Himachal Pradesh State Water Policy, 2013

Government of Himachal Pradesh
Department of Irrigation & Public Health

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No.IPH-B(F)1-3/2013 Dated:Shimla-171002, November 18 , 2013

NOTIFICATION

The Governor, Himachal Pradesh is pleased to notify the "Himachal Pradesh State Water Policy-2013" as per Annexure appended to this Notification for information of all concerned.

2. This Notification has already been uploaded on H.P.Govt. Website .

By order

(Vineet Chawdhry)
Additional Chief Secretary (IPH)to the
Government of Himachal Pradesh

Endst.No.IPH-B(F)1-3/2013 Dated:Shimla-171002, the November 18 , 2013

Copy to:

1. The Secretary, Govt.of India, Ministry of Water Resources, Shram Shakti Bhawan, New Delhi.
2. The Member Secretary, National Water Board, Govt. of India, Ministry of Water Resources, Centre Water Commission, 840(S), Sewa Bhawan, R.K. Puram, New Delhi-66.
3. The Commissioner(PP), Govt. of India, Ministry of Water Resources, Sharam Shakti Bhawan, Rafi Marg, New Delhi.
4. The Joint Secretary , Govt.of India, Ministry of Water Resources, Shram Shakti Bhawan, Rafi Marg, New Delhi w.r.t. D.O. letter No.3/16/2008-GW, dated 5th January, 2010.
5. All Administrative Secretaries to the Govt. of H.P.
6. All Heads of Departments in H.P.
7. All Divisional Commissioners in H.P.
8. All Deputy Commissioners in H.P.
9. All Members of H.P. Water Management Board .
10. The Engineer in Chief, IPH, H.P. Shimla-1 .
11. All Chief Engineers , IPH Department,H.P.
12. All the Superintending Engineers, IPH Department, H.P.
13. The Director, Govt. of India, M&A Directorate, SDA Complex,Shimla-9.
14. The Regional Director Incharge, Central Ground Water Borad, Govt. of India, NHR Dove Cottage, Ramnagar,P.O.Ramnagar, Dharamshala(HP).

(Dr.S.K.Kapta)
Special Secretary (IPH)to the
Government of Himachal Pradesh
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HIMACHAL PRADESH STATE WATER POLICY-2013

1. PREAMBLE

1.1 Water is the elixir of life. Water, as a resource is one and indivisible: rainfall, river waters, surface ponds and lakes and ground water are all part of one system. It is part of a larger ecological system and vital to the essential environment for sustaining all life forms. It is a basic need for all life forms. Therefore, water must be managed in the most optimal manner so that consumption and development needs are met on a sustainable basis for ensuring its availability for our progeny.

1.2 In Himachal Pradesh 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 about 600 mm in Lahaul & Spiti district to around 3200 mm in Dharamshala District Kangra. However, in spite of heavy rain and snow during the rainy season and winter the summer months are periods of water scarcity in many areas as the flow in the rivers and nallahs is quite low and traditional sources also dry up.

1.3 Therefore, the usage of water as a scarce and precious resource has to be planned, along with conservation and management measures, on an integrated, environmentally sound and sustainable basis, keeping in view the socio-economic needs of the community.

2. NEED FOR A WATER POLICY

2.1 Use of water has many socio-economic aspects and complex issues of equity and social justice as also environmental sustainability, public health concerns and development. Complex issues in regard to water usage and distribution have to be addressed systematically.

2.2 Expansion of economic activity inevitably leads to increasing demands for water for diverse purposes: **domestic, commercial, industrial, irrigation, hydro- power generation and recreation, etc.**

2.3 The domestic and industrial water demand in rural areas is expected to increase sharply as the development programmes improve economic conditions and **more industries come up there. Impounding of water for hydropower generation will also increase as** the potential in this sector is harnessed. Disputes in sharing of water between individuals and or communities hamper the utilization of water through scientific planning on basin/sub basin basis.

2.4 The development and exploitation of the groundwater resources in the State have raised concerns about the need for scientific management, conservation **& regulatory mechanisms.**

2.5 Water quality is impacted by untreated or inadequately treated industrial effluents and sewage flowing into nallahs and rivers or affecting the surface and ground water. 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 restore the pristine quality of former years.

2.6 All such factors underscore the need for the utmost efficiency in water utilization on sustainable basis and public awareness of the importance of conservation and maintenance of water quality. Common policies and strategies are necessary to address these issues.

3 PRIORITIES IN STATE WATER POLICY 2013

3.1 Water resources shall be held in public trust for the people & the State is obliged to protect the water sources as a trustee for benefit of all. However, overriding ownership rights over water sources rest with the State as a public trustee even if some of the functions of the state in relation to water are entrusted to any public or private agency.

3.2 Water resources available to the State need to be mapped & brought within the category of utilizable resources to the maximum possible extent.

3.3 Utilisation of available water resources to meet drinking water needs and irrigation requirements should also promote conservation and engender community participation including payment for use of water. Water scarce neighborhoods will enjoy priority entitlement to avail the water available in adjoining areas for meeting their drinking water needs.

3.4 Harnessing of water for commercial, industrial and hydro- power generation usage takes place in a sustainable manner with due regard to maintenance of water quality.

3.5 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 and sustainability considerations.

3.6 Promoting water shed management through extensive soil conservation, catchment-area treatment, preservation of forests and increasing the forest cover and the construction of check-dams and trenching along with efforts to conserve the precipitation in the catchment area itself.

3.7 Enhancing the capabilities of the community to adopt climate resilient technological options. Increasing water harvesting, storage and recycling and its reuse through climate resilient technological options such as dual plumbing. Similarly, industrial processes should be made more water efficient.

3.8 Integrating mandatorily, agricultural strategies, cropping patterns and improved water application methods with all irrigation schemes to enhance the water use efficiency, as also, the capability for dealing with variability because of climate change.

4 WATER ALLOCATION PRIORITIES

4.1 In the planning and operation of systems, water allocation priorities would be broadly as follows:

-Drinking water **& Sanitation**

-Irrigation

-Ecology/ aforestation/biodiversity/tourism

-Hydro-power

-Agro-industries

- Non-agro-based industries.

-Navigation and other uses.

However, this is subject to modification if warranted by special considerations in any area/region.

5 DRINKING WATER & SANITATION

5.1 The state recognizes that every individual has a right to a minimum quantity of potable water for essential health & hygiene & within easy reach of the household. Needs of human beings and domestic animals shall be the first charge on any available source of water.

5.2 Adequate, safe and sustainable drinking water facilities will be provided to the entire population both in urban and rural areas throughout the year as per relevant BIS Standards/CPHEEO Manual.

5.3 **There shall be endeavor to supply water on 24X7 basis subject to the community accepting metered payment for the same as per fixed tariffs.**

5.4 Use of Water ATMs at places of mass public congregation like temples, fairs etc. will be promoted so as to ensure availability of quality water. The government would endeavour to progressively convert all public water stand posts into automated 'water on demand' posts.

5.5 Implementation of a participatory demand driven approach will ensure that the public obtains the level of service they desire and can afford to pay for through the mechanism of a tariff policy.

5.6 Monitoring and surveillance of the quality of drinking water is of utmost importance. Efforts will be made to utilize IT tools to exercise remote oversight over the operation of water supply schemes as well as quality of water supplied.

5.7 A "Catchment Area Approach" shall be adopted by involving grass root level educational and technical institutions in utilizing existing resources and strengthening them by providing additional technical and financial support for their activities in this area.

5.8 Urban water supply and sewage treatment schemes would need to be integrated and executed simultaneously. Water supply bills should include sewerage charges.

5.9 Sewerage plans shall be drawn up for all urban and rural communities. The State aspires to mandatorily connect all households to sewerage networks. Safe disposal of sewage shall be promoted and establishment of STPs in rural areas and their O&M shall be suitably incentivized.

6 IRRIGATION

6.1 The major consumptive use of water in the State has been for irrigation. The gross irrigation potential of the State is estimated to be 3.35 lakh hectare, while the irrigation potential created has reached 2.56 lakh hectare by September 2013. Production of food grains in H.P. has increased from around 0.7 million tonnes in the year 1966-67 to about 1.45 million tonnes in the year 2012-13. This will have to be raised to around 2.4 million tonnes by the year 2025 AD to meet the needs of the projected population of 92.25 lakh. The production of fruits and vegetables has increased from 0.05 million tonnes (1966-67) each to 1.09 and 1.35 million tonnes (2012-13) respectively. We need to cover the balance area of 0.84 lakh hectare by irrigation schemes so that the productivity of the culturable land area of the State improves, food grain output increases and through diversion of the land to cultivation of vegetable, horticulture and cash crops the economic prosperity of the agriculturists is ensured and enhanced.

6.2 All irrigation schemes are to progressively move away from flood irrigation and open channel irrigation to micro irrigation **and piped supply** except in areas where this is not feasible technologically.

6.3 Formulation of proposals for irrigation schemes should be preceded by extensive engagement with the user community(s) to arrive at a common understanding about the operation & maintenance of the scheme(s), the obligations of all stakeholders, including apportionment of operational expenses. Formation of Krishak Vikas Sanghs (KVS) and the inputs to be provided by other line department such as agriculture, horticulture, fisheries and animal husbandry shall be an essential component of the scheme's DPR.

6.4 All schemes of the Irrigation department shall be progressively automated and powered by renewable sources of energy (eg Solar) to the extent possible. Operation of these schemes shall be progressively outsourced through the Krishak Vikas Sanghs (KVS's) with the latter being allowed to retain a portion of the user charges for operating & maintaining the scheme(s).

6.5 The age old method of determining abiana charges shall be replaced by a more scientific system of billing based on the irrigation potential created.

7 PROJECT PLANNING AND MANAGEMENT:

7.1 Water resource development projects should as far as possible be planned and developed as multipurpose projects but provision for drinking water shall be a primary consideration. 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. Following points shall be considered while framing the project: -

a) Pre & post impact of project on human lives, occupations & environment etc.

b) Effect on ecological balance & compensatory measures if required.

c) Environment impact assessment preferably by an independent agency.

d) Economic Evaluation & Socio economic impact

e) Monitoring mechanism

f) Analysis of water Foot prints

g) Rain water harvesting & Reuse of Waste water

7.2 Besides, in projects for hydropower generation involving impounding of water, adequate water shall be released round the year to meet the needs of downstream users. The sustainability evaluation of the Project shall determine "Environmental Discharge" to be prescribed for the Project, which shall not be less than 15% of the available discharge at any given time. In forest areas the extraction of water shall be planned keeping in view the needs of the flora and fauna of the area. The involvement and participation of beneficiaries and other stakeholders will be encouraged at the project planning stage itself.

7.3 Rivers and other water bodies should be considered for development for navigation/Tourism as far as possible and all multipurpose projects over water bodies should keep navigation/Tourism in mind right from the planning stage.

7.4 Special efforts should be made to investigate and formulate projects either in or for the benefit of backward areas and areas inhabited specially disadvantaged groups such as the socially weak and persons belonging to the scheduled castes and scheduled tribes. In other areas also, project planning should pay special attention to the needs of the weaker sections of society.

7.5 Project financing should be structured to incentivize efficient & economic use of water & facilitate early completion of ongoing projects.

7.6 Industries should be encouraged for recovery of industrial pollutants and their recycling / reuse, which are otherwise capital intensive. Subsidies and/or incentives may be offered for the same.

8 GROUND WATER RECHARGE:

8.1 There shall be a periodical reassessment of the ground water potential taking into consideration the quality of that available and economic viability of its extraction.

8.2 Exploitation of ground water resources shall be so regulated as not to exceed the recharging possibilities, as also to ensure social equity.

8.3 Ground water recharge projects will be developed and implemented for improving both the quality and availability of ground water resources.

8.4 The hand pumps programme of the State shall be progressively re-oriented towards off road sites and to areas where ground water recharge schemes have been implemented.. All existing handpumps shall be GIS mapped and maintained/operated through the local PRI's.

9 WATER QUALITY:

9.1 **Water quality parameters for different uses such as drinking, other domestic uses, livestock, irrigation, industries etc. shall be specified/notified by the competent authority & shall continuously be reviewed with a view to effecting improvement in water quality. The quality of both surface & ground water shall be regularly monitored.**

9.2 The industrial units producing effluents/wastewater should have their own effluent systems & the effluent should not be discharged into the municipal sewer and/or disposed on land and/or water without meeting the appropriate effluent standards.

10 CONSERVATION OF WATER

10.1 Efficiency of utilization in all the diverse uses of water should be ensured and awareness of water as a scarce resource should be fostered. Consciousness about conservation should be promoted through education, regulation, incentives and disincentives.

10.2 Water resources should be conserved and the availability augmented by maximizing retention in the catchment area, minimizing pollution and avoiding wastage. For this, measures like selective lining of the conveyance systems, modernization and rehabilitation of existing water distribution systems roof top rain water harvesting, recycling, and re-use of treated effluent water, and new techniques like drip and sprinkler irrigation may be promoted, wherever feasible.

10.3 Reforms and progressive measures for innovations, efficient utilization of water resources, their conservation and rejuvenation would be proactively encouraged and appropriately incentivized.

11 WATER AUDIT & ACCOUNTABILITY:

11.1 Taking into account the fact that substantial losses of raw and treated water take place between the bulk storage, distribution and usage points thereby reducing availability to the ultimate users and financial losses to the supplying agencies as well as giving rise to deficiency in service and dissatisfaction with the public services, audit of the working of systems shall be carried out periodically in accordance with the guide lines for water audit and water conservation and rectification measures initiated where necessary.

11.2 The Citizen's Charter developed under the Public Services Guarantee Act with a view to guaranteeing efficiency, transparency and accountability in the delivery of drinking water and irrigation services will be administered proactively.

12 PARTICIPATORY APPROACH:

12.1 **Water is a common pool resource & shall be managed, protected & preserved as such by the community based institutions. Water resources projects and services should be managed** in a manner that promotes a participatory approach and involves local communities and stakeholders, including women, in the management of water resources, in an effective and decisive manner in various aspects of planning, design, development and management of the water related schemes including recovery of water user charges.

12.2 Necessary legal and institutional changes shall be made at various levels for the purpose, duly ensuring more meaningful decision making roles for women. Water Users' Associations and the local bodies such as municipalities and gram panchayats shall particularly be involved in the operation, maintenance and the management of water related infrastructure /facilities at appropriate levels, progressively, with a view to eventually transfer the management of such facilities to the user groups/local bodies.

13 CONFLICT RESOLUTION:

13.1 Guided by the traditional individual and community entitlements to water use enshrined in the Wazib-ul-arz (record of customary rights) 'Water Adalats' may be devised as a conflict resolution mechanism under the aegis of the local PRIs.

14 INSTITUTIONAL MECHANISMS:

14.1 All existing legislation governing the use of water shall be reviewed and appropriately modified for devolving necessary authority to the lower tiers of the Government to deal with the local water situation.

14.2 Such legislation would recognize water not only as a scarce resource but also a sustainer of life and ecology.

14.3 Age old regulations pertaining to the use of water would be replaced by modern principals of water use efficiency, conservation, micro irrigation and recycling.

14.4 **The State Water Management Board would be restructured as a forum at the state level to deliberate upon issues relating to water and evolve consensus, co-operation and reconciliation amongst stakeholders.**

15 PUBLIC PRIVATE PARTNERSHIPS

15.1 **For improved service delivery on sustainable basis & optimum utilization of water supply capacity, the State Governments / urban local bodies may associate private sector in public private partnership (PPP) mode with penalties for failure, under regulatory control on prices charged and service standards with full accountability**

to democratically elected local bodies on a performance based management contract.

15.2 **Once private sector participation in the delivery of services in the water sector becomes well entrenched in the State, a regulatory authority may need to be established to regulate use of water and pricing of services.**

16 INFORMATION SYSTEMS:

16.1 A well developed information system, for water related data **including data about snow & glaciers, evaporation, erosion, sedimentation etc.** in its entirety, at the State level is a prime requisite for resource planning. A standardized state information system should be established with a network of data banks and data bases **for free exchange of information**, integrating the State and Central level agencies and improving the quality of data collection and analysis.

16.2 Apart from the data regarding water availability and actual usage the system may be equipped to provide reliable projections of demand of water for diverse purposes along with availability in different areas of the State.

16.3 **A State Water Informatics Center should be established to collect, collate and process hydrologic data regularly from all over the state, conduct the preliminary processing, and maintain in open and transparent manner on a GIS platform.**

17 RESETTLEMENT AND REHABILITATION:

17.1 Optimal use of water resources necessitates construction of storages and the consequent resettlement and rehabilitation of the displaced population. As far as possible, large storages shall be avoided and the State shall evolve its resettlement and rehabilitation policy taking into account the local conditions, so that displaced persons are also able to share the benefits of the projects. Careful planning shall be ensured so that the project construction and rehabilitation of affected families proceeds simultaneously and smoothly.

18 FINANCIAL AND PHYSICAL SUSTAINABILITY:

18.1 Tariff structures would need to be gradually restructured so as to cover operational expenses and also to provide for cross-subsidisation for poor and marginal farmers probably through a differential tariff scheme.

18.2 All linked inter-departmental financial resources available shall be pooled and the nodal department would facilitate further leveraging of resources for raising funds for capital investment. A revolving fund may be created to fund prioritized activities in select areas.

18.3 There is an urgent need of a shift from the emphasis on the development and expansion of water resource infrastructure, to improvement of the performance of the existing water resource facilities. Therefore, allocation of funds under the water resources sector would need to be re-prioritized to ensure that needs for development as well as operation and maintenance of the facilities are met in an equitable and sustainable manner.

19 FLOOD CONTROL & MANAGEMENT:

19.1 A master plan for flood control and **disaster management** for each flood prone basin shall be prepared.

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

19.3 While physical flood protection works **like channelisation of rivers/Khads is being done in the state** the construction of embankments, spurs 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 measures.

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

19.5 While deciding the location of new structures or relocation of old structures, it shall be ensured that these are preferably located beyond the HFL/Flood zone, however in case it is not possible to do so adequate flood protection measures shall be provided for the safety of these structures.

20 LAND EROSION BY RIVERS AND TRIBUTARIES:

20.1 The erosion of land by rivers should be minimized by the suitable cost effective measures by construction of **revetments, spurs, embankments, etc. & also construction of rain water harvesting structures should be encouraged to check**

soil erosion and flash floods. The State shall undertake steps to ensure that indiscriminate occupation and exploitation of land near the river banks is discouraged. Economic activity on river banks and beds must be properly regulated.

21 DROUGHT PRONE AREA DEVELOPMENT:

21.1 **Although the state has made huge strides in mitigating the water problem in Drought-prone areas by constructing sustainable water supply & irrigation schemes however in any new identified drought prone area the Relief works undertaken for providing employment to drought affected populations should preferably be aimed at drought proofing of the affected area.**

22 MAINTENANCE AND MODERNIZATION:

22.1 Structures and systems created for water resource management should be properly maintained in good health. Appropriate annual budgetary provisions should be made for this purpose. Preventive maintenance shall be given due attention for reducing overall maintenance cost, optimizing water use and making projects sustainable. There should be a regular monitoring of structures and systems and necessary rehabilitation and modernization programs should be undertaken.

22.2 Norms for maintenance of water supply and irrigation schemes especially regarding change of pipe lines, change of machinery etc. shall be prepared. In order to minimise the maintenance cost of lift schemes automation & use of solar energy pumps shall be encouraged.

23 SCIENCE & TECHNOLOGY:

23.1 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 **such as hydrology, water harvesting/recycling & its conservation, water quality, design of structures, economical/efficient management of water in both water supply & irrigation, use of new eco friendly construction material/construction practices and IT enabled monitoring etc.**

23.2 The State shall encourage continuing research and advancement in technology for efficient implementation of innovative technology under local conditions.

23.3 It is necessary to give adequate grants to the departments to update technology, design practices, planning and management practices, preparation of annual water balances and accounts for the site and basin, preparation of hydrologic balances for water systems, benchmarking and performance evaluation.

24 HUMAN RESOURCES DEVELOPMENT (TRAINING)

24.1 A perspective plan for up gradation of human resources shall be an integral part of water resources development. This shall include 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 and other user groups from time to time. Liberal use of the Skill Upgradation Scheme of the State should also be made towards achieving this objective.

24.2 Research in water policy should also be encouraged by the technical education institutions of the State to evaluate impacts of policy decisions and to evolve policy directives for changing scenario of water resources.

24.3 To meet the needs of the skilled manpower in the water sector, regular training and academic courses in water management should be promoted. These training and academic institutions should be regularly updated by developing infrastructure and promoting applied research, which would help to improve the current procedures of analysis and informed decision making in the line departments and by the community.

25 Conclusion:

25.1 In view of the vital importance of water for the sustenance of 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 is a matter of utmost urgency. Concerns of the community need to be taken into account for water resources development and management. The success of the State water policy will depend on evolving and maintaining a consensus and commitment to its underlying principles and objectives.