the persons to be appointed as thereof and the functions which the Board may be empowered to perform.

- (2) A Board may be established under such name as may be specified in the notification under sub section (1)
 - (3) Every Board so established shall be a body corporate having perpetual succession and a common seal, and shall by the said name ---? and sued.
 - (4) Every Board shall exercise its jurisdiction within such limits of the river (including its tributaries, if any) or river valley as may be specified in the notification under sub-section (1) and the area so specified shall be called the area of operation of the Board.
5. (1) The Board shall consist of A chairman and such other members as the Central Government thinks fit to appoint.

(2) A person shall not be qualified for appointment as a member unless, in the opinion of the Central Government, he has special knowledge and experience in irrigation, electrical engineering, flood control, navigation, water conservation, soil conservation, administration or finance
 6. (1) A member shall, unless his appointment is terminated earlier by the Central Government, hold office for such period as may be notified in this behalf by the Central Government in the Official gazette and shall, on the expiry of the term of his office, be eligible for re-appointment.

(2) A member may resign his office by writing under his hand addressed to the Central Government, but he shall continue in office until the

appointment of this successor is notified in the Official Gazette.

- (3) A casual vacancy created by the resignation of a member under sub section (2) or for any other reason shall be filled by fresh appointment.
 - (4) A member may be appointed either as a whole-time or part-time member as the Central Government thinks fit.
 - (5) The terms and conditions of service of the Chairman and other members shall be such as may be prescribed.
7. If any member is by infirmity or otherwise rendered temporarily incapable of carrying out his duties or is absent on leave or otherwise in circumstances not involving the vacation of this appointment, the Central Government may appoint another person to act in his place.
8. The Board shall meet at such times and places and shall observe such rules of procedure in regard to the transaction of business at its meetings as may be provided by regulations made under this Act.
9. No act or proceeding of the Board shall be deemed to be invalid by reason only of the existence of any vacancy in the Board or any defect in the appointment of a member thereof.
- 10 The Board may, from time to time, appoint one or more advisory committee or committees for the purpose of enabling it to carry out its functions under this Act.
11.
 - (1) The Board may be associate with itself in such manner and for such purposes as may be determined by regulations made under this Act any person whose assistance or advice it may desire in performing any of its functions under this Act.
 - (2) A person associated with the Board under sub-section (1) for any purpose shall have a right to take part in the discussions of the Board relevant to the purpose, but shall not have a right to vote at a meeting of the Board,

and shall not be a member for any other purpose.

12. Subject to such rules as may be made by the Central Government in this behalf, the Board, may for the purpose of enabling it to efficiently perform its functions or exercise its powers under this Act, appoint such officers as it may think fit and determine their functions and terms and conditions of service.

16.3 CHAPTER III POWER AND FUNCTIONS OF THE BOARD

13. A Board may be empowered under sub-section (1) of section 14 to perform all or any of the following functions, namely;
 - (a) Advising the Government interested on any matter concerning the regulation or development of any specified inter-state river or river valley within its area of operation and in particular, advising them in relation to the co-ordination of their activities with a view to resolve conflicts among them and to achieve maximum results in respect of the measures undertaken by them in the inter-State river or river valley for the purpose of
 - (i) Conservation, control and optimum utilization of water resources of the inter-State river;
 - (ii) Promotion and operation of schemes for irrigation, water supply or drainage;
 - (iii) Promotion and operation of schemes for the development of hydro-electric power;
 - (iv) promotion and operation of schemes for flood control;
 - (v) Promotion and control of navigation;
 - (vi) Promotion of a forestation and control of soil erosion;
 - (vii) Prevention of pollution of the waters of the inter-State river;

- (viii) Such other matters as may be Prescribed;
 - (b) Preparing schemes, including multi-purpose schemes, for the purpose of regulating or developing the inter-State river or river valley and advising the Government interested to undertake measures for executing the scheme prepared by the Board;
 - (c) Allocating among the Government interested the costs of executing any scheme prepared by the Board and of maintaining any works undertaken in the execution of the scheme;
 - (d) Watching the progress of the measures undertaken by the Government interested;
 - (e) Any other matter which is supplemental, incidental or consequential to any of the above functions.
14. (1) The Central Government, after consultation with the Governments interested., may, by notification in the Official Gazette, empower the Board to perform all or such of the functions under section 13 as may be specified in the notification
- (2) The Board shall exercise its powers and perform all the functions which it is empowered to do by or under this Act within its area of operation.
- (3) In performing its functions under this Act, the Board shall consult the Governments interested at all stages and endeavor to secure, as far as may be practicable, agreement among such Governments.
15. (1) Where any Board has been empowered to perform functions under clause (b) of section 13, the Board may, from time to time, prepare schemes, not inconsistent with its functions under this Act, for the purpose of regulating or developing any inter-state river or river valley within its area of operation.
- (2) After preparing any such scheme, the Board shall consult the

Governments interested and the Central Government in respect of the scheme and after considering their suggestions, if any, the board may confirm, modify or reject the scheme.

- (3) The scheme as confirmed or modified under sub-section (2) shall thereupon become final and shall be called the approved schemes.
 - (4) Before any scheme is approved, the Board shall take into account the costs likely to be incurred in undertaking measures for executing the scheme and in maintaining any works to be undertaken in the execution of the scheme and the costs shall be allocated among the Governments interested in such proportion as may be agreed or, in default of agreement, as may be determined by the Board having a regard to the benefits which will be received from scheme by them.
 - (5) Every approved scheme shall be forwarded to the Governments interested and the Board may advise them to undertake measures for executing the scheme and a copy of the approved scheme shall also be forwarded to the Central Government.
 - (6) The Central Government may, on a request received in this behalf from any Government interested or otherwise, assist the Governments interested in taking such steps as may be necessary for the execution of the scheme
16. For the purpose of efficiently performing its functions under this Act, every Board may, within its area of operation.
- (a) Acquire, hold and dispose of such property, both movable and immovable, as it deems necessary;
 - (b) Undertake such preliminary investigation or surveys or other measures as it deems necessary.
 - (c) Inspect or cause to be inspected any works undertaken by any Government interested concerning the regulation or development of the

inter-State river or river valley.

- (d) Conduct and co-ordinate research on various aspects of the conservation, regulation or utilization of water resources. Such as water power generation, irrigation, navigation, flood control, soil conservation, land use and connected structural and design features;
 - (e) Collect such topographical, meteorological, and hydrological and sub-soil water data as it deems necessary.
 - (f) Publish statistics or statistics or other information relating to the various aspects of the regulation or development of the inter-State or river valley;
 - (g) Require any Government interested to furnish such information as the Board may require in relation to:-
 - (i) The measures undertaken by the Government for the regulation or development of the Inter-State river or river valley;
 - (ii) The topographical, meteorological, hydrological and sub-soil water data.
 - (iii) Such other matters as may be prescribed.
17. The Central Government may, after due appropriation made by parliament by law in this behalf, pay to the Board in each financial year such sums as the Central Government may consider necessary for the performance of the functions of the Board under this Act.
18. (1) The Board shall have its own fund, and all sum which may from time to time, be paid to it by the Central Government or a State Government and all other receipts of the Board shall be carried to the fund of the Board and all payments by the Board shall be made there from.
- (2) The Board may expend such sums as it thinks fit for performing its functions under this Act, and such sums shall be treated as expenditure payable out of the fund of the Board.
19. The Board shall prepare, in such forms and at such time each year as may be prescribed, a budget in respect of the financial year next ensuing showing the estimated receipts and expenditure, and copies thereof shall

be forwarded to the Central Government and the Governments interested.

- 20 The board shall prepare, in such form and at such time each year as may be prescribed, an annual report giving a true and full account of its activities during the prescribed, an annual report giving a true and full account of its activities during the previous year and copies thereof shall be forwarded to the Central Government and the Governments interested; and the Central Government shall cause report to be laid before both Houses of Parliament.
21. (1) The Board shall cause to be maintained such books of account and other books in relation to its accounts in such forms and in such manner as may be prescribed.
- (2) The accounts of the Board shall be audited at such time and in such manner as may be prescribed.

16.4 CHAPTER IV MISCELLANEOUS

- (22) (1) Where any dispute or difference arises between two or more Governments interested with respect to:
- (a) Any advice tendered by The Board under this Act;
 - (b) Any measures undertaken by any Government interested in pursuance of any advice tendered by the Board;
 - (c) The refusal or neglect of any Government interested to undertake any measures in pursuance of any advice tendered by the Board;
 - (d) The sharing of benefits or financial liabilities arising out of any advice tendered by the Board;
 - (e) Any other matter covered by this Act or touching or arising out of it.

Any of the Governments interested may, in such form and in such manner as may be prescribed, refer the matter in dispute to arbitration.

- (2) The arbitrator shall be a person to be appointed in this behalf by the Chief Justice of India from among persons who are, or have been, Judges of the Supreme Court or are Judges of a High court.

- (3) The arbitrator may appoint two or more persons as assessors to assist him in the proceeding before him.
 - (4) The decision of the arbitrator shall be final and binding to the parties to the dispute and shall be given effect to by them.
 - (5) Nothing in the Arbitration Act, 1940, shall apply to arbitrations under this section.
23. The Board shall furnish to the central Government such returns, statistics, accounts and other information with respect to its fund or activities as the Central Government may from time to time require.
24. The Board may, by general or special order in writing, delegate to the Chairman or any other member or any officer of the Board, subject to such conditions and limitations. If any, as may be specified in the order, such of its powers and functions under this Act as it may deem necessary for the efficient of the day-to-day administration.
25. All members and officers of a Board shall, when acting or purporting to act in pursuance of any of the provisions of this Act, be deemed to be public servants within the meaning of section 21 of the Indian Panel Code.
26. No suit or other legal proceeding shall lie against any member or officer of a Board in respect of anything which is in good faith done or intended to be done in pursuance of this Act.
- 27 (1) When the Central Government is of opinion that a Board has performed its functions under this Act, the Central Government, after consultation with the Governments interested, may, by notification in the official Gazette, declare that the Board shall be dissolved from such date as may be specified in this behalf in such notification; and the Board shall be deemed to have been dissolved accordingly.
- (2) On the dissolution of the Board by a notification under sub-section (1)
- (a) All properties, funds and dues which are vested in, or realizable by, the Board shall vest in, and be realizable by such Government or authority as may be specified in the said notification; and

- (b) All liabilities which are enforceable against the Board shall be enforceable only against the Government or authority specified in the said notification.
28. (1) The Central Government may, notification in the Official Gazette, make rules to carry out the purposes of this Act.
- (2) In Particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:-
- (a) The salaries, allowances and conditions of service of members of the Board
- (b) The matters in respect of which a Board may tender advice to the Governments interested under sub-clause (viii) of clause (a) of section 13;
- (c) The matters in respect of which the board may require a Government interested
To furnish information;
- (d) The manner in which the central Government may assist the Governments Interested to execute any scheme prepared by the Board;
- (e) The form in which, and the time within which, the budget and annual report of the Board may be prepared and forwarded to the Central Government and the Governments interested
- (f) The form and manner in which the accounts of the Board may be maintained, and the time at which, and the manner in which, such accounts may be audited;
- (g) The returns and information which the Board may be required to furnish to the Central Government ;
- (h) The form and manner in which a dispute may be referred on arbitration under this Act;
- (i) The procedure to be followed in arbitration proceedings under this Act.
- (j) The manner of recruitment of the officers of a Board and the terms and conditions of services of such officers;
- (k) Any other matter which has to be, or may be, prescribed.
- (c) All rules made under this section shall, as soon as practicable after they are made, be laid before both Houses of Parliament.

29. The Board may, with the previous approval of the Central Government, by notification in the Gazette of India, make regulations, not inconsistent with this Act or the rules made there under-
- (a) Regulating the meetings of the Board and the procedure for conducting business thereat;
 - (b) Regulating the manner in which, and the purposes of which, advisory committees may be appointed.
 - (c) Regulating the manner in which and the purposes for which persons may be associated with the Board under section 11;
 - (d) Determining the terms and conditions of service of the members of advisory committees, or persons associated with the Board under section 11 and of all officers appointed by the Board.

17 Appendix 7: ENVIRONMENT (PROTECTION) ACT, 1986

A BRIEF REVIEW

According to its Preamble, the Environment (Protection) Act, 1986, (hereinafter referred to as the Act) is an Act to provide for the protection and improvement of environment and for matters connected therewith. The Act has been enacted in the thirty seventh year of the Republic of India, with the objective of further implementing the decision of the United Nations Conference on Human Environment held at Stockholm (Sweden) in June, 1972, to take appropriate steps for the protection and improvement of environment and the prevention of hazards to human beings, other living creatures, plants and property. Thus, the Act has been brought on the Statute Book, and extended to the whole of India.

Objective of the Act:-- A cursory analysis of its Preamble makes it obvious that the objectives behind the present enactment are three fold, namely:-- (1) Protection of environment, (2) improvement of environment, and (3) prevention of hazards to: (a) human beings, (b) other living creatures, (c) plants, and (d) property.

Constitution of India - Vis-à-vis the Act:-- Although evidently the Act has come into shape as the harbinger of the Stockholm Conference of the United Nations, India, as a signatory thereto has endeavored to protect and improve environment and to safeguard the forests and wild life of the country. by incorporating necessary measures by the Constitution (42nd Amendment Act, 1976), in Article-48 A of Part IV, and pledged as a Fundamental Duty, imposed on the citizens under Article 51 A(g) of Part IV A of the Constitution, not only to protect and improve the natural environment including forests, lakes, rivers and wild life but also to have compassion for living creatures. Besides, environmental protection has also been recognized as a Fundamental Right under Article 21 of the Constitution of India, as a result of judicial activism emerged under Articles 32 and 226 of the Constitution of India. Similarly, enjoyment of the Fundamental Right under Art. 19(1)(g) of the Constitution is made available subject to the condition of protecting the Environment based on the doctrine of " Sustainable Development".

Scheme of the Act:-- The Act is a small piece of protective and progressive socio-economic legislation, consisting of only 26 Sections, divided into four Chapters, and is able to achieve greater importance and sensational attention in all walks of life. It

has also put possible deterrent control over the polluters of environment by making them liable to penal action, and its scope has been widely extended by the Courts, so as to make the polluters liable to pay not only the compensation to the victims of pollution but also costs to restore the disturbed ecology and environment.

For a proper understanding of its objectives and for an effective implementation of the various provisions thereof, the Act requires possession of and acquaintance with multifarious knowledge, such as the knowledge of assessment and forecasting of the pros and cons of the pollutants and the problem of pollution caused by industries or otherwise, socio-economic needs and aspirations of the people, knowledge of exploitation of natural and other material sources of the earth and the consequences of exhausting the same in the coming years, and also the environment improvement measures taken up at international forums.

Chapter I of the Act consisting of two Sections, i.e. Section 1 and 2 captioned as "Preliminary" deals respectively with short title, extent and commencement of the Act and also definitions to seven important terminologies laid down in clauses (a) to (g) of Section 2, namely, "environment", "environmental pollution", "handling", "hazardous substance", "occupier" and "prescribed " etc.

Powers of the Central Government to ensure Protection and Improvement of Environment:-- Chapter 11 of the Act containing Sections 3 to 6, empowers the Central Government to take measures to protect and improve the environment, appointment of officers and their powers and functions, power to give directions to any person, officer or any authority, and to make rules to regulate the environmental pollution, respectively.

Environment Pollution - Obligations of Industry:-- In Chapter III of the Act Sections 7 to 17 are embedded as a theme entitled "Prevention, Control and Abatement of Environment Pollution". Accordingly, Section 7 imposes an obligation on persons carrying on industry, operation, etc. which allow emission or discharge of environmental pollutants in excess of the standards. Section 8 requires the persons handling hazardous substances to comply with the prescribed procedural safeguards. Section 9 wholly requires the person in charge of the place of discharge or the person responsible for any discharge of any environmental pollution in excess of the prescribed standards, to furnish necessary information to the prescribed authority. It also imposes a duty on such persons to prevent or mitigate the

environmental pollution caused due to such discharge. In fact, Section 9 is the charging section giving berth for filing public interest litigations seeking intervention of the Courts for safeguarding the environment and save the mankind from the hazards of pollution.

Power of Inspection:-- Powers of entry and inspection along with the consequence of obstruction or delaying in entry are contemplated in Section 10 of the Act. Sub-section (4) of this section envisages that the provisions of the Code of Criminal Procedure, 1973, in relation to the State of Jammu and Kashmir or any area in which that Code is not in force, the provisions of any corresponding law in force in that State or area shall, so far as may be, apply to any search or seizure under this section as they apply to any search or seizure made under the authority of a warrant issued under Section 94 of the said Code or, as the case may be, under the corresponding provisions of the said law.

Environmental Laboratory and Analysis of Samples:-- Section 11 of the Act empowers the Central Government or any of its authorized officers to take samples of air, water, soil or other substances from any factory, premises or other places in the manner as may be prescribed. Section 12 empowers the Central Government to establish Environmental Laboratories and to make necessary rules specifying the functions of such laboratories and the procedure for submission of samples of air, water, soil or other substance for analytical tests etc. Section 13 of the Act empowers the Central Government for the appointment of Government Analysts. Section 14 provides provision for the use of a report of the Government Analyst, as the evidence of facts in any proceedings, under the Act.

Offences and Penalties:-- Section 15 of the Act provides various penalties for contravention of the provisions of the Act, and the rules, orders and directions issued hereunder, including punishments for continued offences. Section 16 while defining the terms "company" and "director" provides punishment and makes liable a company and the officials of such company who are responsible for the conduct of the business of the company. Section 17 of-the Act provides punishment for the commission of offences by any Department of Government.

Miscellaneous aspects:-- Chapter IV, captioned as "Miscellaneous", containing Sections 18 to 26 provides for matters relating to the protection of action being taken in good faith, cognizance of offences, furnishing of reports, returns, statistics,

accounts and other information etc. to the concerned/ authorized authority, and imparting the status of public servants to the officers contemplated under Section 3 of the Act, including all officers and other employees under such authority. Bar of jurisdiction of Civil Court:-- Section 22 bars the jurisdiction of Civil Courts in respect of matters covered by this Act as envisaged therein.

Delegation of powers:-- Section 23 of the Act empowers the Central Government to delegate its powers, except the power of constituting an authority under Section 3(3) of the Act and the power of rule making under Section 25, to any officer, State Government or other authority.

Overriding effect of the Act:-- Subject to the provisions of subsection (2) of Section 24, the present Act, Rules and Orders made therein shall prevail notwithstanding anything inconsistent in any other enactment.

Central Government to make Rules:-- Under Section 25, the Central Government is empowered to make rules for carrying out the purposes of the Act. Similarly the rules made under the Act are required to be laid before each House of the Parliament.

17.1 RULES MADE UNDER THE ACT

Standards of Emission:-- The Environment (Protection) Rules, 1986 framed under Sections 6 and 25 of the Act which have come into force from 19th November, 1986, provide, inter-alia, under Rule 3, standards for emission or discharge of environmental pollutants from the industries, operations or processes as specified in Schedules I to IV thereof. Sub-Rule 3A of Rule 3 contemplates the general standards as provided in Schedule I vis-à-vis Schedule VI for discharge of environmental pollutants, such as effluents, (Part A), Waste Water Generator (Part B), Load Based Standards (Part C), General Emission (Part D), Noise Standards (Part E) etc. as also Schedule VII. Prohibition and restriction on the location of industries and the carrying on processes and operations in different areas are provided in Rule 5.

Analysis of samples:-- While Rule 6 of the above Rules provides procedure for taking samples, Rule 8 provides procedure for submission of samples for analysis and the form of laboratory reports. Rule 13 provides for the prohibition and restriction on the handling of hazardous substances in different areas.

Hazardous waste management:-- Rules regarding management and handling are provided under the Hazardous Waste (Management and Handling) Rules, 1989 framed by the Central Government under Sections 4, 8 and 25 of the Act. The same have come into force with effect from 28th July, 1989.

Besides the above Rules, the following Acts which are also brought into force in connection with Environmental Law:

- 1. The National Environment Tribunal Act, 1995**
- 2. The National Environment Appellate Authority Act, 1997**

18 Appendix 8: THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974

A BRIEF REVIEW

The Water (Prevention and Control of Pollution) Act, 1974 (hereinafter called as the Act) as contemplated in its Preamble, is an "Act to provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith". Since the subject matter of water falls under List II of the Seventh Schedule to the Constitution, the Act has been passed by the Parliament on 23rd March, 1974 in pursuance of Clause (1) of Article 25,2 of the Constitution of India, and the concomitant resolutions passed by all the Houses of the Legislatures of the State of Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Rajasthan, Tripura and West Bengal to the effect that the aforesaid matters should be regulated in those States by Parliament, by law. The Act was, therefore, made applicable in the first instance, to the above said States and with a provision that it shall also apply to such other States which adopt the same by passing necessary resolutions in that behalf under Clause (1) of Article 252 of the Constitution. The Act has come into force in the said States with immediate effect.

The Act has been divided into eight Chapters. Chapter I, with the title "Preliminary" contains Sections 1 and 2 dealing with short title, application and commencement, and definitions, respectively. Chapter II, consisting of Sections 3 to 12, deals with the establishment, etc., of the Central and State Boards for prevention and control of water pollution. Section 3 empowers the Central Government to appoint and constitute a Central Pollution Control Board. Similarly, Section 4 empowers the State Government to appoint and constitute the State Pollution Control Board to exercise such powers and perform such functions as may be assigned to them under the Act.

Constitution, Membership and Powers etc. of Board:-- While Sections 3 and 4 provide for the appointment and constitution of a Central Board and State Boards respectively, Section 5 of the Act deals with the terms and conditions of service of members of the Board including their removal. Section 6 of the Act provides

disqualifications for being appointed as a member of the Board and Section 7 deals with the vacant seat of a disqualified member. Section 8 deals with conducting of Board meetings. Section 9 empowers the Board to constitute committees for such purposes as it may think fit, etc. Section 10 provides provision for temporary association of persons with the Board for any particular purposes including the fees and allowances payable therefore. According to Section 11, no act or proceeding of a Board or any committee shall be called in question on the ground of existence of any vacancy in or any defect in the constitution of the Board or the committee, as the case may be. Section 1 IA deals with the powers and duties of the Chairman of a Board as may be delegated to him by the Board. Section 12 appropriates provision for the terms and conditions of service, powers and duties of the Member-Secretary including the method of recruitment and service conditions, scales of pay of other officers and employees of the Central or State Board as may be determined by the regulations, etc.

Joint Boards:- Chapter III of the Act with the caption "Joint Boards" consisting of Sections 13 to 15 makes provision for the constitution, composition of Joint Boards and the directions to be given to such Boards by the State Government or the Central Government, as the case may be.

Powers and Functions of Boards:-- Chapter IV of the Act consisting of Sections 16 to 18 deals with the powers and functions of the Boards. Section 16 refers to the main functions of the Central Board, namely, **to promote cleanliness of streams and wells** in different areas of the States besides the other functions contemplated under Clauses (a) to (i) of subsection (2) of Section 16. Sub-section (3) of Section 16 empowers the Central Board to establish or recognise a laboratory or laboratories for the efficient performance of its functions including analysis of samples of water from any stream or well or sewage or trade effluents.

Section 17 deals with the functions of a State Board as contemplated in Clauses (a) to (o). Sub-section (2) of this Section empowers a State Board to establish or recognise a laboratory or laboratories for its own efficient functioning including the analysis of samples of water from any stream or well or any sewage or any trade effluents.

Section 18 of the Act obligates the Central Board to bound itself by the written directions as may be given by the Central Government. Every State Board shall be

bound by the written directions of the Central Board or the State Government, as the case may be, in accordance with this Section.

Prevention, control and abatement of water pollution:-- Chapter V containing Sections 19 to 33A deals with prevention and control of water pollution. Section 19 empowers the State Government to restrict the application of the Act to certain areas etc. Section 20 empowers a State Board or any officer empowered by it in that behalf **to make surveys of any area and gauge and keep records of the flow or value and other characteristics of any stream or well in such area, etc.** Section 21 empowers a State Government or any officer empowered by it in that behalf to take samples of water for analysis, etc. Section 22 deals with reporting of the results of analysis of samples taken under Section 21, etc. Section 23 deals with the power of entry and inspection of the persons empowered by a State to that effect. According to sub-section (2) of Section 23 all the provisions of the Code of Criminal Procedure, 1973 or in relation to the State of Jammu and Kashmir, the provisions of any corresponding law in force in that State, shall apply to any search and seizure under this Section in the manner as contemplated under Section 94 of the said Code, etc. **Section 24 prohibits use of streams or wells for the purpose of disposal of polluting matters, any poisonous or noxious matters etc.**

Section 25 of the Act restricts new outlets and new discharges subject to procedures contemplated thereunder. Section 26 deals with the discharges of sewages or trade effluents existing before the commencement of the Act. Section 27 contemplates provision for granting, refusal or withdrawal of the consent by the State Boards in the manner prescribed therein. Section 28 makes provisions for making appeal on an order made by the State Board under Sections 25, 26 or 27 within thirty days from the date on which such order is communicated to him, to the prescribed authority as may be constituted by the State Government etc. This Section also provides for the composition of the Appellate Authority, its powers and procedures. Section 29 of the Act empowers the State Government for the revision of an order made by the State Board under Sections 25, 26 or 27 by calling for the records of the case for the purpose of satisfying itself as to the legality or propriety of such order, subject to the other provisions of the Section. Section 30 of the Act deals with the power of the State Board to carry out certain works in connection with any conditions imposed on any person while granting a consent under Section 25 or Section 26 and when the person required to do so has failed to execute the same, etc.

Intimation about pollution:-- Section 31 of the Act requires the person in-charge of any place where any industry, operation or process or any treatment and disposal system or any extension or addition thereto is being carried on, to furnish information to the State Board and other authorised agents, about any poisonous, noxious or polluting matter is being discharged or is likely to be discharged into a stream or well or sewer or land resulting in pollution or likely pollution due to accident or other unforeseen act or event. This requirement is equally applicable to any local authority operating in sewage system or sewage works. Section 32 of the Act provides provision for taking emergency measures by the Boards if such Boards feel it necessary or expedient so to do and for reasons to be recorded in writing in case of pollution of stream or well in the manner provided in Clauses (a) to (c). Section 33 of the Act empowers a Board to make requisite application to the Court seeking for restraints on the apprehended pollution of water in streams or wells in the manner contemplated thereunder. Section 33A of the Act, having been incorporated by Act 53 of 1988, empowers a Board to issue necessary directions to any person, officer or authority who shall be bound by such directions.

Funds, Accounts and Audit:-- Chapter VI consisting of Sections 34 to 40 deals with funds, accounts and audit. Sections 34 and 35 of the Chapter deal with contributions by Central and State Governments respectively after due appropriation in each financial year to enable the respective Board to perform its functions under the Act. Section 36 of the Act provides for the fund of Central Board and various sources of such fund. Similarly Section 37 deals with the fund of State Board. Section 37A deals with the borrowing powers of a Board. Section 38 deals with the budget of Boards. Section 39 requires the Central and State Boards for the preparation and submission of annual financial reports to the respective Governments within the prescribed time. Section 40 of the Act requires every Board to maintain proper accounts and other relevant records etc., and for such accounts being audited by a duly appointed auditor.

Offences and Penalties:-- Chapter VII of the Act entitled "Penalties and Procedure", contains Sections 41 to 50 which provide various offences and punishments therefor in the manner contemplated thereunder.

Miscellaneous aspects:-- Chapter VIII of the Act consisting of Sections 51 to 64 deals with miscellaneous matters such as establishment of Central/State Water Laboratory, appointment of analysts, report of analysts, duty of local authorities to

render necessary help to the Boards, compulsory acquisition of land for a State Board, returns and reports, bar of jurisdiction, protection against the actions taken in good faith, overriding effect of the Act, power of Central Government to supersede the Central Board and Joint Boards when these Boards make any default or when the Central Government feels it necessary so to do in public interest in the manner prescribed thereunder, power of State Government to supersede State Boards, power of Central Government to make rules in respect of the matters specified in sub-section (2) of Section 63 and power of the State Government to make rules in respect of the matters not falling within the purview of Section 63.

18.1 RULES MADE UNDER THE ACT

The Water (Prevention and Control of Pollution) Rules, 1975 made by the Central Government in exercise of its powers under Section 63 of the Act deals, inter-alia, with the terms and conditions of service of the members of the Central Board and the duties of the Central Board, powers and duties of the Chairman and the Member-Secretary and appointments of officers and employees, manner and purpose of association of persons with the Central Board, appointment, emoluments and powers of consulting engineers, budget of the Central Board, form of annual report, form of Annual statement of accounts of the Central Board, form of report of Central Board Analyst, functions of the Central Water Laboratory, powers and functions of the Central Board, notice to Union Territories etc., in the format and in the manner specified in Schedule I, Forms I to 15, Schedule II, Schedule III, and Schedule IV, respectively. Similarly, various State Governments have framed their own Water (Prevention and Control of Pollution) Rules to meet their own needs.

19 Appendix 9: THE FOREST (CONSERVATION)ACT, 1980 AND RULES 2003

A BRIEF REVIEW

(Central Act No. 69 of 1980)

[27th December, 1980]

An Act to provide for the conservation of forests and for matters connected therewith or ancillary or incidental thereto.

STATEMENT OF OBJECTS AND REASONS

1. Deforestation causes ecological imbalance and leads to environmental deterioration. Deforestation had been taking place on a large scale in the country and it had caused widespread concern.

2. With a view to checking further deforestation, the President promulgated on the 25th October, 1980 the Forest (Conservation) Ordinance, 1980. The Ordinance made the prior approval of the Central Government necessary for dereservation of reserved forests and for use of forest land for non-forest purposes. The Ordinance also provided for the constitution of an Advisory Committee to advise the Central Government with regard to grant of such approval.

3. The Bill seeks to replace the aforesaid ordinance.

Be it enacted by Parliament in the Thirty-first year of the Republic of India as follows:

1. Short title, extent and commencement :- (1) This Act may be called as the Forest (Conservation) Act, 1980.

(2) It extends to the whole of India except the State of Jammu and Kashmir.

(3) It shall be deemed to have come into force on the 25th day of October, 1980.

2. Restriction on the dereservation of forests or use of forest land for non-forest purpose :-Notwithstanding anything contained in any other law for the time being in force in a State, no State Government or other authority shall make, except with the prior approval of the Central Government, any order directing -

(i) that any reserved forest (within the meaning of the expression "reserved forest", in any law for the time being in force in that State) or any portion thereof, shall cease to be reserved ;

(ii) that any forest and or any portion thereof may be used for any non-forest purpose.

(iii) that any forest-land or any portion there of may be assigned by way of lease or otherwise to any private person or to any authority, corporation, agency or any other organization not owned, managed or controlled by government;

(iv) that any forest-land or any portion thereof may be cleared of trees which have grown naturally in that land or portion, for the purpose of using it for reforestation [Explanation :- For the purposes of this Section "non-forest purpose" means the breaking up or clearing of any forest-land or portion thereof for-

(a) the cultivation of tea, coffee, spices, rubber, palms, oil bearing plants, horticultural crops or medicinal plants;

(b) any purpose other than reforestation.

but does not include any work relating or ancillary to conservation, development and management of forests and wild life, namely, the establishment of check posts, fire lines, wireless communications and construction of fencing, bridges and culverts, dams, waterholes, trench marks, boundary marks, pipelines or other like purposes.]

3. Constitution of advisory Committee :- The Central Government may constitute a Committee consisting of such number of persons as it may deem fit to advise that Government with regard to

(i) the grant of approval under Section 2 ; and

(ii) any other matter connected with the conservation of forests which may be referred to it by the Central Government.

3-A. Penalty for contravention of the provisions of the Act :-Whoever contravenes or abets the contravention of any of the provisions of Section 2, shall be punishable with simple imprisonment for a period which may extend to fifteen days.

3-B. Offences by authorities and Government departments :- (1) Where any offence under this Act has been committed (a) by any department of Government, the head of the department or (b) by any authority, every person, who, at the time the offence was committed, was directly in charge of, and was responsible to, the authority for the conduct of the business of the authority as well as the authority ; shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly : Provided that nothing contained in this sub-section shall render the head of the department or any person referred to in Clause (b), liable to any punishment if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where an offence punishable under the Act has been committed by a department of Government or any authority referred to in Clause (b) of sub-section (1) and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any officer, other than the head of the department, or in the case of an authority, any person other than the persons referred to in clause (b) of sub-section (1), such officer or persons shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.]

4. Power to make rules :--(1) The Central Government may, by notification in the Official Gazette, make rules for carrying out the provisions of this Act. (2) Every rule made under this Act shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be ; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.

5. Repeal and Saving :- (1) The Forest (Conservation) Ordinance, 1980 is hereby repealed. (2) Notwithstanding such repeal, anything done or any action taken under the provisions of the said ordinance shall be deemed to have been done or taken under the corresponding provisions of this Act.

20 Appendix 10: THE BIOLOGICAL DIVERSITY ACT, 2002 [No. 18 of 2003]

An Act to provide for conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of biological resources, knowledge and for matters connected therewith or incidental thereto.

- *Whereas* India is rich in biological diversity and associated traditional and contemporary knowledge system relating thereto.
- *And Whereas* India is a party to the United Nations Convention on Biological Diversity signed at Rio de Janeiro on the 5th day of June, 1992;
- *And Whereas* the said Convention came into force on the 29th December, 1993;
- *And Whereas* the said Convention reaffirms the sovereign rights of the States over their biological resources;
- *And Whereas* the said Convention has the main objective of conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of utilization of genetic resources;
- *And Whereas* it is considered necessary to provide for conservation, sustainable utilization and equitable sharing of the benefits arising out of utilization of genetic resources and also to give effect to the said Convention.

BE it enacted by Parliament in the Fifty-third Year of the Republic of India as follows:

20.1 Statement of Objects and Reasons

1. Biodiversity encompasses the variety of all life on earth. India is one of the 12 mega biodiversity countries of the world. With only 2.5% of the land area, India already accounts for 7-8% of the recorded species of the world. India is equally rich in traditional and indigenous knowledge, both coded and informal.

2. India is a Party to the Convention on Biological Diversity (1992). The main objectives of the Convention are:

- (i) Conservation of biological diversity; (ii) Sustainable use of its components;
- (ii) Fair and equitable sharing of benefits arising out of utilisation of genetic resources.

3. Recognizing the sovereign rights of States to use their own biological resources, the Convention expects the Parties to facilitate access to genetic resources by other

Parties for environmentally sound purposes subject to national legislation and on mutually agreed upon terms (Articles 3 and 15). Article 8(j) of the Convention recognizes contributions of local and indigenous communities to the conservation and sustainable utilisation of biological diversity through traditional knowledge, practices and innovations and provides for equitable sharing of benefits with such people arising from the utilisation of their knowledge, practices and innovations.

4. Biodiversity is a multi-disciplinary subject involving diverse sectoral activities and actions. The stakeholders in biological diversity include the Central Government, State Governments, institutions of local self-government, scientific and technical institutions, experts, non-governmental organizations, industry, etc. One of the major challenges before India lies in adopting an instrument which helps realize the objectives of equitable sharing of benefits enshrined in the Convention on Biological Diversity.

5. After an extensive and intensive consultation process involving the stakeholders, the Central Government has decided to bring a legislation with the following salient features:

- (i) to regulate access to biological resources of the country with the purpose of securing equitable share in benefits arising out of the use of biological resources; and associated knowledge relating to biological resources;
- (ii) to conserve and sustainable use biological diversity;
- (iii) to respect and protect knowledge of local communities related to biodiversity;
- (iv) to secure sharing of benefits with local people as conservers of biological resources and holders of knowledge and information relating to the use of biological resources;
- (v) conservation and development of areas important from the standpoint of biological diversity by declaring them as biological diversity heritage sites;
- (vi) protection and rehabilitation of threatened species;
- (vii) involvement of institutions of self-government in the broad scheme of the implementation of the Act through constitution of committees.

6. The proposed legislation primarily addresses the issue concerning access to genetic resources and associated knowledge by foreign individuals, institutions or companies, and equitable sharing of benefits arising out of the use of these resources and knowledge to the country and the people. In order to safeguard the

interests of the local people, vaidas and hakims and to allow research by Indian citizens within the country, the following exceptions are proposed---

- (i) Free access to biological resources for use within India for any purpose other than commercial use for Indian people.
- (ii) Use of biological resources by vaidas and hakims.
- (iii) Free access to the Indian citizens to use biological resources within the country for research purposes.
- (iv) Collaborative research through government sponsored or government approved institutions subject to overall policy guidelines and approval of the Central Government.

7. It is proposed to have National Biodiversity Authority, State Biodiversity Boards and Biodiversity Management Committees.

(a) The National Biodiversity Authority will deal with matters relating to requests for access by foreign individuals, institutions or companies, and all matters relating to transfer of results of research to any foreigner; imposition of terms and conditions to secure equitable sharing of benefits and approval for seeking any form of Intellectual Property Rights (IPRs) in or outside India for an invention based on research or information pertaining to a biological resource obtained from India.

(b) State Biodiversity Boards will deal with matters relating to access by Indians for commercial purposes and restrict any activity which violates the objectives of conservation, sustainable use and equitable sharing of benefits.

(c) Biodiversity Management Committees will be set up by institutions of self-government in their respective areas for conservation, sustainable use, and documentation of biodiversity and chronicling of knowledge relating to biodiversity. Biodiversity Management Committees shall be consulted by the National Biodiversity Authority and State Biodiversity Boards on matters related to use of biological resources and associated knowledge within their jurisdiction.

8. It is proposed to set up Biodiversity Funds at Central, State and local levels. The monetary benefits, fees, royalties received as a result of approvals by National Biodiversity Authority will be deposited in National Biodiversity Fund. The Fund will be used for conservation and development of areas from where resources have been accessed.

9. Normally-traded commodities may be exempted by the Central Government, by notification, and in consultation with the National Biodiversity Authority, from the purview of the proposed legislation.

10. Traditional knowledge is proposed to be protected. It is also proposed that the State Governments notify National Heritage Sites, which are important from the stand point of biodiversity, in consultation with institutions of local self government.

11. The notes on clauses explain in detail the various provisions contained in the Bill.

12. The Bill seeks to achieve the above objectives.

20.2 CHAPTER – I: Preliminary

2(b) "biological diversity" means the variability among living organisms from all sources and the ecological complexes of which they are part, and includes diversity within species or between species and of eco-systems;

2(c) "biological resources" means plants, animals and micro-organisms or parts thereof, their genetic material and by-products (excluding value added products) with actual or potential use or value, but does not include human genetic material;

2(o) "sustainable use" means the use of components of biological diversity in such manner and at such rate that does not lead to the long-term decline of the biological diversity thereby maintaining its potential to meet the needs and aspirations of present and future generations;

20.3 CHAPTER-II: Regulation of Access to Biological Diversity

No person shall, without the previous approval of the National Biodiversity Authority, transfer the results of any research relating to any biological resources occurring in, or obtained from, India for monetary consideration or otherwise to any person who is not a citizen of India or citizen of India who is non-resident as defined in clause (30) of Section 2 of the Income-tax Act, 1961 (43 of 1961) or a body corporate or organization which is not registered or incorporated in India or which has any non-Indian participation in its share capital or management.

(3) The provisions of this section shall not apply to any person making an application for any right under any law relating to protection of plant varieties enacted by Parliament.

Provided that the provisions of this section shall not apply to the local people and communities of the area, including growers and cultivators of biodiversity, and vaidis and hakims, who have been practicing indigenous medicine.

20.4 CHAPTER III : National Biodiversity Authority

8. Establishment of National Biodiversity Authority:- (1) With effect from such date as the Central Government may, by notification in the Official Gazette, appoint, there shall be established by the Central Government for the purposes of this Act, a body to be called the National Biodiversity Authority. (4) The National Biodiversity Authority shall consist of the following members,

(a) a Chairperson, who shall be an eminent person having adequate knowledge and experience in the conservation and sustainable use of biological diversity and in matters relating to equitable sharing of benefits, to be appointed by the Central Government;

(b) three ex officio members to be appointed by the Central Government, one representing the Ministry dealing with Tribal Affairs and two representing the Ministry dealing with Environment and Forests of whom one shall be the Additional Director General of Forests or the Director General of Forests;

(c) seven ex officio members to be appointed by the Central Government to represent respectively the Ministries of the Central Government dealing with -

(i) Agricultural Research and Education; (ii) Biotechnology;

(iii) Ocean Development;

(iv) Agriculture and Cooperation;

(v) Indian Systems of Medicine and Homoeopathy; (vi) Science and Technology; (vii) Scientific and Industrial Research;

(d) five non-official members to be appointed from amongst specialists and scientists having special knowledge of, or experience in, matters relating to conservation of biological diversity, sustainable use of biological resources and equitable sharing of benefits arising out of the use of biological resources, representatives of industry, conservers, creators and knowledge-holders of biological resources.

13. Committees of National Biodiversity Authority:- (1) The National Biodiversity Authority may constitute a committee to deal with agro-biodiversity. Explanation:- For the purposes of this sub-section, "agro-Biodiversity" means biological diversity, of agriculture related species and their wild relatives.

20.5 CHAPTER-IV: Functions and Powers of the National Biodiversity Authority

- (3) The National Biodiversity Authority may
 - (a) advise the Central Government on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of benefits arising out of the utilization of biological resources;
 - (b) advise the State Governments in the selection of areas of biodiversity importance to be notified under sub-section (1) of Section 37 as heritage sites and measures for the management of such heritage sites;

20.6 CHAPTER – V : Approval by the National Biodiversity Authority
CHAPTER – VI : State Biodiversity Board

22. Establishment of State Biodiversity Board:- (1) With effect from such date as the State Government may, by notification in the Official Gazette, appoint in this behalf, there shall be established by that Government for the purposes of this Act, a Board for the State to be known as the (name of the State) Biodiversity Board.

- (4) The Board shall consist of the following members, namely:
 - (a) a Chairperson who shall be an eminent person having adequate knowledge and experience in the conservation and sustainable use of biological diversity and in matters relating to equitable sharing of benefits, to be appointed by the State Government;
 - (b) not more than five ex officio members to be appointed by the State Government to represent the concerned Departments of the State Government;
 - (c) not more than five members to be appointed from amongst experts in matters relating to conservation of biological diversity, sustainable use of biological resources and equitable sharing of benefits arising out of the use of biological resources.
- (5) The head office of the State Biodiversity Board shall be at such place as the State Government may, by notification in the Official Gazette, specify.

23. Functions of State Biodiversity Board:- The functions of the State Biodiversity Board shall be to Finance, Accounts and Audit of National Biodiversity Authority

- (2) The Fund shall be applied for
 - (a) channeling benefits to the benefit claimers;
 - (b) conservation and promotion of biological resources and development of areas from where such biological resources or knowledge associated thereto has been accessed;
 - (c) socio-economic development of areas referred to in clause (b) in consultation with the local bodies concerned.

20.7 CHAPTER – VIII :Finance, Accounts and Audit of State Biodiversity Board

(2) The State Biodiversity Fund shall be applied for(a) the management and conservation of heritage sites;(b) compensating or rehabilitating any section of the people economically affected by notification under sub-section (1) of Section 37; (c) conservation and promotion of biological resources; (d) socio-economic development of areas from where such biological resources or knowledge associated thereto has been accessed subject to any order made under Section 24, in consultation with the local bodies concerned;

20.8 CHAPTER-IX: Duties of the Central and the State Government,,;

36. Central Government to develop National strategies plans. etc., for conservation, etc., of biological diversity:- (1) The Central Government shall develop national strategies, plans, programmes for the conservation and promotion and sustainable use of biological diversity Including measures for identification and monitoring of areas rich in biological resources, promotion of insitu and ex situ, conservation of biological resources, incentives for research, training and public education to increase awareness with respect to biodiversity.

(2) Where the Central Government has reason to believe that any area rich in biological diversity, biological resources and their habitats is being threatened by overuse, abuse or neglect, it shall issue directives to the concerned State Government to take immediate ameliorative measures, offering such State Government any technical and other assistance that is possible to be provided or needed.

(3) The Central Government shall, as far as practicable wherever it deems appropriate, integrate the conservation, promotion and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

4) The Central Government shall undertake measures,

(1) wherever necessary, for assessment of environmental impact of that project which is likely to have adverse effect on biological diversity, with a view to avoid or minimize such effects and where appropriate provide for public participation in such assessment;

(ii) to regulate, manage or control the risks associated with the use and release of living modified organisms resulting from biotechnology likely to have adverse impact on the conservation and sustainable use of biological diversity and human health.

(5) The Central Government shall endeavor to respect and protect the knowledge of local people relating to biological diversity, as recommended by the National

Biodiversity Authority through such measures, which may include registration of such knowledge at the local, State or national levels, and other measures for protection, including sui generis system. Explanation :- For the purposes of this section,-

(a) "ex situ conservation" means the conservation of components of biological diversity outside their natural habitats;

(b) "in situ conservation" means the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural Surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.

37. Biodiversity heritage sites:- (1) Without prejudice to any other law for the time being in force, the State Government may, from time to time in consultation with the local bodies, notify in the Official Gazette, areas of biodiversity importance as biodiversity heritage sites under this Act.

(2) The State Government, in consultation with the Central Government, may frame rules for the management and conservation of all the heritage sites.

(3) The State Government shall frame schemes for compensating or rehabilitating any person or section of people economically affected by such notification.

20.9 CHAPTER – X: Biodiversity Management Committees

41. Constitution of Biodiversity Management Committees:(1) Every local body shall constitute a Biodiversity Management Committee within its area for the purpose of promoting conservation, sustainable use and documentation of biological diversity including preservation of habitats, conservation of landraces, folk varieties and cultivars, domesticated stocks and breeds of animals and microorganisms and chronicling of knowledge relating to biological diversity.

Explanation:- For the purposes of this sub-section,

(a) "cultivar" means a variety of plant that has originated and persisted under cultivation or was specifically bred for the purpose of cultivation;

(b) "folk- variety" means a cultivated variety of plant that was developed, grown and exchanged informally among farmers;

(c) "landrace" means primitive cultivar that was grown by ancient farmers and their successors.

(2) The National Biodiversity Authority and the State Biodiversity Boards shall consult the Biodiversity Management Committees while taking any decision relating to the use of biological resources and knowledge associated with such resources occurring within the territorial jurisdiction of the Biodiversity Management Committee.

20.10 CHAPTER – XI : Local Biodiversity Fund

42. Grants to Local Biodiversity Fund:- The State Government may, after due appropriation made by State Legislature by law in this behalf, pay to the Local Biodiversity Funds by way of grants or loans such sums of money as the State Government may think fit for being utilized for the purposes of this Act.

43. Constitution of Local Biodiversity Fund:- (1) There shall be constituted a Fund to be called the Local Biodiversity Fund at every area notified by the State Government where any institution of self-government is functioning and there shall be credited thereto

(a) any grants and loans made under Section 42;

(b) any grants or loans made by the National Biodiversity Authority; (c) any grants or loans made by the State Biodiversity Boards;

(d) fees referred to in sub-section (3) of Section 41 received by the Biodiversity Management Committees,

(e) all sums received by the Local Biodiversity Fund from such other sources as may be decided upon by the State Government.

44. Application of Local Biodiversity Fund:-

(2) The Fund shall be used for conservation and promotion of biodiversity in the areas falling within the jurisdiction of the concerned local body and for the benefit of the community in so far such use is consistent with conservation of biodiversity.

20.11 CHAPTER – XII :Miscellaneous

52. Appeal:- Any person, aggrieved by any determination of benefit sharing or order of the National Biodiversity Authority or a State Biodiversity Board under this Act, may file an appeal to the High Court within thirty days from the date of communication to him, of the determination or order of the National Biodiversity Authority or the State Biodiversity Board, as the case may be, provided that the High Court may, if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal-within the said period, allow it to be filed within a further period not exceeding sixty days.

55. Penalties:- (1) Whoever contravenes or attempts to contravene or abets the contravention of the provisions of Section 3 or Section 4 or Section 6 shall be punishable with imprisonment for a term which may extend to five years, or with fine which may extend to ten lakh rupees and where the damage caused exceeds ten lakh rupees such fine may commensurate with the damage caused, or with both.

(2) Whoever contravenes or attempts to contravene or abets the contravention of the provisions of Section 7 or any order made under sub-section (2) of Section 24 shall be punishable with imprisonment for a term which may extend to three years, or with fine which may extend to five lakh rupees, or with both.

56. Penalty for contravention of directions or orders of Central Government, State Government, National Biodiversity Authority and State Biodiversity Boards:- If any person contravenes any direction given or order made by the Central Government, the State Government, the National Biodiversity Authority or the State Biodiversity Board for which no punishment has been separately provided under this Act, he shall be punished with a fine which may extend to one lakh rupees and in case of a second or subsequent offence, with fine which may extend to two lakh rupees and in the case of continuous contravention with additional fine which may extend to two lakh rupees everyday during which the default continues.

20.12 THE BIOLOGICAL DIVERSITY RULES, 2004

22. Constitution of Biodiversity Management Committees:-

(1) Every local body shall constitute a Biodiversity Management Committee (BMCs) within its area of jurisdiction.

(2) The Biodiversity Management Committee as constituted under sub rule (1) shall consist of a Chairperson and not more than six persons nominated by the local body, of whom not less than one third should be women and not less than 18% should belong to the Scheduled Castes/ Scheduled Tribes.

(3) The Chairperson of the Biodiversity Management Committee shall be elected from amongst the members of the committee in a meeting to be chaired by the Chairperson of the local body. The Chairperson of the local body shall have the casting votes in case of a tie

(4) The Chairperson of the Biodiversity Management Committee shall have a tenure of three years.

(5) The local Member of Legislative Assembly/ Member of Legislative Council and Member of Parliament would be special invitees to the meetings of the Committee.

(6) The main function of the BMC is to prepare People's Biodiversity Register in consultation with local people. The Register shall contain comprehensive information on availability and knowledge of local biological resources, their medicinal or any other use or any other traditional knowledge associated with them.

(7) The other functions of the BMC are to advise on any matter referred to it by the State Biodiversity Board or Authority for granting approval, to maintain data about

the local voids and practitioners using the biological resources.

(8) The Authority shall take steps to specify the form of the People's Biodiversity Registers, and the particulars it shall contain and the format for electronic database.

(9) The Authority and the State Biodiversity Boards shall provide guidance and technical support to the Biodiversity Management Committees for preparing People's Biodiversity Registers.

(10) The People's Biodiversity Registers shall be maintained and validated by the Biodiversity Management Committees.

(11) The Committee shall also maintain a Register giving information about the details of the access to biological resources and traditional knowledge granted, details of the collection fee imposed and details of the benefits derived and the mode of their sharing.

20.13 Appendix 10: THE SCHEDULED TRIBES (RECOGNITION OF FOREST RIGHTS) BILL, 2005

WHEREAS the recognized rights of the forest dwelling Scheduled Tribes include the responsibilities and authority for sustainable use, conservation of biodiversity and maintenance of ecological balance and thereby strengthening the conservation regime of the forests while ensuring livelihood and food security of the forest dwelling Scheduled Tribes;

AND WHEREAS the forest rights on ancestral lands and their habitat were not adequately recognized in the consolidation of State forests during the colonial period as well as in independent India resulting in historical injustice to the forest dwelling Scheduled Tribes who are integral to the very survival and sustainability of the forest ecosystems;

AND WHEREAS it has become necessary to address the long standing insecurity of tenurial and access rights of forest dwelling Scheduled Tribes. BE it enacted by Parliament in the Fifty-sixth Year of the Republic of India as follows:

20.13.11. (1) This Act may be called the Scheduled Tribes (Recognition of Forest Rights) Act, 2005.

(2) It extends to the whole of India except the State of Jammu and Kashmir.

(3) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint. Short title, extent and commencement.

20.13.2 Definitions.

2. In this Act, unless the context otherwise requires,- (a) “bonafide livelihood needs”, in relation to forest dwelling Scheduled Tribes, means the use of forests and forest based products for subsistence of such Tribes or for their own consumption and includes barter and sale of such forest based products for their household needs; (b) “commercial purpose” includes a forest based activity where such activity is used for profit or for large scale trade or mercantile purposes; (c) “forest dwelling Scheduled Tribes” means the members or community of Scheduled Tribes who primarily reside in and around forests and includes the Scheduled Tribes pastoralist communities and who depend on the forests or forest lands for bonafide livelihood needs; (d) “forest land” means land of any description falling within any forest area and includes unclassified forests, existing or deemed forests, protected forests, reserved forests, sanctuaries and national parks; (e)

“forest rights” means the forest rights referred to in section 3; (f) “forest villages” means the settlements which have been established inside the forests by the forest department of any State Government for forestry operations or which were converted into forest villages through the forest reservation process and includes forest settlement villages, fixed demand holdings, all types of taungya settlements by whatever name called for such villages and includes lands for cultivation and other uses, permitted the Government; (g) “Gram Sabha” means a village assembly, which shall consist of all adult members of a village whose names are included in the electoral rolls for the Panchayat at the village level and in case of State having no Panchayats, the traditional village institutions; (h) “minor forest produce” includes all non-timber forest produce of plant origin including bamboo, brush wood, stumps, cane, tussar, cocoons, honey, wax, lac, tendu or kendu leaves, medicinal plants and herbs, roots, tubers and the like; (i) “prescribed” means prescribed by rules made under this Act; (j) “Scheduled Area” means any Schedule Area as referred to in clause (1) of article 244 of the Constitution; (k) “village” means— (i) a village referred to in clause (b) of section 4 of the Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996; (ii) any area referred to as a village in any State law relating to Panchayats, other than a Schedule Area; (iii) forest villages, old habitation or settlements and unsurveyed villages, whether notified as village or not; or (iv) in the case of States where there are no Panchayats, the traditional village, by whatever name called;

20.14 CHAPTER II FOREST RIGHTS

3. For the purposes of this Act, the following rights shall be the forest rights of forest dwelling Scheduled Tribes, namely:-

- (a) right to hold and live in the forest land under the individual or common occupation for habitation or for self cultivation for livelihood by a member or members of a forest dwelling Scheduled Tribe;
- (b) rights such as nistar, by whatever name called, and uses in erstwhile princely States, Zamindari or such intermediary regimes;
- (c) right of access to, use or dispose of minor forest produce;
- (d) other rights of uses or entitlements such as grazing (both settled and transhumant) and traditional seasonal resource access of nomadic or pastoralist communities,;
- (e) right of habitat and habitation for primitive tribal groups and pre- agricultural communities;
- (f) rights in or over disputed lands under any nomenclature in any State where claims are disputed;

- (g) rights for conversion of Pattas or leases or grants issued by any local authority or any State Government on forest lands to titles;
- (h) rights of conversion of forest villages into revenue villages;
- (i) rights of settlement of old habitations and unsurveyed villages, whether notified or not;
- (j) right to access to bio-diversity and community right to intellectual property and traditional knowledge related to forest biodiversity and cultural diversity;
- (k) right to protect, regenerate or conserve or manage any community forest resource which they have been traditionally protecting and conserving;
- (l) rights which are recognised under any State law or laws of any Autonomous District Council or Autonomous Regional Council or which are accepted as rights of tribals under any traditional or customary law of any State;
- (m) any other traditional right customarily enjoyed by the forest dwelling Scheduled Tribes which are not mentioned in clauses (a) to (l) but excluding the right of hunting.

20.15 CHAPTER III RIGHTS OF FOREST DWELLING SCHEDULED TRIBES

4. (1) Notwithstanding anything contained in any other law for the time being in force, and subject to the provisions of this Act, the Central Government hereby recognises and vests forest rights in the forest dwelling Scheduled Tribes, where they are scheduled, in respect of forest land and their habitat including right to collect, utilize or transfer minor forest produce in such manner as may be prescribed.

(2) The recognition and vetting of forest rights under this Act to forest dwelling Scheduled Tribes in relation to any State or Union territory in respect of forest land and their habitat shall be subject to the condition that such Tribes or tribal communities had occupied forest land before the 25th day of October, 1980 or such other date as the Central Government may, by notification in the Official Gazette, specify.

(3) A right conferred by sub-section (1) shall be heritable but not alienable or transferable.

(4) Save as otherwise provided, no member of a forest dwelling Scheduled Tribe shall be evicted or removed from forest land under his occupation till the recognition and verification procedure is completed in such manner as may be prescribed.

(5) Where the forest rights recognized and vested under sub-section (1) are in respect of land, -

- (i) such land in no case exceed an area of two and one- half hectares per nuclear family of a forest dwelling Scheduled Tribe;
- (ii) the title to the extent given shall be registered jointly in the name of the male member and his spouse;

(6) The forest rights recognized and vested under sub-section (1) in the forest dwelling Scheduled Tribe shall –

(i) be exercised only for bonafide livelihood purposes and not for exclusive commercial purposes;

(ii) include the responsibility of protection, conservation and regeneration of forests.

(7) In case any forest right recognized and vested under sub-section (1) is disputed by any State Government or local authority, the Competent Authority appointed by the Central Government shall consider the records prepared at the time of declaring the area as a Scheduled Area, and while notifying any tribe to be or deemed to be a Scheduled Tribe under article 342 of the Constitution, along with evidence and then pass an appropriate order in the matter:

Provided that no order denying or refusing to grant any forest right shall be passed unless the aggrieved member or members of the community are Recognition of and vesting of forest rights in forest dwelling Scheduled Tribes. given an opportunity of being heard.

5. The holder of any forest right under this Act shall ensure that, –

(a) save as those activities that are permitted under such rights, no activity shall be carried out that adversely affects the wild life, forest and the biodiversity in the area including clearing of forest land or trees which have grown naturally on that land for any non-forestry purposes including reforestation;

(b) catchment areas, water sources and other ecologically sensitive areas are adequately protected;

(c) the habitat of forest dwelling Scheduled Tribes is preserved from any form of destructive practices affecting their cultural and natural heritage;

(d) any activity that adversely affects the wild life, forest and the biodiversity is intimated to the Gram Sabha and to the forest authorities;

(e) appropriate measures taken in the Gram Sabha to regulate access to community forest resource and stop any activity which adversely affects the wild life, forest and the biodiversity are complied with.

20.16 CHAPTER IV AUTHORITIES AND PROCEDURE FOR VESTING OF FOREST RIGHTS

6. (1) The Gram Sabha shall be the authority to initiate any action for determining the extent of forest rights that may be given to the forest dwelling Scheduled Tribes within the local limits of its jurisdiction under this Act.

(2) Every action under sub-section (1) shall be initiated in such manner and subject to such procedure as may be prescribed.

(3) A Sub-Divisional Level Committee shall examine the decision taken by the Gram Sabha.

(4) The composition and functions of the Sub-Divisional Level Committee and the procedure to be followed by it in the discharge of its functions shall be such as may be prescribed.

(5) Any person aggrieved by the decision of the Gram Sabha may prefer an appeal to the Sub-Divisional Level Committee in such manner as may be prescribed and the Sub-Divisional Committee shall consider and dispose of such appeal: Provided that no such appeal shall be disposed of against the aggrieved person, unless he has been given a reasonable opportunity to represent his case.

(6) Every appeal under sub-section (5) shall be preferred within sixty days from the date of decision of the Gram Sabha. Authorities to vest forest rights in forest dwelling Scheduled Tribes and the procedure thereof.

(7) There shall be constituted a District Level Committee with such composition and functions as may be prescribed to consider the record of forest rights prepared by the Sub-Divisional Level Committee for its final approval.

(8) Any person aggrieved by the decision of the Sub-Divisional Committee may prefer an appeal to the District Level Committee in such manner as may be prescribed and the District Level Committee shall consider and dispose of such appeal: Provided that no such appeal shall be disposed of against the aggrieved person, unless he has been given a reasonable opportunity to represent his case.

(9) In discharging the functions under this Act, the District Level Committee shall follow such procedure as may be prescribed.

(10) Every appeal under sub-section (8) shall be preferred within sixty days from the date of decision of the Sub-Divisional Level Committee.

(11) The decision of the District Level Committee shall be final and binding and the Gram Sabha shall maintain the records accordingly.

7. (1) The State Government shall constitute a State Level Monitoring Committee with such composition and functions as may be prescribed.

(2) The State Level Monitoring Committee shall examine the record of recognised and vested rights of forest dwelling Scheduled Tribes submitted by the District Level Committee and conduct periodic inquiry into the process of recognition and vesting through random selection of sites.

(3) The State Level Monitoring Committee shall submit to the nodal agency such periodic returns and reports as may be called for by that agency along with the recommendations of the Committee for appropriate action.

20.17 CHAPTER V OFFENCE AND PENALTIES

8. If any holder of any forest right conferred by or under this Act or any other person –

- (i) contravenes or abets the contravention any of the provisions of this Act, or
- (ii) commits a breach of any of the conditions of the forest right vested or recognised under this Act; or
- (iii) engages in unsustainable use of forest or forest produce; or (iv) destroys wildlife, forests or any other aspect of biodiversity; or (v) fells trees for any commercial purpose, he shall be guilty of an offence against this Act and be punished with a fine which may extend to one thousand rupees and in case of the offence is committed more than once, the forest right of the person who has committed the offence shall be derecognised for such period as the District Level Committee, on the recommendation of the Gram Sabha may decide. Offences by members or officers of authorities under this Act.

9. Where any authority or officers or member of such authority contravenes any provisions of this Act or any rule made thereunder shall be deemed to be guilty of an offence under this Act and shall be liable to be proceeded against and punished with imprisonment which may extend to thirty days or with fine which may extend to five thousand rupees, or with both: Provided that nothing contained in this sub-section shall render any member of the authority or head of the department or any person referred to in this section liable to any punishment if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence.

10. No court shall take cognizance of any offence under section 9 of this Act unless any forest dwelling Scheduled Tribe in case of dispute relating to a resolution of a Gram Sabha or the Gram Sabha through a resolution against any higher authority gives a notice of not less than sixty days to the State Monitoring Committee and the State Monitoring Committee has not proceeded against such authority.

20.18 CHAPTER VI MISCELLANEOUS

11. Every member of the authorities referred to in Chapter IV and every other officer exercising any of the powers conferred by this Act shall be deemed to be a public servant within the meaning of section 21 of the Indian Penal Code 45 of 1860.

12. (1) No suit, prosecution or other legal proceeding shall lie against any officer or other employee of the Central Government or the State Government for anything which is in good faith done or intended to be done under this Act.

(2) No suit or other legal proceeding shall lie against the Central Government or the State Government or any of its officers or other employees for any damage caused or likely to be caused by anything which is in good faith done or intended to be done under this Act.

(3) No suit or other legal proceeding shall lie against the Authority as referred to in Chapter IV including its Chairperson, members, member secretary, officers and other employees for anything which is in good faith done or intended to be done under this Act.

13. The Ministry of the Central Government dealing with Tribal Affairs or any officer or authority authorised by the Central Government in this behalf shall be the nodal agency for the implementation of the provisions of this Act.

14. In the performance of duties and exercise of powers by or under this Act, every authority referred to in Chapter IV shall be subject to such general or special directions, as the Central Government may, from time to time, give in writing.

15. Save as otherwise provided in this Act, the provisions of this Act shall be in addition to and not in derogation of the provisions of any other law for the time being in force

16. (1) The Central Government may, by notification in the Official Gazette, make rules for carrying out the provisions of this Act.

(2) In particular, and without prejudice to the generality of the powers, such rules may provide for all or any of the following matters, namely:-

(a) the procedure and for manner of recognition and verification of forest rights under sub-section (4) of section 4;

- (b) the manner in which action may be initiated to determine the extent of forest rights to be recognised and vested in a nuclear family of a forest dwelling Scheduled Tribe and the procedure to be followed in such proceedings under sub-section (2) of section 6;
- (c) the composition and functions of the Sub-Divisional Committee and the procedure to be followed by it in the discharge of its functions under sub-section (4) of section 6;
- (d) the manner of preferring an appeal to the Sub-Divisional Committee under sub-section (5) of section 6;
- (e) the composition and functions of the District Level Committee under sub-section (7) of section 6;
- (f) the manner in which an appeal may be preferred to the District Level Committee under sub-section (8) of section 6;
- (g) the procedure to be followed by the District Level Committee under sub-section (9) of section 6;
- (h) the composition and functions of the State Level Committee under sub-section (1) of section 7;
- (i) the periodic reports and returns to be submitted to the nodal agency by the State Level Committee under sub-section (3) of section 7; Power to make rules.
- (j) any other matter is required to be, or may be, prescribed.

(3) Every rule made under this Act shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid,

both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.

21 Appendix 11: Rajasthan Irrigation and Drainage Act, 1954

22

(Act No XXI of 1954)

(Received the assent of the President on the 6th day of November, 1954)

and amended subsequently by the Raj act 27 of 1957, Raj act 21 of 1960, Raj act 8 of 1962, Raj act 29 of 1992

22.1 An Act to regulate irrigation and drainage in the State of Rajasthan

Be it enacted by the Rajasthan State Legislature as follows

1 Short title and extent.-(1) This Act may be called the Rajasthan

Irrigation and Drainage Act, 1954. (Raj act 27 of 1957) (2) It extends to the whole of the State of Rajasthan

2. Commencement.-It shall come into force on such date (22-3-1956) and in such areas as the State Government may by notification in the [Official Gazette] specify from time to time.

3. Interpretation.-(1) In this Act, unless the context otherwise requires, (I) "Irrigation Officer" means an Officer appointed under this Act to exercise control or jurisdiction over an irrigation or drainage work or works; "Superintending Irrigation Officer" means an officer appointed under this Act to exercise control over irrigation and drainage works in a circle constituted under section 4; "Divisional Irrigation Officer" means an Officer appointed under this Act to exercise control over irrigation and drainage works in a division constituted under section 4; "Sub-Divisional Irrigation Officer" means an Officer appointed under this Act to exercise control over all irrigation and drainage works in a sub-division constituted under section 4;

(ii) "**Irrigation works**" means a work or system of work, natural or artificial, not being a minor irrigation work as defined in section 2 of the Rajasthan Minor Irrigation Works Act, 1953, and includes—

(a) Any canal, channel, pipe or reservoir constructed, maintained or controlled by the State Government for the supply or storage of water,

(b) Any work, embankment, structure or supply and escape-channel connected with such canal, channel pipe or reservoir,

(c) Any water course,

(d) any part of a river, stream, lake or natural collection of water or natural drainage channel to which the State Government applies the provisions of Part II of this Act;

(iii) "drainage work" includes escape-channel from a canal dams, weirs, embankments, sluices, groins and other works for the protection of lands from flood or from erosion, but does not include works for the removal of sewage from towns;

(iv) "water course" means any channel [not constructed and maintained] at the cost of [State Government] which is supplied with water from a canal, channel, pipe or reservoir and includes any subsidiary work belonging to such channel];

(v) "Outlet" means an opening constructed in a canal through which water passes in to a water course or directly on to any land.

4. Territorial division and appointment of Officers

22.2 PART II On the application of water for public purposes

5. Notification to issue when water supply is to be applied for public purposes

:-Whenever it appears expedient to the State Govt. that the water of any river or stream flowing in a natural channel, or of any lake or other natural collection of still water should be applied or used by the State Government for the purpose of any existing or projected irrigation or drainage work, the State Government may, by notification in the [Official Gazette] declare that the said water will be so applied or used after a day to be named in the said notification not being earlier than three months from the date thereof.

6. Powers of irrigation officers :-At any time after the day so named any irrigation officer, acting under the orders of the State Government in this behalf, may enter on any land or remove any obstruction and may close any channels, and do any other thing necessary for such application or use of the said water.

7. Notice inviting claims for compensation:-As soon as is practicable after the issue of such notification, the Collector shall cause public notice to be given at convenient places, stating that the State Government intends to apply or use the said water as aforesaid, and that claims for compensation in respect of the matters mentioned in section 8 may be made before him.

8. Matter for which compensation shall not be or may be awarded:

(1) No compensation shall be awarded for any damage caused by

(a) Stoppage or diminution of percolation or floods;

(b) Deterioration of climate or soil;

(c) Stoppage of navigation, or of the means of drifting timber or watering cattle;

(d) Displacement of labor;

But compensation may be awarded in respect of any of the following matters:

(e) Stoppage or diminution of supply of water through any natural channel to any defined artificial channel, whether above or, under ground in use at the date of the said notification;

(f) Stoppage or diminution of supply of water to any work erected for purposes of profit on any channel, whether natural or artificial, in use at the date of the said notification;

(g) Stoppage or diminution of supply of water through any natural channel which has been used for the purposes of irrigation within the five years next before the date of the said notification;

(h) damage done in respect of any right to a water course or the use of any water to which any person is entitled under Part IV of the Indian Limitation Act, 1908 or under the Indian Easements Act, 1882 of the Central Legislature as adapted to Rajasthan;

(i) any other substantial damage not falling under any of the above clauses (a), (b), (c), or (d) and caused by the exercise of the powers conferred by this Act, which is capable of being ascertained and estimated at the time of awarding such compensation.

(2) In determining the amount of such compensation, regard shall be had to the diminution in the market value, at the time of awarding compensation of the property in respect of which compensation is claimed and where such market value is not ascertainable, the amount shall be reckoned at twelve times the amount of the diminution of the annual net profits of such property caused by the exercise of the powers conferred by this Act.

(3) No right to any such supply of water as is referred to in clauses (e), (f) and (g) of sub-section (1), in respect of a work or channel not in use at the date of the notification shall be acquired as against the State Government except by grant or under Part IV of the Indian Limitation Act, 1908, or under the Indian Easement Act, 1882 of the Central Legislature as adapted to Rajasthan.

(4) No right to any of the advantages referred to in clauses (a), (b) and (c) of sub-section (1) shall be acquired as against, the State Government under Part IV of the Indian Limitation Act' 1908 or under the Indian Easements Act, 1882 of the Central Legislature as adapted to the State of Rajasthan.

9. Limitation of claims-No claim for compensation for any such stoppage, diminution or damage, shall be made after the expiration of one year from such stoppage, diminution or damage, unless the collector is satisfied that the claimant had sufficient cause for not making the claim within such period.

10. Enquiry into claims and amount of compensation-(1) The Collector shall proceed to enquiry into any such claim and to determine the amount of compensation, if any, which should be given to the claimant.

(2) Except as otherwise provided in this Act, the provisions of the law relating to compulsory acquisition of land in force at the time when any inquiry under sub-section (1) is made shall apply to every such inquiry.

11. Abatement of rent on interruption of water supply-Every tenant holding under an unexpired lease, or having a right of occupancy, who is in occupation of any land at the time when any stoppage or diminution of water supply, in respect of which compensation is allowed under section 8, takes place, may claim an abatement of the rent previously payable by him for the said land, on the ground that the interruption reduces the value of the holding.

12. Enhancement of rent on restoration of water supply.-(1) If a water supply increasing the value of such holding is afterwards restored to the said land, the rent of the tenant may be enhanced in respect of the increased value of such land due to the restored water supply, to an amount not exceeding that at which it stood immediately before the abatement.

(2) Such enhancement shall be on account only of the restored water supply and shall not affect the liability of the tenant to enhancement of rent on any other ground.

13. Compensation when due.-(1) All sums of money payable for compensation under this part shall become due three months after the claim for such compensation is made in respect of the stoppage, diminution or damage complained of.

(2) Simple Interest at the rate of six percent per annum shall be allowed on any such sum remaining unpaid after the said three months except where the non-payment of such sum is caused by the willful neglect or refusal of the claimant to receive the same.

22.3 PART III On the Construction and Maintenance of works

14. Power to enter etc-(1) Any irrigation officer or other person acting under the general or special order of an irrigation officer; may enter upon any lands adjacent to any irrigation work, or on or through which an irrigation work is proposed to be made, and undertake surveys or levels thereon; and dig and bore into the sub-soil: and make set up suitable land marks, level marks or water gauges, and do all other acts necessary for the proper prosecution of any enquiry relating to any existing or projected work under the charge of the said irrigation officer,

(2) Where such enquiry cannot otherwise be completed, such officer or other person may for reasons to be recorded in writing cut down and clear away any part of any standing crop, fence or jungle.

(3) Such officer or person may also enter upon any land, building or water course on account of which any water rate is chargeable for the purpose of inspecting or

regulating the use of the water supplied, or of measuring the land irrigated thereby or chargeable with a water rate, and of doing all thing necessary for the proper regulation and management of such irrigation works.

(4) If such officer or person proposes to enter into any building or enclosed court or garden attached to a dwelling house not supplied with water flowing from any irrigation work, he shall previously give the occupier of such building, court or garden at least seven days notice in writing of his intention to do so.

(5) In every case of entry under this section the irrigation officer shall, at the time of such entry, tender compensation for any damage which may be occasioned by any proceeding under this section and in case of dispute as to the sufficiency of the amount so tendered, he shall forthwith refer the same for decision by the Collector; and such decision shall be final.

15. Power to enter for repairs and prevent accidents.-(1) In case of any accident happening or being apprehended to an irrigation work any divisional irrigation officer or any person acting under his general or special orders in this behalf may enter upon any lands adjacent to such irrigation work, and may execute all works which may be necessary for the repairing or preventing such accident.

(2) In every such case irrigation officer or person shall tender compensation to the proprietors or occupiers of the said lands for all damages done to the same. If such tender is not accepted, the irrigation officer shall refer the matter to the Collector who shall proceed to award compensation for the damage.

16. Application by persons desiring to use water.-(1) Any person desiring to use the water of any irrigation work may apply in writing to the divisional or sub-divisional irrigation officer requesting him to construct or improve a water course at the cost of the applicant.

(2) The application shall state works to be undertaken, their approximate estimated cost, or the amount which the applicants are willing to pay for the same, or whether they engage to pay the actual cost as settled by the Divisional Irrigation Officer, and how the payment is to be made.

(3) When the assent of the Superintending Irrigation Officer is given to such application, all the applicants shall, after the application has been duly attested before the Collector, be jointly and severally liable for the cost of such works to the extent mentioned therein.

(4) Any amount becoming due under the terms of such application and not paid to the divisional irrigation officer, or the person authorized by him to receive the same,

on or before the date on which it becomes due, shall on the demand of such officer, be recoverable by the Collector, as if it were an arrear of land revenue.

17.State Government to provide means of crossing irrigation works :-(1) There shall be provided at the cost of the State Government, suitable means of crossing irrigation works constructed or maintained as the cost of the State Government at such places as the State Government think necessary for the reasonable convenience of the inhabitants of the adjacent lands.

(2) On receiving a statement in writing, signed by not less than five of the owners of such lands, to the effect that suitable crossings have not been provided on any irrigation work, the Collector shall cause enquiry to be made into the circumstances of the case, and, if he thinks that the statement is established, he shall report his opinion thereon for the consideration of the State Government shall cause such measures in reference thereto be taken as it thinks proper.

18. Persons using water course to construct works for passing water across roads etc:-(1) The Divisional Irrigation Officer may issue an order to the persons using any water course to construct suitable bridges, culverts, or other works for the passage of the water of such water course across any public road, irrigation work or drainage channel in use before the said water course was made, or to repair any such works.

(2) Such order shall specify a reasonable period within which such construction or repair shall be completed; and if, after the receipt of such order, the persons to whom it is addressed, do not within the said period, construct or repair such works to the satisfaction of the said irrigation officer, he may, with the previous approval of the superintending irrigation officer, himself construct or repair the same, and if the said persons do not when so required, pay the cost of such construction or repairs as declared by the divisional irrigation officer, the amount shall, on the demand of the divisional irrigation officer, be recoverable from them by the Collector, as if it were an arrear of land revenue.

18 A. Power to construct and maintain water courses and recover the cost there of :-(1) Notwithstanding anything contained in section 16, 17 and 18, in any area to which the State Government may, by notification in the Official Gazette, apply the provisions of this section, Divisional Irrigation Officer may, by notice, require a person to construct and maintain, or a number of persons jointly to construct and maintain, a water-course, at his or their own expense.

(2) Such notice shall state the works to be undertaken, the person or persons by whom they shall be undertaken and the date by which they should be completed

provided that the date mentioned in such notice shall not expire earlier than fifteen days from the receipt of that notice by the person for whom such notice is issued.

(3) If, by the date specified in the notice under sub-section (1), such person fails, or such persons fails, to undertake and complete the works specified in such notice, the Divisional Irrigation Officer shall himself cause the same to be undertaken and completed and, where two or more persons were required so to undertake the said works, shall distribute the cost incurred in doing so among such persons proportionately to their share in the water-course.

(4) If any person does not pay the whole or his share as the case may be, of such cost or a part thereof, the same shall on the demand of the Divisional Irrigation Officer, be recovered by the Collector as an arrear of land revenue.

19. Adjustment of claims between persons jointly using watercourse.-(1) If any person jointly responsible with others for the construction or maintenance of a water course or jointly making use of a water-course with others, neglects or refuses to pay his share of the costs of such construction or maintenance or to execute his share of any work necessary for such construction or maintenance, the Divisional or Sub Divisional Irrigation Officer, on receiving an application in writing from any person injured by such neglect or refusal shall serve notice on all the parties concerned that on the expiration of a fortnight from the service, he will investigate the case accordingly, and make such order thereon as to him seems fit.

(2) Such order shall be appealable to [the revenue appellate authority] whose order thereon shall be final.

(3) Any sum directed by such order to be paid within a specified period, may if not paid within such period, and if, the order remains in force, be recovered by the Collector from the person directed to pay the same, as if it were an arrear of land revenue.

20. Supply of water through intervening water course.-(1) Whenever application is made to a Divisional Irrigation Officer for a supply of water from an irrigation work and it appears to him expedient that such supply should be given and that it should be conveyed through some existing water course. he shall give notice to the person responsible for the [construction and maintenance] of such water course to show cause, on a day not less than fourteen days from the date of such notice, why the said supply should not be so conveyed and, after making enquiry on such day, the Divisional Irrigation Officer shall determine whether, and on what condition, the said supply shall be conveyed through such water-course.

(2) When such officer determines that a supply of water from any irrigation work may be conveyed through any water course as aforesaid, his decision shall, when

confirmed or modified by the superintending irrigation officer, be binding on the applicant and also on the persons responsible for the maintenance of the said water course.

(3) Such applicant shall not be entitled to use such water course until he has paid the expense of any alteration of such water course necessary in order to his being supplied through it, and also such share of the first cost of such water course, as the divisional or superintending irrigation officer may determine.

(4) Such applicant shall also be liable for his share of the cost of maintenance of such water course so long as he uses it.

21 Application for construction of new water course.-Any person desiring the construction of a new water course may apply in writing to the Divisional Irrigation officer stating

(i) That he has endeavored unsuccessfully to acquire from the owners of the land through which he desires such water course to pass, a right to occupy so much of the land as will be needed for such water course.

(ii) That he desires the said irrigation officer, in his behalf and at his cost, to do all things necessary for acquiring such right;

(iii) That he is able to defray all costs involved in acquiring such right and constructing such water course.

22. Procedure of irrigation officer thereupon.-If the Divisional Irrigation Officer considers

(1) That the construction of such water course is expedient; and

(2) that the Statements in the application are true he shall call upon the applicant to make such deposit as a Divisional Irrigation Officer considers necessary to defray the cost of the preliminary proceedings and, the amount of any compensation which he considers likely to become due under section 28, and upon such deposit being made, he shall cause enquiry to be made into the most suitable alignment for the said water course, and shall mark out the land Which, in his opinion, it will be necessary to occupy for the construction thereof and shall forthwith publish a notice in every village through which the water course is proposed to be taken, that so much of such land as belongs to such village has been so marked out.

23. Application for transfer of existing water course,-(1) Any person desiring that an existing water course shall be transferred from its present owner to himself, may apply in writing to the Divisional Irrigation Officer, stating

(i) That he has endeavored unsuccessfully to procure such transfer from the owner of such water course;

(ii) That he desires the said irrigation officer in his behalf and at his cost, to do all things necessary for procuring such transfer;

(iii) That he is able to defray the cost of such transfer;

(2) If the Divisional Irrigation Officer considers

(a) That the said transfer is necessary for the better management of irrigation from such water course; And (b) that the statements in the application are true, he shall call upon the applicant to make such deposit as the Divisional Irrigation Officer considers necessary to defray the cost of the preliminary proceedings and the amount of any compensation that may become due under the provisions of section 28 in respect of such transfer; and upon such deposit being made, he shall publish a notice of the application in every village.

24. Objection to construction or transfer applied for.-(1) Within thirty days from the publication of a notice under section 22 or section 23, as the case may be, any person interested in the land or water course to which the notice refers, may apply to the Collector by petition, stating his objection to the construction or transfer for which application has been made.

(2) The Collector may either reject the petition or may proceed to inquire into the validity of the objection giving previous notice to the Divisional Irrigation Officer of the place and time at which such inquiry will be held.

(3) The Collector shall record in writing all orders passed by him under this section and the grounds thereof

25. When applicant may be placed in occupation.-If no such objection is made, or (where such objection is made) if the Collector over-rules it, he shall give notice to the Divisional Irrigation Officer and shall proceed to place the said applicant in occupation of the land marked out or of the water course to be transferred, as the case may be.

26. Procedure when objection is held valid.-If the Collector considers any objection made as aforesaid to be valid, he shall inform the Divisional Irrigation Officer accordingly, and, if such officer see fit, he may, in the case of an application under section 21, alter the boundaries of the land so marked out and may give fresh notice under section 22.

27. Procedure when irrigation officer disagrees with Collector.-If the irrigation officer disagrees with the Collector, the matter shall be referred to the revenue appellate authority for decision. Such decision shall be final and the Collector, if so directed, shall, subject to the provisions of section 28, cause the said applicant to be placed in occupation of the land so marked out or of the water course to be transferred, as the case may be.

28. Expenses to be paid by applicant.-(1) No such applicant shall be placed in occupation of such land or water course until he has paid to the person named by the Collector such amounts, as may be determined to be due as compensation for the land or water course so occupied or transferred, and for any damage caused by the marking out of occupation of such land, together with all expense incidental to such occupation or transfer.

(2) If such compensation and expenses are not paid when demanded by the person entitled to receive the same, the amount may be recovered by the Collector, as if it were an arrear of land revenue, and shall, when recovered, be paid by him to the person entitled to receive the same.

29. Conditions binding on applicant placed in occupation.-(1) When any such applicant is placed in occupation of land or of a water course as aforesaid, the following rules and conditions shall be binding on him and his representative in interest :

(i) All works necessary for the passage across such water course or water courses, existing previous to its construction and of the drainage intercepted by it, and for affording proper communication across it for the convenience of the neighboring lands, shall be constructed by the applicant, and be maintained by him or his representative in interest to the satisfaction of the Divisional Irrigation Officer;

(ii) Land occupied for a water course under the provisions of Section 22 shall be used only for the purpose of such water course;

(iii) The purposed water course shall be completed to the satisfaction of the Divisional Irrigation Officer within one year after the applicant is placed in occupation of the land.

In cases in which land is occupied or water course is transferred on the terms of a rent charge

(iv) The applicant or his representative in interest shall, so long as he occupied such a land or water course, pay rent for the same at such rate and on such days as are determined by the Collector when the applicant is placed in occupation;

(v) If the right to occupy the land ceases owing, to breach of these rules, the liability to pay the said rent shall continue until the applicant or his representative in interest has restored the land to its original condition, or until he has paid, by way of compensation for any injury done to the said land, such amount and to such persons, as the Collector determines;

(vi) The Collector may, on the application of the person entitled to receive such rent or compensation, determine the amount of rent due or assess the amount of such compensation, and if any such rent or compensation be not paid by the applicant or

his representative in interest, the Collector may recover the amount, with interest thereon, at the rate of six percent, per annum from the date on which it becomes due, as if it were an arrear of land revenue, and shall pay the same, when recovered, to the person to whom it is due.

(2) If any of the rules and conditions prescribed by this section are not complied with or if any water course constructed or transferred under this Act is disused for three years continuously, the right of the applicant, or of his representative in interest, to occupy such land or water course shall cease absolutely.

30. Procedure applicable to occupation for extensions and alterations. The procedure hereinbefore provided for the occupation of land for the construction of a water course shall be applicable to the occupation of land for any extension or alteration of a water course, and for the deposit of soil from water course clearances.

22.4 PART IV On the supply of Water

31. Water supply to be subjected to rules.-In the absence of a written contract, or so far as any such contract does not extend, every supply of water from an irrigation work shall be deemed to be given at the rates and subject to the conditions prescribed by the rules to be made by the State Government in respect thereof. -

32. Conditions of water supply-Such contracts and rules must be consistent with the following conditions: -

(a) The Divisional Officer may not stop the supply of water to any water course, or to any person, except in the following cases:

(i) Whenever and so long as it is necessary to stop such supply for the purpose of executing any work ordered by competent authority and with the previous sanction of the State Government;

(ii) Whenever and so long as any water course is not maintained in such proper customary repair as to prevent the wasteful escape of water there-from;

(iii) Within periods fixed from time to time by the Divisional Irrigation Officer.

(b) No claim shall be made against the State Government for compensation in respect of loss caused by the failure of stoppage of the water in an irrigation work by reason of any cause beyond the control of the State Government, or of any repairs, alterations or additions to the irrigation work or of any measures taken for regulating the proper flow of water therein, or for maintaining the established course of irrigation which the Divisional Irrigation Officer considers necessary ; but the person suffering such loss may claim such remission of the ordinary charges payable for the use of the water as is authorised by the State Government.

(c) If the supply of water to any land irrigated from an irrigation work be interrupted otherwise than in the manner described in the last preceding clause, the occupier or owner of such land may present a petition for compensation to the Collector for any loss arising from such interruption, and the Divisional Irrigation Officer may award to the petitioner reasonable compensation for such loss.

(d) When the water of an irrigation work is supplied for irrigation of a single crop, the permission to use such water shall be held to continue only until that crop comes to maturity and to apply only to that crop; but if it be supplied for irrigation two or more crops to be raised on the same land within the year, such permission shall be held to continue for one year from the commencement of the irrigation, and to apply to such crops only as are matured within that year.

(e) Unless with the permission of the Superintending Irrigation Officer, no person entitled to use the water of any irrigation work, or any work, building or land appertaining to any irrigation work, shall sell or sublet or otherwise transfer his right to such use : provided that the former part of this clause shall not apply to the use, by a cultivating tenant, of water supplied by the owner of a water course for the irrigation of the land held by such tenant. But all contracts made between the State Government and the owner or occupier of any immovable property, as to the supply to water of such property, shall be transferred therewith, and shall be presumed to have been so transferred whenever a transfer of such property takes place.

(f) No right to the use of the water of an irrigation work shall be, or be deemed to have been, acquired under Part IV of the Indian Limitation Act, 1908, or under the Indian Easements Act, 1882, of the Central Legislature as adapted to [the State of Rajasthan]; nor shall the State Government be bound to supply any person with water except in accordance with the terms of a contract in writing.

22.5 PART V Of water rates

33. Liability when person using unauthorized cannot be identified-If water supplied through a water course be used in an unauthorized manner, and if the person by whose act or neglect such use has occurred, cannot be identified, the person on whose land such water has flowed, if such land has derived benefit there from, or if such person cannot be identified, or if such land has not derived benefit, there from, all the persons chargeable in respect of the water supplied through such water course, shall be liable or jointly liable, as the case may be, to the charges made for such case.

34. Liability when water runs to waste.-If water supplied through a water course be suffered to run to waste, and if, after inquiry by the Divisional Irrigation Officer, the person through whose act or neglect such water was suffered to run to waste cannot be discovered, all the persons chargeable in respect of the water supplied through such water course, shall be jointly liable for the charges made in respect of the water so wasted.

35. Charges recoverable in addition to penalties -(1) All charges for the unauthorized use or for waste of water may be recovered in addition to any penalties incurred on account of such use or waste.

(2) All questions under section 33 or section 34 shall be decided by the Divisional Irrigation Officer subject to an appeal to the Superintending Irrigation Officer, or such other appeal, as may be provided under section 60.

36. Charge on occupier for water how determined.-(1) The rates to be charged for water supplied for purposes of irrigation to the occupiers of land shall be determined by the rules to be made by the State Government and such occupiers as accept the water, shall pay for it accordingly.

(2) A rate so charged shall be called the "Occupier's" rate.

(3) The rules hereinbefore referred to may prescribe & determine what persons or classes of persons are to be occupiers for the purposes of this section, and may also determine the several liabilities, in respect of the payment of the occupier's rate, of tenants & of persons to whom tenants may have sub-let their lands, or of proprietors and of persons to whom, proprietors may have let the lands held by them in cultivating occupancy.

37 "Owner's rate."-In addition to the occupier's rate, a rate to be called the owner's rate, may be imposed, according to rules to be made by the State Government, on the owners of irrigated lands, in respect of the benefit, which they derive from such irrigation.

38. Amount of owner's rate.-The owner's rate shall not exceed the sum which, under the rules for the time being in force for the assessment of land revenue, might be assessed on such land, on account of the increase in the annual value or produce thereof caused by the irrigation, and for the purpose of this section only, land which is held free of revenue, shall be considered as though it were temporarily settled and liable to payment of revenue.

39. Owner's rate, when not chargeable.-No owner's rate shall be chargeable either on the owner or occupier of land temporarily assessed to pay land revenue at irrigation rates during the currency of such assessment.

40. Certified dues recoverable as land revenue,-Subject to the provisions of section 41, any sum lawfully due under this part, and certified by the Divisional Irrigation Officer to be so due, which remains unpaid after the day on which it becomes due, shall be recoverable by the Collector from the person liable for the same, as if it were an arrear of land revenue.

41. Lambardars or Patels may be required to collect irrigation dues. The Collector may require the Lambardar or Patel, if any, of any local area to collect any sums payable under this Act in respect of any land or water in such local area, and deposit the amount so collected in the state Treasury, as directed by the Collector, and in the event of any person failing to pay any sum so required, it shall be recovered from him as an arrear of land revenue.

22.6 PART V I Of drainage

42. Power to prohibit obstructions or order their removal.-

(i) Whenever it appears to the State Government that injury to any land or the public health or public convenience has arisen or may arise from the obstruction of any river, stream or drainage channel, the State Government may, by notification published in the Official Gazette, prohibit within limits to be desired in such notification, the formation of any obstruction or may within such limits, order the removal or other modification of such obstruction.

(2) Thereupon so much of the said river, stream or drainage channel as is comprised within such limits, shall be held to be a drainage, work, as defined in section 3.

43. Power to remove obstructions after prohibition.-(1) The Divisional Irrigation Officer, or other person authorized by the State Government in that behalf, may, after such publication, issue an order to the person, , causing or having control over any such obstruction to remove or modify the same within a time to be fixed in the order.

(2) If, within the time so fixed, such person does not comply with the order, the said irrigation officer may himself remove or modify the obstruction and if the person to whom the order was issued does not, when called upon, pay the expenses involved in such removal or modification, such expenses shall be recoverable by the Collector from him or his representative in interest as an arrear of land revenue.

44. Preparation of schemes for works of improvement.-Whenever it appears to the State Government that any drainage work are necessary for the improvement for any lands, or for the proper cultivation or irrigation thereof, or that protection from floods or other accumulations of water, or from erosion by a river, is required for any lands, the State Government may cause a scheme for such drainage works to be

drawn up and Published together with an estimate of its cost and a statement of the proportion of such cost which the State Government proposes to defray and a schedule the lands which it is proposed to make chargeable in respect of the scheme.

45. Power of persons employed on such scheme.-The person authorized by the State Government to draw up such scheme may exercise all or any of the powers conferred on irrigation officers by section 14.

46. Rate of lands benefited by works.-(1) An annual rate, in respect of such scheme, may be charged, according to rules to be made by the State Government on the owners of all lands which shall, in the manner prescribed by such rules, be determined to be so chargeable.

(2) Such rate shall be fixed as nearly as possible so as not to exceed either of the following limits :

(i) Six per cent per annum on the first cost of the said works, adding thereto the estimated yearly cost of the maintenance and supervision of the same, and deducting there from the estimated income, if any, derived from the works, excluding the said rate;

(ii) In the case of agricultural land, the sum which under the rules then enforce for the assessment of land revenue might be assessed on such land on account of the increase of the annual value or produce thereof caused by the drainage work;

(ii) Such rate may be varied from time to time within such maximum by the State Government;

(iv) So far as any defect to be remedied is due to any irrigation work, road or other work or obstruction, constructed or caused by the State Government or by any person, a proportionate share of the cost of the drainage works required for the remedy of the said defect, shall be borne by the State Government or such person, as the case may be.

47. Recovery of rate.-Any such drainage rate may be collected & recovered in manner provided by sections 40 & 41 for the collection and recovery of water rates.

48. Disposal of claims to compensation.-Whenever in pursuance of a notification made under sec. 42, any obstruction is removed or modified or whenever any drainage work is carried out under section 44, all claims for compensation on account of any loss consequent on the removal or modification of the said obstruction or the construction of such work, may be made before the Collector and he shall deal with the same in the manner provided in section 10.

49. Limitation of such claims.-No such claim shall be entertained; after the expiration of one year from the occurrence of the loss complained of unless the

Collector is satisfied that the claimant had sufficient cause for not making the claim within such period.

22.7 PART VIII Of obtaining Labor for Irrigation and Drainage works

50. Power to prescribed number of labors to be supplied by persons benefited by irrigation works.

-(1) In any district in which an irrigation or drainage work is constructed, maintained or projected by the State Government, the State Government may, if it thinks fit, direct the collector

(a) to ascertain the proprietors, sub-proprietors or farmers, whose villages or estates are or will be, in the judgment of the Collector, benefited by such irrigation or drainage work, and

(b) to set down in a list, having due regard to the circumstances of the district and of the several proprietors, sub-proprietors, or farmers, the number of laborers which shall be furnished by any of the said persons, jointly or severally, from any such village or estate, for employment on any such Irrigation or drainage work when required as hereinafter provided.

(2) The Collector may, from time to time, add to or alter such list or any part thereof.

51. Procedure for obtaining labor for works urgently required.

-(1) Whenever it appears to a Divisional Irrigation Officer duly authorised by the State Government that unless some work is immediately executed, such serious damages will happen to any irrigation or drainage work as to cause sudden and extensive public injury, and that the labor necessary for the proper execution thereof cannot be obtained in the ordinary manner within the time that can be allowed for the execution of such work as to so prevent such injury, the said officer may require any person named in such list to furnish as many labors (not exceeding the number which according to the said list, he is liable to supply) as to the said officer seem necessary for the immediate execution of any work.

(2) Every requisition so made shall be in writing and shall state-

(a) the nature and locality of the work to be done,

(b) the number of laborers to be supplied by the person upon whom the requisition is made, and

(c) the approximate time for which and the day on which the laborers will be required, and a copy thereof shall be immediately sent to the Superintending Irrigation Officer for the information of the State Government.

(3) The State Government shall fix, and may from time to time alter the rates to be paid to any such labors; provided that such rates shall exceed the highest rates for the time being paid in the neighborhood for similar works; and in the case of every

such laborer, the payment shall continue for the whole period during which he is, in consequence of the provisions of this part prevented from following his ordinary occupation.

(4) The State Government may direct that the provisions of this part shall apply, either permanently or temporarily (as the case may be), to any district or part of a district for the purpose of effecting necessary annual silt clearances, or to prevent the proper operation of an irrigation or drainage work being stopped or so much interfered with as to stop the established course of irrigation or drainage.

22.8 PART IX Of Jurisdiction

52. Jurisdiction under this Act of Civil Court.-Except where herein otherwise provided, all claims against Government in respect of anything done under this Act may be tried by the Civil Courts; but no such court shall in any case pass an order as to the supply of water to any crop sown or growing at the time of such order.

53. Settlement of reference as to mutual rights and liabilities of persons interested in water course.-(1) Whenever a difference arises between two or more persons in regard to their mutual rights or liabilities in respect of the use, construction or maintenance of a water course, any such person may apply in writing to the divisional Irrigation Officer stating the matter in dispute; and such officer shall thereupon give notice to the other person interested that, on a day to be named in such notice, he will proceed to enquire into the said matter, and, after such enquiry, he shall pass his order thereon unless he transfers (as he is hereby empowered to do) the matter to the Collector who shall thereupon enquire into and pass his order on the said matter.

(2) Such order shall be final as to the use or distribution of water for any crop sown or growing at the time when such order is made and shall thereafter remain in force until set aside by the decree of a Civil Court.

54. Power to summon and examine witness.-Any officer empowered under this Act to conduct any inquiry may exercise all such powers connected with the summoning and examining of witnesses, as are conferred on Civil Courts by the Code of civil Procedure; and every such enquiry shall be deemed a judicial proceeding.

22.9 PART X Of offences and penalties

55. Offences under Act.-Whoever, without proper authority and voluntarily does any of the act following, that is to say

(1) damages, alters, charges or obstructs any irrigation or drainage Work;

(2) interferes with, increase or diminishes the supply of water in, or the flow of water from, through, over or under, any irrigation or drainage work;

(3) Interferes with or alters the flow of water in any river or stream, so as to endanger, damage or render less useful any irrigation or drainage work;

(4) being responsible for the maintenance of a water course or using a water course, neglects to take proper precautions for the prevention of waste of the water thereof or interferes with the authorised distribution of the water there from, or uses such water in an unauthorized manner ;

(5) Corrupts or fouls the water of any canal so as to render it less fit for the purposes for which it is ordinarily used ;

(6) being liable to furnish laborers under Part VII of this Act, fails without reasonable cause to supply or assist in supplying the laborers required of him;

(7) destroys or moves any level mark or water gauge fixed by the authority of a public servant ;

(8) passes, or causes animals or vehicles to pass, on or across any of the works, banks or channels of an irrigation or drainage work contrary to rules made under this Act, after he has been desired to desists there from ;

(9) violates any rule made under this Act for breach whereof a penalty may be incurred ; shall be liable, on conviction before a Magistrate, to a fine not exceeding one hundred rupees, or to imprisonment not exceeding one month, or to both, for the first offence ;and to a fine not exceeding five hundred rupees, or to imprisonment not exceeding three month, or to both, for a subsequent offence 56. Saving of prosecution under other laws.-Nothing herein contained shall prevent any person from being prosecuted under any law for any offence punishable under this Act ; provided that no person shall be punished twice for the same offence. ,

57. Compensation to person injured.-Whenever any person is fined for an offence under this Act, the Magistrate may direct that the whole or any part of such fine may be paid by way of compensation to the person injured by. such offence.

58. Power to arrest without warrant.-Any person in charge of, or employed upon, any irrigation or drainage work may remove from the lands, or buildings belonging thereto, or may take into custody and take forthwith before Magistrate or to the nearest Police Station, to be dealt with according to law, any person who within his view, commits any of the following offences,

(1) willfully damages or obstructs any irrigation or drainage work ;

(2) without proper authority interferes with the supply of flow of water in or from any irrigation or drainage work or in any river or stream, so as to endanger, damage or render less useful any irrigation or drainage work.

59. Definition of "irrigation work".-In this part the expression "irrigation work" (unless there be something repugnant in the subject or context) be deemed to include also all lands occupied by the State Government for the purpose of irrigation works, and all buildings, machinery, fences, gates and other erections, trees, crops, plantations or other produce, occupied by, or belonging to the State Government, upon such lands.

22.10 PART XI Of Subsidiary Rules

60. Power to make rules.-(1) The State Government may, from time to time, make rules to regulate the following matters :

- (a) the proceedings of any officer who, under any provision of this Act, is required or empowered to take action in any matter ;
- (b) the cases in which, and the officers to whom, and conditions subject to which, orders and decisions given under any provisions of this Act, and not expressly provided for as regards appeal, shall be appealable ;
- (c) the persons by whom, the time, place or manner at or in which anything for the doing of which provision made in this Act, shall be done ;
- (d) the amount of any charge made under this Act ;
- (e) and generally to carry out the provisions of this Act.

(2) Such rules shall be published in the '[Official Gazette]', and shall thereupon have the force of law.

22.11 RAJASTHAN IRRIGATION & DRAINAGE RULES, 1955

Preliminary

1. Short title and commencement- These rules may be called the Rajasthan Irrigation and Drainage Rules, 1957 and shall come into force on their publication in the Rajasthan Gazette.

2. Definitions-In these rules, unless the context otherwise requires: - (a) "Act" means the Rajasthan Irrigation and Drainage Act, 1954; (b) "Form" means a Form appended to these Rules; (c) "Schedule" means a Schedule appended to these rules; (d) "Section" means a section of the Act, and

(e) Words and expressions not defined in these rules bear the meaning respectively assigned to them in the Act.

3. Orders for construction of masonry works-The order which a Divisional Irrigation Officer may issue under Section 18 shall be issued in writing, and shall be served on each person concerned, personally or affixed on conspicuous part of his place of residence, if it cannot be served personally. The Divisional Irrigation Officer shall himself sanction the design and estimate of the works after satisfying himself that they are suitable.

4. Form of application for water and notice.-(1) All applications for water to be supplied for irrigation through an existing channel, or through a channel to be constructed by the applicant, shall be made as nearly as may be form 1.

(2) A notice under section 20, 22 and 23 shall be issued by the Divisional Irrigation officer to all persons concerned in from 2.

5. Divisional Irrigation Officer to send record to Collector.-The Divisional Irrigation Officer, whenever he makes an inquiry under section 22 or section 23, shall forward his proceedings to the Collector of the district for his orders under section 24 and 25.

6 Proceeding of Collector -The notice which the Collector is required to give to the Divisional Irrigation Officer under section 24 shall be given not less than 14 days previous to the date fixed for the inquiry.

7. Opening of new water courses.--Water shall not be admitted into any new water course until all works have been constructed which are necessary for the passage across such water-course of water-courses existing previous it,, to construction and of the drainage intercepted by it, and for affording proper communication across it for the convenience of the neighboring lands and of the public.

8. Introduction of new irrigation :- In deciding the actual percentage of the cultivated area which should be adopted for irrigation for any tract the proportion of the culturable to the cultivated area, the.: quantity of water available , for the irrigation of the tract and the existing annual irrigation form masonry well or other permanent and reliable sources should be considered.

9 Grounds of refusal to grant water.--An outlet for the supply of water from a Government channel shall not ordinarily be granted in respect or lands where in the opinion of the Divisional Irrigation Officer:

(a) Serious loss from wastage is likely to occur.

(b) reasonable grounds exist for believing that canal irrigation, will, by raising the spring level or otherwise, prove injurious to health or agriculture;

(c) the available supply of water in the canal, distributary's or water-course is already fully utilized; or

(d) the length of the water course from its head to the point of contact with such lands does, or would exceed one mile.

10. Fields liable to be debarred from canal irrigation :- with the previous approval of the Superintending Irrigation Officer, the Divisional Irrigation Officer may prohibit the use of canal water:

(a) in any field which is irrigated from any other source of a permanent and reliable character;

(b) on lands to which in accordance with rule 9 a supply of water would not ordinarily be granted;

(c) for the irrigation of any Kharif crop when the land to be irrigated is situated within one and half kilometers from the outer most houses of any town, if such irrigation be objected to by the Municipal Board or committee, or if there is no Municipal Board or Committee, by the Collector;

(ii) for the irrigation of any Kharif crop under tank irrigation;

(d) in any field which has not been prepared properly and which has not been divided into kyarris of suitable sizes;

(e) by any cultivator, cultivating such lands for which irrigation charges have not been paid for two consecutive crops;

(f) by any cultivator who does not adhere to Barabandi, wherever enforced by the Irrigation Deptt ;

(g) by any cultivator whose water courses are not in proper condition;

(h) by any cultivator who does not take water during night according to his turn;

(i) by any cultivator who obstructs the flow of water in the water course passing through his fields for supply to other cultivators under the same outlet;

(j) by any cultivator who resorts to lift irrigation from Irrigation channels or water course without prior written approval of officers not below the rank of Divisional Irrigation Officer;

(k) by any cultivator who has been found to act in contravention of the programme for irrigation as approved by the Irrigation authorities;

(1) in any particular year to cultivable land holding exceeding three acres in case sufficient quantity of water available to irrigate whole of irrigable area is not available, such holdings will be supplied water according to scale prescribed in the programme approved by the irrigation authorities for that year; provided that, when any prohibition of the future use of canal water is made under this rule, in respect of

lands in which irrigation is already established, the occupier to the land effected shall be entitled to such compensation, if any, as the State Government may think just.

2. The order under this rule debarring any field or fields from irrigation by canal water shall be made in writing by the Divisional Irrigation Officer and shall be affixed on a conspicuous place in each village concerned, and a copy of the order shall be conveyed to the canal Zileadar and to the Patwari or, in his absence, to the Panch or Sarpanch of the area.

3. It shall be the duty of the Zileadar and the Patwari to make the purport of the order known to the land Owners and cultivators concerned".

11. Distribution of canal Irrigation.-- 1) No irrigation from canals will be drawn from outlets other than those authorised by the Divisional Irrigation Officer. Outlets not so authorised may be removed and no claims in this respect shall lie against the Government. Persons violating this rule will be liable to punishment under Section 55 (9) of the Act.

(2) No material change shall be made in an established system of canal distribution except under the orders of the Divisional Irrigation Officer Appeal against the orders of the Divisional Irrigation on officer, shall lie to the superintending Irrigation officer within 15 days from the date of issue of such orders and his decision in the matter shall be final.

(3) Notice for the reduction and removal of outlets, with brief reasons there for, shall be issued by the Divisional Irrigation Officer and given adequate publicity through Panchayts requiring all periods affected by such reduction or removal, who may wish to make objections in writing to the Divisional Irrigation Officer within 15 days from the date of issue of such notice. The Divisional Irrigation Officer shall, after considering all such objections, make necessary orders. Appeal if any, against the orders of the Divisional Irrigation Officer shall lie to the Superintending Irrigation officer within 15 days from the date of issue of the orders and his decision in the matter shall be final.

(4) In case the Divisional Irrigation officer is of the opinion the distribution of Irrigation in a 'chak' is not being ensured equitably and economically and Barabandi is essential he may enforce Barabandi in the 'chak' concerned after giving adequate Publicity through Panchayats of his intentions of doing so. Appeal if any against the orders of the Divisional Officer shall lie to the Superintending Irrigation Officer within 15 days from the date of the issue of the orders and his decision in the matter shall be final. Breach of such Barabandi will be an offence punishable under section 55 (9) of the Act,

12. Filling of tanks for watering cattle.-Tanks may be filled with canal water without charge, and without reference to the area irrigated in any village, whenever water can be made available without injury to the cultivation dependant on any canal, subject to the following conditions:

(1) Except as provided in rule 13 no tank shall be so filled unless exclusively used for domestic purposes or watering cattle.

(2) No tank shall be so filled which, intercepting any line of drainage is liable to overflow from accumulation of water from natural causes.

(3) No tank shall be so filled except on the written order of the Sub Divisional irrigation officer , issued on the written applications of the people interested in filling of the tanks at such times and to such extent as the Sub-Divisional Irrigation Officer approves.

(4) No tank shall be so filling unless the water course used to fill it shall be filled unless the water course used to fill it shall shown to the satisfaction of the Sub-Divisional Irrigation Officer to be in a sound condition when the application is made.

(5) In the event of any breach of the foregoing conditions by any person for whose benefit the tank has been so filled, or of any such person using any tank so filled otherwise than for domestic purposes or for watering cattle, the privilege. afforded by this rule, may, in addition to any penalty which may be incurred under the Act, be suspended for twelve months by order of the Divisional Irrigation Officer, and passed after inquiry in each case.

(6) In this rule expression "tank" shall include any tank, pond or cistern private or otherwise.

13. Irrigation from tanks or natural depressions -On the written application of the owner of a tank or natural depression and of any person requiring the water, and with the previous sanction of the Divisional irrigation purposes, or canal water filled into tanks under rule 12 or rule 15 may be used for irrigation. The rates ordinarily leviable for irrigation from the canal shall be charged for all fields irrigated in this way from tanks or natural depressions filled with canal water, provided that the fields, if any, irrigated from a natural depression, during the FASL in which the water is supplied, and previous to the introduction of canal water, shall not be liable to water rate for the FASL. A list of such fields 'shall be drawn up and signed by the Zildar and the Lambardar or Patwari in token of its correctness.

14. Contracts for water for other than irrigation purposes.--The Divisional Irrigation Officer may make contract for the supply of canal water for purposes other than irrigation for any term ,after previous sanction of the state government except that the sanction for such contracts exclusively for drinking water may be given by

Superintending engineer of the circle .In cases diggis have been constructed by the PHED ,canal water is to be supplied to Army cantonments ,government department and other public sector undertakings and by the chief engineer in cases canal water is to be supplied to public diggis ,for drinking water to institutions like colleges, schools ,panchayats etc.

16. Water supplied to cantonments Towns etc.-When water is supplied to forts or other military buildings, cantonments, civil stations, cities, rail way:, public gardens or other place of public resort, either by filling of tanks or by direct flow contracts at special rates may be made by the Divisional Irrigation Office with the sanction of the State Government.

17. Closure.-(1) Divisional Irrigation officers are empowered,for purposes of administration, closed days, and canal repairs and maintenance, to order the closure of any water course for periods which shall not extend beyond fourteen consecutive days. For longer closures the authority of the Superintending Irrigation officer is required.

(2) Orders for closures under this rule must be notified

(a) by a notification signed by Divisional Irrigation Officer, a copy of which shall be conveyed by the Canal establishment, with due expedition, to each village concerned, and delivered to the Patwari, or, in his absence, to any lambardar, the acknowledgement of each person to whom a copy of the notification is delivered shall be affixed to a schedule prepared for the purpose, which shall be recorded in the Divisional Irrigation officer, or

(b) in the form of special orders if issued upon particular occasions.,, to be signed by the Divisional Irrigation officer.

(2) It shall be the duty of the Patwari or Lambardar who receives the notification described in sub-rule 2 (a) to affix it at once in a conspicuous position in the village, and to make its purport generally known.

18. Stoppage of supply to improperly maintained water courses.: -Stoppage of water to any water-course under Section 32 (a)(ii) May be enforced when the irrigation Officer recommending such stoppage has satisfied himself, by personal inspection, that the water-course is not maintained in proper repair. The order for such stoppage shall be in writing under the hand of the Divisional Irrigation Officer. Immediate report shall be make to the Collector when the durations of such stoppage is likely to extend to a period of thirty days or more, the special grounds for stoppage being explained in each case.

19. Power of canal officer in the cases of emergency:-Nothing in the rule 18 shall be taken to affect the power of the Irrigation Officer to close any water-course or stop any supply of water on his own authority in case of pressing emergency.

20. Claims for remission due to stoppage or failure of supply.-(1) Claims under clause (b) of section 31 to remission of the occupier's rate, shall be admitted only on proof of actual loss caused by the failure or stoppage of supply; on proof of such loss, the water rates may be reduced in the manner provided in rule 32, or if the rates have already been assessed, the whole or any portion of the charges may be remitted as hereinafter provided.

(2) All claims to such remissions shall be made to the Divisional Irrigation Officer at least 15 days previous to the cutting of the crop. The Divisional Irrigation Officer may reject or admit any claim. If the claim be admitted, the Divisional Irrigation Officer shall remit, or, where collection has already been made, direct refund.

(3) Claims to remission of ordinary charges, other than occupier's rate payable for the use of canal water, shall only be admitted on proof of actual loss caused by the stoppage of supply. On proof of such loss the whole or any portion of the charge may be remitted by the Divisional Irrigation Officer.

21. Compensation.-If a claim for compensation is made under clause (c) of section 32, the Collector shall ascertain the amount of loss and recommend the Divisional Irrigation Officer, for issuing orders for refund.

22. Assessment of occupier's rates ;-(1) Occupier's rate shall be assessed by the Divisional Irrigation Officers on the area irrigated at the rate specified in the Schedule II, subject to other provisions of these rules.

(2) In case the land is irrigated without dividing in to compartments (Kyaries), at a minimum of ten compartments (Kayries) per hectare the rate, assessed under Sub-Rule (1) shall be 25 percent more than the rates specified in Schedule II.

(3) when, however in order to secure efficiency of distribution economy in the use of water, or the rapid development of Irrigation the State Govt. has constructed water-courses at its own expenses, an additional charge per acre may be levied on all lands irrigated from the water-courses at such rate and for such period as will recoup the Government for the cost of construction together with interest charges at a rate of six per annum.

23. Charge leviable for.-"Paleo" When a field receives only a preliminary or paleo watering and afterwards no crop is grown, owing to reasons beyond the control of the occupiers, the lowest rate of charge relating to the FASL 'lift' or 'flow' as the case may be, shall be imposed. If a crop is afterwards sown, the assessment shall be made as follows;

(a) If a Kharif crop, the field shall be assessed at the rate prescribed for the crop sown, whether or not a subsequent water is taken;

(b) If a Rabi crop, the field shall be assessed on the rate specified for the crop sown, only if a subsequent watering is given.

24. Sugarcane :-The irrigation year for sugarcane shall be assessed as from January 15 year in any year ,however, the divisional irrigation officer may by written order permit paleo for sugarcane before that date ,if the conditions of the season admit of it without damage to ,or restriction of, rabi irrigation. areas irrigated ,under such permission shall be measured and assessed as Kharif irrigation.

(2) Areas irrigated without such permission before January 15, shall be assessed as follows;

(a) If no subsequent watering is given, the full rate of sugarcane shall be charged.

(b) If a subsequent watering is given, the Rabi Paloe rate, shall be charged in addition to the full sugarcane rate. In very dry year when water is required to save Rabi Crops a special rate may be levied under the orders of the Divisional Irrigation Officer equal to double the Rabi paleo rate in addition to the full sugarcane rate.

NOTE;-See rule for Sugarcane fields re-sown with other crops.

25. Charge leviable for the irrigation of mixed crops.-If mixed crops be grown in the same field, the occupier's rate shall be calculated on the highest rated crop. If different crops be grown in different part, of the same field the occupier's rate for the whole shall be calculated on the highest rated crop, unless the division between crops shall have been clearly defined by a ridge not less than half-a-foot high.

26. Charge leviable for Arhar crop -(1) Arhar sown with any other crops and irrigated shall be subject to the rules of assessment for mixed crops for the FASL in which it is irrigated.

(2). Arhar when sown alone and irrigated in the Kharif Fasl be assessed at the Rabi ate, even if subsequently it is not irrigated in the Rabi FASL.

27. Charge leviable on Fields-Resown -(1) If an irrigated Rabi or Kharif crop, other than Sugarcane, fails for any cause beyond the control of the occupier and the field is ploughed up and re sown with another crop and subsequently irrigated in the same season the occupier's rate leviable shall be that due on the highest rate of the crops sown in the field during that season.

Explanation.--The failure due to flooding of a Kharif crop sown in land which is usually flooded in the monsoon shall be deemed to be cause wherein the control of the occupier.

(2) Sugarcane which has been irrigated but fails to germinate or is destroyed owing to causes beyond the occupiers' control before the break of the monsoon shall not be charged for irrigation but, if the field is re-ploughed with another crop and subsequently irrigated in the same Kharif season the occupier's rate leviable shall be that due on the crop which comes to maturity.

(3) If sugarcane, which has been irrigated fails or is destroyed after the break of the monsoon by any cause beyond the control of the occupier, and if the field is re-ploughed and another crop of any kind is sown and subsequently irrigated in the same Kharif season, the occupier's rate leviable shall be that due on the crop which comes to maturity.

(4) Sugarcane which has been irrigated but fails or is destroyed after the break of the monsoon owing to having been sown on land which is usually flooded, or owing to any other cause within the control of the occupier, shall be charged the full occupier's rate, but if the field is re-ploughed and another crop of any kind is sown and subsequently irrigated in the same Kharif season, no occupier's rate shall be leviable on the second crop.

(5) If a Rabi crop is sown and irrigated subsequently to the cutting of the Kharif crop in a field on which irrigation rates have been levied in the Preceding Kharif in accordance with sub rule (2), (3) or (4) of this rule, the occupier's rate for the Rabi crop shall be levied in addition to that for the Kharif and/or for the sugarcane crop .

28. Charge leviable on fields Partly Irrigated -If only a portion of a field has been irrigated the occupier's rate shall be chargeable on the whole field unless such portion have been clearly demarked by ridge not less then half foot high.

29. Charge leviable on fields partly irrigated from Canal and partly from well or other source :-Where a portion of a field has been irrigated with canal water and another portion is irrigated with water from a well of any other source, the whole field is liable for canal occupier's rate, unless a clearly distinguishable boundary, demarcated by a ridge not less than half -a-foot high, exists between the two portions.

30. Use canal water courses for conveyance of water from a well or any, other source. :- If water from a well or any other source is conveyed in the same channel as canal water in the course of the same season, the whole of the irrigation from that channel during such season is liable to be treated as irrigation from the canal.

31. Charge leviable for water used without permission, or at time prohibited by proper authority or for the irrigation of debarred fields -

(1) Persons using water without permission or at time prohibited by proper authority (i.e. during closed day) or for the irrigation of a field which has been debarred from

canal irrigation under rule 10 or in contravention of any of the provisions of the Act and these Rules, shall in addition to the ordinary rate which would be leviable, be chargeable with punitive rate equal to six times the ordinary rates for each separate and distinct occasion on which water is so used; provided that the total punitive water rate charged in case of a single crop shall not be more than twenty times and ordinary water rate and further provided that in every such case the Divisional Irrigation officer impose lower charge if he thinks fit.

(2) In the case, of a person or persons willfully cutting the banks or placing bunds in the bed of a canal or damaging outlets or drawing excess supplies by placing siphons on canal, etc., for the purpose of irrigating their fields or otherwise the punitive rate will in each case, be twenty times the ordinary rate for each separate and distinct occasion on the area which such water is applied or spreads and they shall be debarred for one year .

(3) If the water has been so used for irrigation, the area irrigated shall be measured, and notice shall at once be given on each such occasion to the persons concerned that they will be charged in the demand statement under this rule for the area so watered .Provided that in case the Divisional Irrigation Officer is satisfied that the circumstances justify, he may order the payment of the punitive rates imposed in terms of this rule within one month of issue of notice to that effect.

(4)In case the Irrigation charges as prescribed in the schedule H appended to the Irrigation and Drainage rules, 1955, are not paid by the due date the charges, at the penal rate of 12% per annum shall be recovered on the amount to be paid.

Explanation-

The expression "due date " means the date prescribed by the irrigation Department from time to time in this connection.

32. Charge leviable on crops injured by failure of supply, floods etc.(10 If a crop which has been irrigated with canal water is subsequently injured by failure or stoppage of supply, or by locusts, hail rain, floods or other calamity, and if in the opinion of the Divisional Irrigation Officer the injury is not due to the negligence of the cultivator, or if the injury, to the crop being a Kharif crop, is not due to its having been sown on land which is usually flooded during the rainy season, the rate to be charged for the irrigation of the crop shall be such proportion of the ordinary rate as may be determined by the Divisional Irrigation Officer acting under the general instructions of the State Government and in consultation with the Collector,

(2) Reductions of water-rates under this rule shall, so far as is Possible, be made before the Jamabandis are dispatched to the Collectors offices. All claims for remissions subsequently received on the grounds of injury from locusts,

hail, rain, floods or other calamity shall be dealt with in accordance with the procedure laid down in rule 20 for claims on account of loss from failure or stoppage of supply.

33. Charge for Irrigation from Escapes.-(1) Irrigation from escape Channels. when the supply is permanent, shall be governed by the same rule as irrigation from other parts of the canal.

(2) Irrigation from such channels, when the supply is intermittent, may be allowed at half the rates in force for irrigation from the canal.

(3) One the escape water has left an escape channel no rate shall be changed on irrigation effected from it, except as provided for in rule 13.

34. Charge leviable for irrigation from drainage channels.-If there is sufficient water in a drainage cut, or in a natural drainage channel improved by the State Government and notified under section 43 to allow of irrigation there from without making bunds, such irrigation may be permitted by the Sub-Divisional Irrigation Officer free of charge, on the understanding that no obstructions whatever. will be allowed in the drain, and that if any are put in, not only will the permission to use the water be withdrawn but the persons causing the obstructions will be prosecuted under sub-section (1) to (3) of section 55

Note--When, without the permission of the Divisional Irrigation Officer under rule 14, canal water is taken by means of a neighboring water-course into a drainage channel formed or maintained by the State Government, the person so taking the water can, whether the water be wasted or not, be proceeded against under section 55 (2). Any person taking water in a similar way into a natural, and there by wasting the water, is liable to be prosecuted under section 55 (4). The water rates ordinarily in force shall be levied on all lands irrigated in either of the above ways, and all such irrigation should be discouraged.

35. Charge leviable for waste.-The charge leviable for water suffered to run to waste may when then the land flooded is uncultivated, be calculated on the area flooded at the highest occupier's rate for the time being leviable; or at double this rate when the depth to which the area is flooded exceeds one foot , and, when the Land is cultivated at double the rate so leviable for the class of crop grown on it; provided that in every such case the Divisional Irrigation Officer may impose a lower charge if he thinks fit.

36. Definition of the term 'Occupier.'- For the purposes of section 36 the following persons shall be deemed to be 'Occupiers', namely: -

(a) Where the proprietor or the tenant, other than a tenant of sirland is in actual cultivator occupation's such proprietor or tenant; and

(b) Where the proprietor of sir land has let it, or where the tenant of the land other than sir land has sublet it, such proprietor or tenant and the person in actual cultivatory occupation.

In the cases referred to in clause (b), the proprietor or tenant and the person in actual cultivatory occupation shall be jointly and severally liable for the payment of the occupier's rate.

37. Schedule of rates to be accessible to Villagers :- The Patwari of every village irrigated by canal shall be furnished by the Divisional Irrigation officer with a statement in Hindi showing the rates of assessment of each class of crop according to the ordinary local and canal standards of measurements, which statement shall be suspended in a place of Public resort in the village.

38. Assessment of owner's rate.-The owner's rate shall be assessed by the Divisional Irrigation Officer at one time of the occupier's rate for such land subject to a maximum of difference between wet and dry rate for land revenue in the locality .

39. Charges to be excluded in Assessing owner's rate.:-No portion of;- (a) any additional charge imposed under rule 22 (2), (b) any charge imposed on uncultivated land or of the amount by which the charges on cultivated land exceed the ordinary charge leviable on such land in the case of charges under rule 35, (c) any charge imposed under rule 13, or 33 (2) shall be included in the occupier's rate for the purpose of assessing the owner's rate.

40. Appeals against the assessment of owner's rate.-Appeal against the assessment of owner's rate shall be subject to the following rules:

(1) (a) An appeal against the assessment of owner's rate by the irrigation Officer shall lie to the Collector, provided it is brought within 30 days from the date of the receipt by the owner of the notice of the assessment by the Irrigation officer.

(b) Where the sum assessed on an individual exceeds Rs. 300/- a second appeal shall lie to the Commissioner from the order of the Collector; provided that such appeal be presented within 30 days from the date of the order appealed against.

(2) The grounds on which an appeal may be preferred under sub rule (1) shall be as follows:

(i) that any particular field or portion of a field is not liable to the rate, i e. that it was assessed at wet rates at last settlement;

(ii) that the assessment exceeds one third of the occupier's rate;

(iii) that it exceeds the sum which under the law for the time being in force for the assessment of land revenue could be assessed on the land in question on account of the increase in the annual value or produce thereof resulting from irrigation;

iv) that the appellant is not liable for the rate assessed,

41. Preparation of Khatauni or demand statement.-On the completion of measurements of a village, a Khatauni shall be prepared from the Khasra Shudkar in which all the entries concerning each cultivator will be brought together and totaled. The Khatauni will be prepared by the staff of the Irrigation Department or Revenue Department as is entrusted with this work by the Government in Form No. 3 in Hindi and signed by the Irrigation Official carrying out the measurements.

42. Khatauni to be accessible to cultivators.-The Irrigation Patwari shall see that the village copy of the Khatauni is at all reasonable time accessible to any person who pays water rate.

43. Distribution of parcha :-A parcha or slip containing particulars of the rate due from him shall be supplied to each cultivator. On entering a village for the purposes of finally measuring up irrigation, the Irrigating Official shall inform the Lambardar or his agent of the day on which parchas will be distributed, and shall, at the same time, cause a written notice of the same to be pasted in the village Chaupal. The Lambardar will call upon the cultivators to attend and receive the parchas from the irrigation Official. Undistributed parchas will be entrusted to the Lambardars of the village, or in their absence, to the Patwari for delivery to the cultivators concerned. The Irrigation Official will enter the date of distribution on every parcha, and if it is delivered to any one but the cultivator concerned, he will not enter the name of the persons to whom it is delivered.

22.11.144: Deleted.

45. Objections regarding entries.-(1) If a cultivator desires to contest the correctness of the entries made against him in the Jamabandis, whether as to the fact of the land having been irrigated or of its being charged "flow" or "lift" or as to the measurement and entries of crop, he shall lodge an objection with the Sub-Divisional Irrigation Officer, Dy. Collector, or Canal Ziladar, within thirty days of the date of which the parchas were distributed on the completion of the measurement of the village, or if he has been charged without having done any irrigation from the canal during the fasl, within twenty one days of the date on which he first became acquainted with the claim against him, and the objection shall be investigated on the spot by the officer with whom it is lodged within fifteen days of its being lodged.

(2) If the objection is lodged with the Dy. Collector 'or' Canal Ziladar he will, after investigation, report the circumstances of the case to the Sub-Divisional Irrigation Officer for orders

(3) The Sub-Divisional Irrigation Officer shall dispose objections lodged with him under sub rule (1) or reported to him under sub-rule (2) .An appeal shall lie from the

decision of the Sub-Divisional Irrigation Officer within fifteen days to Divisional Irrigation Officer, whose decision shall be final.

46. Disputed liability to assessment to occupier's rate.-When the liability of assessment to occupier's rate is contested on the ground that the water for which the charge has been made was not derived from an Irrigation work as defined in section 3(i) (ii) of the Act, the objection shall be investigated and decided by the Divisional Irrigation Officer.

47. Objection on behalf of cultivators -When a Lambardar or other person is responsible, under section 41, for the collection of the occupier's rates in a village or any portion of a village, objections under rules 45 and 46 may be lodged by such Lambardar or other person instead of by cultivators, and any refund that may be necessary in consequence of the order passed upon objection so lodged shall be paid to such Lambardar or other person.

48. Receipts: -Receipts shall be given by the Lambardar to every cultivator on payment of the occupier's rate and shall be countersigned by the Patwari.

49. Method of dealing with alternations in the Demand.-If after the distribution of the parchas, any additions are made to the demand, or any reductions are allowed upon objections under the rules contained above or on account of any remission under the Act or these rules or otherwise, such additions or reductions shall be communicated to the cultivator by means of supplementary Parchas. Demands shall be shown on slips printed in back, and remissions on red forms.

50. Objections to the Demand made to Collector and irrecoverable dues. (1) Objection to the demand shall be referred to the divisional commissioner whose decision shall be final.

(2) Balances of irrigation rates, irrecoverable owing to want of assets, absconding of defaulter or other cause shall be dealt with by the same rules as are applicable for the time being to the writing off of irrecoverable amounts of land revenues for that purpose, the Divisional Irrigation Officer shall have the same powers as the Collector, and the Superintending Irrigation Officer shall have the same powers as the Commissioner

51. Payment of refunds :-Payment of refunds of the occupier's or owner's rate shall in all cases be made by the Divisional Canal Officer,

(2) The recovery of dues -The recovery of irrigation dues including occupier's or owner's rate will be effected as per procedure to be prescribed by the Chief Engineer, Irrigation.

52. Lambardar's Fees.-An allowance shall be made to Lambardars or other persons under engagement for collecting the rates, at a percentage equal to that

allowed for the time being for Land Revenue collectors in the area. It is payable on the canal revenue due upon the Jamabandies entrusted to them, provided that the canal revenue due is paid in full within 90 days of the receipt of the Jamahandies. Canal dues shall become reliable 30 days after the receipt of the Jamabandies by the Lambardars.

53. Prohibition against passing on or across canal works-No persons shall, without the permission in writing of the Divisional Irrigation Officer, pass, or cause any animal or vehicle to pass, on or across any of the works banks or channels of a canal or drainage work, after he has been desired to desist there from, excepting upon such bridges, fords, and ferries, and their approaches, as are provided for public use. A person who passes, or causes any animal or vehicles to pass, on or across any work, bank or channel of a canal or drainage work, in contravention of a notice in Hindi displayed at the junction of a public road with such work, bank, or channel, shall be presumed to have been desired to desist there from within the meaning of sub-section (8) of section 55.

54. Persons employed on canals not to have an interest in the distribution of water etc.-No person employed on a canal shall, without previous sanction obtained from the Divisional Irrigation officer, have any interest in the use or distribution of water from the said canal, or purchase, or bid either in his own name or another, or separately or in partnership with others, for any property sold by or on behalf of Government thereon.

55. Appeals.-Except as is otherwise provided in the Act or in these rules:-

(a) an appeal shall lie to the Divisional Irrigation officer from any original order passed by the Sub Divisional Irrigation officer under the Act or these rules;

56 Limitation for appeals -Except as is otherwise provided in the Act or in these rule, all appeals under the Act or these rules, shall be filed within a period of 30 days from the date of the order appealed from and an appeal presented thereafter shall not be entertained.

57. Extension of limitations. -Any authority empowered to hear an appeal under the Act or these rules may, notwithstanding anything contained in rule 56, entertain an appeal presented after the expiry of the period prescribed for such appeal, if the appellant satisfies the appellate authority that he was prevented by sufficient cause from presenting the appeal within the prescribed period.

58. Appeal to be accompanied by copies of Judgment.-Every appeal under the Act or these rules shall be accompanied by a copy of the order appealed from certified by the officer who passed the order.

59. Bar of appeal against an order extending limitation.-No appeal shall lie from an order under rule 57 entertaining an appeal after the expiry of the prescribed period.

SCHEDULE-II

(Vide Rule 22)

Occupiers Rates

Part I

GENERAL PROVISIONS

2. Meaning of spices---Spices and oilseeds Mentioned in this Schedule include the crop of Dhaniya, Methi, Haldi, Chillies, Sonf, Zeera, Ajwan, Groundnuts, Alsi Sarson, Taramera & dyes.

3. Meaning of old tank :- Old tank means a water reservoir constructed prior to the 1st January, 1952 :

Provided that if such a tank:

- (a) Was not in use and has been restored on or after the 1st January, 1952, or
- (b) Has received repairs on or after the 1st January, 1952 and its irrigated area before repairs was less than 10 % of the total area irrigated after repairs, it shall be deemed to be tank made after the 1st January, 1952 for the purpose of this Schedule.

4. Resumed Jagir Tanks.-Areas irrigated from Jagir tanks resumed under the Rajasthan Land Reforms and Resumption of Jagirs Act,1952, shall be assessed at the rate provided in this Schedule

5. Concessions discontinued-Concessions or Maufis, if any, in irrigation charges enjoyed heretofore, shall be discontinued, unless the Collector, After hearing any person objecting to such discontinuance, and in consultation with the Executive Engineer, Irrigation concerned decides otherwise.

6. Charges in case of fall in water below sluice level.-Where the irrigation charges are levied on the basis of crops and if the water level on the 15th February, then on lands which have received not less than three watering, rates as provided in this Schedule shall be charged; and on lands which have received watering less than three, the said rates shall be reduced by one-third in case of two watering and two third in case of one watering.

7 Lift or seepage irrigation- Where irrigation is by lift or seepage, half the rates provided in this schedule shall be charged. If the lift is done by the Government the charges will be levied upto twice the rates applicable to flow irrigation'

8. (1) Whenever the assessment parchas distributed to the tenants show the rent and the irrigation charges separate and the tenants have been paying both these, separate water charges at occupier's rate shall not be charged.

23 Appendix 12: THE RAJASTHAN MINOR IRRIGATION WORKS ACT., 1953

24

(Act No. XII of 1953)

[Published in the Rajasthan Gazette No. 16. Part IV-A. dated 25-4-1953.]

As amended subsequently by the following Rajasthan Acts: No. 27 of 1957: & No. 8 of 1962.

24.1 An Act to provide for the construction, improvement and maintenance of minor irrigation works in the State of Rajasthan.

Whereas it is expedient to make provision for the construction, improvement and maintenance of minor irrigation works in the State of Rajasthan. It is hereby enacted as follows :

PART I

24.1.1 Preliminary

1. Short title, extent and commencement.-(1) This Act may be called the Rajasthan Minor Irrigation Works Act, 1953.

[(2) It extends to the whole of the State of Rajasthan

(3) It shall come into force on the date of its first publication in the Official Gazette.

2. Definitions.-In this Act, unless there be something repugnant in the subject or context,

(1) "constriction" (with its grammatical variations and cognate expressions) includes improvement within a limited time and in a specific manner:

(2) "Minor Irrigation Work" or "work" means an irrigation, submersion, drainage, or protective work or system of such works, natural or artificial, of which the construction or maintenance by the State Government appears to that State Government to call for action under this Act:

Provided that the cost of such construction or in the case of maintenance, the value of such work or works does not exceed Rs. 15,000/-.

(3) "owner" includes a mortgagor or mortgagee in possession: but does, not include a mortgagor or mortgagee out of possession or a lessee for a term of years nor, where a superior and an inferior right of ownership co-exist, the owner of the superior right:

PART II

24.1.2 Preparation of Scheme

3. Preliminary order of State Government.-The State Government may direct the Collector or any other person to make inquiry whether it is desirable to

undertake the construction or maintenance of a minor irrigation work of any description in any specified local area.

4. Publication of Preliminary Order.-(1) The Collector shall, thereupon publish a notice in the village or villages concerned specifying the place at which and the date (which shall not be earlier than forty-two days after the date of such publication) on which the inquiry shall be held, and shall also, subject to any rule made under section 49, cause a copy of the notice to be served on any owner whose land he believes to be likely to be affected by the proposed construction or maintenance.

(2) The notice shall set forth the general character of the proposed construction or maintenance, and shall invite all persons having interest likely to be affected thereby to submit any objection or suggestion that they may desire to make on or before a date specified in the notice and to produce any evidence in support of such objection or suggestion on the date appointed for the holding of the inquiry.

5. Implied consent of owners.-Every owner of land likely to be affected by construction or maintenance who fails within the period allowed by the notice to submit any objection or suggestion in the manner prescribed, shall be deemed for the purposes of this Act to have given his consent thereto.

6. Inquiry and report by Collector.-(1) If the Collector or other person appointed to make the inquiry after considering any objection or suggestion duly submitted and taking such evidence as he thinks necessary, finds that the owners of at least one-half of the land likely to be affected by the construction or maintenance of the work consent, or are deemed to consent, to such construction or maintenance, he shall embody his proceedings in a report to be submitted to the State Government and shall in such report make proposals as to the manner in which the State Government is to be compensated or to recoup itself for any expenditure, whether capital or recurring, incurred by it.

(2) If the owner of more than one-half of the land affected or likely to be affected are opposed to the construction or maintenance of the work, a report to this effect only shall be submitted to the State Government.

7 Notification by the State Government directing draft scheme to be prepared.-Upon receipt of the report referred to in sub-section (1) of the preceding section, the State Government may, after such further inquiry if any, as it thinks fit, publish a notification in the [Official Gazette] directing the preparation of a draft scheme of construction or maintenance or of both.

8. Powers of officer preparing Draft schemes.-Upon such publication, any officer empowered by the State Government in this behalf by general or special order may

enter, or depute any other person to enter, upon any lands within the area specified in section 3, or on any lands adjacent thereto, for the purpose of doing any act necessary in his opinion for the preparation of the draft scheme. provided that reasonable notice shall be given before entry is made into any building or any enclosed court or garden attached to a dwelling house.

9. Compensation for damages caused by entry under section 8.-In case of entry under section 8, the officer empowered under that section shall, at the time of such entry, tender compensation for any damage which may be occasioned by any proceeding under that section and, in case of dispute as to the sufficiency of the amount so tendered. he shall forthwith refer the same for decision by the Collector, and such decision shall be final.

10. Draft scheme.-(1) The officer empowered by the State Government under section 8, shall submit a draft scheme to the State Government, and such scheme shall, so far as he deems necessary, embody the following particulars and be accompanied by the following documents, namely:

- (a) a specification and plan of the work which it is proposed to construct or maintain and an estimate of the capital or recurring expenditure involved thereby:
- (b) the estimated time required for the completion of a scheme of construction:
- (c) a statement detailing
 - (i) the land and interests in land which in his opinion it will be necessary to acquire in order to carry out the scheme:
 - (ii) the portion of such land and interests therein which can be acquired by negotiation:
 - (iii) the portion of such land and interests which it will be necessary to acquire under the law relating to compulsory acquisition of land: and
 - (iv) an estimate in each case of the expenditure required for the purpose of acquisition;
- (d) the extent to which it will be necessary in his opinion to make compensation for damage caused to property by the carrying out of the scheme and the expenditure required for this purpose:
- (e) the area which will be benefited by the scheme:
- (f) the method of management of the work:
- (g) with reference to section 19, the method or methods by which the State Government will be recouped or compensated for expenditure incurred by in
- (h) where all or any of the owners within the benefited area agree

(i) to make themselves responsible to the State Government for any expenditure incurred by the State Government from time to time in the execution of the scheme or for future interest at a specified rate thereon or for both. or

(ii) to pay any fixed contract sum or sums (along with interest at a specified rate on arrears thereof) to the State Government for the execution by the State Government of the scheme;

an agreement to either executed by such owners:

(i) the description of any river or stream flowing in a natural channel or of any lake or other natural collection of still water, whereof the water should be applied or used for the purpose of the work:

(j) any other matter which is required by the circumstances of the case.

(2) Such scheme shall also embody any particulars and be accompanied by any documents required by any rules made under section 49.

(3) Any agreement referred to in clause (h) of sub-section (1) may provide that on payment of the amount expressed therein, the work shall vest in and be maintained by the owners executing the agreement. subject to the provisions of Part 111.

11. Publication of Draft scheme.-(1) When the draft scheme has been prepared to the satisfaction of the State Government, a notice giving such particulars as are required by rule in this behalf and stating at what place and times the scheme will be open to inspection shall be published by affixing a copy of the notice in a prominent place in each village of which the land is in the opinion of the Collector likely to be affected by the scheme, if carried out.

(2) The Collector may also serve notice to the same effect on any owner or occupier of land likely to be affected by the scheme. or on the agent of such owner or occupier.

(3) On publication of the notice under sub-section;(1). any person likely to be affected by the scheme may within one month from the date of such publication present in writing to the Collector any objection which he may have to the scheme.

(4) The Collector shall forward to the State Government all objection which may be presented to him together with any remark that he may desire to make in respect of such objections.

12. Adoption by the State Government of approved scheme. (1)After such modification of the draft scheme as appears to be required by any objection made under the previous section or otherwise, the State Government may, if it thinks fit to proceed with the scheme, notify the same as approved by publication in the [Official Gazette] and thereafter it shall be entitled to carry out such approved scheme in accordance with the provisions of this Act:

Provided that if the scheme has in the opinion of the State Government been substantially altered, the provisions of section 11, shall apply to the amended scheme.

(2) The publication under sub-section (1) of a scheme as approved shall be conclusive proof that any consent recorded therein has been duly obtained, that the scheme will benefit the area specified therein in that behalf (hereinafter called the benefited area), and that the scheme has in all respects been duly prepared and approved.

13. Operation of a notified scheme as a notification declaring application of specified waters.-The intimation in a scheme notified under sub-section (1) of section 12 of the intention to apply or use the water of any river or stream flowing in a natural channel: or of any lake or other natural collection of still water, for the purpose of the work to which the scheme relates, shall operate as notification declaring that the said water will be so applied or used on the expiration of three months from the date of the notification.

14. Modification of approved scheme or substitution of new Scheme.-The State Government may from time to time modify any approved scheme notified under section 12 or substitute another scheme in its stead, and the provisions of this Act applicable to a scheme notified under section 12, shall thereafter be applicable to any scheme so modified or substituted:

Provided that any consent, publication or other thing required by this Act in respect of a scheme shall be necessary also in respect of the alteration of a scheme or the substitution of a new scheme for an existing one.

24.1.3 PART III

Construction and Maintenance

15. Appointment of Officer-in-charge.-The State Govern-Sent may, by general or special order, appoint an officer (hereinafter called the Officer-in-charge) to be in charge of the construction or maintenance of a minor irrigation work in respect of which an approved scheme has been published.

16. Powers of Officer-in-charge.-(1) The Officer-in-charge and any officer to whom he is subordinate, shall have the following powers namely :

(a) at any time after the expiration of three months from the date of the notification under section 12, to enter on any land, remove any obstructions, close any channels and do any other thing necessary for the use or application of the water of any river or stream following in a natural channel or of any lake or other natural collection of still water:

(b) to prohibit by order in writing any person from doing anything which in his opinion diminishes? or is likely to diminish the efficiency of the work:

(c) to require by order in writing any owner or occupier of land within the benefited area to take or permit such action in respect of any property therein belonging to him or in his possession, as may appear necessary for the preservation or maintenance of the work or may appear to be necessary for the purpose of increasing or extending within the benefited area by means of distributaries or otherwise. the benefit of the work:

(d) to enter or authorize any other person to enter upon any land for the purpose of constructing or maintaining the work, or of preventing or remedying the effect of any accident to the same, or of inspecting or regulating the sue of the water supplied, or of measuring lands irrigated by the work or chargeable with any water rate or other sum, or of doing any other thing necessary for the proper regulation and management of the work:

(e) to require in cases of urgency any owner or occupier of land receiving benefit from the work to assist in procuring at market rates such labor, as may be necessary for the preservation or maintenance of the work:

(1) to do or prevent being done anything in respect of which an order has been issued by him under clauses (b) and (c), provided that the person so ordered has failed to obey the order within the time specified in the order, and provided also that no action shall be taken under this clause in respect of an order issued under clause (c) until such order has become final under section 17:

(g) to issue an order in writing to the persons using any watercourse to construct suitable bridges, culverts or other works for the passage of the water of such water-course across any public road, canal or drainage channel in use before the said water-course was made or to repair any such works, and on

the failure of the person to whom the order has been issued to comply within a reasonable time. himself to take the required action at the cost of such person which shall be recoverable under section 28.

(2) The power conferred by clause (c) of sub-section (1), shall include the power to order the transfer by one person to another, on the payment of compensation to be determined in the manner described in section 42, of a water-course or of any land or right in land required for the construction of a water-course.

17. Appeal against order of Officer-in-charge.-(1) Order issued by the officer-in-charge under section 16, shall be subject to appeal in writing made within fifteen

days to such officer or officers, as the State Government directs by rule, but, unless appealed against in the prescribed manner. shall be final.

(2) The order of the appellate authority shall be final.

18. Land Acquisition.-(1) Any land or interest in land which, in the opinion of the State Government, it is necessary to acquire in pursuance of a scheme notified under section 12, shall, for the purposes of the law relating to compulsory acquisition of land be deemed to be required for a public purpose.

(2) For the purposes of such law, the market value of such land or interest shall be deemed to be the market value at the time of the issue of the preliminary order under section 3.

24.1.4 PART IV

Recovery of Expenditure

19. Alternative modes of recoupment by Government.-The

State Government may compensate or recoup itself for any expenditure which it incurs, or agrees to incur, in the carrying out of any approved scheme of construction or maintenance or of both, in any one or more of the following methods, namely:

(a) by the levy from the owners of land within the benefited area, whether such benefit takes the form of direct irrigation, percolation, submersion, improvement of the water supply in wells or drainage of excessive water or otherwise, of a uniform rate or of differential rates imposed on such land in accordance with rules made by the State Government: or

(b) by the recovery from any owners executing an agreement under clause (h) (i) or clause (h) (ii) of sub-section (1) of section 10 of any sums due thereunder: or (c) by the realization of miscellaneous income arising from the management by the State Government of the work.

20. Appeal against rates.-(1) An appeal against the assessment of levy of any rate under this Act shall lie to such officer as is empowered by rule in this behalf.

(2) In every appeal, the costs shall be at the discretion of the officer deciding the appeal.

(3) Costs awarded under this section against the appellant shall be recoverable as though they were an arrear of land revenue due from the appellant.

21. Limitation of appeal.-No appeal shall lie in respect of any rate unless it is preferred within thirty days from the time when the demand for the rate is first made.

22. Exclusion of jurisdiction of ordinary Courts.-No objection shall be taken to any assessment, nor shall the liability of any person to be assessed or rated by questioned in any manner, or by any other authority, than is provided in or under this Act:

Provided that nothing in this section shall prevent any person from obtaining a declaration in the Civil Court that he is not liable to such assessment on the ground that he is not the owner of the land in respect of which the assessment has been made, and the assessing officer shall be bound by such declaration.

23. Rate by whom payable when charged on land held by several occupiers.-Where a rate is charged on land held by several joint owners, it shall be payable by the manager or other person who receives the rents or profits of such land, who may recover from such joint owners any sums so paid on their behalf.

24. Enhancement and abatement of rent.-(1) Notwithstanding anything contained in any enactment to the contrary, but subject to any rules made in this behalf, where benefits are received from a minor irrigation work constructed or maintained under this Act, such benefits, whether due to the supply of direct irrigation or to percolation, submersion, improvement of the water supply in wells or drainage or excessive water or otherwise shall be deemed a ground for enhancement of rent.

(2) In like manner, the loss or discontinuance of any benefits received from a minor irrigation work shall be deemed a ground for abatement of rent.

25. Procedure in enhancement and abatement.-Except as may be otherwise provided by rules made under section 49, all claims under the preceding section in any local areas shall be made by suit to be instituted in a Revenue Court empowered to try suits for the enhancement or abatement of rent in such local area.

26. Appointment of charges due under clause (b) of section 19.Where any sum is recoverable under clause (b) of section 19 from owners for the time being of land within the benefited area, they shall be jointly and severally liable for the same.

27. Enforcement of agreement previous to Act.-(1) All agreements made within a period of twelve years prior to the date on which this Act comes into force regarding the construction, repair and maintenance of a minor irrigation work which might have been constructed or maintained under this Act, had it been in force shall, so far as the terms thereof are consistent with this Act, be deemed to have, been made under this Act, and shall have force accordingly.

(2) Nothing in sub-section (1) shall apply to any such agreement in respect of a minor irrigation work unless and until the State Government declares the work by notification in the [Official Gazette) to be subject to the provisions of this section.

28. Certified dues and debts recoverable as land revenue.-Any sum lawfully due under this Act. and certified by the Officer-in-charge to be so due and any sum not otherwise recoverable under this Act but due under and agreement referred to in

section 27 which remains unpaid after the day on which it becomes due, shall be recoverable by the Collector from any person liable for the same, as if it were an arrear of land revenue.

29. Lambardars may be required to collect dues.-The Collector may require the Lamardar, if any, of any local area to collect any sums recoverable under this Act from an owner or occupier of any land or water in such local area, and deposit the amount so collected in the State Treasury as directed by the Collector. In the event of an owner or occupier of such land or water failing to pay any dues so required, it shall be recovered from him as an arrear of land revenue.

30. Saving in respect of fines.-Nothing in sections 28 and 29 applies to fines.

24.1.5 PART V

Penalties and Preventive Action

31. Offences.-whoever without proper authority, and voluntarily does any of the following acts, namely :

- (1) damages, alters, enlarges or obstructs any work:
- (2) interferes with, increases or diminishes the supply of water in or the flow of water from, through, over or under any work:
- (3) being responsible for the maintenance of any work or of any part thereof or using any work or any part thereof, neglects to take proper precautions for the prevention of water there from or uses such water in an unauthorized manner;
- (4) corrupts or fouls the water of any work so as to render it less fit for the purposes for which it is ordinarily used;
- (5) destroys or moves any level-mark or water gauge fixed by the authority of a public servant:
- (6) Passes or causes animals or vehicles to pass on or across any work contrary to rules made under this Act:
- (7) Violates any rule made under this Act. the breach of which is declared to be punishable or disobeys any lawful order of the Collector or other office shall be liable on conviction before a Magistrate to imprisonment for a period not exceeding one month or to fine not exceeding fifty rupees or, where the offence is a continuing one, to further fine which may extend to ten rupees for every day on which the offence continues after due date of first conviction.

32. Saving.-Nothing herein contained shall prevent any person from being prosecuted under any other law for any offence punishable under this Act. provided that no person shall be punished twice for the same offence.

33. Summary arrest.-Any person in charge of or employed upon any work may remove from the lands or buildings belonging thereto or may take into custody

without a warrant and take (or send) forthwith to a Magistrate or to the nearest police station to be dealt with according to law, any person who within his view commits any of the following offences:

- (a) willfully damages or obstructs any work:
- (b) without proper authority interferes with the supply of flow of water to or from any work so as to endanger, damage or render less useful such work.

34. Definition of "work" in this Part.-In this Part. the word "work" shall be

deemed to include all wands occupied by the State Government for the purpose of a minor irrigation work in respect of which an approved scheme has been published and all buildings. machinery, fences. gates and other erection, trees, crops, plantations or other produce, occupied by or belonging to the State Government upon such lands.

24.1.6 PART VI

Jurisdiction and Procedure

35. Preparation of record and rights.-(1) The Collector shall, whenever the State Government, by special order or by rules made under this Act, so directs, prepare or revise for any minor irrigation work in respect of which an approved scheme has been published. a record showing all or any of the following matters. namely:

- (a) the custom or rule of irrigation:
- (b) the rights to water and the conditions on which such rights are enjoyed:
- (c) the rights as to the erection, repair, and reconstruction slid working of mills, and the conditions or which such rights are enjoyed: and
- (d) such other matters, as the State Government may by rule prescribe in this behalf.

(2) Entries in the record so prepared or revised shall be relevant as evidence in any dispute as to the matters recorded and shall be presumed to be true until the contrary is proved or a new entry is lawfully substituted therefor:

Provided that no such entry shall be so construed as to limit any of the powers conferred on the State Government by this Act.

(3) When a record showing all or any of the matters enumerated in sub-section (1) has been framed at any settlement such record shall be deemed so have been made under this section.

(4) Every person interested shall be bound to furnish to the Collector or to any person acting under the direction of the Collector, all information necessary for the correct preparation of a record under this section.

36. Settlement of disputes between private persons.-(1) Subject to the provisions of section 41, whenever a dispute arises between two or more persons in regard to any right or liability arising from the construction of maintenance under this Act of a minor irrigation work in respect of which an approved scheme have been published from the issue of any order under this Act in respect of such work, any such person may apply in writing to the officer-in-charge of work stating the matter in dispute.

(2) That officer shall thereupon give notice to the other persons interested that on a day to be named in the notice, he will proceed to inquire into the said matter.

(3) On the day fixed for the inquiry, or on any subsequent day. the aforesaid officer shall pass an order determining the matter in dispute, unless he transfers (as he is hereby empowered to do) the matter to the Collector who, in such case, shall inquire into and pass an order determining the said matter.

(4) An order under subsection (3), may award compensation to any person who is a party to the proceedings against any other such person for any injury sustained: and any compensation so awarded shall be recoverable upon application made to the Revenue Court having jurisdiction in the area concerned, if it had been awarded by a decree of that Court.

(5) The order of the officer-in-charge of the work or of the Collector, as to the use or distribution of water, shall be final so far as it applies to any crop sown or growing at the time when such order is made. and, so far as it applies to any future crop, shall remain in force until and except so far as it is set aside by a subsequent order passed in a fresh dispute under this section or by a decree of a Civil Court passed in a suit or proceeding within its jurisdiction.

(6) For the purpose of sub-section (5), a dispute shall be deemed to be a fresh dispute when it arises out of different or changed circumstances.

37. Compensation for damage caused by the applications or use of water.-(1) No compensation shall be awarded for any damage caused by:

(a) stoppage or diminution of percolation or floods.. or (h) deterioration of climate or soil, or (c) stoppage of navigation or of the means of drifting timber of watering cattle, or (d) displacement of labor.

(2) No right to any of the advantages referred to in clauses (a), (b) an {c) of sub-section (1), shall be acquired as against the State Government under Part. IV of the Indian Limitation Act. 1908 or under the Indian Easements Act, 1882, of the Central Legislature as adapted to the State of Rajasthan.

(3) Compensation may be awarded in respect of all or any of the following matters. namely:

(i) stoppage or diminution of supply of water through any natural channel to any defined artificial channel whether above or under-ground, in use at the date of the notification under section 12,

(ii) stoppage or diminution of supply of water to any work erected for purposes of profit or any channel, whether natural or artificial, in use at the date of the said notification;

(iii) stoppage or diminution of supply of water through any natural channel which has been used for purposes of irrigation within the five years next before the date of the said notification,

(iv) damage done in respect of any right to a water course or the use of any water to which any person is entitled under part IV of the Indian Limitation Act. 1908 or under the Easements Act. 188, of the Central Legislature as adapted to state of Rajasthan, and

(v) any other substantial damage, not falling under the provisions of sub-section (1) and caused by the exercise of the powers conferred by this Act, which is capable of being ascertained and estimated at the time of awarding such compensation.

(4) No right to any such supply of water as is referred to in clause (i) or clause (ii) or clause (iii) of sub-section (3), in respect of a work or channel in use at the date of the notification under section 12, shall be acquired, as against the State Government. except by grant or under Part IV of the Indian Limitation Act. 1908 or under the Indian Easements Act, 1882, of the Central Legislature, as adapted to the State of Rajasthan.

38. Notice for a limitation of claims for compensation. (1) As soon as is practicable after the issue of the notification under section 13. the Collector shall cause public notice to be given at convenient places, stating that the State Government intends to apply, or use the water referred to in section 13 in the manner specified in the said notification and that claims for compensation in respect of the matters mentioned in sub-section (3) of section 37 may be made before him.

(2) No such claim for compensation shall be made after the expiration of one year from the stoppage, diminution or damage in respect of which compensation is claimed, unless the Collector is satisfied that the claimant had sufficient cause for not making the claim within such period.

39. Enquiry into claims and determination of amount of compensation.-

(1) The Collector shall proceed to inquire into each such claim and to determine the amount of compensation, if any, which should be given to the claimant.

(2) In determining such amount, regard shall be had to the diminution in the market value at the time of awarding compensation, of the property in respect of which compensation is claimed; and, where such market value is not ascertainable, the amount shall be reckoned at twelve times the amount of the diminution of the annual net profits of such property caused by the exercise of the powers conferred by this Act.

(3) Except as otherwise provided in this Act. The provisions of the law relating to compulsory acquisition of land for the time being in force shall apply to all enquiries under this section.

(4) Any sum of money payable as compensation under section 37. Shall become due three months after the claim therefore is made.

(5) Simple interest at the rate of six per cent per annum shall be allowed on any such sum remaining unpaid after the said three months, except where the non-payment of such sum is caused by the willful neglect or refusal of the claimant to receive the same.

40 Variations in rent.-(1) Every tenant holding under an unexpired lease or having a right of occupancy or Khatedari, who is in occupation of any land at the time when any stoppage or diminution of water supply, in respect of which compensation is allowed under section 37, takes place, may claim an abatement of the rent previously payable by him for the said land on the ground that such stoppage or diminution reduces the value of the holding.

(2) If a water supply increasing the value of such holding is afterwards restored to the said land, the rent of the tenant may be enhanced, in respect of the increased value of such land due to the restored water supply, to an amount not exceeding that at which it stood immediately before the abatement. Such enhancement shall not affect the liability of the tenant to enhancement of rent on any grounds other than that of restored water supply.

41. Compensation relating to water-courses.-(1) Where the transfer of any water-course or of any land or interest in land required for the construction of a water-course, is directed by an order made under section 16, upon payment of compensation, the Collector shall, on the application of any person affected by such order, proceed to determine the compensation in accordance with the provisions of the law for time being in force relating to compulsory acquisition of land, but he may if the person to be compensated so desires, award such compensation in the form of a rent charge payable in respect of the land or water-course occupied or transferred.

(2) If any sum or rent charge awarded under sub-section (1) is not paid when lawfully demanded by the person entitled to receive the same. the amount shall be

recovered by the Collector, as if it were an arrear of land revenue and shall when recovered, be paid by him to the person entitled to receive the same.

42. Compensation for damage caused by entry under section 16 (1) (d).-In every case of entry under clause (d) of sub-section (1) of section 16 upon any lands adjacent to a minor irrigation work for the purpose of preventing or remedying the effect of any accident to the work, the officer-in-charge shall tender compensation to the proprietors or occupiers of the said lands for all damage done to the same. If such tender is not accepted, the officer-in-charge shall refer the matter to the Collector who shall proceed to award compensation for the damage in a gross sum of money. The decision of the Collector shall be final.

43. Compensation for damage caused in other cases. -Where any damage other than damage of the description referred to in sections 16(2), 37, 41(1) and 42 is caused to a person by the exercise with reference to a minor irrigation work of any of the powers conferred by this Act, the officer in-charge of the work shall, subject to any rules made under section 49 in this behalf, tender reasonable compensation to the person sustaining the damage and in case of dispute as to the sufficiency of the amount tendered, he shall forthwith refer the matter for decision to the Collector and such decision shall be final.

44. Limitation of claims for compensation for damage.-No claim for compensation for damage under this Act other than a claim under section 37 shall be made after the expiration of one year from the accrual of the damage unless good cause is shown by the claimant for not making his claim within that period.

45. Bar to suits against officers.-No suit or other legal proceeding shall lie against any officer of the State Government or any person acting under the directions of an officer of the State Government for anything done or intended to be done in good faith under this Act.

46. Powers to summon and examine witnesses.-Any officer empowered by or under this Act to conduct any inquiry or to assess compensation may exercise all such powers connected with the summoning and examining of witnesses, as are conferred on Civil Courts by the Code of Civil Procedure, 1908, and the inquiry or proceeding shall be deemed a judicial proceeding.

24.1.7 PART VII Miscellaneous

47. Vesting of work.-Every work shall be deemed to be vested in the persons or authority for the time being entrusted with the construction or maintenance thereof by the terms of a scheme notified under section 14.

48. Delegation of powers by the State Government. -The State Government may delegate any of its powers under this Act to the Board of Revenue or to other officer and in such case references to the State Government shall be construed as references to the Board of Revenue or to other officer, as the case may be.

49. Power of the State Government to make rules.-(1) The State Government may, after previous publication make rules to carry out the purposes of this Act. (2) In particular and without prejudice to the generality of the foregoing power, such rules may be made as to all or any of the following matters, namely (a) the nature, scope and extent of works to be undertaken under this Act;

(b) the conduct of an inquiry under section 3 and other matters relating to the preparation of a draft scheme; (c) the publication and service of notices under sections 4 and 11;

(d) the particulars and documents to be embodied in or submitted with a draft scheme:

(e) the rates leviable from owners and the methods of assessing the scene and time of payment:

(f) the officer to whom an appeal shall lie under section 20:

(g) the procedure to be adopted in proceedings held under section 24 or section 40 for the enhancement or abatement of rent:

(h) the remuneration of persons collecting sums for the State Government under section 29 and their indemnification against expenses properly incurred in collection

(i) the delegation by the State Government of any powers conferred upon it under this Act:

(j) any other matter that may be or is required to be prescribed by this Act: and

(k) generally to give effect to the provisions of this Act.

(3) In making any rule under this section, the State Government may declare that a breach of such rule is punishable under this Act.

(4) All rules made under this section shall be published in the official Gazette and on such publication shall have effect as if enacted in this Act.

50. Interpretation (omitted in 1957)

THE RAJASTHAN MINOR IRRIGATION WORKS RULES, 1956

1. Title and commencement.-(1) These rules may be called the Rajasthan Minor Irrigation Works Rules, 1956.

(2) They shall come into force at ones.

2. Definitions.-In these rules, unless there is something repugnant in the subject or context:

(1) "the Act" shall mean the Rajasthan Minor Irrigation Works Act, 1953 (Rajasthan Act XII of 1953).

(2) "section" shall mean a section of the Act.

(3) words and expressions defined in the Rajasthan tenancy Act, 1955 (Rajasthan Act 3 of 1955) shall have the meaning assigned to them by that Act.

(3) Nature, extent and scope of work.-These rules shall apply to the following works:

(1) Construction of small Bunds and Nadas:

(2) Construction and improvement of water-courses, whether defined artificial channels or natural channel:

(3) Construction of masonry wells:

(4) Conversion of Kham wells into masonry wells;

(5) Construction of Kham wells;

(6) Improvement of masonry wells which are out of use and the lands whereunder have been classed as Barani during the current settlement: and

(7) Boring of wells.

Explanation.-Improvement shall mean improvement of the works affected in accordance with the draft scheme within the period specified in the order

4. Maintenance of works.-Where the work is constructed by the Government, it shall be maintained by the Government. In cases covered by clause (h) of sub-section (1) of section 10, it shall be maintained in accordance with the agreement.

5. Nature of enquiry under section 3.-The Collector or any other officer directed to make an enquiry under section 3 shall enquire into the following matters before submitting his reports, namely:

(1) Khewat Nos., Khasra Nos., area, soil class, and the rent of lands which the proposed work would benefit:

(2) Name, description, and place of residence of the land-holders and the tenants interested in the land and their status, e.g. Zamindar, Bisweddar, Jagirdar, or Khatedar tenant or tenant of Khudkasht or Ghair Khatedar tenant:

(3) Full details of the work proposed to be done:

(4) Estimated total expenditure on the work, with details of dimensions and other particulars as far as possible: and

(5) Estimated approximate benefit, i.e. extent of increase in irrigation or bed cultivation that the work is expected to result in.

6. Publication of notice under section 4.-(1) The notice under section 4 shall be published in the village or villages concerned by affixing a copy thereof on the Village Chaupal, if any, and by announcing the contents of the notice at a prominent place, and also, if so directed by the Collector, by publishing it by beat of drum.

(2) The notice shall be in Form A appended to these rules.

(3) The copy of the notice to be served on the owners of land shall be so served in the manner prescribed for the service of summons and processes issued by revenue courts.

7. Particulars and documents to be embodied in or submitted with a draft scheme.-In addition to the documents specified in section 10 the draft scheme shall also be accompanied by the Khewat Nos., Khasra Nos. and particulars of the soil class, and rent of the land which would be benefited by the work, together with a description and address of the land-holders and tenants interested in the land.

8. Publication of notice under section 11 and particulars of draft scheme to be published. The notice under section 11 shall be published in the manner provided in Rule 6.

(2) The notice under section 11 shall be in Form B appended to these rules and shall contain the following particulars of the scheme namely: the category of scheme as mentioned in rule 3, the Khasra numbers of the land in which work would be situated, the Khasra numbers of the land to be acquired for the work and the estimated cost of the work.

9. Appeal against an order under section 16.-An appeal against an order under section 16 shall lie to the Collector of the district in which the land in relation to which or in relation to whose owner the order is made, falls and shall be preferred in the manner prescribed for the filings of appeals in revenue suits and proceedings.

10. Rates leviable under section 19.-In addition to the land revenue, or rent, payable by the owners, the owners of the land benefited by the scheme shall pay (a) in the case of owners executing an agreement under clause (h)(i) or clause (b)(ii) of sub-section (1) or sub-section (3) of section 10, the sums due under the said agreement:

(b) in the case of other owners, a rate per acre of the land benefited by the work which would yield an interest at six and a half percent per annum on the total

expenditure incurred on the construction and maintenance thereof; provided that the rate per acre shall in no case exceed rupees ten per acre per annum.

(2) The assessment shall be made by the Sub-Divisional Officer concerned.

(3) The sums due under clause (a) and the water rate due under clause (b) of this rule shall be payable along with the installment of revenue or rent and shall be recoverable as such.

11. Appeal under section 20.-An appeal against an order of assessment made under section 19 shall lie to the Collector of the district and shall be preferred in accordance with the procedure for the filings of appeals in revenue suits and proceedings.

12. Variation of rent. Any variation in rent under section 24 and 40 shall be made in the manner provided in section 120 of the Rajasthan Tenancy Act, 1955.

13. Remuneration to lambardars for collection of dues.-The remuneration to be paid for collection of water-rates shall be five per cent of the amount collected and this remuneration shall cover all expenses incurred in the collection of water-rates by the lambardars.

14. Publication of notice under section 38.-The notice under section 38 shall be given by affixing copies thereof on the notice board of the office of the Collector and the Tehsil office and in the nearest police station and on the Village Chaupal, and by announcement by beat of drum and, if so directed by the Collector, it may also be published in some newspaper having circulation in the locality.

15. Offence.-No person shall, without permission in writing of the officer in-charge

(1) pass or cause any animal or vehicle to pass on or across any work controlled under these rules except upon such bridges, fords and ferries and their approaches as are provided for public use, or

(2) fish in any such work by means other than a fishing rod:

and whosoever contravenes this rule shall be punishable under section 31.

25 Appendix 13: PANCHAYAT RAJ ACT 1994

THE FIRST SCHEDULE

(See section 50)

25.1 FUNCTIONS AND POWERS OF PANCHAYATS

I. General Functions:

- (i) preparation of annual plans for the development of the panchayat area:
- (ii) preparation of annual budget;(iii) mobilising relief's in natural calamities;.(iv) removal of encroachments on public properties.(v) organizing voluntary labor and contribution for community works;(vi) maintenance of essential statistics of village(s).

II. The Sphere of Administration:

- (i) the numbering of premises; (ii) the taking of census:(iii) the drawing up of programmes for increasing the out-put of agricultural produce in the panchayat circle;
- (iv) the preparation of the statement showing the requirement of supplies and finance needed for carrying out rural development schemes;(v) acting as a channel through which assistance given by the Central or State Government for any purpose reaches the panchayat circle;(vi) making surveys:(vii) the control of cattle stands, threshing-floors, grazing grounds and community lands;(viii) the establishment, maintenance and regulation of fairs, pilgrimages and festivals, not managed by the State Government or a Panchayat Samiti; (ix) the preparation of statistics of unemployment;(x) reporting to proper authorities of complaints which are not removable by the Panchayat;(xi) the preparation, maintenance and upkeep of panchayat records:(xii) the registration of births, deaths and marriages in such manner and in such form, as may be laid down by the State Government by general or special order in this behalf:
- (xiii) the preparation of plans for the development of village within the panchayat circle. '

III. Agriculture including Agriculture Extension:

- (i) promotion and development of agriculture and horticulture: (ii) development of waste lands: (iii) development and maintenance of grazing lands and preventing their unauthorised alienation and use. IV. Animal Husbandry, Dairying and Poultry:(i) improvement of breed of cattle, poultry and other livestock;(ii) promotion of dairy fanning, poultry and piggery;(iii) Grassland development.

V. Fisheries:

Development of fisheries in the village(s).

VI. Social and Farm Forestry, Minor Forest Produce, Fuel and Fodder:

planting and preservation of trees on the sides of village and district roads and other public lands under its control: fuel plantations and fodder development: promotion of farm forestry; development of social forestry and farmer nurseries.

VII. Minor Irrigation:

control and maintenance of tanks irrigating upto 50 acres.

VIII. Khadi, Village and Cottage Industries:

(i) promotion of rural and cottage industries;(ii) organisation of awareness camps, seminars and training programmes, agricultural and industrial exhibitions for the benefit of the rural areas.

IX. Rural Housing:

(i) Allotment of free house sites within its jurisdiction;(ii) maintenance of records relating to the houses, sites and other private and public properties.

X. Drinking Water:

(i) construction, repairs and maintenance of drinking water wells, tanks and ponds;(ii) prevention and control of water pollution;(iii) maintenance of hand pumps and tank schemes.

XI. Roads, Buildings, Culverts, Bridges, Ferries,

Waterways and other Means of Communication:

(i) construction and maintenance of village roads, drains and culverts;(ii) maintenance of buildings under its control or transferred to it by the Government or any public authority;(iii) maintenance of boats, ferries and waterways.

XII. Rural Electrification Including Providing for and Maintenance of Lighting of Public Streets and other Places

XIII. Non-Conventional Energy Source:

(i) promotion and maintenance of non-conventional energy schemes;(ii) maintenance of community non-conventional energy devices, including bio-gas plants;(iii) propagation of improved chulhas and other efficient energy devices.

XIV. Poverty Alleviation Programme - (i) promotion of public awareness and participation in poverty alleviation programmes for fuller employment and creation of productive assets etc.;

(ii) selection of beneficiaries under various programmes through Gram Sabhas;

(iii) participation in effective implementation and monitoring of the aforesaid;

XV. Education (Primary):

(i) promotion of public awareness and participation in village education committees for total literacy programme;(ii) ensuring full enrolment of boys and especially girls and attendance in primary schools and its management.

XVI. Adult and Non-Formal Education:

Promotion and monitoring of adult literacy programme.

XVII. Libraries: village libraries and reading rooms.

XVIII. Cultural Activities: promotion of social and cultural activities.

XIX. Markets and Fairs: Regulation of fairs (including cattle fairs) and festivals

XX. Rural Sanitation: (i) maintenance of general sanitation; (ii) cleaning of public roads, drains, tanks, wells and other public places; (iii) maintenance and regulation of burning and burial grounds; (iv) construction and maintenance of rural latrines facility parks, bathing platforms, soak pits etc.; (v) disposal of unclaimed corpses and carcasses; (vi) management and control of washing and bathing ghats.

XXI. Public Health and Family Welfare:

(i) implementation of family welfare programmes; (ii) prevention and remedial measures against epidemics; (iii) regulation of sale of meat, fish and other perishable food articles; (iv) participation in programmes of human and animal vaccination:

(v) licensing of eating and entertainment establishments; (vi) destruction of stray dogs; (vii) regulation of curing, tanning and dyeing of skins and hides; (viii) regulation of offensive and dangerous trades.

XXII. Women and Child Development:

(i) participation in the implementation of women and child welfare programmes: (ii) promotion of school health and nutrition programmes; (iii) supervision of Anganwadi Centers.

XXIII. Social Welfare including Welfare of the Handicapped and Mentally Retarded:

(i) participation in the implementation of the social welfare programmes including welfare of the handicapped, mentally retarded and destitute; (ii) assisting in old-age and widows pension and social insurance schemes.

XXIV. the Weaker Sections and in particular the Castes and Scheduled Tribes:

Welfare of Scheduled

(i) promotion of public awareness with regard to welfare of Scheduled Castes, Scheduled Tribes, Backward Classes and other weaker sections: (ii) participation in the implementation of the specified, programmes for the welfare of the weaker sections.

XXV. Public Distribution System:

(i) promotion of public awareness with regard to the distribution of essential commodities; (ii) monitoring the public distribution system.

XXVI. Maintenance of Community Assets:

(i) maintenance of community assets; (ii) preservation and maintenance of other community assets.

XXVII. Construction and Maintenance of Dharamshalas and similar Institutions.

XXVIII. Construction and Maintenance of Cattle Sheds, Ponds, and Cart Stands.

XXIX. Construction and Maintenance of Slaughter Houses. XXX. Maintenance of Public Parks, Playgrounds etc.

XXXI. Regulation of Manure Pits in Public places.

XXXII. Regulation of Liquor Shops.

XXXIII. General Powers of the Panchayats: . To do all acts necessary for or incidental to .the carrying out of the functions entrusted, assigned or delegated to it and, in particular, and without prejudice to the foregoing power, to exercise all powers specified under this Act.

25.2 THE SECOND SCHEDULE

(See section 51)

Functions and Powers of Panchayat Samitis

I. General Functions:

(i) preparation of the Annual Plans in respect of the schemes entrusted to it by virtue of the Act and those assigned to it by the Government or the Zila parishad and submission thereof to the Zila Parishad within the prescribed time for integration with the District Plan; (ii) consideration and consolidation of the Annual Plans of all Panchayats in the Panchayat Samiti area and submission of the consolidated plan to the Zila Parishad: (iii) preparation of Annual Budget of the Panchayat Samiti; (iv) performing such functions and executing such works as may be entrusted to it by the Government or Zila Parishad; (v) providing relief in natural calamities.

II. Agriculture, including Agriculture Extension:

(i) promotion and development of agriculture and horticulture; (ii) maintenance of horticultural nurseries; (iii) assistance to registered seed growers in distribution of seeds: (iv) popularisation of manures and fertilizers and their distribution; (v) propagation of improved methods of cultivation; (vi) plant protection, development of cash crops in accordance with policy of the State Government: (vii) promotion of cultivation of vegetables, fruits and flowers: (viii) Assistance in providing credit facilities for development of agriculture; (ix) training of farmers and extension activities.

III. Land Improvement and Soil Conservation:

assisting the Government and Zila Parishads in the implementation of land improvement and soil conservation programmes of the Government.

IV. Minor Irrigation, Water Management and Watershed Development:

(i) construction and maintenance of minor irrigation works, anicuts, lift irrigation, irrigation wells, bunds, mud bunds; (ii) implementation of community and individual irrigation works.

V. Poverty Alleviation Programmes:

Planning and implementation of poverty alleviation programmes and schemes especially Integrated Rural Development Programme, Training of Rural youth Self Employment. Desert Development Programme, Drought Prone Area Programme, Tribal Area Development. Modified Area Development Approach, Scheduled Caste Development Corporation Schemes etc.

VI. Animal Husbandry, dairying and Poultry:

(i) inspection and Maintenance of veterinary and animal husbandry services;(ii) improvement of breed of cattle, poultry and other live stock; (iii) Promotion of dairy farming, poultry and piggery; (iv) prevention of epidemics and contagious diseases; (v) introduction of improved fodder and feeds.

VII. Fisheries: Promotion of fisheries development.

VIII. Khadi, Village and Cottage Industries:

(i) promotion of rural and cottage industries; (ii) organisation of conferences, seminars and training programmes, agricultural and industrial exhibitions; (iii) training of unemployed rural youth with master craftsman and technical training-institutes; (iv) popularisation of modern scientific methods of increased productivity.

IX. Rural Housing: implementation of Housing Schemes and recovery of housing loan installments.

X. Drinking Water:

(i) monitoring, repair and maintenance of Hand Pumps and Pump and Tank Scheme of Panchayats, (ii) maintenance of rural water supply schemes; (iii) prevention and control of water pollution; (iv) implementation of rural sanitation schemes.

XI. Social and farm Forestry, fuel and fodder:

(1) planting and preservation of trees on the sides of roads and other public lands under its control especially pasture lands; (ii) fuel plantation and fodder development;

(iii) promotion of farm forestry; (iv) waste land development.

XII. Roads, Buildings, Bridges, Ferries, Waterways and Other Means of Communication:

(i) construction and maintenance of public roads drains, culverts and other means of communication which are not under the control of any other local authority or the Government; (ii) maintenance of any building or other property vested in the Panchayat Samiti; (iii) maintenance of boats, ferries and waterways.

XIII. Non-Conventional Energy Sources:

promotion and maintenance of non-conventional energy sources especially solar lights and such other devices.

XIV. Education Including primary Schools:

(i) running of primary education including total literacy programmes and especially girls education; (ii) construction, repair and maintenance of primary schools buildings and teachers quarters; (iii) promotion of social education through youth clubs and Mahila Mandals; (iv) distribution of text books, scholarships, dresses and other incentives to SC/ST/OBC poor students.

XV. Technical Training and Vocational Education: promotion of rural artisan and vocational training. XVI. Adult and Non-formal Education:

(i) establishment of information, community recreation centers and libraries; (ii) implementation of Adult literacy.

XVII. Cultural Activities: promotion of social and cultural activities, exhibitions, publications.

XVIII. Markets and Fairs: regulation of fairs and festivals including cattle fairs. **XIX.**

Health and Family Welfare: (i) implementation of health and family welfare programme; (ii) monitoring of immunization and vaccination programmes; (iii) health and sanitation at fairs and festivals; (iv) inspection and control of Dispensaries (Allopathic and Ayurvedic, Unani, Homoeopathic) Community and Primary. Health Centers, Sub-Centers etc.

XX. Women and Child Development:

(i) implementation of programmes relating to development of women and children; (ii) implementation of school health and nutrition programmes through Integrated Child Development Schemes; (iii) promotion of participation of voluntary organizations in Women and Child Development Programmes; (iv) formation of Development of Women and Child in Rural Area groups for economic development and assistance in procurement of material and marketing.

XXI. Social Welfare including Welfare of the Handicapped and Mentally Retarded: (i) social welfare programmes including welfare of handicapped, mentally retarded and destitute; (ii) sanctioning the old age and widow's pensions and pensions for the handicapped.

XXII. Welfare of the Weaker sections and in Particular of the Scheduled Castes, Scheduled Tribes and Backward Classes: (i) promotion of welfare of Scheduled Castes, Scheduled Tribes, Backward Classes and other weaker sections; (ii) protecting such castes and classes from social injustice and exploitation.

XXIII. Maintenance of Community Assets: (i) maintaining all community assets vested in it or transferred by the Government or any local authority or organisation; (ii) preservation and maintenance of other community assets.

XXIV. Statistics: Collection and compilation of such statistics as may be found necessary by Panchayat Samiti, Zila Parishad or the State Government.

XXV. Emergency Relief: in case of fire, flood, epidemics and other wide-spread calamities.

XXVI. Cooperation: promotion of cooperative activities by helping in establishing and strengthening of Cooperative Societies.

XXVII. Libraries: promotion of libraries.

XXVIII. Supervision of and Guidance to the Panchayats in all their Activities and Formulation of Village and Panchayat plans.

XXIX. Miscellaneous:(i) encouragement of thrift through small savings and in Insurance; (ii) assisting in preparation and payment of social insurance claims in case of accident, fire, death etc. including cattle insurance.

XXX. General Powers of the Panchayat Samitis:

to do all acts necessary for or incidental to the carrying out of the functions entrusted, assigned or delegated to it and, in particular, and without prejudice to the foregoing power, to exercise all powers specified in this Act.

25.3 THE THIRD SCHEDULE

(See Section 52)

I. General Functions:

To prepare plans for economic development and social justice of the district, and to ensure the coordinated implementation of such plans in respect of matters including those enumerated in the items following.

II. Agriculture:

(I) Promotion of measures to increase agricultural production and to popularize the use of improved agricultural implements and the adoption of improved agricultural practices; (ii) conduction agricultural fairs and exhibitions; (iii) training of farmers; (iv) land improvement and soil conservation.

III. Minor Irrigation, Ground water resources and watershed Development:

(i) construction, renovation and maintenance of "C" & "D" class minor irrigation works upto 2500 acres and lift irrigation; (ii) Providing for the timely and equitable distribution and full use of water under irrigation schemes under the control of Zila Parishad and revenue realization; (ii) development of ground water resources; (iii) installation .of Community Pump sets; (iv) watershed development programme.

IV. Horticulture:

(i) rural parks and gardens; (ii) cultivation of fruits and vegetables.

V. Statistics:

(I) Publication of statistical and other information relating to activities of Panchayat Samitis and Zila Parishad: (ii) coordination and use of statistics and other information required for the activities of the Panchayat Samitis and Zila Parishad; (iii) Periodical supervision and evaluation of projects and programmes entrusted to the Panchayat Samitis and Zila Parishad.

VI. Rural Electrification:

(I) Monitoring the priority of Rural Electrification;
(ii) Connections, especially power connections, Kutir Jyoti and other connections.

V . Soil Conservation:

(i) soil conservation works; (ii) land development works.

VIII. Social Forestry:

(i) Promotion of social and farm forestry, plantation and fodder development; (ii) development of waste land; (iii) organisation' and campaigning for tree planting and encouragement of farmer nurseries; (iv) planting and maintenance of trees except in forest lands; (v) road side plantation except Highways and major district roads.

IX. Animal Husbandry and Dairying: (i) establishment and maintenance of Veterinary Dispensaries except District and raferal hospitals: (ii) fodder development programmes; (iii) promotion of dairy farming, poultry and piggery; (iv) prevention of epidemics and contagious diseases.

X, Fisheries:

(i) all programmes of fish farmers Development agency; (ii) development of pisciculture in private and community tanks; (iii) assistance to traditional fishing; (iv) organising fish marketing cooperatives; (v) welfare schemes for the uplift and development of fishermen.

XI. Household and Cottage Industries:

(i) identification of traditional skills in the locality and development household industries; (ii) assessment of raw material requirements so as to ensure timely supply; (iii) design and production to suit the changing consumer demand; (iv) Organization of training programme for craftsmen and artisan: (v) Liaison to tap bank credit for the programme under sub item (iv); (vi) promoting Khadi, Handloom, Handicraft and village and cottage industries.

XII. Rural roads and Buildings:

- (i) construction and maintenance of roads other than National and State Highways:
- (ii) bridges and culverts coming under roads other than National and State Highways;
- (iii) construction and maintenance of office buildings of the Zila Parishad; (iv) identification of major link roads connecting markets, educational institutions, health centers and link roads in interior areas; (v) organising voluntary surrender of lands for new roads and for widening of existing roads.

XIII. Health and Hygiene's:

- (i) establishment and maintenance of community and Primary ; Health Centers, Dispensaries, Sub-Centers; (ii) establishment and maintenance of Ayurvedic, Homeopathic, Anion Dispensaries; (iii) implementation of immunization and vaccination programme; (iv) health education activities; (v) maternity and child health activities; (vi) family welfare activities; (vii) organising health camps with assistance of Panchayat Samitis and Panchayats; (viii) measures against environment pollution.

XLV. Rural Housing: (i) identification of houseless families; (ii) implementation of house building programmes in the district; (iii) popularizing low cost housing.

**XV. Ed
ucation:**

- (i) promotion of educational activities including the establishment and maintenance of upper primary schools; (ii) planning of programmes for Adult Education and Library facilities; (iii) extension work for propagation of science and technology to rural areas; (iv) survey and evaluation of educational activities.

XVI. Social Welfare and Welfare of weaker sections:

- (i) extension of educational facilities to the Scheduled Castes, Scheduled Tribes and Backward Classes by giving scholarships, stipends, boarding grants and other grants for the purchase of books and other accessories; (ii) organising nursery schools, balwadis, night schools, and libraries to eradicate illiteracy and impart general education: (iii) conduct of Model Welfare Centers and Craft Canters to train Scheduled Castes, Scheduled Tribes and in Backward Classes in cottage and rural industries; (iv) providing facilities for marketing of goods produced by members of the Scheduled Castes, Scheduled Tribes and Backward Classes: (v) organising cooperative societies of scheduled Caste, Scheduled Tribes and Backward Classes; (vi) other welfare schemes for the uplift and development of Scheduled Castes, Scheduled Tribes and Backward Classes.

XVII. Poverty Alleviation Programmes: Planning, Supervision, Monitoring and

implementation of poverty alleviation programmes.

XVIII. Social Reform Activities: (i) women's organisation and welfare: (ii) children's

organisation and welfare: (iii) local vagrancy relief: (iv) monitoring of sanctioning and

distribution of pension for widows, old and physically disabled destitute and allowances for unemployed and couples of inter-caste marriage in which one party is a member of a Scheduled Caste or a Scheduled Tribe; (v) control of fire outbreaks; (vi) campaign against superstition, casteism, untouchability, alcoholism, expensive marriage and social functions, dowry and conspicuous consumption; (vii) encouraging community marriage and inter caste marriages; (viii) vigilance against economic offences such as smuggling, tax evasion, food adulteration; (ix) assistance for developing lands assigned to landless labourers; (x) resumption of lands alienated by tribals: (xi) to identify, free and rehabilitate bonded labour: (xii) to organise cultural and recreation activities; (xiii) encouragement of sports and games and construction of rural stadium; (xiv) to give new form and social content to traditional festivals; (xv) promotion of thrift and savings through: (a) promotion of saving habits; (b) small savings campaign; (c) fight against spurious money lending practices and rural indebtedness.

XIX. General Powers of the Zila Parishads:

to do all acts necessary for or incidental to the carrying out of the functions entrusted assigned or delegated to it and, in particular, and without prejudice to the foregoing power, to exercise all powers specified in this Act and specially those necessary to :

(i) manage or maintain any work of public utility or any institute vested in it or under its control and management; (ii) acquire and maintain village hats and markets; (iii) distribute ad hoc grants to Panchayat Samitis or Panchayats and coordinate their work; (iv) adopt measures for the relief of distress; (v) coordinate and integrate the development plans and schemes prepared by Panchayat Samitis in the district: (vi) examine and sanction the budget estimates of Panchayat Samitis in the district; (vii) undertake or execute: any scheme extending to more than one block; (viii) organise camps, seminars, conferences of Panchas, Sarpanchas, Pradhans and members of Panchayat Samitis in the district: (ix) require any local authority to furnish information regarding its activities; (x) to jointly undertake and execute any development schemes on such terms and conditions as may be mutually agreed upon between the Zila Parishads of two or more adjacent districts

26 Appendix 14: THE RAJASTHAN SOIL AND WATER CONSERVATION ACT, 1964 :- (Act No. 1 of 1965)

An Act to provide for the conservation and improvement of soil and water resources in the State of Rajasthan

Be it enacted by the Rajasthan State Legislature in the Fifteenth Year of the Republic of India as follows:

CHAPTER I Preliminary

1. Short title and commencement.-(1) This Act may be called the Rajasthan Soil and Water Conservation Act, 1964.

(2) It shall come into force at once in the districts mentioned in the First Schedule. In the remaining districts it shall come into force on such date as the State Government may, by notification in the Official Gazette, appoint in this behalf and different dates may be appointed for different districts.

2. Definitions.-In this Act, unless the context otherwise requires,

(a) "beneficiary", in relation to any land benefited or likely to be benefited by the execution of a plan means

(i) in the case of land held by a khatedar tenant, such tenant; and

(ii) in any other case, any owner, holder or occupier of land whom the District Soil Conservation Officer, in view of the nature of his interest in land and the benefits or likely benefits to the land from the execution of the plan, declares in the prescribed manner to be the beneficiary;

(b) "Board" means the Rajasthan Soil and Water Conservation Board established under section 8;

(c) "Collector" includes any person whom the State Government may, by notification in the Official Gazette, appoint or designate to exercise and perform the powers and duties of a Collector under this Act;

(d) "District committee" means the District Soil and Water Conservation Committee established under section 11;

(e) "District Soil Conservation Officer" means an officer appointed under section 14;

(f) "erosion" means the removal or displacement of earth, stones or other materials by the action of wind or water;

(g) "Executive Officer" means an officer appointed under section 23 to execute a plan;

(h) "Inquiry Officer" means an officer appointed under section 18;

(i) "khatedar tenant" means a tenant recognised as such under the Rajasthan Tenancy, 1955 (Rajasthan Act 3 of 1955);

- (j) "plan" means a plan prepared under this Act;
- (k) "prescribed" means prescribed by rules made under this Act;
- (1) "reclamation" means cultivation, afforestation or any other improvement of land; "soil and water conservation" means reclamation, maintenance and improvement of soil and water resources and includes proper land utilization according to its potentialities; and any of the measures mentioned in the Second Schedule;
- (n) "State Soil Conservation Officer" means the officer appointed or designated by the State Government as such for the purposes of this Act;
- (o) "waste land" means any land lying waste on account of water logging, salinity, accumulation of sand, growth of weeds, soil erosion or any other cause or lying uncultivated, for not less than three consecutive years;
- (p) "work" means any work carried out under a plan and includes pasture or forest provided for or raised under the plan;
- (q) the expression "cattle", "forest produce", "timber" and "tree" have the meanings respectively assigned to them in the Rajasthan Forest Act, 1953 (Rajasthan Act 13 of 1953); and
- (r) the expression "block", "Panchayat Samiti" and "Zila Parishad" have the meanings respectively assigned to them in the Rajasthan Panchayat Samitis and Zila Parishads Act, 1959 (Rajasthan Act 37 of 1959).

26.1 CHAPTER II

Notification of Areas and Control over them

3. Notification of areas.-Whenever it appears to the State Government that in any area it is desirable to provide for soil and water conservation, the State Government may, by notification in the Official Gazette, declare the area to be a notified area for the purposes of this Act..

4. Power to regulate, restrict or prohibit certain matters within , notified areas.-In respect of any notified area or part thereof, the State Government may, by order published in the Official Gazette, regulate, restrict or prohibit

(a) the clearing or breaking up of land for cultivation; (b) the quarrying of stone or the burning of lime:

(c) the cutting of trees and timber or the collection or removal or subjection to any manufacturing process. otherwise than as described in clause (b), of any forest produce for raw purpose;

(d) the setting on fire of trees, timber or forest produce;

(e) the admission, herding, pasturing, or retention of cattle or any class or description of cattle; and

(f) the grant of permits to the inhabitants of towns and villages situated within the limits or in the vicinity of the area specified in the order

(i) to take any tree, timber or forest produce for their own use, or

(ii) to pasture cattle, or

(iii) to erect buildings in such areas,

and the production and return of such permits by such persons.

5. Proclamation of order under section 4 and admission of claims for compensation.-

(1) Upon the publication of an order under section 4, the Collector shall cause to be published, in every village or town in which any part of the area specified in such order is situated, a proclamation, in Hindi written in Devnagri script, as provided in sub-section (2).

(2) The proclamation referred to in sub-section (1) shall contain the terms of the order and shall also require every person claiming any compensation in respect of any right, the exercise of which is restricted or prohibited by the order, to prefer his claim to the Collector with such particulars and within such period as may be prescribed.

(3) Any claim not preferred within the prescribed period shall be rejected:

Provided that the Collector may admit a claim after such period if he is satisfied that the claimant had sufficient cause for not preferring the claim within such period.

6. Inquiries into claims and award of compensation.- (1) The Collector shall proceed to inquire, in the prescribed manner, into every claim admitted under section 5.

(2) For the purpose of such inquiry, the Collector may exercise all or any of the powers of a civil court for the trial of suits under the Code of Civil Procedure, 1908 (Central Act 5 of 1908).

(3) The Collector shall, after such inquiry, make an award in writing with respect to each such claim, setting out therein the following particulars, namely:

(i) the person making the claim;

(ii) the nature and extent of the right claimed; (iii) the extent to which the claim is upheld; and

(iv) the amount of compensation awarded and the persons to whom it is payable.

(4) The Collector shall give notice in the prescribed manner of his award to claimants or their representatives and to the person to whom compensation is payable.

7. Method of awarding compensation.- (1) In determining the amount of compensation, the Collector shall be guided, so far as may be, by the provisions of section 23, 24 and 24A of the Rajasthan Land Acquisition Act, 1953 (Rajasthan Act 24 of 1953) and as regards matters which cannot be dealt with under those provisions, by what is just and reasonable in the circumstances of each case.

(2) The Collector may,, with the sanction of the State Government and the consent of the person entitled, instead of money, award compensation by reduction of revenue or in any other form.

(3) If any case the exercise of any right is prohibited or restricted for the time only, compensation shall be awarded only in respect of the period during which the exercise of such right is so prohibited or restricted.

26.2 CHAPTER III

Administrative Machinery

8. Establishment and constitution of Soil and Water Conservation Board.-(1) As soon as may be after the commencement of this Act, there shall be established by the State Government, by notification in the Official Gazette, a Board for the State called the Rajasthan Soil and Water Conservation Board.

(2) The Board shall consist of the following members, namely:

(a) the Minister in charge of the Agriculture Department, who shall also be the Chairman;

(b) three members of the Rajasthan Legislative Assembly to be nominated by the State Government;

(c) the Development Commissioner, Rajasthan;

(d) the Secretary to the Government, Agriculture Department; (e) the Secretary to the Government, Revenue Department; (f) the Secretary to the Government, Forest Department;

(g) the Secretary to the Government, Finance (Expenditure) Department:

(h) the Director of Agriculture, Rajasthan;

(i) the Chief Conservator of Forests, Rajasthan;

(j) the Director of Animal Husbandry, Rajasthan; (k) the Chief Engineer, Irrigation, Rajasthan;

(1) one representative of, and proposed in the prescribed manner by, the Rajasthan Branch of the Farmers Forum; and

(m) members not exceeding five to be nominated by the State Government from amongst person interested in soil and water conservation.

(3) The State Soil Conservation Officer, Rajasthan, and the Soil Conservation Officer, Forest Department, Rajasthan, shall respectively be the Secretary and Additional Secretary of the Board.

(4) All communications and order of the Board shall be issued by the Secretary of the Board or by such officer as may be specially authorized by the Board in this behalf.

9. Term of office of members.- (1) The term of office of member referred to in clause (b) and clause (1) of sub-section (2) of section 8 shall be five years:

Provided that the term of office of a member nominated under clause (b) or (1) of sub-section (2) of section 8, to fill a casual vacancy shall be for the remainder of his predecessor's term of office.

(2) The term of office of a member nominated under clause (m) of sub-section (2) of section 8 shall be two years.

(3) When a member ceases to hold the office by virtue of which he become eligible for the membership of the Board he shall cease to be such member.

(4) A non-official member may, at any time by notice in writing to the chairman, resign his office.

10. Functions of the Board.- The functions of the Board shall be

(a) to lay down policy for soil and water conservation in the state;

(b) to advise the State Government regarding matters pertaining to soil and water conservation;

(c) to devise ways and means for co-ordinating the work under the plans and for eliminating any difficulties in relation thereto;

(d) to consider and approve the soil and water conservation plan for the State or any part thereof;

(e) to scrutinize the progress made under the plans;

(f) to perform such other functions as may be specified by or under this Act.

11. Establishment and constitution of District Soil and Water Conservation Committees.- (1) There shall be established for each district a District Soil and Water Conservation Committee.

(2) The District Committee shall consist of

(a) the collector, who shall also be the chairman thereof;

(b) the Pramukh of the Zila Parishad;

(c) the Executive Engineer, Irrigation Department, exercising jurisdiction in the district or any part thereof;

(d) the Divisional Forest Officer exercising jurisdiction in the district or any part thereof;

(e) the District Agriculture Officer exercising jurisdiction in the district or any part thereof;

(f) the District Soil Conservation Officer;

(g) a person interested in soil and water conservation chosen annually by the Zilla Parishad:

Provided that an Executive Engineer or a Divisional Forest Officer or a District Agriculture Officer shall have a right of participation in only such proceedings of the District Committee as relate to a plan covering an area in which he exercises jurisdiction as such Engineer or Officer.

(3) The District Committee may, for the purpose of assisting it in the consideration of any plan, prepared for any area, co-opt one person from amongst farmers of that area:

Provided that such co-opted member shall have a right of participation in only such proceedings of the District Committee as relate to the plan for consideration of which he has been co-opted and any dispute as to the right of such participation shall be decided by the chairman of the District Committee whose decision in the matter shall be final.

(4) The District Soil Conservation Officer shall be the ex-officio Secretary of the District Committee.

(5) All communications and order of the District Committee shall be issued by the Secretary of the Committee or by such officer subordinate to him as may be authorized by the District Committee in this behalf.

12. Functions of District Committee. -The functions of the District Committee shall be

- (a) to take steps to educate people in soil and water conservation;
- (b) to direct the District Soil Conservation Officer to make survey, collect data and prepare plans for the district or any selected area, or catchments therein and to perform functions incidental thereto;
- (c) to consider the plan and, subject to prescribed conditions, approve the same;
- (d) to take steps to ensure proper execution of the plans and to watch the progress of work hereunder;
- (e) to make recommendations to the Board for securing efficient administration of the plans;
- (f) to carry out the directions issued by the Board from time to time with regard to a plan; and
- (g) to perform such other functions as may be specified by or under this Act.

13. Functions of Panchayat Samiti.-The functions of the Panchayat Samiti shall be

- (a) to take steps to educate people in soil and water conservation;
- (b) to prepare a soil and water conservation plan for the block;
- (c) to perform such other functions pertaining to soil and water conservation in the block or any selected area or catchment therein as may be specified in this Act or the rules made thereunder;

(d) to carry out instructions issued by the Board or the District Committee, as the case may be, from time to time.

14. District Soil Conservation Officer.-(1) The State Government shall appoint for every district a District Soil Conservation Officer: Provided that one person may be appointed to be the District Soil Conservation Officer for_ more than one district or more than one person may be appointed to be District Soil Conservation Officer in the same district.

(2) The District Soil Conservation Officer shall perform such functions as may be specified by or under this Act.

26.3 CHAPTER IV

Preparation of Soil and water Conservation Plan

15. Power of State Government to require the Board to prepare plans.-(1) The State Government may, by order, direct the Board that soil and water conservation be undertaken in any notified area or part thereof.

(2) Subject to any rules that may be made in this behalf the Board may, and if so directed by the State Government under sub- section (1) shall, prepare or cause to be prepared a plan setting out

(a) the extent and details of the area to be covered by the plan:

(b) the details about the proposed work;

(c) the programme for the execution of the plan;

(d) the ways and means for the execution of the plan;

(e) the agency or agencies through which the work shall be executed;

(f) the names or particulars of the persons (including the Government) who will be affected by the plan; and

(g) such other particulars as may be prescribed.

16. Preparation of plan by District Committee.-(1) Subject to any rules that may be made in this behalf, the District Committee may, and if so directed by the Board shall, direct that soil and water conservation be undertaken in the district or any part thereof.

(2) On the direction of the District Committee under sub-section (1), the District Soil Conservation Officer shall prepare a draft of the plan setting out the particulars stated in clauses (a) to (g) of sub-section (2) of section 15.

(3) The draft plan shall be placed for the District Committee which shall consider the same and forward it with their comments to the Board; the Board may, subject to the provisions contained in the proviso to sub-section (1) of section 21, approve the draft plan with or without modifications and may reject it and prepare or cause to be prepared another draft plan:

Provided that the State Government may prescribe the circumstances in and the conditions subject to which the District Committee, and in the case of plans prepared by the Panchayat Samiti, the District Soil Conservation Officer also, may approve and sanction such plans; and to the plan so approved, the provisions of section 18 to 21 shall apply as if for the word "Board" therein, wherever occurring the words "the District Committee or the District Soil Conservation Officer, as the case may be," were substituted.

17. Preparation of plan by Panchayat Samiti.-The Panchayat Samiti may, and if so directed by the District Committee or the Board shall, prepare, or cause to be prepared, a draft of the plan for soil and water conservation in the block or any part thereof setting out the particulars specified in clauses (a) to (g) of sub-section (2) of section 15; the draft plan so prepared shall be placed before the District Committee which shall consider and forward the same with their comments to the Board or may approve and sanction the same in accordance with the provisions contained in the proviso to sub-section. (3) of section 16:

Provided that in cases in which the District Soil Conservation Officer is competent to approve and sanction the plan, such plan shall be forwarded to such officer for approval and sanction.

18. Inquiry Officer. -Whenever the Board approves any draft plan, or itself prepares or causes to be prepared a draft-plan. it shall appoint an officer called the Inquiry Officer for the purposes hereinafter specified:

Provided that where the District Soil Conservation Officer approves a plan, he may himself act as Inquiry Officer for the purposes hereinafter specified.

19. Publication of draft plan.-(1) Copies of every draft plan approved or prepared, shall be forwarded to the Inquiry Officer and the Inquiry Officer shall prepare a notice in the prescribed form stating at what place and what time the plan shall be open to inspection by the public free of charge and such other particulars as may be prescribed. The notice shall be published in the prescribed manner. It shall also be published by beat of drum in the village or villages to which the draft plan relates.

(2) A copy of the draft plan prepared by the District Committee under section 16 shall be sent to the Panchayat Samiti of the block in which the work is to be carried out. The Samiti shall consider the plan in a meeting to be called for the purpose and may, within thirty days of the receipt of the draft plan, make such objections or suggestions in writing to the Inquiry Officer as it may deem necessary.

(3) On publication of the notice under sub-section (1), any person likely to be affected by the plan may, within thirty days from the date of publication by beat of drum, make objections in writing to the Inquiry Officer.

20. Inquiry Officer to consider objections and submit report to Board.-The Inquiry Officer shall inquire into the objections and suggestions, received or recorded by him and submit them to the Board through the District Committee or Committees concerned together with his report thereon and his recommendations, if any, for the modification of the draft plan.

21. Power of Board to sanction or reject draft plan.-(1) After considering the objections and suggestions and the report and recommendations of the Inquiry Officer and any further report which the Board may require from him, and the comments of the District Committee, if any, the Board may sanction the draft plan with or without modifications or may reject it and direct that in lieu thereof, a fresh draft plan be prepared and submitted for its sanction:

Provided that it shall submit the draft plan to the State Government for its order,- -

(a) where the beneficiaries of more than fifty per cent of the area of the lands included in the draft plan other than Government lands have made objections to the draft plan or part thereof; or

(b) where the draft plan has been prepared in pursuance of order of the State Government under section 15.

(2) Where a draft plan is submitted to the State Government under sub-section (1), it may sanction the draft plan with or without modifications or may reject it and direct that a fresh plan be prepared and submitted for its sanction.

(3) The copies of the plan as sanctioned by the Board or the State Government, as the case may be, shall be made available in every village and at the headquarters of the sub-division in which the lands included in the plan are situate, at such place and in such manner as the Executive Officer may direct. The Executive Officer shall prepare a notice in the prescribed form stating at what place and time the plan shall be open to inspection by public free of charge and such other particulars as may be prescribed. The notice shall be published in the Official Gazette.

-(4) The plan shall come into force and shall have effect as if it was enacted in this Act on and from the date of publication of the notice, under sub-section (3), in the Official Gazette.

(5) The Board may, for the purpose of carrying out the objects of the plan which has come into force under sub-section (4), make regulations requiring any person or persons or the public generally to take certain action or to refrain from taking certain action in respect of any matters supplemental or incidental to the plan.

22. Subsequent changes and correction of errors in the plan. Notwithstanding anything contained in section, the Executive Officer

(a) may make such minor changes in the plan as are at any stage necessitated by the charges that may occur in the land due to any unforeseen circumstances:

Provided that no such change shall be made to the prejudice of any beneficiary without allowing him an opportunity of being heard;

(b) may, if satisfied that a clerical or arithmetical error exists in the plan, correct the same in the prescribed manner, either on his own motion or on the application of an interested person.

26.4 Chapter V Execution of the plan

23. Appointment of Executive Officer. -Subject to any general or special direction, which the State Government may issue in this behalf, where a plan has been sanctioned by the District Committee, the District Committee and where it has been ,sanctioned by the District Soil Conservation Officer, such officer and in other cases, the Board shall, when a plan comes into force, appoint an officer, called the Executive Officer, to execute it.

24. Directions to execute work.-(1) The Executive Officer may, by notice require any beneficiary to carry out at his own cost any work specified in the notice in the manner and within the period mentioned therein.

(2) Where a beneficiary intimates in writing, to the Executive Officer that he is unable to carry out the work within the time aforesaid or if the work is not carried out to the satisfaction of the Executive Officer by the date fixed in that behalf or within such further time as he may allow, the Executive Officer shall get the work carried out and recover the expenses incurred from the beneficiary as arrears of land revenue.

(3) Notwithstanding anything contained in sub-sections (1) and (2), where the plan is sanctioned by the State Government or the Board, the Board or where it is sanctioned by the District Committee, such committee, or where it is sanctioned by the District Soil Conservation Officer, such officer is of the view that it will be in the interest of the general public to have a work carried out by the Executive Officer it may direct the said officer to carry out the work and the cost of such work shall be recovered by the Executive Officer from the beneficiary or from the beneficiaries in such proportion as the Board or the District Committee or the District Soil Conservation Officer, as the case may be, may fix.

(4) If the costs are not paid by the beneficiary or the beneficiaries within the prescribed time, such beneficiary or beneficiaries shall also be liable to pay such interest thereon at such rate as may be prescribed.

(5) The costs directed to be recovered under sub-section (4) together with interest as aforesaid shall be recoverable from the beneficiaries concerned in such number

of equated annual installments payable on the date appointed for payment of the first installment of land revenue as may be prescribed.

25. Liability of persons whose lands are not included.- (1) If in consequence of any work carried out under the plan, any person (including the Government) other than the beneficiary of the land in which the work is done, is likely to be benefited, such person shall pay such amount and within such time as the Board may determine, to the beneficiary of the land in which the work has been carried out if the work is carried out by him, or to the Government if the work is carried out by the Executive Officer: Provided that before any person is required to pay any such contribution, he shall be given a reasonable opportunity of making his representations, if any, in regard to the matter: Provided further that any such contribution may be waived by the Government in whole or in part in respect of any work carried out in hand owned and held by it.

(2) If default is made in the payment such contribution within the time determined in that behalf in pursuance of sub-section (1), the Collector or any officer authorized by him in this behalf shall recover it from the defaulter and pay the same to the beneficiary of the land in which the work has been carried out in such manner as may be prescribed.

26. Executive Officer to make report.- (1) The Executive Officer shall report to the District Committee and to such officer or authority and in such form and at such intervals as may be prescribed the progress made in the execution of plans.

(2) A copy of the progress report shall also be forwarded to the State Soil Conservation Officer.

(3) The Executive Officer shall submit a quarterly report on the progress of the plans to the Board.

26.5 CHAPTER VI

Maintenance, report and use of works carried out under the plan

27. Preparation of statement.- (1) The Executive Officer or any other officer specially authorized by the State Government in this behalf shall on completion of the work prepare a statement giving for any specified area the following particulars:

(a) (i) the work done; (ii) the cost thereof;

(iii) the total amount to be recovered from the beneficiaries;

(iv) the general rate per acre or per rupee of assessment per annum at which such amount is to be recovered from the beneficiaries;

(v) the period within which such amount is to be recovered; and

(vi) the work which in his opinion shall be maintained and repaired individually or jointly and the name of every such person;

(b) if in the case of any survey number or sub-division of survey number the beneficiary is not liable to repair or maintain works therein, or if the cost is to be recovered from a beneficiary at a rate other than the general rate,

a list of such survey numbers of sub-divisions and the rate at which the cost is to be recovered from the beneficiary or beneficiaries of such survey numbers or sub-divisions;

(c) a map showing the work carried out in the village; and (d) such other matters as may be prescribed.

(2) The District Soil Conservation Officer or any other Officer specially authorized by the State Government in this behalf shall, within the prescribed time and in the prescribed manner prepare a statement of any work carried out in any area in the district where any soil and water conservation measures have been or are being undertaken on or before the date of commencement of this Act, giving the following particulars:

(a) (i) the work done;

(ii) the work which in his opinion shall be maintained and repaired individually or jointly and the name of any such person:

(b) a map showing the work carried out in the village; and

(c) such other matters as may be prescribed:

Provided that no such statement shall be prepared under this subsection unless notice has been given to all persons proposed to be made liable for the maintenance and the repairs of any work specified in such statement.

(3) When a statement is prepared under this section, any rights and liabilities shown therein shall be entered in the record of rights or where there is no record of rights, in such village record and in such manner as may be prescribed and shall thereupon form part of such record of rights or such village record.

28. Obligations of persons to maintain and repair.-(1) Every person shown in the statement prepared under section 27 is liable to maintain and repair any work or his successor-in-interest shall to the satisfactions of the Collector and within such time as that officer may fix, maintain and repair the work in his own hand and in any other land in respect of which he is shown as liable in the said statements:

Provided that the State Government may waive in whole or in part, any contribution for maintenance or repair of any work of soil and water conservation already constructed by a Covenanted State of Rajasthan and maintained by it.

(2) If any person fails to maintain or repair the work within the time fixed by the Collector under sub-section (1), the said officer shall himself get the work executed or repaired and recover the cost thereof from such person.

(3) Any dispute as to the amount of the expenses shall be decided by the Collector and his decision shall be final.

26.6 CHAPTER VII

Reclamation of Waste Land

29. Order for taking possession of waste land.-(1) If the Board is satisfied that for the purpose of executing any plan, it is necessary that temporary possession of any waste land should be taken, it may by order in writing direct the Collector to take temporary possession of

such land on behalf of the State Government on such date as may be specified in this order:

Provided that no such order shall be made under this sub-section unless notice has been given to all persons interested in such land and they have been given a reasonable opportunity of being heard.

(2) The order shall be made in such form, and brought to the notice of the person or persons interested in land in such manner, as may be prescribed.

(3) On the date specified in the order, the Collector or any other officer authorized by him shall enter upon and take possession of the land on behalf of the State Government.

30. Arrangement for reclamation.-When the land has been taken possession of, the Officer appointed by the Board for the purpose may arrange for undertaking soil and water conservation measures therein,

(a) by retaining it under his management for such period as he thinks fit; or

(b) by settling it for such period and on such terms as may be fixed by the Board with the person or persons who on the date of taking possession under section 29 were in lawful possession of the land or were entitled to such possession or, if any such is dead, with his successor in interest; or

(c) by a combination of the methods aforesaid:

Provided that the total period for which the land is retained or settled under this section shall not exceed ten years.

31. Claim for arrears of rent not to be enforced against Government etc.-No claim of the person interested in land to any arrear of rent accrued or due in respect of the land for the period prior to the date of taking possession shall thereafter be enforced by any court, whether in execution of a decree or otherwise, against the State

Government or against any person holding the land under State Government or against land.

32. Termination of possession on completion of reclamation.(1) When the temporary possession has to be removed from the land, and in any case before the expiry of the period of ten years from the date of taking possession, the Collector shall, after making an inquiry in the prescribed manner, by order in writing

- (a) determine the person to whom possession is to be restored;
- (b) declare that possession of the land shall be restored on such date as may be specified in the order;
- (c) where such person is a tenant, determine the rent payable on account of the use or occupation of the land; and
- (d) where the land or any part thereof has been afforested, regulate the cutting of trees in such land according to a working plan.

(2) On the date specified in the said order, possession of the land shall be deemed to have been delivered by the State Government under clause (a) of sub-section (1).

(3) The delivery of possession of the land to the person determined under clause (a) of sub-section (1) shall be final and full discharge of the State Government from all liability in respect of such delivery, but shall not prejudice any right in respect of the land to which any other person may be entitled, by due process of law, to enforce against the person to whom possession of the land has been so delivered.

33. Compensation for period of possession.-(1) As soon as may be after the date of taking possession of the land, the Collector shall make an inquiry in the prescribed manner and determine:

- (a) in respect of any land which on the said date was in the occupation of a tenant,
 - (i) the annual rent payable by him; and
 - (ii) the average net annual income, if any, after deducting the rent derived by him during the three years immediately preceding the said date;
- (b) in respect of any other land, the average net annual income, if any, without deducting any land revenue payable, derived by the person interested in land during the three years immediately preceding the said date.

(2) There shall be payable by the State Government as compensation on each anniversary of the date of taking possession until the date referred to in sub-section (2) of section 32,

- (a) in respect of such land as is referred to in clause (a) of sub-section (1), the amount determined under sub-clause (1) thereof to the landholder and the amount determined under sub-clause (ii) to the tenant; and

(b) in respect of any other land, the amount determined under clause (b) of sub-section (1) to the person interested in land.

(3) For the purposes of this section "landholder" means the person under whom the tenant holds land and to whom the tenant is, or but for a special contract would be, liable to pay rent for that land, and any reference to a person interested in land, or landholder or tenant shall be deemed to include a reference to the predecessors and successors in interest of the person interested in land, landholder or tenant.

34. Accounts.-The Board shall maintain or cause to be maintained in such form and in accordance with such rules, as may be prescribed, an account of all receipts and payments, by the State Government in respect of the land, and the beneficiaries of the land or any other person having an interest therein, may on payment of a fee of fifty naye paise, inspect the account.

35. Recovery of net expenditure incurred by State Government.- (1) The net expenditure incurred by the State Government on the reclamation of the land under the provisions of this Chapter or such part of that expenditure as the State Government may, by general or special order, direct together with interest calculated at the prescribed rate and in the prescribed manner, shall be recovered as arrears of land revenue from the person to whom possession of the land is delivered by the State Government under sub-section (2) of section 32.

(2) The amount to be recovered under sub-section (1) from any person shall be decided by the Board.

26.7 CHAPTER VIII

Preventive action and penalties

36. Prevention of action prejudicial to soil and water conservation.- (1) Any person who does any act on any land which is prejudicial to the interest of soil and water conservation shall be given notice by the Collector to show cause as to why orders prohibiting him from doing that act should not be passed.

(2) On receipt of such notice the person shall suspend the act and the same shall remain suspended till the notice is discharged.

(3) The person on whom the notice is served may, within thirty days of its receipt, file objections before the Collector.

(4) The Collector shall dispose of the objection after allowing the objector an opportunity of being heard. In case the objection is allowed, the Collector shall discharge the notice. Otherwise he shall pass an order prohibiting the person from doing the act.

37. Penalties.-Any person who without proper authority damages or obstructs any work under a plan or contravenes any of the provisions of this Act or any rule or

order made thereunder, shall, on conviction be liable to imprisonment for a period not exceeding three months or to a fine not exceeding two hundred rupees or to both and where the offence is a continuing one, to further fine which may extend to twenty rupees for every day during which the offence continues after the date of the first conviction.

26.8 CHAPTER IX

Miscellaneous

38. Appeals.- (1) Any person aggrieved by an order under subsection (3) of section 6, sections 29, 32, 33 or sub-section (2) of section 35 may appeal to the prescribed authority, hereinafter in this Act, referred to as the "appellate authority", within such period and in such manner as may be prescribed:

Provided that the appellate authority may entertain an appeal after the expiry of the prescribed period if it is satisfied that the appellant

was prevented by sufficient cause from filing it in time. (2) The appellate authority may, after hearing the appeal, confirm, vary or reverse the order and pass such order in relation thereto as it deemed fit.

(3) The order of the appellate authority on such appeal, and where no appeal is preferred the order which has not been appealed against, shall be final and shall not be called in question in any court.

39. Vacancy or defect in constitution not to invalidate proceedings. -No act or proceeding of the Board or a District Committee shall be invalid by reason merely of the existence of any vacancy in, or defect in the constitution of, the Board or the District Committee.

40. Decision by majority. -If there is a difference of opinion amongst the members of the Board or of a District Committee regarding any question, the decision of the majority of the members present and voting shall prevail and in case of equality of votes, the Chairman of the Board or the District Committee, as the case may be, shall have a casting vote.

41. Amount recoverable as arrears of land revenue.-All amounts due to the State Government or the Board under this Act, shall be recoverable in the same manner as arrears of land revenue.

42. Procedure and powers at inquiries.- (1) Any officer or authority empowered to make an inquiry under this Act shall, where no specific provision has been made therefor, make the inquiry in the manner provided in any law relating to revenue inquiries and all the provisions contained in such law shall, as far as may be apply to an inquiry under this Act.

(2) Any officer or authority referred to in sub-section (1) shall have the same powers of summoning and enforcing the attendance of any person and examining him on oath and compelling the production of documents as are vested in revenue officers under the law referred to in that sub-section.

43. Power to enter, etc.-For the purpose of preparation or execution of a plan or repairing or maintaining any work under a plan, the State Soil Conservation Officer and any person generally or specially authorized by him in this behalf, and the Executive Officer, may enter upon, survey and mark out any land and do all acts necessary for such purposes.

44. Officer under the Act to be public servants.-Every person who is appointed or authorized to exercise any power or perform any function or duty conferred or imposed by or under this Act shall be deemed to be a public servant within the meaning of section 21 of the Indian Penal Code, 1860 (Central Act XLV of 1860), and every person who is required to submit any opinion or particular shall be deemed to be legally bound to do so within the meaning of the said Code.

45. Procedure under the Act.-A proceeding under this Act before a District Soil Conservation Officer or a Collector or an Inquiry Officer or an appellate authority shall be deemed to be a judicial proceeding within the meaning of section 193 and 228 of the Indian Penal Code and also for the purposes of section 196 of the said Code.

46. Registration of documents.- (1) Nothing in the Indian Registration Act, 1908, shall be deemed to require the registration of any document or map prepared, made or sanctioned in pursuance of this Act in connection with any plan which has come into force.

(2) All such documents and maps made for the purposes of sections 48 and 49 of the said Act, shall be deemed to be registered in accordance with the provisions of that Act:

Provided that documents and maps relating to such plan shall be accessible to the public in the manner prescribed.

47. Public access to documents and maps.-Subject to the rules made in this respect, the public shall have access to all documents and maps pertaining to a plan and copies thereof shall be furnished to any person applying on payment of the prescribed fee.

48. Determinations and order to be final.-Save as otherwise provided by or under this Act, any determination or order made in pursuance of the provisions of this Act or the rules made thereunder shall be final and shall not be questioned in any court of law.

49. Delegation of powers, etc.-The State Government, and subject to the control of the State Government, the Board or the Collector may delegate to any officer or authority subordinate to it or him any of the powers, functions and duties conferred or imposed on it or him by or under this Act:

Provided that the power of the State Government under section 52 to make rules shall not be so delegated.

50. Protection of action taken under the Act.-(1) No suit, prosecution or other proceeding shall lie against any person for anything in good faith done or intended to be done in pursuance of this Act or any rule made thereunder.

(2) Save as otherwise expressly provided by or under this Act, no suit or other legal proceeding shall lie against the State Government for any damage caused or likely to be caused by anything in good faith done or intended to be done in pursuance of this Act or any rule made thereunder.

51. Provisions of this Act to prevail.-The provisions of the Act shall have effect notwithstanding anything inconsistent therewith contained in any other law for the time being in force.

52. Power to make rules.-(1) The State Government may, by notification in the Official Gazette, make rules for the purpose of carrying into effect the provisions of this Act.

(2) Without prejudice to the generality of the foregoing power, such rules may provide for-

(a) the manner in which any owner, holder or occupier of land shall, in cases other than those falling in sub-clause (i) of clause (a) of section 2, be declared a beneficiary;

(b) the particulars with which and the period within which a claim under sub-section (2) of section 5 may be preferred;

(c) the manner in which a notice of award shall be given by the Collector under sub-section (4) of section 6;

(d) the manner in which a representative of the Rajasthan Branch of the Farmers' Forum shall be proposed as member of the Board;

(e) matters relating to the establishment and constitution of the Board and District Committee;

(f) the procedure (including quorum) for the conduct of business by the Board and District Committees;

(g) the appointment and functions of the State Soil Conservation Officer;

(h) the appointment and functions of District Soil Conservation Officers and allocation of business to District Soil Conservation Officers in the same district;

- (i) the particulars to be set in the draft plan;
- (j) the conditions subject to which the District Committees may approve the plan;
- (k) the time within which costs shall be paid by the beneficiary or beneficiaries and the interest which they shall be liable to pay, if the costs are not paid within such time;
- (l) the number of annual installments, equated or otherwise, payable under sub-section (5) of section 24;
- (m) the manner in which the amount of contribution recovered from the defaulter shall be paid to the beneficiary of the land in which the work is carried out;
- (n) the particulars of the matters which may be given in any statement prepared under sub-section (1) of section 27;
- (o) the manner in which the rights or liabilities shown in the statements prepared under section 27 shall be entered in the record of rights or village records;
- (p) the form in which the order shall be made under sub-section (1) of section 29 and the manner in which it shall be brought to the notice of the person or persons interested in land;
- (q) the manner in which inquiry shall be made under sub-section (1) of section 32 and section 33;
- (r) the form in which an account of all receipts and payments shall be maintained under section 34;
- (s) the rate at which and the manner in which interest shall be calculated under section 35;
- (t) the period within which and the manner in which an aggrieved person may appeal under section 38;
- (u) the manner in which the plan shall be accessible to the public under the provision to sub-section (2) of section 46;
- (v) fee on payment of which copies of all documents and maps pertaining to a plan shall be furnished to any person applying for it;
- (w) the form in which and the intervals at which the progress report shall be submitted by an Executive Officer;
- (x) the statements, returns, registers and other records required to be maintained by or under this Act;
- (y) the form and manner of service of notice under this Act or . the rules made thereunder;
- (z) the duties of any officer or authority having jurisdiction under this Act and the procedure to be followed by such officer or authority; and
- (zz) other matters which are to be or may be prescribed.

(3) All rules made under this Act shall be laid, as soon as may be after they are so made, before the House of the State Legislature while it is in a session, for a period of not less than fourteen days which may be comprised in one session or in two successive sessions and, if, before the expiry of the session in which they are so laid or of the session immediately following the House of the State Legislature makes any modification in any such rules or resolves that any such rules should not be made, such rule shall thereafter have effect only in such modified form or be of no effect as the case may be, so however that any such modification or annulment shall be without prejudice to the validity of anything previously done thereunder.

53. Repeal.-The Bombay Land Improvement Schemes Act, 1942, as applicable to the Abu area and any other corresponding law in force in any part of Rajasthan are hereby repealed.

THE FIRST SCHEDULE

(See sub-section (2) of section 1)

Names of districts in which the Act shall come into force at once:

Ajmer.

Bharatpur

Bundi

Banswara

Dungarpur

Ganganagar.

Jaipur.

Jodhpur.

Jalore.

Jhalawar

Kotoh

Nagapur

Pali

Sirohi

Sawai Madhopur.

Udaipur.

Bhilwara.

THE SECOND SCHEDULE

[See section 2(j)]

Matters to be provided for in Soil and Water Conservation Schemes:

1. Measures against wind erosion and water erosion (sheet erosion, gully and ravine formation, bank cutting and floods), such as:

- (a) Construction and maintenance of 'mends', 'dauls', and 'bundhis' and planting of munja, sarkanda or other soil binding grasses or plants thereon;
 - (b) Leveling of the land, grading and irrigation layouts; (c) Contour cultivation;
 - (d) Prohibition on growing row crops;
 - (e) Strip cropping;
 - (f) Growing of quick-maturing leguminous crops and close growing crops during rainy season;
 - (g) Green manuring and application of bulky organic manures, e.g. compost, farm-yard manures, etc;
 - (h) Retirement of a land from cultivation if its continuance under cultivation is prejudicial to this land or some other land;
 - (i) Control of grazing;
 - (j) Afforestation or planting of fruit trees or raising of pastures on any land for its protection from erosion or for the protection of any other land;
 - (k) Planting of trees or shrubs to serve as windbreaks;
 - (l) control of the felling or lopping or trees or clearance of bushes;
 - (m) prevention from breaking of marginal and sub-marginal lands including "chamet" for cultivation purposes;
 - (n) maintenance of surface mulches; (o) adoption of suitable crop rotations.
2. Measures against water-logging and impeded drainage, such as:
- (a) drainage of water-logged areas to make fit for cultivation;
 - (b) conversion of water-logged area into ponds where drainage under clause (a) cannot be economically done;
 - (c) opening of drainage cuts;
 - (d) pumping out the sub-soil water;
 - (e) increasing the number of culverts and aqueducts or widening the existing ones along railways, canals or road embankments.
3. Measures for improving sandy soils, such as:
- (a) constructions of 'mends', 'dauls' or 'bundhis' and planting munja, sarkanda or any other soil binding grasses thereon;
 - (b) leveling of land in irrigated areas;
 - (c) prohibition of cultivation of sand dunes; (d) growing of leguminous crops;
 - (e) application of bulky organic manures, e.g. compost, farmyard manures, etc;
 - (f) maintenance of surface mulches; (g) control on grazing;

(h) creation of wind-breaks along canals, roads, railway tracts, fields and other places wherever it is considered necessary, for the purpose of checking the drifting sand;

(i) adoption of suitable crop rotations.

4. Measures for prevention of soil formation and reclamation of soil lands, such as:

(a) drainage of both surface soil and sub-soil where the water table is high;

(b) construction of bundhis and impounding of rain and canal water in places where the water table is low with a view to washing down the injurious salts;

(c) providing drainage cuts where there is water logging; (d) application of gypsum and such other correctives. 5. Such other measures as may be prescribed.

26.8.1 THE RAJASTHAN SOIL AND WATER CONSERVATION RULES, 1966

1. Short title and commencement. -These rules may be called the Rajasthan Soil and Water Conservation Rules, 1966.

2. Definitions.-In these rules, unless the context otherwise requires;

(i) "Act" means the Rajasthan Soil and Water Conservation Act, 1964 (Rajasthan Act 1 of 1965).

(ii) "Form" means a form appended to these Rules. (iii) "Section" means a section of the Act.

(iv) "Beneficiary" means a person declared as such within the meaning of sub-section (ii) of section 2 of the Act and as defined in rule 3 of the said rules.

3. Procedure for declaring a beneficiary under sub-clause (ii) of clause (a) of section 2 of the Act.-To determine a beneficiary under sub-section 2(a)(ii) of the Act, the District Soil Conservation Officer will issue a notice in Form 1 to person/s who occupy the land or who are supposed to own or hold the land and are likely to be benefited by the execution of the Plan, inviting objections within a period of 30 days of the service of the notice. Any objection/s received, will be considered by the District Soil Conservation Officer who shall decide the matter after giving an opportunity of being heard to the parties concerned. In case no objection/s are received, District Soil Conservation Officer shall finalize the proceedings and notify the same to the parties concerned under intimation to the authority which sanctions the Plan.

4. Proclamation of orders section 4 and admission of claims for compensation.-

Upon the publication of the order under section 4, the Collector shall cause to be published a proclamation in Form 2 by affixing a copy thereof :

(1) On the Notice Board in the Office of the Collector Sub Divisional Officer, Vikas Adhikari and the Tehsildar concerned.

(2) At the Panchayat-ghar, and at such other place/s if any, as the Collector may consider appropriate in such village/s or town/s as are comprised in the notified area,

5. The period within which claim under sub-section (2) of section 5 is to be preferred.-All claims preferred under sub-section (2) of section 5 shall contain full particulars as required in the proclamation referred to in rule 4 and shall be preferred in writing to the Collector within a period of 30 days from the date of issue of the proclamation.

6. Inquiry by the Collector.-The Collector shall then hold an inquiry after summoning the claimant and his witnesses if any, and such other persons known or believed to have interest in the land for which claim has been preferred on a date fixed for hearing or any other date to which the hearing may be adjourned and shall determine the amount of compensation under sub-section (3) of section 6.

7. Notice of the Award.-(i) The Collector shall give a notice of his award under sub-section (4) of section 6 in Form 3.

(ii) The notice of such award shall be given to the claimant/s or his/their representative/s and to person/s to whom compensation is payable, in the manner specified below :

(a) In person by delivering or tendering it to them; or

(b) through their agent/s, if any, by delivering or tendering it to the agent/s; or

(c) by registered post.

8. Manner of proposing Representative of Farmer's Forum as member of Board.-One representative of the Rajasthan Branch of Farmer's Forum, proposed by the President thereof in consultation with the Executive Body of Forum, shall be member of the Board.

9. Conduct of business by and procedure to be followed for meetings of the Board. -(i) (a) The Board shall meet at least once a year and more frequently, if necessary. The Chairman of the Board may either at the request of any Member of his own accord convene a meeting of the Board.

(b) All notices of such meeting shall be issued by the secretary at least 15 days in advance specifying the place and time of the meeting, provided that the Chairman, may if he considers necessary, call an emergent meetings at a shorter notice.

Ordinarily, notice regarding meetings shall be sent by post under Certificate of posting which shall be considered as sufficient proof of notice.

(c) Seven Members shall form a quorum.

(ii) Performance of duties of Chairman in his absence.-In the absence of the Chairman, a member nominated by him in writing and when no such nomination has been made, a person chosen by the members present in the meeting, shall preside over the meeting of the Board.

(iii) Record of Proceedings.-The record of proceedings of the meeting shall be maintained in a proceeding book by the Secretary and signed by the Secretary and the Chairman.

(iv) Confirmation of Proceedings. -Before transacting any business, the proceedings of the last meeting if any, shall be read out and confirmation thereof shall be recorded and signed by the Chairman.

(v) Mode of Voting. - Voting, when necessary, shall ordinarily be by show of hands but it may be by ballot when so required by the Chairman.

(vi) Presence of Non-members by special invitation. -The Chairman may request any person/s to attend a meeting/s by special invitation but such person/s shall have no right to vote.

(vii) Payment of T.A. and D.A.-(a) The Non-official member/s of the Board shall be paid T.A. and daily allowance for attending the meeting of the Board at the rates admissible under the State T.A. Rules to the Government Officers of the status of class I. Such claim shall be preferred to the Secretary of the Board who shall check and pass the claims. These claims shall be chargeable to the T.A. grants of the Agriculture Department.

(b) The Official members shall be entitled to receive T.A. and where permissible, at the rates admissible to them from their respective Departments.

(c) Non-official member residing at the place of meeting, shall be entitled to receive Rs. 5/- per day by way of conveyance allowance.

10. Circumstances and Conditions subject to which the District Committee or District Soil Conservation Officer may approve and sanction a plan.-(i)

Where a plan is confined to a Panchayat Samiti area, the District Soil Conservation Officer will accord technical and financial sanction of the plan and execute work within the powers delegated to him.

(ii) When a plan covers more than one Panchayat Samiti area or when such plan is beyond the financial competence of the District Soil Conservation Officer, it shall

be submitted to the District Committee for sanction within the limit of its financial powers.

(iii) Plans, the technical sanction of which is beyond the competence of the District Soil Conservation Officer, or plans which are beyond the financial powers of the District Committee, shall be submitted to the ¹ [Additional Director of Agriculture (Soil Conservation)] for sanction.

11. Conduct of Business and Procedure to be followed by the District Committees.

(i) (a) The Committee should meet at least once a quarter and more frequently, if necessary, the Chairman of the Committee may either at the request of any member or of his own accord convene a meeting of the Committee.

(b) All notices of such meeting shall be issued by the Secretary at least 15 days in advance specifying the place and time of the meeting, provided that the Chairman, may if he considers necessary, call an emergent meeting at a shorter notice. Ordinarily, notice regarding meetings shall be sent by post under "Certificate of posting" which shall be considered as sufficient proof of notices.

(c) Three members shall form a quorum.

(ii) Performance of Duties of Chairman in his absence.-In the absence of the Chairman, a member nominated by him in writing and when no such nomination has been made, a person chosen by the members present in the meeting, shall preside over the meeting of the District Committee.

(iii) Record of Proceedings. -The record of proceeding of the meeting shall be maintained in a proceeding book by the Secretary and signed by the Secretary and the Chairman.

(iv) Confirmation of proceeding.-Before transacting any business the proceedings of the last meeting if any, shall be read out and confirmation thereof shall be recorded and signed by the Chairman.

(v) Mode of Voting.-Voting, when necessary, shall ordinarily be by show of hands but it may be by ballot when so required by the Chairman.

(vi) Presence of Non-members by special invitation. The Chairman may request any persons to attend a meetings by special invitation butt such persons shall have no right to vote.

(vii) Payment of T.A. and D.A.-(a) The Non-official member/s of the Committee shall be paid T.A. and D.A. for attending the meeting of the District Committee at the rates admissible under the State T.A. Rules to the Government Officers of the status of Class I. Such claims shall be preferred to the Secretary of the Committee who

shall check and pass the claims. These claims shall be chargeable to the T.A. and D.A. grants of the Agriculture Department.

(b) The Official members shall be entitled to receive T.A. and D.A. where permissible, at the rates admissible to them from their respective Departments.

(c) Non-official members residing at the place of meeting, shall be entitled to receive Rs. 5/- per day by way of conveyance allowance.

12. Functions of the District Soil Conservation Officers.-The District Soil Conservation Officer shall perform the following functions:

(a) To select suitable areas catchments suitable for drawing up Soil Conservation Plans.

(b) To draw up a draft Soil Conservation Plan.

(c) To refer the draft plan to the Panchayat Samiti/s concerned for their comments within a specified period.

(d) To review the draft plan in the light of comments. if any, received from the Panchayat Samitis.

(e) To forward the draft plan to the Inquiry Officer under section 19 of the Act if deemed necessary, and to function as Inquiry Officer in the case of draft plan approved by him or in respect of such plans for which he has been appointed as Inquiry Officer.

(f) To examine and sanction the draft plans within his technical and financial powers and in other cases to obtain technical and financial sanction of the competent authority.

(g) To ensure expeditious and efficient implementation of the approved plans.

(h) To assist and guide the Panchayat Samitis in the development of suitable Soil and Water Conservations Plans.

(i) To organise suitable field demonstrations and to hold field days in consultation with the Panchayat Samiti staff with a view to explain the programme to the field staff and the farmers.

(j) To organise special training programmes for the extension staff and farmers.

(k) To assist the District Committee in formulating an annual programme of work.

(l) To carry out periodical inspections of works with a view to examine progress and furnish technical guidance and supervision.

(m) To exercise adequate financial control and to ensure that accounts are maintained and rendered properly.

(n) To prepare quarterly, annual and any other periodical reports of progress of the various schemes and plans as may be required, and to forward the same to the [Additional Director of Agriculture (Soil Conservation)]

(o) To carry out directions of the District Committee¹ [Additional Director of

Agriculture (Soil Conservation)] and the Board.

13. Procedure to be followed by the Inquiry Officer and the manner of publication of the draft plan under section 19 of the Act.

-On receipt of a draft scheme/plan approved or prepared by the Board District Committee, District Soil Conservation Officer or²[Addition Director of Agriculture (Soil Conservation)] the Inquiry Officer shall issue a notice in Form No. 4 and display the same in the manner provided in rule 4. The contents of the notice shall also be published by beat of drum in the village or villages to which the draft plan relates.

(ii) The details of the draft plan shall be displayed in the following manner during office hours on working days for a period of 30 days from the date of publication of the public notice.

(a) Draft Plan approved by the District Soil Conservation Officer shall be displayed in the Gram Panchayat concerned and in the concerned offices under the supervision and control of the District Soil Conservation Officer, and Panchayat Samiti concerned.

dated 7-12-1972, w.e.f. 31-12-1970.

dated 7-12-1972, w.e.f. 31-12-1970.

(b) Draft Plans approved or prepared by the District Committee shall be displayed at the places indicated in clause (a) above and also in the office of the District Soil Conservation Officer.

(c) Draft Plans approved or prepared by the Additional Director for of Agriculture (soil Conservation)] or Board shall be displayed as provided in clause (b) above and in addition in the office of the '[Additional Director of Agriculture (Soil Conservation.)]

(iii) Any suggestions or objection pertaining to the said draft plan shall be received only within 30 days from the date of publication of the public notice.

14. Procedure for the publication of sanctioned Plans under section 21 (3).

-After the plan has been finalized the Executive Officer shall prepare a Notice in Form No. 5 and shall get it published in the official Gazette. He shall also specify in the Notice the place/places in every village and at the headquarters of the sub-division in which the lands included in the plan are situated, when and during what time the copies of the sanctioned plans will be made available for inspection free of cost.

15. Correction of clerical and arithmetical errors.-The Executive Officer, after checking the relevant records plans etc. may correct any clerical or arithmetical error, in calculation of estimate of works, actual cost of works and such other figures as may be affected by such correction and intimate the authority which has sanctioned the plan.

16. Period of payment and rate of interest to be charged.-Every beneficiary, whose work is carried out by the Executive Officer, shall pay the cost in such equal annual installments, not exceeding 15, as may be fixed by the Executive Officer. The first installment will fall due one year after the completion of the work. It will bear such interest as Government may fix from time to time. If the beneficiary fails to pay the installment when due, it will bear penal interest at 1 1/2% above the normal rate of interest fixed by Government from time to time.

17. Liability of persons whose lands are not included.-If any default is made in the payment of contributions mentioned in subsection (2) of section 25 of the Act, the Collector or any Officer authorized by him in this behalf shall recover the amount from the persons concerned as arrears of Land Revenue and pay the amount to the persons entitled to it under sub-section (1) of section 25 of the Act.

18. Reports.-(i) Quarterly Reports of progress of work and expenditure shall be prepared by the Executive Officer in respect of individual plans sanctioned at the district level and sent to the District Soil Conservation Officer who shall consolidate all such reports received by him and forward a consolidated report of all such schemes/plans within his jurisdiction to the State Soil Conservation Officer.

(ii) The District Soil Conservation Officer will also prepare a quarterly report of progress in respect of schemes/plans sanctioned by the ¹[Additional Director of Agriculture (Soil Conservation)] the Board and the State Government and forward the same to the State Soil Conservation Officer.

(iii) The progress of plans shall also be reported to the District Committee/State Board, as the case may be, by the District Soil Conservation Officer, ²[Addition Director of Agriculture (Soil Conservation)] respectively.

19. Maintenance of works carried out before the date of commencement of the Act. -(i) The District Soil Conservation Officer shall maintain a list of all works which had been or were being undertaken on or before commencement of the Act and submit a copy of the same to the ³[Additional Director of Agriculture (Soil Conservation)] by 30th September, 1966. These lists should contain the following particulars

1. Serial No.
2. Name of Village, Panchayat Samiti and District. 3. Khasra No.
4. Total area in acres.
5. Nature of Soil Conservation work done.
6. Name/s of Owner/s, area (in acres) held by each with Khasra Nos.
7. Whether work is to be maintained and repaired individually or jointly by owners as mentioned at item 6.
8. Instructions regarding maintenance and repair. 9. Map of the area/catchment.
10. Any other remarks.

(ii) As provided under sub-section (2) of section 27, a notice in Form 7 shall be served on each beneficiary who is liable to maintain such works, before finalizing the above statement.

20. Entry in the records of rights.- [(i)] As required under subsection (3) of section 27, a statement shall be prepared in Form 8.

(ii) One copy of the Statement will be served upon the beneficiary and three copies will be sent to the Tehsildar, who will forward two copies to the Patwari concerned. The Patwari will make necessary entries in the Khasra Girdawari and attach one copy of the Statement with the relevant record and thereafter return one copy to the Tehsildar recording his compliance report. On the basis of his report the Tehsildar will complete the entries provided on the back of the form and forward one statement to the District Soil Conservation Officer concerned

(iii) The entry in the Khasra Girdawari shall be repeated from year to year by the Patwari.

21. Taking over temporary possession of land under section 29 of the Act.-(i) The Board shall issue directions to the Collector in Form 9 to take possession of land specified in the order.

(ii) On receipt of the directions of the Board, the Collector shall cause notice to be issued for taking over temporary possession of the land to the owner/s in Form 10 in the following manner:

- (a) personally by delivering or tendering it to him, or
- (b) through his agent, if any, by delivering or tendering it to the agent, or
- (c) by affixing a copy thereof at some conspicuous place on the land to which it relates, or
- (d) by Registered post, or
- (e) where the person cannot be found, by leaving an authentic copy of the order with any adult member of his family or by affixing such copy on some

conspicuous part of the premises in which he is known to have last resided or carried on business or personally worked for profit.

(iii) Objection if any, by the owner/s may be filed within a period, of 30 days of the said notice.

(iv) After hearing the objections and petitions, if any, the Collector shall issue appropriate orders. If the objections are not valid, the Collector shall issue orders in Form 11 for taking over possession of land.

22. Termination of possession on completion of reclamation.(i) The Collector may, before making over the possession of land under sub-section (1) of section 32, require the officer appointed by the Board for the purpose of reclamation to submit a detailed report on the reclamation of the said land.

(ii) On receipt of the report of the said Officer, the Collector may issue a general notice as to why the orders for the restoration of the possession of the land in question should not be made in favour of the party or parties from whom possession was taken under sub-section (3) of section 29.

(iii) On the day fixed for hearing, or on any day to which the enquiry may be adjourned, the Collector should proceed to enquire into the objections, if any, by hearing the persons present, examining the documents, if any, produced by him/them, and decide the objection/s and pass orders in Form 12.

(iv) A copy of the orders shall be sent to the person to whom the possession of the land is to be restored.

23. Manner of Inquiry under section 33 of the Act.-(i) The Collector, on receipt of an application for compensation, shall appoint an Inquiry Officer by a notification displayed at the places specified under Rule 13 in respect of any land under enquiry which shall be mentioned in the notification.

(ii) The Inquiry Officer shall be a Revenue Officer not below the rank of Naib Tehsildar.

(iii) The Inquiry Officer shall determine (a) the annual rent payable by the Khatedar tenant.

(b) the average gross annual income assessed on the date of the past three years.

(c) the net amount of the compensation payable to the Khatedar tenant, mentioning the name of the person/s to whom the same is payable.

(iv) In respect of any other land he shall determine the average net annual income, if any, without deducting any land revenue. This amount shall also be determined on the basis of the income derived during the three preceding years.

(v) In conducting this inquiry, the Inquiry Officer, shall have access to all available information including the claim preferred by the tenant.

(vi) The Collector, shall on receipt of the report of the Inquiry Officer, issue an award of compensation in Form 13 endorsing a copy thereof to the Board and the District Soil Conservation Officer.

24. Accounts.-(i) Accounts of all receipts and expenditure of money for reclamation of waste-lands as provided in section 30 of the Act shall be maintained by the District Soil Conservation Officer.

(ii) A Ledger in Form 14 shall be maintained and all income and expenditure for such plans in the district shall be recorded in brief as and when any transaction takes place. Separate entries will be made for separate plans. Each entry will be initialled by the District Soil Conservation Officer. Daily totals will be struck and signed by the District Soil Conservation Officer.

(iii) At the close of each month the totals of the income and expenditure will be worked out and the cash balance verified by the District Soil Conservation Officer and a note of verification recorded in the ledger.

(iv) A separate ledger for each plan will also be maintained in Forms 15A and 15B in the same way.

25. Appeals.-(i) Appeals against orders shall be heard by the authorities specified below:-

(a) In the case of order under sub-section (3) of section 6 and section 32 and 33 appeals shall be filed before the Revenue Appellate authority.

(b) In the case of an order passed under section 29, appeals shall lie to the State Government.

(ii) The period for filing appeals under section 38 shall be 30 days from the date of communication of the order.

(iii) The procedure for filing an appeal and for hearing and disposal thereof shall be the same as is prescribed for appeals under the Rajasthan Land Revenue Act, 1956.

26. Public Access to Document.-All document and plans shall be accessible to the public in accordance with Rajasthan Registration Rules and copies thereof may be made available to the general public on payment of the charges as under:

(i) Site Plan.-Blue print copy (Size 16"=1 Mile) for individual holding. Re. 0.50 Paise per copy.

(ii) Soil and water Conservation plan.- Rs. 2.50 per copy. Blue print copy (16"=1 Mile) complete with agronomic recommendation for individual holding.

(iii) Copies of written document @ Re. 1/- per one , thousand words.

27. Records to be maintained. -In addition to the various registers required to be maintained and returns to be rendered under General Financial and Accounts Rules, the following registers and records are required to be maintained by the District Soil Conversion Officer and or the Executive Officer:

A- Registers. -(1) Registers for disposal of proposals for catchments/areas for which plans are to be prepared.

(2) Register of works completed since the date of commencement of the Act.

(3) Register of funds allocated for individual plans and the works done.

(4) Registers for recoveries from beneficiaries.

(5) Register for money received from farmers for execution of work. (6) Register for correction of errors in the plan.

(7) Ledger of accounts.

B-Statements.-(i) Quarterly statements of cases pending technical and financial sanction.

(ii) Quarterly statements of notifications sent for publications in official Gazette.

(iii) Quarterly statements of works-material to be procured.

(iv) Quarterly statements of recovery from individual cultivator to be rendered to the Collector.

(v) Quarterly statements of progress of works.

27 Appendix 15: FARMERS PARTICIPATION IN MANAGEMENT OF IRRIGATION SYSTEMS ACT 2000

27.1 CHAPTER –I PRELIMINARY

1. Short title, extent and commencement – (1) This Act may be called the Rajasthan Farmers' Participation in Management of Irrigation System Act, 2000. (2) It extends to the whole of the State of Rajasthan. (3) It shall be deemed to have come into force on and from 20th day of July, 2000.

2. Definitions – (1) In this Act, unless the context otherwise requires :-

(a) 'Area of operation' in relation to Farmers Organization means a contiguous block of land in the command area of an irrigation system as may be delineated by the Project Authority under section 23 and as may be delineated and declared by the Government under section 8, for the purpose of this Act.

(b) 'Command area' means an area irrigated or capable of being irrigated either by gravitational flow or by lift irrigation or by any other method from a Government source and includes every such area whether it is called 'Command Area' or by any other name under any law for the time being in force.

(c) 'Competent Authority' means the Authority appointed under section 22;

(d) 'Distributary system' means and includes -

(i) All main canals, branch canals, distributaries and minor canals constructed for the supply and distribution of water irrigation ;

(ii) All works, structures and appliances connected with the distribution of water for irrigation; and

(iii) All water courses and other related channels and structures under an outlet.

(e) 'Drainage System' in relation to an irrigation system includes –

(i) Channels either natural or artificial , for the discharge of waste or surplus water and all works connected therewith or ancillary thereto –

(ii) Escape channels from an irrigation or distribution system and other works connected therewith, but does not include works for removal or sewage;

(iii) All collecting drains and main drains to drain off surplus water from field drains; and

(iv) all field drains and related structures under outlets;

(f) 'Farmers organisation' wherever it occurs, shall mean and include –

(i) Water users' Association at the primary level consisting of all the water users, as constituted under section 4;

- (ii) Distributary Committee at the secondary level, as constituted under section 6; and
- (iii) Project Committee at the project level, as constituted under section 8;
- (g) "Field Drain" includes a channel excavated and maintained by the land owner or by any other agency, to discharge waste or surplus water from the land under an outlet; and includes drains, escape channels and other similar works existing or to be constructed;
- (h) "Financing Agency" means any Commercial Bank, or any Co-operative Society or any other Bank or organization established or incorporated under any law, for the time being in force, which lends money for the development of the area of operation of the Farmers' Organization;
- (i) "Financial Year" means a year commencing from the 1st April of the relevant year to the 31st March of the ensuing year;
- (j) "Government" means the Government of the State of Rajasthan.
- (k) "Hydraulic Basis" means the basis for identifying a viable irrigated area served by one or more hydraulic structures such as head works, distributaries, minors, outlets and the like;
- (l) "Irrigation System" means such major, medium and minor irrigation system for harnessing water for irrigation and other allied uses from the Government source and includes reservoirs, open head channel, diversion system, anicuts, lift irrigation schemes, tank, walls and the like;
- Explanation :-
- (i) "Major Irrigation System" means irrigation system under Major Irrigation Project having irrigable command area of more than 10,000 hectares;
- (ii) "Medium Irrigation System" means irrigation system under Medium Irrigation Project having irrigable command area of more than 2,000 hectares and upto 10,000 hectares;
- (iii) "Minor Irrigation System" means irrigation system under minor irrigation project having irrigable command area upto 2,000 hectares;
- (m) "Land Owner" means a person recorded as tenant / sub-tenant of land in the record of rights prescribed, prepared and maintained under the Rajasthan Land Revenue Act, 1956 (Act No. 15 of 1956) and rules made there under ;
- (n) "Maintenance" means execution and continuance of such works on the irrigation system as are necessary to ensure that the physical system designed to the standards operates for proper distribution of water to the land owners in the area of operation ;
- (o) "Notification" means a notification published in the Official Gazette, and the expression "notified shall be constructed accordingly";

(p) "Operational Plan" means a schedule of irrigation deliveries with details of the mode and duration of supplies drawn up for regulation of irrigation in the command area of an irrigation system;

(q) "Osrabandi" means and includes a system of distribution of water allocation to one or more group of water users in proportion of command area of such group / groups indicating duration of such water allocation in a cycle of irrigation ;

® "Outlet" means an opening constructed in main canal / branch canal / distributary / minor and reservoir or through lift irrigation management which passes water into a water course or directly on any land.

(s) "Prescribed" means prescribed by the Government by rules made under this Act ;

(t) "Project Authority" means the authority appointed under section 23;

(u) "Warabandi" means and includes a system of distribution of water allocation to water users by turn, according to an approved schedule indication the day, duration and the time of supply;

(v) "Water Allocation" in relation to an irrigation system means distribution of water determined from time to time by a farmers' organization in its area of operation.

(w) "Water Course" means any channel existing or to be constructed by the Government or by the land owners or by any agency to receive and distribute water from an outlet; and

(x) "Water User" mean and includes any individual or body corporate or a society using water for agriculture, domestic, power, non-domestic, commercial, industrial or any other purpose from a Government source of irrigation.

(2) The words and expression used in this Act, but not defined, shall have the meaning assigned to them in the Rajasthan Irrigation and Drainage Act, 1954 (Act No. 21 of 1954).

27.2 CHAPTER – II FARMERS' ORGANISATION

3. Delineation of water users' area and territorial constituencies –

(1) The Project Authority may, by notification delineate every command area under each of the irrigation systems on a hydraulic basis which may be administratively viable; and declare it to be a water users area for the purpose of this Act ;

Provided that in respect of the command area under the minor and lift irrigation system, the entire command area may, as far as possible, form a single water users' area;

Provided further that Project Authority shall not delineate any area under this section unless he is satisfied that the Irrigation System in that area is in satisfactory working condition.

(2) Every water users' area shall be divided into territorial constituencies with shall not be less than four but not more than ten, as may may be prescribed.

4. Constitution of Water Users' Association –

(1) There shall be a Water Users' Association called by its local distinct name for every water users' area delineated under sub-section (1) or section 3.

(2) Every Water Users' Association shall consist of all the water users who are land owners in such water users' area as member.

(3) All members specified in clause (2) shall constitute the General body of the Water Users' Association and shall have right to vote.

5. Managing Committee of Water Users' Association and Election of its President and Members –

(1) There shall be a Managing Committee for every Water Users' Association.

(2) The Project Authority shall make arrangements for the election of President of the Managing Committee of Water Users' Association by direct election from among its members by the method of secret ballot in the matter as may be prescribed.

(3) The Project Authority shall also cause arrangements for the election of a Managing Committee consisting or one Member from each of the territorial constituencies of water users' area, by the method of secret ballot in the manner as may be prescribed.

Provided that where a land owner holds land in more than one territorial constituencies of the water users' area, he shall be eligible to take part in election for membership of the Managing Committee only from one territorial constituency for which he opts in the manner as may be prescribed.

(4) If, at an election held under sub-section (2) or (3) the President or the Members of the Managing Committee area not elected, fresh election shall be held : Provided than the Project Authority may, for the reasons to be recorded in the writing from time to time, postpone election.

(5) The President and the Members of the managing Committee shall, if not recalled earlier under section 10, be in office for a period of five yeas, from the date of the first meeting.

(6) The Managing Committee shall exercise the powers and perform the functions of the water users association.

6. Delineation of Distributary area and constitution of the Distributary Committee –

(1) The Project Authority may, by notification delineate every Command Area of the irrigation system, comprising of two or more Water Users' Areas and declare it to be distributary area for the purpose of this Act.

(2) There shall be distributary committee called by its local distinct name for every distributary area declared as such under sub-section (1).

(3) All the Presidents of the Water Users' Associations in the distributary area, so long as they hold such office by virtue of sub-section (5) of section 5, shall constitute the General Body of the Distributary Committee including two officials nominated by the Project Authority.

7. Managing committee of Distributary Committee and election of its president and Members –

(1) There shall be Managing Committee for every Distributary committee and the said committee shall consist of such number of members, not exceeding five including President, as may be specified by the State Government.

(2) The Project Authority shall cause arrangements, in the prescribed manner for the election by the method of secret ballot of the President and Members of the Managing Committee from among the members of the General Body of the Distributary Committee.

Provided that the Government may, for the reason to be recorded in writing from time to time postpone elections.

(3) If, at an election held under sub-section (2), the President and the members or the Managing Committee are not elected, fresh election shall be held.

(4) The term of office of the president and the members of the Managing committee shall, if not recalled earlier under section 10, be co-terminous with the term of general body specified in sub-section (3) of section 6.

(5) The Managing Committee shall exercise the powers and perform the functions of the Distributary Committee.

8. Delineation of Project Area and constitution of Project Committee -

(1) The Government may, by notification, delineate every command area or part thereof, of an irrigation system and declare it to be a project area for the purposes of this Act .

(2) There shall be a Project Committee called by its distinct local name for every project area declared under sub-section (1).

(3) All the Presidents of the Distributary Committees in the project area, so long as they hold such office by virtue of sub-section (4) of section 7, shall constitute the General Body of the Project committee.

9. Managing Committee of the Project Committee and Election of its Chairperson and Members -

- (1) There shall be a Managing Committee for every Project Committee consisting of nine Members including Chairperson.
- (2) The Project Authority shall cause arrangements, in the prescribed manner for election by the method of secret ballot, of Chairperson and eight Members of Managing Committee from among the members of the General Body of the Project Committee: Provided that the Government may, for the reasons to be recorded in writing, from time to time, postpone elections.
- (3) If at an election held under sub-section (2), the Chairperson and the Members of the Managing Committee are not elected, fresh elections shall be held in the prescribed manner.
- (4) The term of office of the Chairperson and the Members of the Managing Committee shall, if not recalled earlier under section 10, be co-terminous with the term of general body specified in sub-section (3) of section 8.
- (5) The Managing Committee shall exercise the powers and perform the functions of the Project Committee.

10. Procedure for recall - (1) A motion for recall of a Chairperson or a President or a Member, as the case may be, of a Managing Committee of a Farmers' Organisation may be made by giving a written notice in such form, as may be prescribed, signed by not less than one-third of the total number of members of the Farmers' Organisation, who are entitled to vote :-

Provided that no notice of motion under this section shall be made within one year from the date of assumption of office by the person against whom the motion is sought to be moved.

(2) If the motion referred to in sub-section (1) is carried with the support of majority of the Members present and voting at a meeting of the General Body specially convened for the purposes, the Project Authority, shall by order remove the person, against whom motion is carried, from office and the resulting vacancy shall be filled in the manner a casual vacancy is filled.

11. Constitution of sub-committees of Farmers' Organisation - The Managing Committee of a Farmers' Organisation may constitute sub-committee to carry out all or any of the functions vested in each organisation under this Act .

12. Farmers' Organisation to be a body Corporate - Every Farmers' Organisation shall be body corporate with a distinct name having perpetual succession and a common seal and, subject to the provisions of this Act , vested with the capacity of entering into contracts and of doing all things necessary, proper or expedient for

the purposes for which it is constituted and it shall sue or be sued in its corporate name represented by the Chairperson or the President, as the case may be
Provided that no Farmers' Organisation shall have the power to alienate in any manner, any property vested in it.

13. Changes in Farmers' Organisation - The Government may, in the interest of a Farmers' Organisation in the command area, by notification and in accordance with the rules made in this behalf,

- (a) form a new Farmers' Organisation by separating the area from any Farmers' Organisation;
- (b) increase the area of any Farmers' Organisation;
- (c) diminish the area of any Farmers' Organisation;
- (d) alter the boundaries of any Farmers' Organisation; or
- (e) cancel a notification issued under this Act for rectifying any mistake

Provided that no such separation, increase, diminution, alteration and cancellation shall be effected unless a reasonable opportunity of hearing is given to the organisation likely to be affected.

14. Disqualifications - (1) A person, who is employee of the Government of India or any State Government or a Local Authority or any institution receiving aid from the funds of the Government, shall be disqualified for election or for continuing as a Chairperson or a President or a Member of a Managing Committee of a Farmers' Organisation.

(2) No person who has been convicted a criminal court for any offense involving moral turpitude committed under any law for the time being in force shall be qualified for election or continuing in the office of a Chairperson or a President or a Member of a Managing committee of a Farmers' Organisation.

(3) A person shall be disqualified for being chosen as a Chairperson or a President or a Member of the Managing Committee of a Farmers' Organisation if on the date fixed for scrutiny of nominations for election, or on the date of nominations, he is : -

- (a) of unsound mind and stands so declared by a competent court;
- (b) an applicant to be adjudicated as an insolvent or an undercharged insolvent;
- (c) a defaulter of land revenue or water tax or charges payable either to the Government or to the Farmers' Organisation;
- (d) interested in a subsisting contract made with, or any work being done for, the Panchayat or Panchayat Samiti or Zila Parishad or any State or Central Government or the Farmers' Organisation:

Provided that a person shall not be deemed to have any interest in such contract or work by reason only of his having share or interest in, -

- (i) a company as a mere share-holder but not as a director; or
- (ii) any lease, sale or purchase of immovable property or any agreement for the same; or
- (iii) any agreement for the loan of money or any security for the payment of money only; or
- (iv) any newspaper in which an advertisement relating to the affairs of the Farmers' Organisation is inserted.

Explanation :- For the removal of doubts it is hereby declared that where a contract is fully performed it shall not be deemed to be subsisting merely on the ground that the Panchayat, Panchayat Samiti, Zila Parishad, the Farmers' Organisation, the State or Central Government has not performed its part of the contractual obligations.

- (4) A Chairperson or a President or a Member of Managing Committee shall be disqualified for election to or continuing in office of Chairperson or President or Member of Managing Committee of a Farmers' Organisation, if he absents from three consecutive meetings of the Managing Committee without reasonable cause:

Provided that the disqualification under this sub-section shall not apply in the case of women, who during the advanced stage of pregnancy or during a period of three months after delivery, is unable to attend the meetings.

- (5) A person having more than two children shall be disqualified for election as a Chairperson or a President or a Member of the Managing Committee

Provided that a person having more than two children shall not be disqualified under this section for so long as the number of children he had on the date of such commencement does not increase

Provided further that the birth of an additional child within one year from the date of commencement of this Act shall not be taken into consideration for the purposes of this section.

Explanation - For the purpose of sub-section (5), where any couple has only one child from the earlier delivery or deliveries on the date of commencement of this Act and thereafter, any number of children born out of a single delivery shall be deemed to be one entity.

- (6) A person shall become disqualified to continue as Member of Water Users' Association or hold the office of Chairperson or President or Member of a Managing

Committee of a Farmers' Organisation, if he ceases to be a land owner in the area of operation of concerned Farmers' Organization.

15. Filling up of Vacancies - (1) A vacancy arising either due to disqualification under section 14 or due to death or resignation or by any reason, such vacancy shall be filled up by nomination in the following manner :

(a) a vacancy in the Water Users' Association shall be filled, by nomination by the Managing Committee of the Distributary- Committee in the prescribed manner;

(b) a vacancy in the Distributary Committee shall be filled, by nomination by the Managing Committee of the Project Committee in the prescribed manner; and

(c) a vacancy in the Project Committee shall be filled by nomination either by the Apex Committee constituted under section 34 or by the Government, as the case may be, in the prescribed manner.

(2) The term of office of a member or a President or a Chairperson of the Farmers' Organisation, nominated under sub-section (1), shall expire at the time at which it would have expired, had he been elected at the ordinary election.

27.3 Chapter III

OBJECTS, FUNCTIONS AND POWERS OF THE FARMERS' ORGANISATION

16. Objects - The objects of the Farmers' Organisation shall be to promote and secure distribution of water among its users, adequate maintenance of the irrigation system, efficient and economical utilization of water to optimize agricultural production, to protect the environment, and to ensure ecological balance by involving the farmers, including a sense of ownership of the irrigation system in accordance with the water budget and the operational plan.

17. Functions of the Water Users' Association - The Water Users' Association shall perform the following functions, namely :

(a) to prepare and implement a warabandi schedule for each irrigation season, consistent with the operational plan, based upon the entitlement, area, soil and cropping pattern;

(b) to prepare a plan for the maintenance, extension, improvements, renovation and modernization of irrigation system in the area of its operation and carry out such works of both distributary system and field drains in its area of operation with the funds of the association from time to time;

(c) to regulate the use of water among the various outlets under its area of operation according to the warabandi schedule of the system;

(d) to promote economy in the use of water allocated ;

- (e) to prepare demand and collect water charges;
- (f) to maintain a register of land owners as published by the revenue department;
- (g) to prepare and maintain an inventory of the irrigation system within the area of operation;
- (h) to monitor flow of water for irrigation;
- (i) to resolve the disputes, if any, between its Members and water users in its area of operation;
- (j) to raise resources;
- (k) to maintain accounts;
- (l) to cause annual audit of its accounts;
- (m) to assist in the conduct of elections to the Managing Committee;
- (n) to maintain such other records, as may be prescribed;
- (o) to abide by the decisions of the Distributary and Project Committee;
- (p) to conduct General Body meeting in the manner, as may be prescribed;
- (q) to encourage avenue plantation on canal bonds and tank bonds by leasing such bonds, and
- (r) to conduct regular water budgeting and also to conduct periodical social audit in the manner, as may be prescribed.

18. Functions of the Distributary Committee - The Distributary Committee shall perform the following functions, namely :

- (a) to prepare an operational plan based on its entitlement area, soil, cropping pattern at the beginning of each irrigation season, consistent with the operational plan prepared by the Project Committee;
- (b) to prepare a plan for the extension, improvements, renovation, modernization and annual maintenance of both distributaries and medium drains within its area of operation;
- (c) to regulate the use of water among the various Water Users' Associations under its area of operation;
- (d) to resolve disputes, if any, between the Water Users' Associations in its area of operation;
- (e) to maintain a register of Water Users' Associations in its area of operation;
- (f) to maintain an inventory of the irrigation system in the area of its operation, including drains;
- (g) to promote economy in the use of water allocated;
- (h) to maintain accounts;
- (i) to cause annual audit;

- (j) to maintain such other records, as may be prescribed;
- (k) to monitor the flow of water for irrigation;
- (l) to conduct General Body Meetings in the manner, as may be prescribed; (m) to abide by the decisions of the Project Committee;
- (n) to cause regular water budgeting and also the periodical social audit in the manner, as may be prescribed;
- (o) to assist in the conduct of elections ,,-, the Managing Committee; and
- (p) to encourage avenue plantations in its area of operation.

19. Functions of the Project Committee - The Project Committee shall perform the following functions, namely :

- (a) to approve an operational plan based on its entitlement, area, soil, cropping pattern as prepared by the Competent Authority in respect of the entire project area at the beginning of each irrigation season;
- (b) to approve a plan for the extension, improvements, renovation, modernization and annual maintenance of irrigation system including the major drains within its area of operation at the end of each crop season;
- (c) to maintain a list of the Distributor Committees and Water Users' Associations in its area of operation;
- (d) to maintain an inventory of the distributory and drainage systems in its area of operation;
- (e) to resolve disputes, if any, between the Distributory Committees;
- (f) to promote economy in the use of water;
- (g) to maintain accounts;
- (h) to cause annual audit of its accounts;
- (i) to maintain such other records as may be prescribed;
- (j) to conduct general body meetings in the manner, as may be prescribed;
- (k) to cause regular water budgeting and also the periodical social audit in the manner, as may be prescribed; and
- (l) to encourage avenue plantations in its area of operations.

20. Power to levy and collect fee - A Farmers' Organisation may, for carrying out the purposes of this Act, achieving the objects of the organisation and performing its functions, levy and collect such fees as may be prescribed from time to time.

(21).Power to remove encroachments - A Farmers Organisation shall remove encroachments from property attached to the irrigation system within its area of operation in accordance with the procedure as may be prescribed.

22. Appointment of competent authority and his functions - (1) the Government may by notification appoint such officer of the Irrigation Department or the Command Area Development Department or any other Department of the State, as may be considered necessary, to be the competent authority for every Farmers' Organisation for the purpose of this Act .

(2) The competent authority appointed under sub-section (1) shall be responsible to the respective Farmers' Organisation in the implementation and execution of all decisions taken by the farmers' organisation in the manner as may be prescribed and shall provide technical advice and ensure that the work is executed in accordance with the technical parameters.

23. Appointment of Project Authority and his functions - (1) The Government may, by notification, appoint such officer, as may be considered necessary, to be the Project Authority for the project area for the purposes of this Act .

(2) The project authority appointed under sub-section (1) shall perform following functions within his area of operation :

(a) delineation of Water Users' Area and its territorial constituencies; and delineation of distributory area;

(b) cause arrangements for the election of Chairperson, President, and Member of Managing Committee of Farmers' Organisation;

(c) recall a Chairperson or a President or a Member of Managing Committee of a Farmers' Organisation against whom the motion is carried out and will cause arrangements for filling-up such vacancy within one month; and

(d) will supervise the functioning of all the competent authorities.

27.4 Chapter IV RESOURCES

24. Resources of Farmers' Organisation - The funds of the Farmers' Organisation shall comprise of the following, namely:

(i) grants received from the Government as a share of the water tax collected in the area of operation of the Farmers' Organisation;

(ii) such other funds, as may be granted by the State and Central Government for the development of the area of operation;

(iii) resources raised from any financing agency for undertaking any economic development activities in its area of operation;

(iv) income from the properties and assets attached to the irrigation system within its area of operation;

- (v) fees collected by the Farmers' Organisation for the service rendered in connection with better management of the irrigation system; and
- (vi) sums received from any other source.

27.5 Chapter V OFFENCES AND PENALTIES

25. Offences and Penalties - Whoever, without any lawful authority, -

- (a) damages, alters, enlarges or obstructs any irrigation system;
- (b) interferes with, increases, or diminishes the water supply in, or the flow of water from, through, over or under any irrigation system;
- (c) being responsible for the maintenance of the irrigation system neglects to take proper precautions for the prevention of wastage of the water thereof or interferes with the authorized distribution of water therefrom, or uses water in an unauthorised manner or in such manner so as to cause damage to the adjacent land holdings;
- (d) corrupts or fouls, water of any irrigation system so as to render it less fit for the purposes for which it is ordinarily used;
- (e) obstructs or removes any level marks or water gauge or any other mark or sign fixed by the authority of a public servant; and
- (f) opens, shuts or obstructs or attempts to open, shut or obstruct any sluice or outlet or any other similar contrivance in any irrigation system;

shall, on conviction, be punished with imprisonment which may extend to two years or with fine which may extend to rupees five thousand or with both.

26. Punishment under other laws not barred- Nothing in this Act shall prevent any person from being prosecuted and punished under any other law for the time being in force for any act or omission made punishable by or under this Act

Provided that no person shall be prosecuted and punished for the same offence more than once.

27. Composition of Offences - (1) A Farmers' Organisation may accept from any person who has committed or in respect of whom a reasonable belief can be inferred that he has committed an offence punishable under this Act , a sum of money not exceeding rupees one thousand by way of composition for such offence.

(2) On payment of such sum of money, the said person, if in custody , shall be discharged and no further proceedings shall be taken against him in regard to the offence, so compounded.

27.6 Chapter VI SETTLEMENT OF DISPUTES

28: Settlement of disputes - (1) Any dispute or difference touching the constitution, management, powers or functions of a Farmers' Organisation arising between members, shall be determined by the managing committee of the Farmers' Organisation concerned.

(2) Any dispute or difference arising between a Member and the Managing Committee of a Water Users' Association or between two or more Water Users' Associations shall be determined by the managing Committee of the Distributory Committee.

(3) Any dispute or difference arising between a Member and the Managing Committee of a Distributory Committee or between two or more Distributory Committees shall be determined by the Project Committee.

(4) Any dispute or difference arising between a Member and the Managing Committee of a Project Committee or between two or more Project Committees shall be determined by the Apex Committee, whose decision shall be final.

(5) Every dispute or difference under this section shall be disposed of within forty five days from the date of reference of the dispute or difference.

29. Appeals - (1) Any persons aggrieved by any decision made or order passed by the Managing Committee of a Water Users' Association under sub-section (1) of section 28 may appeal to the Managing Committee of the Distributory Committee, whose decision thereon shall be final.

(2) Any person aggrieved by any decision made or order passed by the Managing Committee of a Distributory Committee under sub - section (1) or sub - section (2) of section 28 may appeal to the Managing Committee of a Project Committee, whose decision thereon shall be final.

(3) Any persons aggrieved by any decision made or order passed by the Managing Committee of a Project Committee under sub - section (1) or sub - section (3) of section 28 may appeal to the Apex Committee, whose decision thereon shall be final.

(4) Any appeal under sub - section (1) or sub - section (2) or sub - section (3) shall be preferred within fifteen days of communication of the decision or the order to the person aggrieved.

(4) Every appeal under this section shall be disposed off within thirty days from the date of filing of the appeal by adopting summary procedure.

27.7 Chapter VI MISCELLANEOUS

30. Records - (1) Every Farmers' Organisation shall keep at its office, the following accounts, records and documents, namely :

- (a) an up-to-date copy of this Act ;
- (b) a map of the area of operation of the Farmers' Organisation along with map of the structures and distributory networks prepared in consultation with the irrigation department;
- (c) a statement of the assets and liabilities;
- (d) minutes book;
- (e) books of account showing receipt and payments;
- (f) books of account of all purchases and sales of goods by the Farmers' Organisation;
- (g) register of measurement books, level field books, work orders and the like;
- (h) copies of audit reports and enquiry reports; and
- (i) all such other accounts, records and documents as may be prescribed from time to time.

(2) The books of accounts and other records shall be open for information to the Members of the Farmers' Organisation.

31. Audit - Every Farmers' Organisation shall get its accounts audited in such manner as may be prescribed.

32. Recovery of dues - All the amounts payable or due to a Farmers' Organisation if not paid on demand, shall be recovered as arrears of land revenue.

33. Meetings - The intervals, the procedure, the presidency and the quorum of the meetings of the Farmers' Organisation and the Managing Committee thereof shall be such, as may be prescribed.

34. Resignation - (1) A member of Managing Committee of a Farmers' Organisation may resign his office by a letter sent by registered post or tendered in person to the Chairman or President of the Managing Committee concerned.

(2) The President of the Managing Committee of a Water Users' Association may resign his office by a letter sent by registered post or tendered in person to the President of the Distributory Committee concerned.

(3) The President of the Managing Committee of a Distributory Committee may resign his office by a letter sent by registered post or tendered in person to the Chairman of the Project Committee concerned.

(4) The Chairman of the Managing Committee of a Project Committee may resign his office by a letter sent by registered post or tendered to the Government.

(5) Such resignation as above mentioned shall take effect from the date of its , acceptance or on the expiry of thirty days from the date of its receipt whichever is earlier.

35. Constitution of Apex Committee and appointment of Commissioner - (1)

The Government may, by notification, constitute an Apex Committee with such number of Members as may be considered necessary.

(2) The Committee constituted under sub-section (1) may exercise such powers and functions as may be necessary to, -

(a) lay-down the policies for implementation of the provisions of this Act; and

(b) give such directions to any Farmers' Organisation, as may be considered necessary, in exercising their powers and performing their functions in accordance with the provisions of this Act.

(3) The Government may appoint a Commissioner to exercise general control and superintendence over the competent authorities in performance of their functions under this Act or the rules made thereunder.

(4) The powers to be exercised and the functions to be performed by the Commissioner shall be such as may be prescribed by the Government.

36. Transitional Arrangements - The Government may by notification appoint an officer or officers to exercise the powers and perform the functions of a Farmers' Organisation and the Managing Committee thereof, till such time such Farmers' Organisation is duly constituted, or reconstituted and such Managing Committee assumes office under the provisions of this Act ;Provided that where a Farmers' Organisation registered under the Rajasthan

Societies Registration Act, 1958 (Act No. 28 of 1958) or the Rajasthan Co-operative Societies Act, 1965 (Act No. 13 of 1965) has entered into a Memorandum of Understanding with the Government for Participatory Irrigation Management of the system before promulgation of this Act, such Organisation will continue to exercise the powers and functions of a Water Users' Association for respective area of operation upto six months from the date of commencement of this Act and the Managing Committee of Water Users' Association for such water Users area shall be constituted within six months.

37. Authentication of orders and documents of the Farmers' Organisation -

All permission, orders, decisions, notices and other documents of the Farmers' Organisation shall be authenticated under the signature of the Chairperson or

President of the Farmers' Organisation or any other Member of the Managing Committee authorized by the Managing Committee in this behalf.

38. Acts not to be invalidated by reason of defect or vacancy etc. - No act or proceedings of the Managing Committee of a Farmers' Organisation shall be invalid by reason only of the existence of any vacancy in, or defect in the constitution of the said Committee.

39. Deposit and administration of the funds - (1) The Farmers' Organisation shall keep their funds in a Nationalized Bank or a Co-operative Bank or a Post Office.

Explanation :- Co-operative Bank means a Primary Agriculture! Co-operative Society or the District Central Co-operative Bank or the Rajasthan State Co-operative Bank.

(2) The funds shall be applied towards meeting of the expenses incurred by the Managing Committee of the concerned Farmers' Organisation in the administration of this Act and for no other purpose.

40. Sinking Fund - (1) The managing Committee of the Farmers' Organisation shall maintain a sinking fund for the repayment of moneys borrowed and shall pay every year into the sinking fund such sum as may be sufficient for repayment within the period fixed of all moneys so borrowed.

(2) The sinking fund or any part thereof shall be applied in or towards, the discharge of the loan for which such fund was created and until such loan is wholly discharged, it shall not be applied for any other purpose.

41. Budget - In every financial year, the Managing Committee of a Farmers' Organisation shall prepare a budget in respect of the next financial year, showing the estimated receipts and expenditure of the committee and shall place before the General Body of the Farmers' Organisation for its approval in the manner, as may be prescribed.

42. Protection of acts done in good faith - No suit, prosecution or other legal proceedings shall be instituted against any person for anything which is in good faith done or intended to be done under this Act or under the rules made thereunder.

43. Power to remove difficulties - If any difficulty arises in giving effect to the provisions of this Act or as to the first constitution or reconstitution of any Farmers' Organisation after the commencement of this Act, the Government, as the occasion may require, by order published in the Official Gazette, make such provisions or take such measures not in consistent with any provisions of this Act as appears to it to be necessary for removing such difficulty

Provided that no such order shall be made after the expiry of three years from the date of commencement of this Act.

44. Merger of Societies- All the Societies registered under the Rajasthan Societies Registration Act, 1958 (Act No. 28 of 1958) or the Rajasthan Co-operative Societies Act, 1965 (Act No. 13 of 1965) prior to the commencement of this Act for purposes of carrying out the functions for Participatory Irrigation Management shall cease to exist and shall stand merged with Water Users' Association having the same area of operation with effect from the date, the Managing Committee of the Water Users' Association is formed in accordance with section 5 of this Act.

45. Dissolution of Managing Committee of a Farmers' Organisation - In case of any embezzlement, fraud, abuse of powers and functions or any other act on the part of Managing Committee of a Farmers' Organisation in contravention of the provisions of this Act, the Competent Authority of the project area shall have power to dissolve the Managing Committee and to make transitional arrangements to carry out the functions of the Farmers' Organisation provided that in case of such dissolution the Managing Committee shall be re-constituted within a period of three months from the date of dissolution.

46. Savings - (1) Nothing contained in this Act shall affect the rights of or properties vested in, Panchayati Raj Institutions and Municipalities under any law for the time being in force.

(2) Nothing contained in this Act shall apply to the minor water bodies in the Scheduled Areas declared by the President of India under Part C of the Fifth Schedule of the Constitution of India, in the State of Rajasthan.

(3) All lawful acts performed/decisions taken, as well as any assets and liabilities created by Water Users' Association registered under the Rajasthan Societies Registration Act, 1958 (Act No.28 of 1958) or the Rajasthan Co-operative Societies Act, 1965 (Act No. 13 of 1965) prior to commencement of this Act, shall be deemed to have been performed/taken or created by the Water Users' Association formed under section 4 of this Act for the respective area.

(4) The operation and maintenance of the main canal, its branches and large distributories of major and medium projects shall continue to be the responsibility of the Irrigation/Command Area Development Department.

47. Power to make rules - (1) The State Government may, by notification in the Officio Gazette, make rules for carrying out the purposes of this Act .

(2) All rules made under this Act shall be laid, as soon as may be after they are so made, before the House of the State Legislature, while it is in session for a period of not less than fourteen days which may be comprised in one session or in two

successive session and if before the expiry of the session in which they are so laid or of the session immediately following, the House of the State Legislature makes any modification if any of such rules or resolves that any such rules should not be made, such rules shall thereafter have effect only in such modified form or be of no effect, as the case may be, so however, that any such modification or annulment shall be without prejudice to the validity of anything previously done thereunder.

48. Repeal and Savings.-(1) The Rajasthan Farmers' Participation in Management of Irrigation Systems Ordinance, 2000(Ordinance No. 5 of 2000) is hereby repealed

(2) Notwithstanding such repeal, all actions taken or made under the said Ordinance shall be deemed to have been taken or made under this Act.

28 Appendix 16: DRAFT STATE POLICY FOR RURAL DRINKING WATER AND SANITATION

On behalf of the Public Health Department of Government of Rajasthan an extensive, elaborative policy has been drafted for ensuring sustainable availability of drinking water and sanitation facilities in rural areas. The detailed draft report is available on the web site of Public Health Engineering Department ,Government Of Rajasthan.(www.rajwater.gov.in). The Goals and objectives of this draft policy are as follows :-

- (i) To make everybody in the State, water-secured on a sustainable basis, provision of safe and potable water to meet their lifeline and other needs.
- (ii) Adoption and evolution of the demand responsive and participatory waterManagement systems.
- (iii) Legal ownership of and responsibilities for management of public drinking water and sanitation assets by the Panchayati Raj Institutions in a phased manner to be completed.
- (iv) 100% responsibility of operation and maintenance (O&M) by the users and empowerment of panchayats/communities, in this regard in a phased manner to plan implement, operate, manage all water supply and sanitation schemes.
- (v) Attainment of full sanitation coverage in rural areas.
- (vi) Adoption of hygiene practices at personal, family and community level.
- (vii) Movement from a low subsidy regime to no subsidy regime for house holds toilets.

28.1 Other objectives

- Transfer of legal ownership of water and sanitation assets by entry in revenue record for different levels of schemes in a phased manner.
- Integration of Rural Dinking Water, Sanitation, Health and Hygiene programmes at the state, district, block and GP levels
- Integration of water use and land use policies with the main objective of providing drinking water needs of human beings and animals, which should be the first charge on any available water.
- Delineation of the role of the State Government in respect of multivillage, multi-block, and multi- district schemes, in relation to water quality, source sustainability issues and technical administrative and financial support to the Gram Panchayats/ VWSCs.
- Developing operational procedures for Swajaldhara and total sanitation schemes.

- Defining the role and responsibilities of all stakeholders under Swajaldhara and sanitation campaign.
- Enactment and implementation of law for effective ground water extraction control, regulation and recharge?
- The sustainability of drinking water sources.
- Rationalization of tariff structure.
- Appropriate sanitary options suitable for arid zones.
- Ensuring linkages among Swajaldhara, TSC and SSA.
- Scaling up the school water, sanitation and hygiene education programme.
- Adoption of integrated approach for fluorosis mitigation.
- Water quality surveillance.

28.2 Salient Features of The Draft Policy

(1) Water allocation shall be done at the level of District Collector, keeping in view the urgent requirements for various needs, but giving over riding priority to drinking water demand.

(2) Irrigation department shall ensure construction of water harvesting and conservation structures where ever required and feasible.

(3) In areas where exploitation of ground water has already reached upto 85%, schemes shall be framed from surface water of a canal or impounding reservoir available in the nearby area. If required, construction of a new impounding reservoir may be proposed.

(4) Roof top/ground level water harvesting should be taken up in individual households by providing necessary subsidies so as to reduce the drinking water demand in critical period. The beneficiary family shall contribute towards labour component of the work so that it develops a sense of ownership of the assets so created. Some community 'tankas' may also be constructed wherever possible so that surplus rainwater of a village is collected and utilized during critical period. The local village water and sanitation committee shall look after the up-keep of such community assets and impose a ban on taking out or pumping out of water from such tankas and transporting it to their individual household storage tanks. Wherever possible individual households shall be encouraged to construct ground water recharge dug well/kui so as to use surplus rain water of their household for recharge purposes.

(5) Surplus rain water of a village shall be impounded in an already existing Nadi/Johar/Local Talab for storage. The VWSC shall also arrange to clear any encroachment of the catchments area of such structures and shall be responsible for its maintenance. A ban on drawing of water by individual persons

through pumping or transportation to their storage tanks shall also be imposed on these Nadi/Johar/Talab by the VWSC. The PHED in consultation with Irrigation Department and the Ground Water Department shall take up construction of anicut, sub-surface barrier on rivers/streams/nallas and provide necessary recharge structures. Such works shall be executed by the relevant department. Necessary schemes for large scale recharge of the ground water for increasing its availability in the sources of the existing scheme, shall also be prepared and executed by the PHED/Irrigation department/GWD so as to make the sources of the existing scheme self sustainable.

(6) Enactment of Law for Regulation And Control Of Ground Water

There is a conscious view among the Government and stakeholders that before enacting the Ground Water Legislation, there is a need to create awareness among the people about the scarcity of water and its management Power subsidy in over exploited block shall be reduced steadily as given below so that people have a gradual acceptance of this subsidy reduction

(7) Random checking of the water supply source for bacteriological examination shall be carried by the PHED at its own cost through its network of laboratories. The expenditure on staff for laboratories, provision of vehicles in each laboratory for a period of six months in a year, expenditure on equipment and chemicals shall be borne in equal ratio (50:50) by the GOI and GOR.

(8) Keeping in view the large cattle population of the state and requirement of cattle drinking water, inadequate and quality problematic sources of water, the rate of water supply recommended to be adopted for all types of Rural Water Supply Schemes shall be 70 liters per capita per day for the entire state.

(9) Mass awareness campaign shall be undertaken to involve the community towards the use and benefits of IHHL. Necessary subsidy shall be provided to the BPL families for adopting IHHL. For APL families all scheduled banks/ co-operative banks shall be bound to give loans on soft interest rates (about 2% p.a.) for taking up construction of IHHL upto an amount of Rs. Thousand per IHHL, to be recovered in equal installments @ Rs. 50/- p.m. No separate guarantee other than that of a house where this IHHL is being constructed shall be required by the bank for release of such loan.

(10) For preparation of new projects, an overall view in reference to surface water availability, ground water exploitation level and its recharge projects, water harvesting and conservation projects, waste water collection and drainage projects and their use for ground water recharge, unaccounted flow of water (UFW) reduction

projects etc., is to be taken for schemes beyond the boundaries of one village/ Gram Panchayat/ Block/ District, therefore, specific project planning cell is required at various levels.

(11) A water regulatory authority shall be constituted to administer water allocations for drinking water needs and fix water tariffs to be charged from consumers and subsidy to be provided by GOI/GOR from general budget. Water tariff policy shall be so regulated that it is cheaper on lower consumption level or even free for BPL families but costlier on higher levels of water consumption. (i) ensure effective enforcement of water regulation laws, privatization, wherever possible, for transportation and distribution of water, (ii) carving out adequate share of drinking water from the surface water sources like rivers, canals and all other basin levels and (iii) regulation of water tariffs. This body would also have regular dialogues with water users/consumers and all stakeholders pertaining to agricultural, industrial and domestic use of water.

(12) Broad strategy for future development :

- Community Awareness and Participation
- Capacity Building of Institutions and Role Players.
- HRD and Joint Orientation of PHED officials/VWSC Chairman, Workshops for MLAs/MPs and detailed training programmes for other stakeholders.
- Institutional Reforms and redefining the Role of PHED officers.
- Information, Education and Communication (IEC).)

(13) While the transfer of legal ownership of assets and responsibility for operation and management of water and sanitation schemes to the community/PRI Institutions at the appropriate level appears to be sound and logical, the road map for implementation has to be drawn, keeping in view the past policies of the government over the decades, present practices and procedures and the nature of the functioning of PRIs in the current scenario.

(14) The basic premise of the strategy framework assumes that people would be willing to pay capital cost partially and also operate and maintain water supply schemes. (a) if they own the assets (b) if they themselves planned and installed the systems and were actively involved throughout in the process. (c) if they have been trained to do simple repairs. (d) if they know the government will not maintain the asset. (e) if they have sufficient funds for maintenance. (f) if they have to pay for operation and maintenance of the system.

(15) NGOs with a strong presence in clusters of villages and known for service and work to play a lead role in guidance of VWSC as well as in planning, project formulation, implementation and monitoring in specific assigned villages. Local NGOs have the direct linkages with the community and they have bridged the gaps between community and Government. The NGOs shall be involved in rural drinking water, total sanitation campaign including rural health and hygiene and cultivating desired habits for these purposes amongst the school children. Services of NGOs would be utilized for activities such as social mobilization, Communication and Capacity Development, Participatory Rural Appraisal (PRA)/ Participatory Learning and Action (PLA), Human Resource Development (HRD), Training and implementation of schemes.

(16) The State Legislature have already authorized the PRIs to perform these functions but orders prescribing conditions for transfer of these functions to Panchayats along with funds and functionaries are still required to be issued, for want of which panchayats could not assume these functions at their own despite lapse of even more than one decade, since RPR Act was passed in 1994. The State Government would therefore issue necessary orders indicating conditions, if any, for transfer of aforesaid functions relating to rural drinking water, rural sanitation, health and hygiene activities etc. to PRIs along with all assets created under these sectors and all related funds under plan and non-plan and all concerned functionaries in a phased manner.

29 Appendix 17: Article 26 from the WSSD (World Summit On Sustainable Development)

Plan of Implementation Johannesburg, September 2002

Develop integrated water resources management and water efficiency plans by 2005, with support to developing countries, through actions at all levels to:

- (a) Develop and implement national/ regional strategies, plans and programs with regard to integrated river basin, watershed and groundwater management and introduce measures to improve the efficiency of water infrastructure to reduce losses and increase recycling of water;
- (b) Employ the full range of policy instruments, including regulation, monitoring, voluntary measures, market and information-based tools, land-use management and cost recovery of water services, without cost recovery objectives becoming a barrier to access to safe water by poor people, and adopt an integrated water basin approach;
- (c) Improve the efficient use of water resources and promote their allocation among competing uses in a way that gives priority to the satisfaction of basic human needs and balances the requirement of preserving or restoring ecosystems and their functions, in particular in fragile environments, with human domestic, industrial and agriculture needs, including safeguarding drinking water quality;
- (d) Develop programs for mitigating the effects of extreme water-related events;
- (e) Support the diffusion of technology and capacity-building for non-conventional water resources and conservation technologies, to developing countries and regions facing water scarcity conditions or subject to drought and desertification, through technical and financial support and capacity-building;
- (f) Support, where appropriate, efforts and programs for energy-efficient, sustainable and cost-effective desalination of seawater, water recycling and water harvesting from coastal fogs in developing countries, through such measures as technological, technical and financial assistance and other modalities;

(g) Facilitate the establishment of publicprivate partnerships and other forms of partnership that give priority to the needs of the poor, within stable and transparent national regulatory frameworks provided by Governments, while respecting local conditions, involving all concerned stakeholders, and monitoring the performance and improving accountability of public institutions and private companies.